

Central Michigan Cooperative Invasive Species Management Area (CM-CISMA) Strategic Plan

Mission Statement

Protect and improve the natural resources, economy, and human health in Central Michigan through collaborative outreach and management of invasive exotic species.

Geographic Scope

The geographic scope of the CM-CISMA encompasses 2,769 square miles and includes five counties in the Lower Peninsula of Michigan: Clare, Gladwin, Isabella, Midland, and Gratiot.

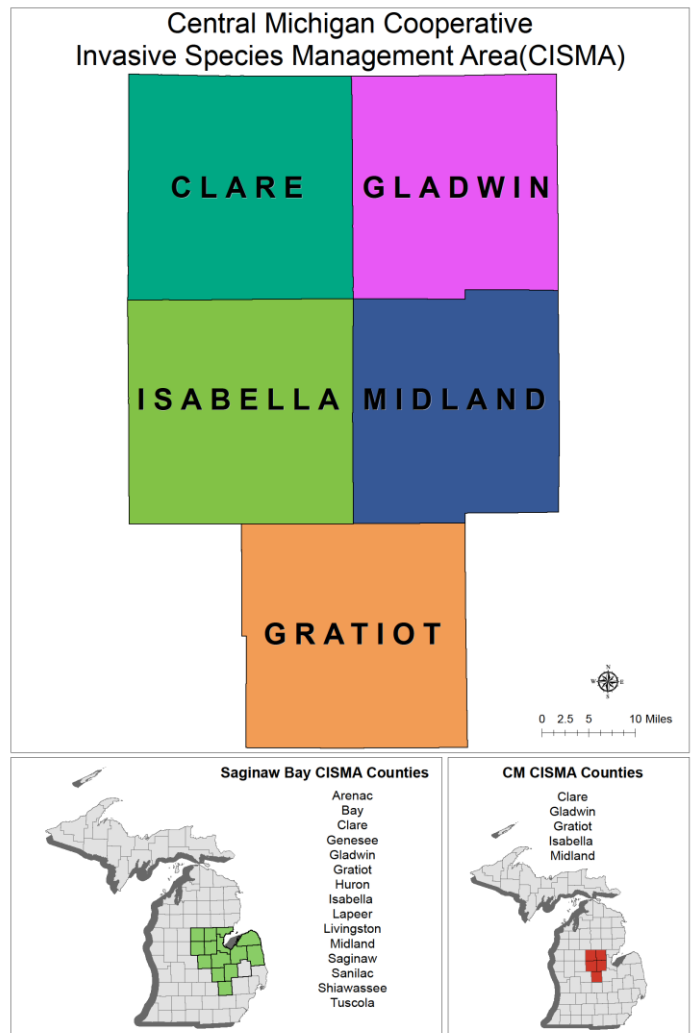
This area is headwaters to many important rivers and has the following within its borders: Tittabawassee, Chippewa, Pine, Maple, Bad, Coldwater, Muskegon, Clam, Tobacco, Sugar, Molasses and Cedar. Numerous miles of creeks and drains also flow into these important rivers. These systems along with reservoirs, lakes, ponds and large expanses of wetlands found within the 5 counties, offer an important diversity of plants, wildlife, recreational and economical value.

Land open to the public includes large tracts of state land, county, city and township parks, nature conservancies, nature centers and other non-profit lands.

Strategic Scope

The CM-CISMA will focus on working with partners throughout the five-county region to educate the public about invasive exotic species and lead the monitoring and control efforts within its borders. It will work to secure funding from a diversity of sources to help these efforts.

Helping people within this region to understand the importance of protecting our native species and what they can do to control the invasive exotic species that threaten them will create a unified effort to keep this area an important resource and place of enjoyment.



CM-CISMA Priorities

Based on limited funding and time available to control numerous invasive exotic species within the five-county region, it is important to consider both species type and location when determining what to prioritize when planning treatment. By incorporating the information found from the MISIN map and using the priority locations and priority species list created for CM-CISMA, a plan of action can be determined for cases with multiple species that fall in the same tier on the priority species list. A priority system will be further developed using CM-CISMA priority species, locations, MISIN map and Nature Conservancy Decision Analysis Tool.

Priority Locations

Priority Locations are key areas that are considered alongside the species priority list when determining how to spend resources within the CM-CISMA region. To better monitor these areas they will each be mapped and characteristics noted. Invasive work for these areas will take priority over others that may have species in the same priority tier (listed in the following section). The following are characteristics considered to determine priority locations:

- Presence of “Early Detection Rapid Response” (EDRR) species
- Presence of native species of special importance
- Unique ecosystem to the region
- Outlier area or outside edge of current invasive-occupied area to prevent spread to new locations
- High visibility and high recreation use
- Infestations would create safety issues
- Accessibility (Permission for entry, cost and equipment needed to access)

Priority Species

Education about the impacts of all the invasive exotic species found in or threatening the area will be offered. However, key species will be given a higher priority when educating, monitoring and controlling. Species that are highest on the priority/tier list will have a greater amount of time and dollars spent as it becomes more available than those lower on the list. The following table is the CM-CISMA species priority list:

Common Name	Scientific Name	Habitat
Tier 1: Early Detection Rapid Response		
Brazilian Elodea	<i>Egeria densa</i>	Aquatic
Chinese yam	<i>Dioscorea oppositifolia</i>	Aquatic
European frog-bit	<i>Hydrocharis morsus-ranae</i>	Aquatic
Giant hogweed*	<i>Heracleum mantegazzianum</i>	Terrestrial
Hydrilla	<i>Hydrilla verticillate</i>	Aquatic
Japanese stiltgrass	<i>Microstegium vimineum</i>	Terrestrial
Invasive swallow-wort	<i>Cynanchum spp.</i>	Terrestrial
Kudzu	<i>Pueraria montana var. lobate</i>	Terrestrial
Lyme grass	<i>Leymus arinareus</i>	Terrestrial
Mile-a-minute weed	<i>Persicaria perfoliate</i>	Terrestrial
Parrot feather	<i>Myriophyllum aquaticum</i>	Aquatic
Tier 2: Priority Species		
Flowering rush	<i>Butomus umbellatus</i>	Aquatic
Knotweeds*	<i>Fallopia spp.</i>	Terrestrial
Oak wilt*	<i>Ceratocystis fagacearum</i>	Terrestrial
Phragmites*	<i>Phragmites australis</i>	Aquatic
Starry stonewort*	<i>Nitellopis obtuse</i>	Aquatic
Tier 3		
Autumn olive*	<i>Elaeagnus spp.</i>	Terrestrial
Garlic mustard*	<i>Alliaria petiolaria</i>	Terrestrial
Japanese barberry*	<i>Berberis thunbergii</i>	Terrestrial
Japanese honeysuckle*	<i>Lonicera japonica</i>	Terrestrial
Invasive buckthorns*	<i>Rhamnus spp.</i>	Terrestrial
Multiflora rose*	<i>Rosa multiflora</i>	Terrestrial
Purple loosestrife*	<i>Lythrum salicarium</i>	Aquatic
Watercress*	<i>Nasturtium officinale</i>	Aquatic
Tier 4		
Bittersweet nightshade*	<i>Solanum dulcamara</i>	Terrestrial
Bull thistle*	<i>Cirsium vulgare</i>	Terrestrial
Canada thistle*	<i>Cirsium arvense</i>	Terrestrial
Cow vetch*	<i>Vicia cracca</i>	Terrestrial
Curly pondweed*	<i>Potamogeton crispus</i>	Aquatic
Dame's rocket*	<i>Hesperis matronalis</i>	Terrestrial
Eurasian watermilfoil*	<i>Myriophyllum spicatum</i>	Aquatic
Scotch pine*	<i>Pinus sylvestris</i>	Terrestrial
Spotted knapweed*	<i>Centaurea stoebe</i>	Terrestrial

*Denotes the species is present in the Central Michigan service area.
Additional species will be added to the list as needed.

CM-CISMA Organizational Structure

Fiduciary

- The Fiduciary is responsible for housing and advising the coordinator, administrating the budget and providing reimbursements.

Steering Committee

- All five counties will be represented on the steering committee. Steering committee meetings typically occur bi-monthly with extra meetings possible. Committee members are expected to attend most meetings or call in (a minimum of 50%). Committee members are required to have support letters for their time commitment in CM-CISMA from their organization, and be an active participant in meetings, administration follow-up and projects.
- The steering committee will ensure deliverables are being met, decide on work priorities and help secure new funding. The committee will provide feedback on grant proposals prior to submission.
- Letters of support, including match funding, are expected from each steering committee organization.
- A chairman will be voted in annually by the committee, with the role of leading the meetings and ensuring the meeting's agenda is completed.

Staff (Coordinator)

- The coordinator is responsible for the day-to-day operations of the CM-CISMA. This includes the organization and coordination of the CM-CISMA by attending and helping lead steering committee meetings and communicating with landowners, partners, steering committee members and the fiduciary.
- The coordinator is accountable for completing the deliverables set for grants, grant data reporting and overseeing implementation of the strategic plan. Along with securing permits that are needed to fulfill the previously stated tasks.
- The coordinator will support collaboration of invasive exotic species management within the five-county region by helping secure funding for invasive work, developing a plan to document priority species and locations and overseeing potential additional staff and/or contractors.
- The coordinator will lead and coordinate educational programming and outreach through social media and community connections.
- The coordinator will be given rights determined by the steering committee to complete deliverables within a determined amount of resources without the steering committee's approval.

Partners

- Partners are organizations within the area that have signed a memorandum of understanding (MOU) document that describes their commitment to the CM-CISMA activities. Each partner organization agrees to report required grant documents (e.g. match and activities documents), attend partner meetings and promote the CM-CISMA. The goal of the CM-CISMA is to have a large number of active partners representing all five counties including governmental, non-profit, and private.

Performance Indicators

1. Outreach and Education

- a. Develop awareness of CM-CISMA (*1st quarter – literature and social media presence*)
 - i. where to find information
 - ii. what our purpose (mission) is
- b. Public awareness of early detection species
- c. Respond to public inquiries on invasive exotic species through email and phone
- d. Invasive exotic species education/workshops (*12 active outreach efforts*)
 - i. Schools and organizations
 - ii. Conferences/info booths and displays
 - iii. Public programming and invasive plant pulls
- e. New educational literature – CM-CISMA (*brochure*)
- f. Increase Passive Outreach through social media, educational literature, automated email, link to website, logo items (shirts, pens, etc.) (*30,000 impressions*)
- g. Have a mechanism in place to respond to invasive exotic species concerns from the public
 - i. Have a contact list for contractors
 - ii. Treatment methods for various invasive plants – handout or electronic version
- h. Develop a method to evaluate outreach and education impacts

2. Control Efforts

- a. Further develop a priority system using CM-CISMA priority species, locations, MISIN map and Nature Conservancy Decision Analysis Tool
- b. Inventory priority invasive exotic species based on the priority system developed (*200 acres*)
 - i. Have high priority locations mapped
 - ii. Incorporate SB-CISMA and MISIN data of the mentioned five counties into CM-CISMA data
- c. Determine a plan to control early detection invasive exotic species in the CM-CISMA
- d. Provide information to MISIN to help with further efforts of tackling invasive exotic species (*200 detections uploaded*)
- e. Share mapping and data with all CM-CISMA partners
- f. Work with the county road commissions, conservancies, MDNR, non-profit organizations, etc. to control invasive plants through treatment (*100 acres*)
- g. Increasing understanding of Oak Wilt expansion and best management practices

3. Funding

- a. Secure sustainable funding sources to educate and control invasive exotic species in the five counties for CM-CISMA (*1*)
 - i. CM-CISMA will develop a list of funding sources available in our region which will include community foundations, private foundations and corporate giving programs. Private foundations that support conservation work in the five-county region include: the *Herbert H. and Grace A. Dow Foundation*, *Gerstacker Foundation*, and *Alden and Vada Dow Foundation*. In addition, we will evaluate all federal and state grant opportunities including the Great Lakes Restoration Initiative, United States Fish and Wildlife Service Partners for Wildlife Program, and state grants.
- b. Create a diverse funding stream
 - i. CM-CISMA will evaluate cost share programs for invasive exotic species treatment to assist invasive exotic species management on private and public land. These funds can be used both as match and to assist in developing financial sustainability.
- c. Receive in-kind match from partners

4. CM-CISMA Organizational Structure

- a. Strengthen relationships, knowledge of CM-CISMA and invasive exotic species with Partners
 - i. Inform partners of how their involvement benefits their organization
 - ii. Increase the number of Partners (30)
 - iii. Have partner participation from all five counties
 - iv. Have committed partners
- b. Have a coordinator in place
- c. Operate under set roles and responsibilities
- d. Have committed steering committee members with the same mind-set who feel good about the direction and structure of the CM-CISMA
- e. Hold regular steering committee meetings (6-12)
- f. Hold regional partners meetings (2)
- g. Explore future employee possibilities (Educator, strike team, etc.)
- h. Consider creating subcommittees (marketing, education, monitoring/control, funding, etc.)