



Detroit River Western Lake Erie Cooperative Weed Management Area

Strategic Plan 2025 -2030

Prepared by:

Jessica MacTavish-Bogda

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Contact Information

DR-WLE CWMA Coordinator

Jessica MacTavish-Bogda

Detroit River International Wildlife Refuge
5437 W. Jefferson Ave.
Trenton, MI 48183

734-249-6887

drwlecwma@gmail.com

DR-WLE CWMA Strike Team Leader

Kaitlyn Chisholm

Detroit River International Wildlife Refuge
5437 W. Jefferson Ave.
Trenton, MI 48183

Social Media/Website

- www.drwlecwma.org
- www.facebook.com/drwlecwma
- www.instagram.com/drwlecwma

This document is subject to change as needed.

Introduction

Invasive species continue to be a problem not only locally, but within every state, nation, and worldwide. Invasive species are a costly issue that requires much more time and resources to combat once established versus if they're caught early or prevented entirely. It has been estimated that invasive species have cost over \$1.2 trillion over the last 50 years globally (Zenni et al. 2021). The United States alone experiences over \$26 billion in damages annually from invasive species (Crystal-Ornelas et al. 2021) while the Great Lakes region experiences over \$200 million in damages annually (Rothlisberger et al. 2012). The introduction of these species comes from a variety of sources that each have their own challenges in addressing. That is where organizations like the Detroit River-Western Lake Erie Cooperative Weed Management Area (DR-WLE CWMA) comes in.

The DR-WLE CWMA was formed in 2011 by 13 partners – federal, state, and local governments, non-governmental organizations, tribes, and universities – dedicated to removing and preventing the spread of invasive species in Wayne and Monroe Counties. The DR-WLE CWMA is one of 22 Cooperative Invasive Species Management Areas (CISMAs) in the state of Michigan that work on the forefront of invasive species prevention, detection, and eradication. As of 2024, the DR-WLE CWMA has over 20 partners that share the same goal and vision on combating invasive species. To assist in achieving these goals, the DR-WLE CWMA and its partners use defined Early Detection and Rapid Response (EDRR) protocols to identify local populations of invasive species and remove them through mechanical and chemical means. The DR-WLE CWMA also participates in community outreach, educating the public about invasive species and the harm they cause to our native ecosystems in the hopes of spreading awareness to communities that may not otherwise know.

The purpose of this strategic plan is to better identify, define, and outline the goals and methods of invasive species management in Wayne and Monroe Counties. It is also intended to serve as a guide for the direction that the DR-WLE CWMA and its partners take regarding the management of invasive species in the next five years. For the purpose of this document and providing an understanding, the DR-WLE CWMA defines an invasive species as *“a non-native species that has spread beyond its native range and has the potential to cause harm to the environment, people, and the economy.”*

Currently, the DR-WLE CWMA has identified four main strategic goals internally and externally in the efforts of invasive species management.

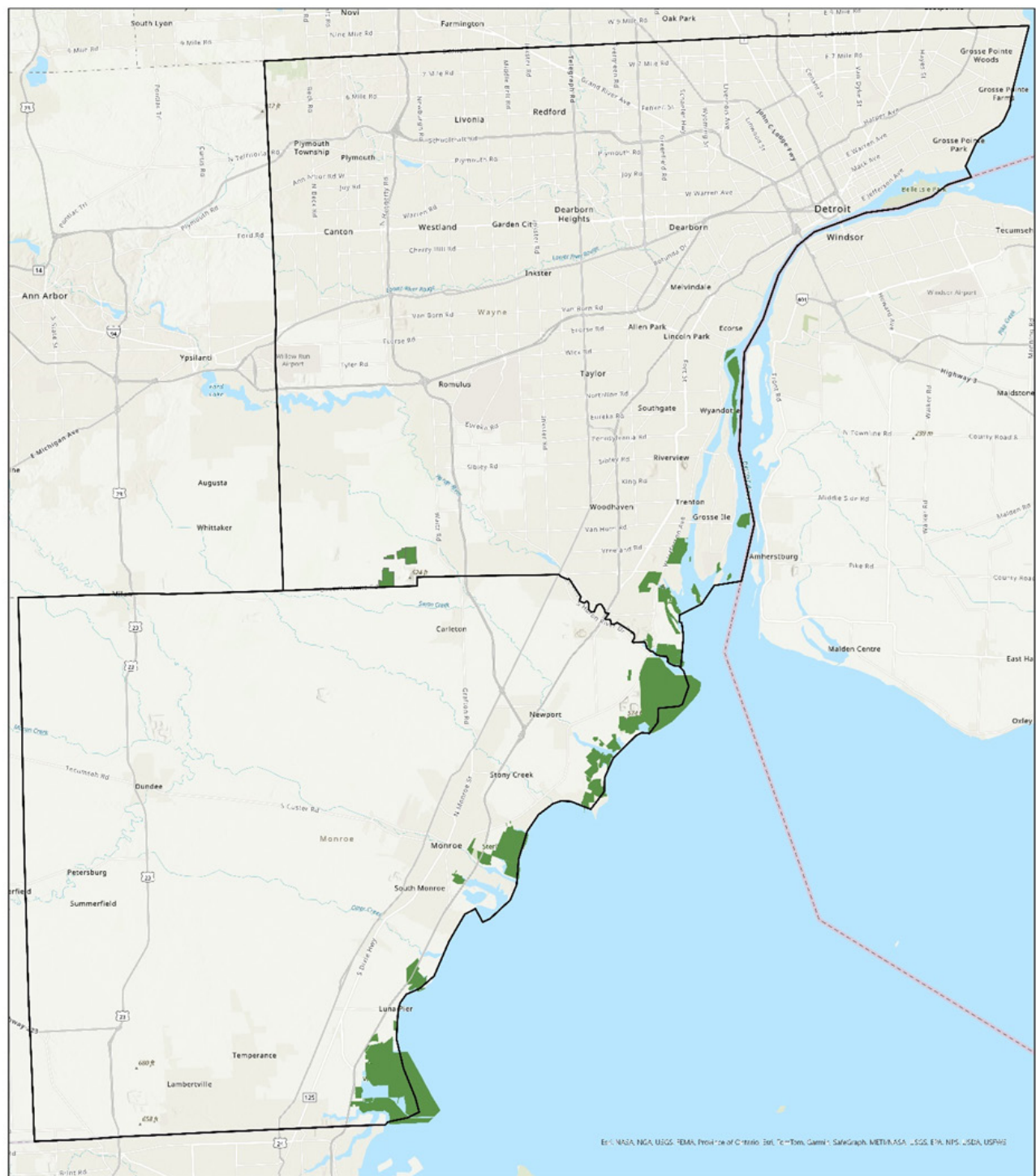
1. Maintain the day-to-day operations of the DR-WLE CWMA
2. Provide EDRR and treatment efforts to partners based on prioritized management of established and newly emerging invasive species
3. Provide outreach and education to the public and partners regarding invasive species
4. Maintain the DR-WLE CWMA's ability to function in the long-term

Scope

DR-WLE CWMA's geographic scope covers Monroe and Wayne Counties in southeast Michigan, which spans approximately 1,353 square miles (or 865,920 acres) of land and water (State Statistics 2024). Partners of the DR-WLE CWMA make up approximately 18,640 acres of varying ecosystems from wetlands to prairies to forests to coastlands (**see Figure 1**).

Invasive species continue to be an ongoing issue and the DR-WLE CWMA has been and is dedicated to the continuing detection, prevention, and removal of these species in Wayne and Monroe Counties. The DR-WLE CWMA's service area is an interesting combination of highly urbanized and rural all at once. The high urbanization of the area provides ample opportunity for invasive species to spread both to and from Wayne and Monroe Counties. There are several major highways (I-75, I-275, I-94, and I-96), railways, and shipping channels that transect the area that all serve as potential vectors of introduction (**see Figure 2**).

The high potential for introductions and *spread* of invasive species makes monitoring and management of upmost importance. The DR-WLE CWMA will continue to make invasive species priority through the continued monitoring and management of problem species, the conservation and restoration of native ecosystems, and the education of both partners and the public. Monroe and Wayne Counties have both suffered the highest wetland loss in the state of Michigan at 93% and 90% respectively. The work that the DR-WLE CWMA and its partners do is vital when trying to protect and restore habitats like these and prevent further losses within county borders and elsewhere.



Produced by DR-WLE CWMA
Trenton, Michigan
Produced: January 2024
Basemap: ESRI Imagery
File: CWMA Partner Properties.aprx

□ County Boundaries
■ Partner Owned Land

0 3 6 12 Miles



Figure 1. Map of DR-WLE CWMA's partners and the county boundaries.



**Wayne and Monroe county boundaries,
urban sprawl footprint, major roads,
and active railroads**



Produced by DR-WLE CWMA
Trenton, Michigan
Produced: JULY 2024
Basemap: ESRI Imagery
File: CWMA Partner Properties.aprx

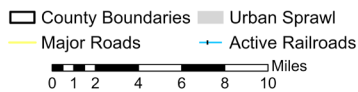


Figure 2. Map of potential avenues for invasive species introduction and spread.

Strategic Goals

Day-to-Day Operations

The day-to-day operations that support the DR-WLE CWMA and its overarching goal of invasive species management are outlined below. While the listed operations are by no means, exhaustive, they are the ones that have been identified as key to the continued functioning of the DR-WLE CWMA in order to serve partners and the community.

For a better understanding of how the DR-WLE CWMA is structured, please refer to **Appendix B**.

Operation	Frequency
Steering committee meetings	Quarterly* <i>*As time, resources, and partner availability allow</i>
Host pre-survey and post-surveys & treatments partner meetings	April (pre-surveys) December (post-surveys & treatments)
Collect Bottomlands Agreement from partners	February
Cultivate and maintain partnerships	Ongoing/Continuous
Seek funding from various grants/sources	Ongoing/Continuous
Collect signed Memorandum of Understanding from partners	Every five years* <i>*From date of last signature</i>
Create and disseminate post-surveys & treatments maps to partners	September (survey) January (treatment)
Create and disseminate annual report to partners	January
Conduct EDRR surveys & prioritized treatments on partner properties	May – August (surveys) August – February (treatments)
Cultivate and maintain education & outreach efforts	Ongoing* <i>*Attend at least four outreach events annually</i>
Apply for appropriate permits to conduct treatments	February

Maintain and repair field and office equipment	Ongoing/Continuous
Host Marsh Master Partner meetings	March/As needed

Methods

Not all of the necessary operations require explanative strategies to implement, so only the ones that have been identified have been pulled out.

Operations:

1. Steering committee and partner meetings
 - a. Partnerships and collaboration are one of the most important ways a Cisma functions. Participation of partners goes alongside that; if there's no participation from partners, then is the Cisma operating efficiently or impactfully?

In order to increase partner participation, the DR-WLE CWMA aims to host steering committee meetings quarterly. The steering committee aims to consist of three to five members selected by partners from their organization with a chairperson voted in by majority. The goal of the steering committee is to determine the direction the DR-WLE CWMA would like to take and assess the progress of actions taken by the DR-WLE CWMA.

- b. Alongside quarterly meetings for the Steering committee, the DR-WLE CWMA will continue to engage with *all* partners via continued pre- and post-season meetings to disseminate information and allow discussion of efforts and concerns.
2. Seek out various funding sources
 - a. Funding has been and continues to be one of the DR-WLE CWMA's biggest needs and struggles. The DR-WLE CWMA coordinator will seek to rectify this by seeking out funding from various sources with possible assistance from the steering committee, Chair, and Co-Chair as time and resources permit.
 - b. Potential funding sources currently identified are the Michigan Invasive Species Grant Program (MISGP), Great Lake Restoration Initiative (GLRI), and Sustain Our Great Lakes (SOGL).

Early Detection and Rapid Response (EDRR)

The DR-WLE CWMA continues to utilize [EDRR protocols](#) established in 2015 and updated in 2025 due to their success. These protocols are used to determine the population size, density, location, history, expansion probability, and examine site quality and level of concern. Using these protocols allows the DR-WLE CWMA to survey well over 8,000 acres of lands used by the public and partners.

When able, DR-WLE CWMA conducts invasive species surveys annually to monitor the spread and distribution of invasive species throughout the service area. These surveys take place at units owned or cooperatively managed by partners of DR-WLE CWMA. These units are surveyed strategically from south to north due to plant phenology (i.e. species further south will be more detectable earlier in the year versus those in the north).

Species surveyed include all present on the [MDNR Michigan Invasive Species Watchlist](#) and any plants that are unfamiliar and in need of examination; these unfamiliar plants can be/are recorded under a new point in the Fieldmaps or Survey123 apps with photos and detailed descriptions. Because the list of invasive species is extensive and there is limited resources and time, treatment of invasive species identified are prioritized based on grant obligations and a three-tiered ranking system that evaluates treatment feasibility and presence/absence (see **Appendix A**).

Control and Management

Utilizing species-specific best management practices (BMPs), DR-WLE has and will continue to manage invasive species within Wayne and Monroe Counties. This will be done with a combination of control methods based on plant species, current research, BMPs, and site specificities.

Objectives:

1. Manage and control emerging and established invasives effectively based on research, priority goals, and BMPs.
2. Encourage stewardship and management of invasive species by partners and communities.
3. Work with local, state, and federal governments to manage and control invasive species.
4. Continue use of proper decontamination protocols for all equipment used.
5. Continue to contribute to MISIN and PAMF.
6. Assist partners and communities with restoration of sites and continued monitoring of them.
7. Update the Strategic Management Plan every five years or as needed.

Education and Outreach

Education and outreach are a huge component in raising awareness about invasive species, how they are spread, how they can be managed, and what members of the public/community can do to help. DR-WLE CWMA is a huge resource for both partners and the community and wishes to continue to be so to provide quality suggestions/information based on BMPs and latest research.

Objectives:

1. Share information on BMPs and stewardship with the general public and partners through workshops, assemblies, presentations, and field days.
2. The coordinator will attend trainings, webinars, and meetings to stay up to date on available information that can disseminated to partners and the community.
3. Expand outreach/education efforts into more underprivileged areas.
4. Continue to update the DR-WLE CWMA website (drwlecwma.org), Facebook page (facebook.com/drwlecwma), and Instagram (Instagram.com/drwlecwma) with job postings, latest invasive species information, staff changes, and events.
5. Continue to push forward and support state and federal initiatives such as: [Clean, Drain, Dry](#); [Don't Move Firewood](#); [Ripple](#); [Play, Clean, Go](#); ect.

6. Brainstorm new and inventive ways to disseminate information of problem species to the public and partners in a way that removes guilt, shame, and blame.

Long-term Survival

The DR-WLE CWMA is determined to remain relevant and present in Wayne and Monroe Counties. Long-term survival of organizations like the DR-WLE CWMA is challenging and requires constant work. The list below is what has been identified as needed to ensure that the DR-WLE CWMA can continue to function sustainably in the long-term.

Operation	Frequency
Cultivate, maintain, and seek partnerships	Ongoing/Continuous
Seek funding from various grants/sources; if no funding source is identified or obtained, plan how the DR-WLE CWMA should respond to continue functioning	Ongoing/Continuous
Update invasive species list based on local, State, and Federal concerns	As needed
Staff the DR-WLE CWMA adequately as needs change and grow	Annually/Ongoing
Grow and maintain partner engagement	Ongoing/Continuous
Maintain and develop long-term storage for survey and treatment data, outreach materials, and documents/records related to the DR-WLE CWMA	Ongoing/Continuous
Establish chair, co-chair, and steering committee	Ongoing/Continuous
Continue to have staff attend trainings on invasive species management	Ongoing/Continuous

Methods

Not all of the necessary operations require explanative strategies to implement, so only the ones that have been identified have been pulled out.

Operations:

1. Cultivate, maintain, and seek partnerships
 - a. Partnerships are the main way an organization like the DR-WLE CWMA exists and can continue to function. Special consideration should be given to established partners to continue cultivating engagement. The DR-WLE CWMA aims to reiterate

that it is a resource for all partners to utilize equally. Increasing communication with partners and hosting open discussions are one avenue to address this.

- b. New partnerships are an essential component of sustaining the DR-WLE CWMA long-term. The coordinator and steering committee will occasionally seek out new partnerships.
2. Seek out various funding sources; if no sources are identified then develop a plan to address continued functioning
- a. Funding is ultimately the key to the successful survival of the DR-WLE CWMA. It is constant process of searching, finding, applying, and obtaining funding that is readily available and is enough to support functioning. The coordinator, with assistance (as needed) from the chair, co-chair, and steering committee, will continue to seek out known reliable sources as well as seek out new opportunities.
 - b. What happens if there's a lapse in funding? That's a question that doesn't have a clear answer. If there's a lapse in funding, then no staff can be hired or paid and most likely will lead to the halt of DR-WLE CWMA functions.

The best solution is not to allow a lapse in funding, but this is easier said than done, so in the event of a lapse, essential duties would ideally be transferred to the agreed upon partners until funding is restored.

Current Partners

The DR-WLE CWMA is lucky to have the support of a multitude of partners, through which, we are able to continue to do our work. Below is the list of current DR-WLE CWMA partners.

Alliance of Downriver Watersheds	Monroe Conservation District
Bay Creek Hunt Club	Monroe County Road Commission
City of Monroe	National Park, Service, River Raisin National Battlefield Park
DTE Energy	Saint Therese IHM Senior Living
Eastern Michigan University	The Nature Conservancy, Michigan
Friends of the Rouge	U.S. Fish and Wildlife Service, Detroit River International Wildlife Refuge
Huron – Clinton Metropolitan Authority	Wayne County
International Wildlife Refuge Alliance	Wyandot of Anderdon Nation
Michigan Department of Natural Resources, Wildlife Division	

Appendices

Appendix A: Priority Invasive Species

Invasive Plant Species Surveyed & Groupings

PRIORITY SPECIES: species with treatment potential that are already within the DR-WLE CWMA's service area, whether it be long standing populations or new invasions

PRIORITY SPECIES			
Amur honeysuckle	<i>Lonicera maackii</i>	Glossy buckthorn	<i>Frangula alnus</i>
Autumn olive	<i>Elaeagnus umbellata</i>	Golden-and-silver honeysuckle	<i>Lonicera japonica</i>
Black alder	<i>Alnus glutinosa</i>	Itadori knotweed	<i>Reynoutria japonica</i>
Common buckthorn	<i>Rhamnus cathartica</i>	Multiflora rose	<i>Rose multiflora</i>
Common privet	<i>Ligustrum vulgare</i>	Phragmites	<i>Phragmites australis</i>
Cut leaf teasel	<i>Dipsacus laciniatus</i>	Red barberry	<i>Berberis thunbergia</i>
Dame's rocket	<i>Hesperis matronalis</i>	Roundleaf bittersweet	<i>Celastrus orbiculatus</i>
European frog-bit	<i>Hydrocharis morus-ranae</i>	Tatarian honeysuckle	<i>Lonicera tatarica</i>
Garlic mustard	<i>Alliaria petiolata</i>	Wild Teasel	<i>Dipsacus fullonum</i>
Giant knotweed	<i>Reynoutria sachalinensis</i>		

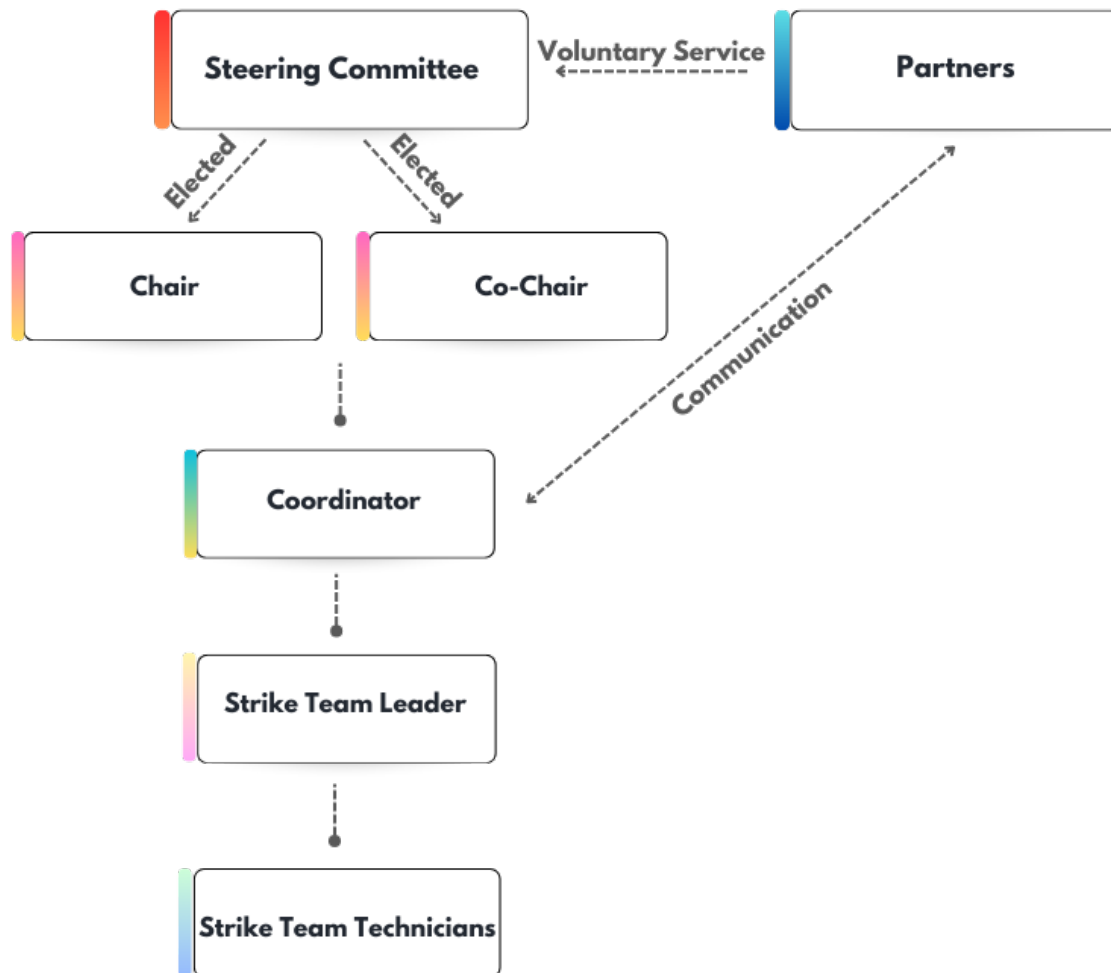
EDRR SPECIES: species that we keep an eye out for that aren't yet detected in our service area and have the highest priority if found

EDRR SPECIES			
Black swallow-wort	<i>Vincetoxicum nigrum</i>	Mile-a-minute weed	<i>Persicaria perfoliate</i>
Carolina fanwort	<i>Cabomba caroliniana</i>	Pale swallow-wort	<i>Vincetoxicum rossicum</i>
Cinnamon vine	<i>Dioscorea polystachya</i>	Parrot feather watermilfoil	<i>Myriophyllum aquaticum</i>
Common water hyacinth	<i>Pontederia crassipes</i>	Purple jewelweed	<i>Impatiens glandulifera</i>
European waterclover	<i>Marsilea quadrifolia</i>	Starry stonewort	<i>Nitellopsis obtusa</i>
Hydrilla	<i>Hydrilla verticillata</i>	Stiltgrass	<i>Microstegium vimineum</i>
Kudzu	<i>Pueraria montana var. lobata</i>	Water lettuce	<i>Pistia stratiotes</i>
Lesser celandine	<i>Ficaria verna</i>	Yellow floating heart	<i>Nymphoides peltata</i>

ADDITIONAL SPECIES: species we keep an eye on that are widespread throughout the DR-WLE CWMA's service area/state and/or not feasibly treatable

ADDITIONAL SPECIES			
Black locust	<i>Robina pseudoacacia</i>	Purple loosestrife	<i>Lythrum salicaria</i>
Creeping thistle	<i>Cirsium arvense</i>	Spiked watermilfoil	<i>Myriophyllum spicatum</i>
Curly leaf pondweed	<i>Potamogetan crispus</i>	Spotted knapweed	<i>Centaurea stoebe</i>
Floating primrose-willow	<i>Ludwigia peploides</i>	Tree-of-Heaven	<i>Ailanthus altissima</i>
Flowering rush	<i>Butomus umbellatus</i>	White poplar	<i>Populus alba</i>

Appendix B: DR-WLE CWMA Structure



Appendix C: Links

<https://www.michigan.gov/invasives/id-report>

<https://drwlecwma.org/our-watch-list/>

<https://drwlecwma.org/our-members/>

<https://www.misin.msu.edu/>

<https://www.cleandraindry.org/>

<https://www.dontmovefirewood.org/>

https://www.canr.msu.edu/invasive_species/ripple/

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