

# Northeast Michigan Coastal Cooperative Weed Management Plan



## **Introduction**

For years the threat of invasive species has been prevalent in the state of Michigan. Under constant attack, our precious natural resources have often fallen victim to unrelenting and advantageous invasive species. An effective solution to this resource threatening issue is to develop a cooperative weed management area. The cooperative weed management concept allows public and private entities to share resources toward controlling noxious weeds.

Control and prevention of invasive species has been called for throughout the conservation community in Northeast Michigan for many years. The first meeting of the group involved in this agreement took place in December 2008, organized by Huron Pines. The intention of this meeting was to gain partners and support for creating an invasive species program that would help in the protection of the vital coastal resources in Northeast Michigan. The support and interest from that meeting resulted in a resolution to create a cooperative weed management agreement. Geographically this management agreement covers Lake Huron shoreline in Iosco, Alcona, Alpena, Presque Isle and Cheboygan counties.

## **Background Information- Reasoning for a Coordinated Effort**

What are invasive weeds and why manage them?

The federal government defines an invasive weed as any plant or plant product that can injure or damage crops, livestock, public health, natural resources, or the environment. There are several weeds listed on the state's prohibited or restricted lists, including the three species that will be the focus for this weed management plan.

The three target species will be: purple loosestrife, buckthorn and phragmites. These three species, which were chosen by the Huron Pines Resource Advisory Group, have significant short and long term effects upon the environment, natural resources and the citizens of Northeast Michigan. In order to protect our quality of life and abundant natural resources from irreparable damage, these invasive plants need to be controlled and monitored. Not doing so would jeopardize Northeast Michigan's economy, tourism industry, distinctive natural heritage, diverse recreational opportunities, public health and scenic beauty. These target species may not always be the focus of this agreement. There are new and emerging invasive species on the horizon that may threaten Northeast Michigan in the future so it important that the partnership be allowed to expand and fluctuate as other species emerge.

Why invest in a Cooperative Weed Management Area?

When an invasive weed species is first noticed in an area, often the initial reaction is one of neglect or uncertainty. Neglect because small patches of weeds are generally not seen as a pressing issue, and uncertainty showing up as a result of not knowing how to handle such a problem. Thus, a once small, manageable and inexpensive problem becomes large, unmanageable and expensive. To invest now in a region-wide weed management effort is an investment in the future of Northeast Michigan.

Cooperative weed management is much more cost effective, especially when dealing with small infestations. Less time, effort and money is required to perform the needed tasks. The coordination of partners also allows for the sharing of resources and information across jurisdictional boundaries so that weed management can be carried out along ecological rather than political boundaries. Also the united front is much more visible, helping to generate public awareness. Finally, cooperative weed management can make securing funding easier and more productive.

## **Mission and Goals for Northeast Michigan's Weed Management Efforts**

The Northeast Michigan Cooperative Weed Management Area provides a framework that will guide our efforts to control invasive weeds in Northeast Michigan, acquire and allocate resources and set goals/objectives to work toward and achieve. The purpose of this cooperative weed management area is

**To stop the introduction, spread, and distribution of invasive weed species in the ecosystems along the Lake Huron shoreline.**

To successfully carry out this mission, there are a number of goals that need to be achieved:

1. Identify specific invasive plants to target efforts and resources toward.
  - The three target species (phragmites, purple loosestrife and buckthorn) will be the initial focus for the efforts of this weed management agreement.
  - They were chosen by the Huron Pines Resource Advisory Group, which is made up of resource professionals in the Northeast region of Michigan.
2. Develop cooperative weed management partnerships with public and private partners to attack shared weed problems.
  - Partnerships should involve individuals, agencies and nonprofit organizations to prioritize and pool their limited resources in efforts to control invasive weeds.
  - Partnerships need to allow management across ownership and jurisdictional boundaries and allow for joint application for local, regional and national grant funding sources.
  - Partners currently included in this weed management area are: U.S. Fish and Wildlife Service, The Nature Conservancy, Thunder Bay National Marine Sanctuary, Huron Pines, Michigan Department of Natural Resources, Michigan Department of Environmental Quality and the Michigan Sea Grant.
3. Implement the most efficient, economical and environmentally friendly control methods for targeted weeds.
  - Continuing research of new/different methods of control is crucial to ensure that the most cost-effective and environmentally friendly methods are being employed for removal projects.
  - Good herbicide practices ensure that safe and appropriate herbicides are used, with an accurate mixture of herbicides, as well as proper use and rate of application.
  - Accurate maps of targeted weed locations make budgeting easier and more accurate.
4. Implement an early detection and rapid response system.
  - The early detection and rapid response system will be volunteer based. This will require proper training for volunteers in plant identification and documentation when an infestation is discovered.
  - Mapping of weeds is an important measure of control success or failure, rate of establishment and movement of weeds.
5. Reduce the extent and density of established weed infestations to lower or eliminate economic and environmental impacts.
  - Total eradication of a large established weed infestation is highly unlikely. The goal for such areas should be to reduce the stands density and prevent it from spreading.
  - For these types of areas a long-term plan must be designed and followed that uses cost-effective measures over a long period of time. A single treatment will not be effective in this situation.
6. Engage volunteers to assist in early detection, rapid response and removal projects.
  - Train volunteers to properly identify and document the three target species as well as new invasive species that have the potential to threaten the area as they emerge.

- Develop and distribute quality brochures and fact sheets on identification, impacts and control methods for the three target species.
  - Speak to local citizen groups about the impacts of invasive weeds and their control methods.
7. Develop and maintain a database of noxious and invasive weed infestations that is made accessible to the public.
- A centralized database of mapped information of the three targeted weeds will make for more accurate tracking of changes in weed infestations area and density.
  - Accumulated data will be easily accessible to any interested party via the Huron Pines website.
8. Comply with all State of Michigan weed laws and permitting requirements when necessary.
- All State of Michigan Noxious Weed laws will be followed at all times to ensure that our efforts are not damaged by negligence.
  - Rules and regulations regarding the movement, mixture and application of herbicides will be followed for protection of the environment as well as public health.
  - Any requirements of permits for herbicide application, prescribed burns, etc., will be applied for and received prior to any action taken.
9. Reestablish native plant communities where appropriate.
- Any restoration of native plant communities would be on a site by site basis.
  - Areas dominated by a monoculture of invasive species would likely require some restoration to ensure that the natural integrity of the site is maintained.
  - Reestablishing native plant communities fills the gaps created by the removal of invasive species and reduces the probability of them returning.

## **Conclusion**

This cooperative weed management plan provides a framework for the implementation of successful and cost-effective weed management through the Northeast region of Michigan. These efforts will help protect the natural resources and environment that so many people depend on for their livelihoods, culture and recreation. A strong and well coordinated effort will ensure the ecological and economical impacts felt in western states by exotic weeds do not materialize here in Northeast Michigan.

All organizations and partners signed onto this agreement have a mutual accord to the protection of Northeast Michigan from invasive species and restoration of native plants and ecosystems. The purpose of this Cooperative Weed Management Area is to provide protection to the sensitive natural ecosystems along the Lake Huron shoreline by reducing the spread and distribution of invasive plant species and restoring areas already impacted. It will also aid in the application for various types of funding to assist in the continuing effort to restore and protect essential habitat for wildlife and recreationalists alike.

**Partner Roles**

**Alcona County Conservation District** agrees to contact property owners in their district about participating in the program and assist with coordinating removal projects.

**Huron Pines** agrees to coordinate and develop the program and resulting projects, conduct communications with all partners, organize outreach efforts, train volunteers, seek funding and report and post results of efforts to partners as well as the public

**Iosco County Conservation District** agrees to contact property owners in their district about participating in the program and assist with coordinating removal projects.

**Michigan Department of Environmental Quality** agrees to help navigate the permit process required before removal projects begin, provide technical assistance as well as seek funding when opportunities arise

**Michigan Department of Natural Resources** agrees to provide technical assistance and seek funding when opportunities arise

**Michigan Sea Grant** agrees to provide technical assistance as well as seek funding when opportunities arise

**The Nature Conservancy** agrees to provide technical assistance, seek funding when opportunities arise and coordinate projects on TNC managed lands and adjacent lands

**Thunder Bay National Marine Sanctuary** agrees to provide their services as a location to hold meetings, volunteer training sessions, and for housing when necessary

**U.S. Fish and Wildlife Service** agrees to provide technical assistance as well as seek funding when opportunities arise

**U.S. Forest Service** agrees to provide technical assistance as well as seek funding when opportunities arise

**By signing this agreement partners are affirming their support and role as a member of this cooperative to assist in the restoration, protection, and maintenance of Northeast Michigan's Lake Huron shoreline.**

\_\_\_\_\_  
**Alcona County Conservation District**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Huron Pines**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Iosco County Conservation District**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Michigan Department of Environmental Quality**

\_\_\_\_\_  
**Date**

---

**Michigan Department of Natural Resources**

---

**Date**

---

**Michigan Sea Grant**

---

**Date**

---

**The Nature Conservancy**

---

**Date**

---

**Thunder Bay National Marine Sanctuary**

---

**Date**

---

**U.S. Fish and Wildlife Service**

---

**Date**

---

**U.S. Forest Service**

---

**Date**

---

**Date**

---

**Date**