

Saginaw Bay Coastal Initiative

Saginaw Bay *Phragmites* Control and Restoration Demonstration Project

Over the past ten years, the spread of invasive phragmites has become a major problem in Saginaw Bay. Phragmites displaces native plant species, and replaces diverse, high quality wetlands with dense monotypic stands. It also discourages wildlife use of the wetland, blocks shoreline views and can be a fire hazard.

In order to address the rapid infestation of this invasive wetland grass, and to better communicate effective treatment methods and regulatory requirements, the Michigan Department of Environmental Quality (MDEQ) has joined with a number of partners to implement a Phragmites Control Demonstration Project. The intent of this project is to exhibit the effectiveness of various phragmites control methods. Landowners wishing to undertake a phragmites control project can use the demonstration site, along with other education materials developed by the MDEQ and its partners, to develop a control plan that will work for their property.

The demonstration project is open to the public and is located in Hampton Township at the Finn Road Park and Campground, approximately two miles north of M-25 at the end of Finn Road. Major funding for this project was provided by the U.S. Environmental Protection Agency - Great Lakes National Program Office. The project was also supported by the National Fish and Wildlife Foundation, BASF Corporation, and Cygnet Enterprises. Partners on this project include MDEQ, Michigan Department of Natural Resources, Ducks Unlimited, and Hampton Township.

To effectively demonstrate various control methods, the project site was divided into six 30 acre plots, each of which is receiving a different combination of chemical and mechanical treatments. Treatment combinations were chosen based on the recommendations provided in *A Landowner's Guide to Phragmites Control*, an informational brochure that was produced for Great Lakes shoreline property owners and other riparians by the MDEQ's Office of the Great Lakes. Essentially, these treatments involve various combinations of two broad spectrum herbicides (imazapyr and glyphosate) used in conjunction with a nonionic surfactant, followed by mowing treatments. Table 1 describes the treatments that have taken place since the project began in 2007.

For each year of the project, the treatment plots are monitored by the MDEQ. Vegetation diversity, phragmites stem density, and percent cover data are collected each year in mid-August. These measurements will help the MDEQ and its partners gain more knowledge on the effectiveness of each treatment combination. Photo monitoring is also conducted in September of each year.

In June 2008, an open house and press event were held at the demonstration site to inform the public about the project and encourage phragmites control on private properties. Guests at the event were able to view new interpretive signs, take tours through the project, and obtain advice on phragmites control.

We anticipate that the demonstration project will result in the restoration of 160 acres of high quality Great Lakes coastal wetland, and hope that it will help educate coastal

landowners about options available to control phragmites on their properties. Landowners interested in learning more about phragmites control are encouraged to visit the MDEQ's Phragmites Control Website at www.michigan.gov/deqaquaticinvasives.

Table 1: Treatments taking place at the phragmites demonstration project

Plot	2007 treatment	2008 treatment	Proposed 2009 Treatment
Control	No treatment	No treatment	No treatment
Imazapyr	No treatment	Broadscale application with a helicopter in late June, followed by winter mowing	Selective summer herbicide treatment targeting phragmites regrowth
Imazapyr/ Glyphosate combination	Broadscale application with a helicopter in early September, followed by winter mowing	Selective fall herbicide treatment targeting phragmites regrowth	Selective fall herbicide treatment targeting phragmites regrowth
Glyphosate	Broadscale application with a helicopter in early September, followed by winter mowing	Selective fall herbicide treatment targeting phragmites regrowth	Selective fall herbicide treatment targeting phragmites regrowth
Mow only	Winter mowing with no herbicide treatment	Winter mowing with no herbicide treatment	Winter mowing with no herbicide treatment
Preservation Plot	No treatment	Selective fall herbicide treatment followed by winter mowing.	Selective fall herbicide treatment targeting phragmites regrowth

Contact:

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