



**Jackson Lenawee Washtenaw
Cooperative Invasive Species Management Area
Strategic Management Plan
2023- 2028**



The species shown on the cover of this strategic management plan is the invasive mute swan (*Cygnus olor*). Hunting mute swans is not allowed. If you have mute swans on your property and wish to remove them or their nests and eggs, you must request a permit from your local DNR office. If there are mute swans on public property and are creating conflict, contact the DNR to determine what kind of permits are needed and who needs to submit the application. For more information on mute swan removal permits, link to the procedures and policy document, and contact information, please visit this link:

<http://www.michigan.gov/dnr/managing-resources/wildlife/wildlife-permits/mute-swan-removal-applications-permits>

Photo Credit: Shikha Singh

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I. Introduction

According to the International Union for Conservation of Nature (IUCN), invasive alien species are on the rise worldwide and more than a third of initial introductions have been recorded between 1979 and 2014¹. Within the United States, invasive species have contributed to the decline of 42% of threatened and endangered species², costing the country approximately \$120 billion a year. As of 2018, approximately 187 non-native species have become established within the Great Lakes region since the 1800s³. Some invasive species are of concern to specific stakeholders, such as mile-a-minute weed being of concern to Christmas tree farms (at least 20+ Christmas tree farms in the JLW CISMA region). Other invasive species such as spotted lanternfly, which is a watchlist species that can damage important fruit and hardwood trees, is a concern for a broad spectrum of stakeholders including the farming community, hobby gardeners, public entities that manage parkland, and commercial and residential landowners. A small population of spotted lanternfly was recently detected in Oakland County, Michigan and a known, viable nesting population has been detected in Ohio, a 2-hour drive southeast of Lenawee County. Although prevention is an integral part of invasive species management, a coordinated, early detection, rapid response eradication program is needed if managers and stakeholders want to reduce negative impacts stemming from new invasions in both aquatic and forested areas^{4,5}. In many cases, costly short-term eradication efforts might be preferable to long-term damage and control costs⁴.

To address invasive species in the tri-county area, a collaborative group of stakeholders applied for and received a grant to establish the "Jackson, Lenawee and Washtenaw Cooperative Invasive Species Management Area (JLW CISMA)". The JLW CISMA's purpose is to prevent, detect, eradicate, and control invasive species in the area, create a strategic plan for reducing the threat of invasive species, and provide outreach and educational opportunities for local citizens and stakeholder groups. The JLW CISMA is also working to coordinate and support partner efforts to survey and develop a protocol for early detection and a rapid response plan.

This strategic plan is intended to identify goals, management actions and inform the future direction of invasive species management in the Jackson, Lenawee and Washtenaw region as overseen by the JLW CISMA. It is also intended to guide the CISMA and its partners' management actions on the topic of invasive species.

II. Vision and Mission

The JLW CISMA strives to increase community awareness regarding invasive species, promote measures to increase the resiliency of our terrestrial and aquatic ecosystems in the face of invasive species, and to increase the capacity to manage invasive species by providing resources and assistance to partners and tri-county residents to prevent, detect and perform early detection-rapid response. The JLW CISMA uses the definition of "invasive

species” as defined by the Michigan Department of Natural Resources (MDNR): “An *invasive species is one that is **not native** and whose introduction causes harm, or is likely to **cause harm** to Michigan's economy, environment, or human health.”*

The JLW CISMA has five overarching objectives in achieving this mission.

Objective 1: Maintain day-to-day operations of the JLW CISMA.

Objective 2: Organize and provide invasive species education, outreach, and engagement.

Objective 3: Inventory priority areas or areas of concern within the tri-county region for invasive species, as determined by the steering committee, CISMA Coordinator and partners.

Objective 4: Rapid response and strategic management of invasive species prioritized by tiers.

Objective 5: Ensure the long-term sustainability and function of the JLW CISMA.

III. Scope

Geographic Scope

The geographic jurisdiction of the JLW CISMA includes Jackson, Lenawee, and Washtenaw counties (Figure 1). Our three counties are diverse from a land use/cover and demographic perspective. Jackson, Washtenaw, and Lenawee counties each have 19.8%, 9.8% and 7.13% wetland cover, respectively⁶. There are also population differences with the total population for each county being 158640, 367627 and 98623 respectively. Highway corridors can be both direct and indirect vectors of invasive species spread. Weeds or seeds may be brought in during right-of-way maintenance or drop off vehicles while travelling or at rest stops. Trucks can also indirectly transport invasive species via contaminated loads or egg masses laid on vehicles or pallets. A few major highways run through our region including US 127 (a highway linking north and south Michigan), and Interstate 94 (linking eastern Michigan to mid-Montana). US 23 (Washtenaw County) and US 223 (Lenawee County) are major travel routes into the region from Ohio and other southern locations. US 12 (Washtenaw and Lenawee Counties) is another busy route that runs along the southern border of Michigan.



Figure 1. Map of the three counties (Jackson, Lenawee, and Washtenaw) located within the JLW CISMA boundaries.

Strategic Scope

The JLW CISMA’s overarching goal is to maintain a sustainable and healthy environment which benefits native species and the communities of Jackson, Lenawee, and Washtenaw County. The JLW CISMA is a hub for information and assistance for a variety of stakeholders and partners as we work to address challenges resulting from invasive species. We actively work with our partners to increase the number of outreach and educational opportunities and reach underserved communities that have not been historically targeted. Underserved communities include (but are not limited to) visible minorities, immigrants, and ESL (English as a second language) groups, commercial businesses such as construction, landscaping, nurseries (aquatic and terrestrial), bait fish, and aquaculture companies.

The Role of Partnerships

We seek to increase capacity for invasive species management via education, outreach, and building partnerships with a variety of organizations. Partners may include, but are not limited to: units of government, non-profit organizations, businesses, and citizen groups/associations who are interested in the management of invasive species within the

tri-county region. To be a partner, organizations must submit an official and signed letter indicating a willingness to support CISMA goals and objectives and promote CISMA activities and initiatives.

Partner responsibilities and benefits include:

1. An opportunity to serve on various CISMA committees
2. An opportunity to provide input into the direction of the CISMA and shape future management decisions and goals
3. Attend JLW CISMA partner meetings
4. Provide input on CISMA training and activities
5. Are notified of new and emerging invasive threats facing the tri-county region
6. Opportunities to apply for small grants for management/eradication when available
7. Receive outreach materials
8. Request training and informational seminars for their networks and members

The JLW CISMA will carry out its goals, present information, and conduct activities in an unbiased, non-confrontational, and transparent manner as to build trust within the community. In addition to outreach and education, the JLW CISMA will work towards increasing its capacity to survey terrestrial and aquatic environments within the tri-county region, and to offer treatment and training opportunities when appropriate and as funding allows.

Forming strong partnerships across the region is imperative in managing invasive species, especially across political boundaries. The JLW CISMA seeks to bring together partners to address invasive species issues in the region, strives to build new partnerships and supports partners to refine, adapt and update local goals and objectives to meet the changing environmental landscape. The CISMA will continue to rely on partners for their expertise and manpower, and keep them apprised of opportunities to participate in public engagement, survey, and treatment activities. Partners will continue to be encouraged to coordinate, assist, or attend JLW CISMA activities.

Periodically, the JLW CISMA will be applying for various grants that require partner match and support letters. Partners who submit match letters (e.g., committing staff or volunteer time, venue use, or other resources) for those grants will be given priority when implementing grant objectives and activities. In instances where partners joined on post grant application, or the CISMA is approached by community members and non-partner organizations, the steering committee will provide guidance on if and how to include these groups in meeting those grant objectives as funding permits.

To document our progress and improve future efforts and outcomes, the JLW Cisma will disseminate an annual report to all partners and funding agencies summarizing activities and management efforts.

The Role of Conservation Districts

The Jackson County Conservation District Manager and the JLW Cisma Coordinator currently administer the MISGP grant funds and day-to-day grant activities. Under the 2023 to 2028 Strategic Plan, each of the conservation districts will manage their respective funds and activities (with respect to promised “match”) and help in the promotion of the JLW Cisma, including tasks such as sharing Facebook posts, disseminating JLW Cisma information in newsletters, handing out printed materials at local events and within their offices when appropriate.

IV. Objectives and Their Outcomes

Objective 1: Maintain day-to-day operations of the JLW Cisma

- Recruit partners and ensure responsibilities and expectations (e.g., volunteer recruitment, requests for match when applying for grants, etc.) are clear and being met
- Maintain regular and transparent communication to promote collaboration and sharing of invasive species related information between partner organizations
- Ensure grant deliverables are being met, progress reports submitted, and respond to requests for information from partners, community members and granting agencies

Outcome	Frequency
Steering committee* meets in-person or virtually (to be decided by the steering committee) and makes decisions by majority vote <i>*Must be from a partner organization to be eligible to serve on steering committee</i>	Every other month on the last Monday.
Host partner meeting	Every other month on the last Monday.

Partner organizations are identified, contacted, and recruited to increase the capacity of CISMA, and to share in the exchange of knowledge and expertise	Ongoing
Partners sign or submit a letter of support to document agreement and commitments made between partner organizations and the CISMA	Reach out to three groups a year
CISMA applies for grants and will seek letters of support when necessary. Seek out funding for coordination, research, and restoration in conjunction with education and outreach.	As needed (two priority grants are MISGP (DNR) and GLRI (Forest Service).
Create and maintain organizational chart showing structure of the CISMA	Complete, update as needed
Bylaws: Creation of a governance document	Updated at the same time as Strategic Plan
Maintain availability as resource and update invasive species resources for partner organizations	Ongoing
Conduct a survey to 1) assess partner needs and what services they can provide the CISMA, and 2) broadcast outreach needs	Yearly (spring-prior to summer field work)
Produce and share an annual report of progress and accomplishments	Yearly

Objective 2: Organize and provide invasive species education, outreach, and engagement

- The three county Conservation Districts will serve as the primary education outlets for the JLW CISMA
- Key educational program concepts: 1) Identification of invasive species, 2) Understanding factors leading to their spread, and 3) Acting to manage and reduce the number of infestations
- Incorporate language, design, or communication alternatives that allow for inclusivity and accessibility when possible (incorporating different languages, alternate text, large font etc.)
- Seek out locations that are universally accessible when possible (wheelchair

accessible, sign language interpreters/close captioning, and aides if possible, etc.)

Outcome	Frequency
Promote JLW Cisma mission and services available at virtual and in-person events (creating a brochure, mentioning tool rental program, brief introduction at partner events etc.)	Ongoing; Update brochure once a year
Create and distribute educational materials about JLW Cisma priority invasive species (including but not limited to post cards, brochures, flyers etc.)	Ongoing
Prioritize outreach responses to documented and/or nearby invasive species problems; reach out to communities who need assistance	As needed
Coordinator will maintain an online presence for the JLW Cisma (JLW Cisma website, Facebook, Twitter, Instagram, monthly bulletin, and email list serve) and share information from partner and governmental organizations when appropriate	Ongoing
Attend local and regional events with table display and educational materials	Ongoing
Organize (in the absence of funding, promote events on website) Aquatic Invasive Species (AIS) education and outreach events and training such as Landing Blitz, Boat Wash, Clean Boats Clean Waters etc.	Ongoing (at least 3 mobile boat wash events a summer with MSU mobile boat wash crew)
Promote established statewide and national outreach campaigns and invasive species programs such as: PlayCleanGo, CleanDrainDry, Don't Move Firewood, etc.	Ongoing

Focus on decontamination and invasive species pathways (aquatic and terrestrial)	Ongoing
Identify other opportunities for passive outreach campaigns	Ongoing
Offer training sessions geared towards partner/local agency land managers, staff, stewards; businesses that perform management (landscapers, lawn services etc.) if funding permits	3/yr (one per county)
Target key groups such as, but not limited to local private landowners, youth and student groups, and local businesses of concern (nurseries, pet stores, bait shops, agricultural entities, wildlife organizations and construction companies etc.)	Ongoing

Objective 3: Inventory priority areas or areas of concern within the tri-county region for invasive species, as determined by the steering committee, Cisma Coordinator and partners.

Surveying for invasive infestations will be important to the planning process for JLW Cisma, and will be prioritized as follows:

- Where new watchlist species have been found, and surrounding areas
- Where the threat of new invasive species being brought in or transferred to other areas exists, such as high traffic areas, public access sites, places where watchlist species may be sold or consumed
 - If a watch list species is found, the appropriate department (DNR, EGLE or MDARD) at the State of Michigan will be notified for guidance on how to proceed
- When appropriate, incorporate surveying for newly listed watchlist species alongside current survey activities

Outcome	Frequency
Identify an Early Detection and Response (EDR) watch list (prioritize what is on the watchlist)	Ongoing
Familiarize JLW CISMA staff and partners with current watchlist species on the State of Michigan website.	Post link to social media page at least once a year; update strategic management plan appendix listing the species at the same time as the strategic plan
Use MISIN for tracking new invasive species detections, mapping extent of established infestations, and expansion of infestations.	Ongoing
Host survey events within the JLW CISMA boundaries, prioritize regions that are in high use/traffic areas, may have public access points, or a new watchlist species found nearby	As needed
Include partners or assist partner watchlist species survey efforts	As relevant
Organize species identification opportunities in the field for partner organizations to improve survey accuracy of known watchlist species	As needed (and if threat exists for potential spread to adjacent partner property)
Notify State and Federal agencies, as well as JLW CISMA partners of new watchlist species findings	As needed
Identify invasive species in high quality areas for conservation planning efforts	As needed

Objective 4: Rapid response and strategic management of invasive species prioritized by tiers.

- Invasive species treatment by the CISMA and sites treated will be determined by the steering committee based on the tier system and prioritization protocol listed below
- Treatments will be conducted following best practices for individual species, obtaining permits as needed, and following decontamination guidelines to prevent the spread of invasive species to other areas
- To encourage invasive species control and eradication, and if funding is available, offer small grants to residents and partner organizations for contracted treatment
- Each treatment plan will vary but partnering organizations and landowners are expected to monitor treatments and report outcomes yearly to the CISMA.

Outcome	Frequency
Gain landowner consent for surveying and other actions	Ongoing
Support invasive species management as resources allow	Ongoing
Provide support for contracting management when resources allow	Ongoing
Collect annual reports on monitoring results of treatment from partners	Yearly
Report JLW CISMA management to MISIN treatment tracker (See Appendix B)	Ongoing
Purchase equipment as needed and provide opportunities for public use in collaboration with Conservation Districts	Ongoing
Discuss development of strike team to conduct treatments of invasive species	As needed and if funding is available

Support restoration after invasive species removal (provide information, assist native seed collection efforts, survey for invasive species etc.)	Ongoing
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JLW CISMA Small Grants or Cost-Share for Invasive Species Treatment

When funding permits, the JLW CISMA may offer private residents and partner organizations the opportunity to apply for small grants or cost-share to control and eradicate invasive species. In extenuating circumstances, or regions with multiple landowner collaborations, larger grants may be awarded at the discretion of the steering committee and as funding permits. The Steering Committee will ultimately determine what grants get funded and what CISMA services are provided using the tier system and criteria outlined below.

JLW CISMA Resources and Services Provided Prioritized at Each Tier:

The below three tiers identify how the JLW CISMA will prioritize invasive species early detection and rapid response efforts and management actions, and list possible services staff may provide.

*Tier 1: Watchlist species** and species hazardous to human health*

Newly detected species, such as watchlist species, are prioritized since the probability of eradication or containment is higher than established invasive species. Hence, early detection and timely reporting of invasive species is integral for preventing their spread and minimizing negative ecological, economic, and health impacts

JLW CISMA Services: A “Tier 1” species could result in the JLW CISMA taking some or all of the following actions: obtaining photographic documentation for identification purposes, a site survey to map species extent, and a species report to MISIN or other relevant local, state, federal agency officials. If funding is available for treatment, the JLW CISMA staff will help facilitate. If funding is not available, JLW CISMA staff or the steering committee will work with agency officials and local partners to determine next steps and assign duties that are agreed upon and determined feasible by all parties. As needed, the JLW CISMA could collaborate to develop an “early detection rapid response plan-of-action”, facilitate partner involvement, and provide outreach and educational materials.

**State of Michigan watchlist: <https://www.michigan.gov/invasives/id-report/watchlist>

Tier 2: Species or specific areas supported by outside grants awarded to the JLW CISMA

Species or areas for which the CISMA has an active grant open and has grant funding in hand will be prioritized in the second tier.

JLW Cisma Services: JLW Cisma involvement will be specific to project needs but could involve site visits, MISIN reporting, development of educational material, facilitation of partner involvement, management support, continued funding development, and grant reporting. In most cases, grant funds cannot be used until the grant has been signed by the granting agency/authority and the grant recipient. Any services provided will be done so in accordance with grant rules and regulations.

Tier 3: Response to a community request for assistance with an invasive species

A community member request, such as from a neighborhood Homeowner Association, recreational club, or concerned citizen, will be addressed as resources allow. Invasive species in this tier are likely established across the region.

JLW Cisma Services: The JLW Cismas involvement will be designed to support the needs of the community on a case-by-case basis and may include: the development of various education and outreach materials, hosting or participating in events or seminars, or advising partners and residents on a management plan.

Prioritization ranking tool within each tier (one point for each condition):

To determine the priority of multiple projects within a single tier, the Steering Committee will consider the following ranking criteria:

- I. Site is prioritized in a conservation plan^{***} as determined by the JLW Cisma
- II. Site is considered a high traffic/activity area with a potential for spread
- III. Strong partner support and resource availability
- IV. Site is publicly accessible/visible
- V. Site is privately owned but contiguous to a prioritized site
- VI. Site is privately owned but protected by a conservation easement
- VII. Site is privately owned but owner is willing to provide financial match for treatment

Sites with higher scores will be treated first. Ultimate decisions will be made by majority vote of the Steering Committee

**** Conservation plans may include but are not limited to the watershed conservation plans, county/municipal planning documents, multi-jurisdictional conservational plans that identify high priority areas etc. For individual sites/residential properties, a conservation plan can be a management plan created for that site.*

Objective 5: Ensure the long-term sustainability and function of the JLW CISMA

- Continue to seek funding to support CISMA activities, including:
 - Adequate staffing
 - Ability to produce and disseminate educational materials
 - Attend meetings, trainings, and conferences, and be updated on emerging issues
 - Maintain and reaffirm existing partnerships and collaborative opportunities
 - Build new partnerships

Outcome	Frequency
JLW CISMA staff will seek out funding from a variety of sources to support and enhance CISMA activities (e.g., seasonal employees, field crew, new outreach initiatives etc.)	Ongoing
JLW CISMA partners organizations will seek out funding and additional grants to benefit the CISMA mission and activities (e.g. treatment and outreach)	Ongoing
Maintain partner and collaborator engagement invasive species management	Ongoing
Survey partner needs and determine what activities are needed moving forward	Yearly
Update priority species list and tiers, considering local needs and State priority species	Every two years, or as needed
Continue to use and promote invasive species reporting website MISIN, and explore new programs at regional, state, and federal levels	Ongoing
Continue the development and distribution of outreach materials to stakeholder groups (and ensure that funding exists for staffing and material development)	Ongoing

Maintain an electronic database for relevant outreach materials such as flyers, postcards, and brochures	Ongoing
Continue to hold partner and steering committee meetings (including in the absence of funding)	Ongoing
Attend meetings (virtually and/or in-person) such as MISC, working groups, collaborative conferences to share experiences relevant to the meeting	Ongoing
Fund Development Plan: Develop a formal contingency plan to address how the JLW CISMA will operate if no external funding is received	Update with Strategic Plan

V. Strategies to reach JLW CISMA objectives

Objective 1: Maintain the day-to-day operations of the JLW CISMA

- a) Jackson, Lenawee, and Washtenaw Conservation Districts will work closely together to conduct the outreach activities, and to coordinate activities located within their respective counties.
- b) A steering committee will consist of three to seven members. The core team will consist of three to four permanent members (i.e., one representative from each of the conservation districts plus the JLW Coordinator if funding permits). One additional representative from each county will be asked to serve on the committee and will be pulled from partner organizations. The committee will meet once every two months to discuss the progress of the JLW CISMA and to make decisions regarding activities of the CISMA with input from partner organizations. Any decisions made at the steering committee meeting will occur through voting and must pass by majority. Opportunities to serve on the steering committee will be announced via JLW CISMA communications and will be on a volunteer basis. In the event many individuals volunteer, the core steering committee members will select members to diversify the background, knowledge, and interests of the committee to best serve the JLW CISMSA. The expectation is that core members will be able to track the diversity of previous members and their affiliations (a list will be housed and stored on the JLW CISMA google drive), thus balancing both long and short term needs and objectives of the JLW CISMA.
- c) A governance document will be created to guide meetings and decision-making processes. This will be reviewed and updated as necessary in

conjunction with the strategic plan.

- d) The last partner meeting before the end of the MISGP grant will be designated to celebrate and reflect on the activities of the JLW CISMA and provide input to the future development of CISMA activities.

Objective 2: Organize and provide invasive species education, outreach, and engagement.

- a) The JLW CISMA and its partner organizations will seek out opportunities to increase awareness about the CISMA and the invasive species within and threatening its borders. These opportunities will include, but are not limited to virtual events, sharing information on our website, social media, email list serve, etc. If funding allows, JLW CISMA representatives may also attend outreach events such as county fairs, AIS landing blitzes, adopt a stream events, partner events and classrooms.
- b) JLW CISMA staff (or recruited experts) will speak at CISMA sponsored events such as seminars and training events.
- c) Collaborate, assist and/or promote partner training activities and programs that increase community awareness on the topic of invasive species and to increase identification skills.
- d) Partner organizations can suggest outreach opportunities or invite JLW CISMA to attend events (through emails and at meetings).
- e) Educational materials will be developed and distributed as needed, and try to incorporate different languages and alternate text where appropriate and possible.
- f) Increase the accessibility of CISMA events to include historically underserved populations when possible. Examples can include seeking out venues allowing for wheelchair accessibility, and space for interpreters and aides when possible.

Objective 3: Inventory priority areas or areas of concern within the tri-county region for invasive species, as determined by the steering committee, CISMA Coordinator and partners.

In addition to performing early detection surveys, the JLW CISMA will train partners and citizens to report invasive species to MISIN.

- a) Conduct surveys and public ID training events within the region to monitor for priority invasive species. Surveys will follow proper decontamination procedures as outlined by the State of Michigan⁸. These trainings will support the CISMA's efforts to increase awareness and increase accuracy of field identification of invasive species.
- b) Support partner efforts in surveying for invasive species.
- c) Priority species will be determined by using the State of Michigan's watchlist species (See Appendix A), grants/funding received, and input by the CISMA Steering Committee, JLW CISMA Coordinator, and partners.
- d) To track new occurrences of "Tier 1" watchlist species, a log will be created with information that allows the JLW CISMA to record if the site has been visited, species verified and the date of both occurrence and verification.

- e) If contacted by partners or members of the community regarding help identifying a tier 1 or tier 2 species, photos and written descriptions will be requested. Based on the prioritization model identified in objective 4, the coordinator and/or CISMA staff will perform field visits to identify, document and assess scale of infestation.
- f) If rapid response is needed, follow through with objective 4 “rapid response and strategic management of invasive species” as directed by steering committee.

Objective 4: Rapid response and strategic management of invasive species prioritized by tiers

- a) Gain grant funds to support the treatment of prioritized invasive species. This program will allow for partners and residents within the JLW CISMA boundary to apply for funds to treat invasive species as specified in objective 4.
- b) The JLW CISMA will assist in the management of local populations of invasive species as determined by the tier system described earlier.
- c) Treatment site selection will be determined using a tiered points system (as outlined in objective 4). The ranking system will be reviewed every two years (or earlier if needed) to incorporate new species and changing circumstances.
- d) Established best management practices and protocols will be followed during any treatment and survey efforts. In the absence of established protocols, expertise and treatment experience by our partners and the DNR/DEQ will be used to develop a protocol for treatment.
- e) Treatment will be conducted by partner organizations (who will be reimbursed for contracted treatment if funding is designated for that species under a grant), or contracted out (bid request will be publicly released and advertised on social media, word of mouth, posted on the JLW CISMA website, and emailed out on the partner email listserv).
- f) Annual monitoring of treatment sites will be the responsibility of the respective landowner. The CISMA will perform one site visit post treatment for treatment performed on watchlist species and will continue to monitor treatment sites post treatment as funding and staffing allows.
- g) The JLW CISMA will provide information and resources about invasive species and how to manage them as requested by residents and partner organizations.
- h) If funding exists, the CISMA will maintain tools available to rent in coordination with Jackson, Lenawee, and Washtenaw Conservation Districts (for free with a deposit, or if decided later by the steering committee, for a fee to cover maintenance) so that partners and residents within the JLW CISMA jurisdiction can manage invasive species on their own property. The JLW CISMA will not be responsible for damages incurred by the user to themselves or the environment using rented equipment.
- i) Encourage habitat restoration post invasive species removal by planting native species or promoting management that will maintain native species.

Objective 5: Ensure the long-term sustainability and function of the JLW Cisma

- a) Funding will be identified and pursued by the Steering Committee, the JLW Cisma Coordinator and partners to support JLW Cisma activities.
- b) A yearly survey to partners will be performed to determine partner needs, questions, and requests. In the absence of funding, the survey will serve to update the partners on Cisma activities.
- c) It is important to continue seeking out new partners across the region. The JLW Cisma Coordinator and Steering Committee will periodically send out emails and letters to prospective partner organizations. To be a partner, a signed letter of interest will be required of the partner organization.
- d) The Cisma will provide an overview of Cisma events and activities at the end of the fiscal year. This yearly review document will be shared with partners and sent to prospective partners to provide information to them about the organization.
- e) If no funding is available, essential roles will be designated to partner organizations.
- f) Appendix C shows the organizational structure of the JLW Cisma.
- g) On an annual basis, the JLW Cisma will evaluate operational needs, facilities, staffing, and material needs (transportation, technology) for the future.

VI. List of Current Partners

Jackson Conservation District (fiduciary organization)
Lenawee Conservation District (core member)
Washtenaw Conservation District (core member)
Adrian Garden Club
Grand River Environmental Action Team
Jackson County
Jackson County Department of Transportation
Jackson County Drain Commissioner
Jackson County Master Gardener Association
Jackson County Parks
Legacy Land Conservancy
Lenawee County Drain Commissioner Office
Lenawee County Road Commission
Lyndon Township
Men's Garden Club (Jackson)
Michigan Autobahn Society
Michigan Lake & Stream Associations, Inc.
Michigan Nature Association
Mid-Michigan Land Conservancy
MSU-Extension (Jackson)
Natural Resources Conservation Service
Pittsfield Charter Township
River Raisin Watershed Council
Southeast Michigan Council of Governments (SEMCOG)
Southeast Michigan Land Conservancy
Tecumseh Parks & Recreation
The Nature Conservancy (Michigan)
The Stewardship Network
Upper Grand River Watershed Alliance
Washtenaw County Road Commission
Washtenaw County Water Resources

VII. Appendices

Appendix A. Michigan's Watch List Species

Insects and Tree Diseases (Tree diseases list the scientific name for the pathogen or fungus associated with the disease)

- Asian long horned beetle (*Anoplophora glabripennis*)
- Balsam wooly adelgid (*Adelges piceae*)
- Hemlock wooly adelgid (*Adelges tsugae*)
- Thousand cankers disease (*Geosmithia morbida*)
- Beach leaf disease (*Litylenchus crenatae* and potential associates)
- Spotted lanternfly (*Lycorma delicatula*)

Mammals

- Nutria (*Myocastor coypus*)

Terrestrial Plants

- Asiatic sand sedge (*Carex kobomugi* Ohwi)
- Chinese yam (*Dioscorea oppositifolia* L.)
- Himalayan balsam (*Impatiens glandulifera*)
- Japanese stiltgrass (*Microsegium vimeum* (Trin.) A. Camus)
- Kudzu (*Pueraria montana* var. *lobata*)
- Mile-a-minute weed (*Persicaria perfoliata*)
- Japanese chaff flower (*Achyranthes japonica*)

Aquatic Plants

- Parrot feather (*Myriophyllum aquaticum*)
- Yellow Floating Heart (*Nymphoides peltata*)
- European frog-bit (*Hydrocharis morsus-ranae*)
- European Water-clover (*Marsilea quadrifolia*) – This species is currently allowable for sale and possession. Please contact the EGLE if these plants are observed outside of cultivation.
- Brazilian elodea (*Egeria densa*)
- Hydrilla (*Hydrilla verticillata*)
- Water chestnut (*Trapa natans*)
- Water hyacinth (*Eichhornia crassipes*) – This species is currently allowable for sale and possession. Please contact the DEQ if these plants are observed outside of cultivation.
- Water lettuce (*Pistia stratiotes*) – This species is currently allowable for sale and possession. Please contact the DEQ if these plants are observed outside of cultivation.
- Water soldier (*Stratiotes aloides*)

Fish and other Aquatic Animals

- Invasive carps
 - Silver carp (*Hypophthalmichthys molitrix*)
 - Bighead carp (*Hypophthalmichthys noblis*)
 - Grass carp (*Ctenopharyngodon idella*)
 - Black carp (*Mylopharyngodon piceus*)
- Northern snakehead (*Channa argus*)
- Marbled crayfish (*Procambarus virginalis*)
- Red swamp crayfish (*Procambarus clarkii*)
- New Zealand mud snail (*Potamopyrgus antipodarum*)

Appendix B: Treatment tracker links

Coordinated by Claire Peterson (MISIN) Tel: (517) 355-5965):

<https://portal.asetmsu.edu/arcgis/apps/webappviewer/index.html?id=a7ce199d7d64fe68c5368fc3b436300>

<https://www.misin.msu.edu/files/maps/treatmenttracking/>

Help document:

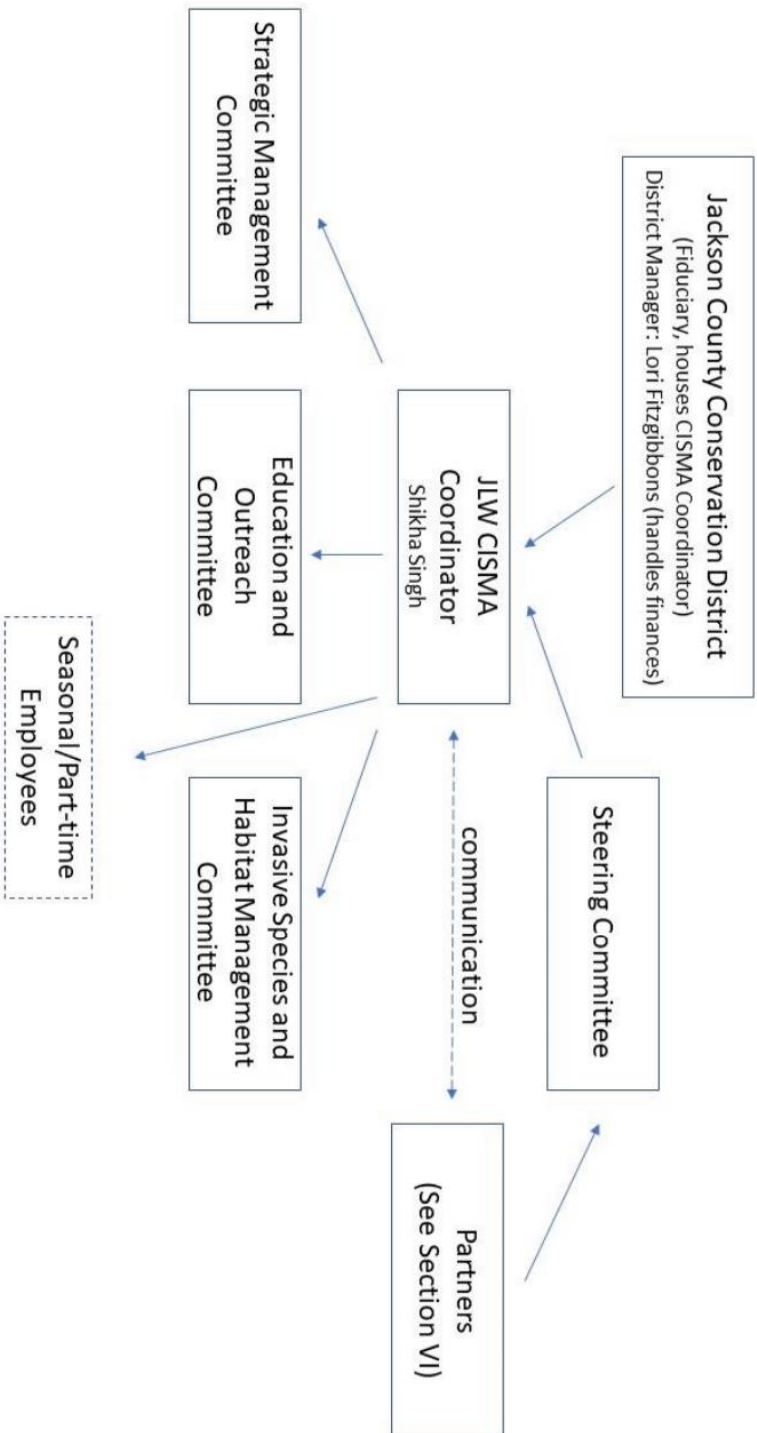
http://www.misin.msu.edu/files/docs/treatment_help.pdf

Data Dictionary:

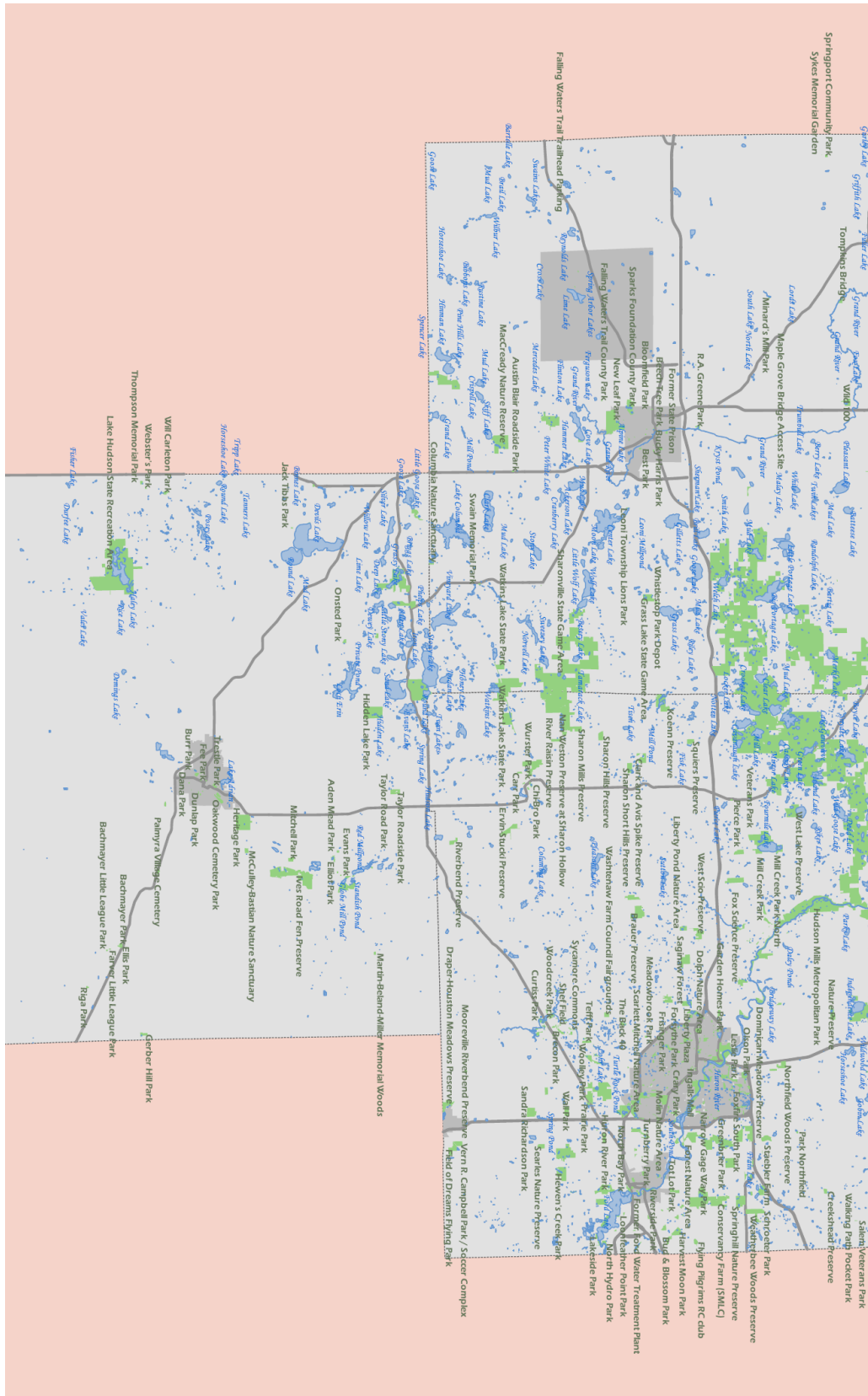
http://www.misin.msu.edu/files/docs/2018_Data_Dictionary.pdf

Appendix C: Organization structure

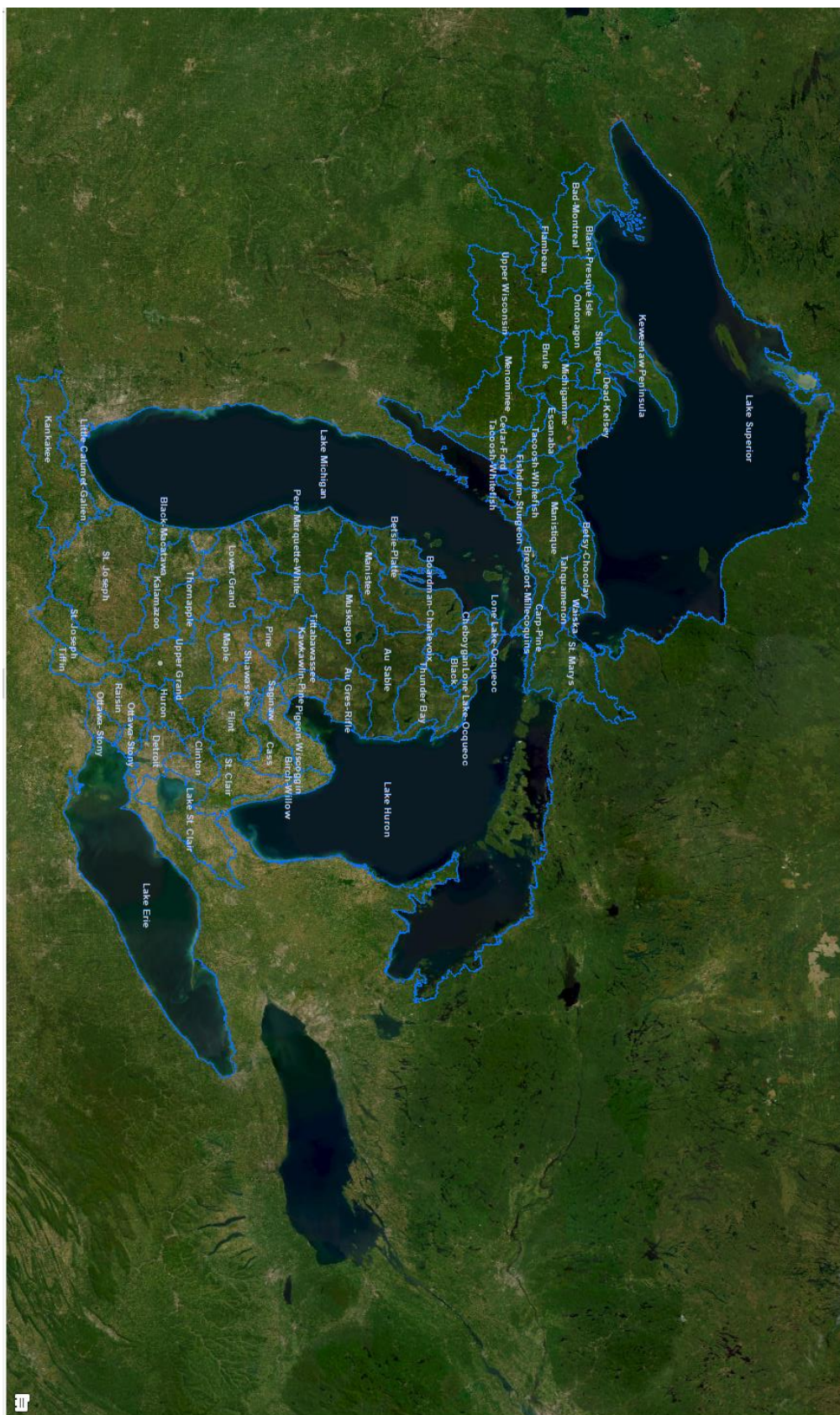
Jackson-Lenawee-Washtenaw Cooperative Invasive Species Management Area Organizational Chart (2018)



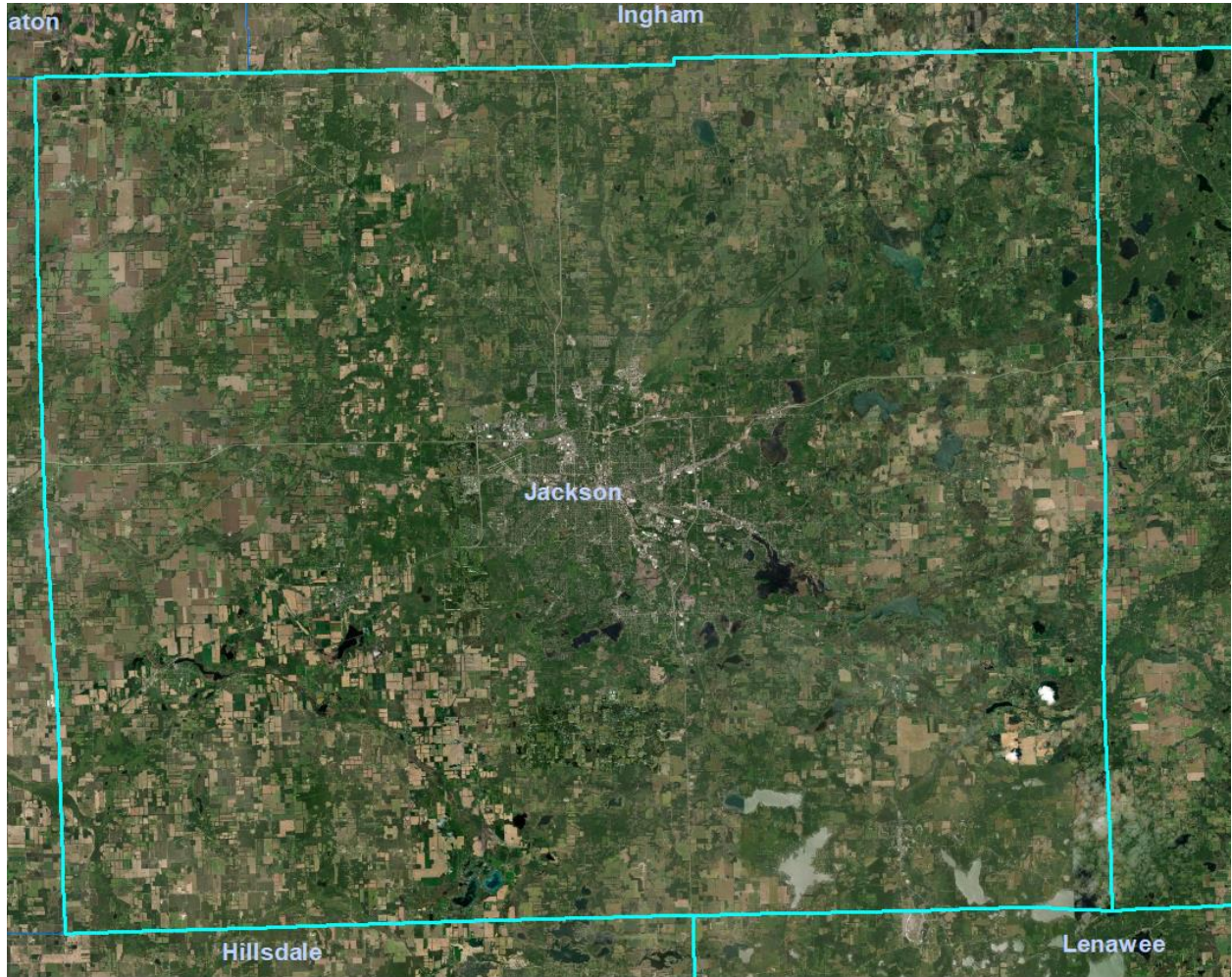
Appendix D: Major Lakes and Natural Areas in the JLW CISMA Region



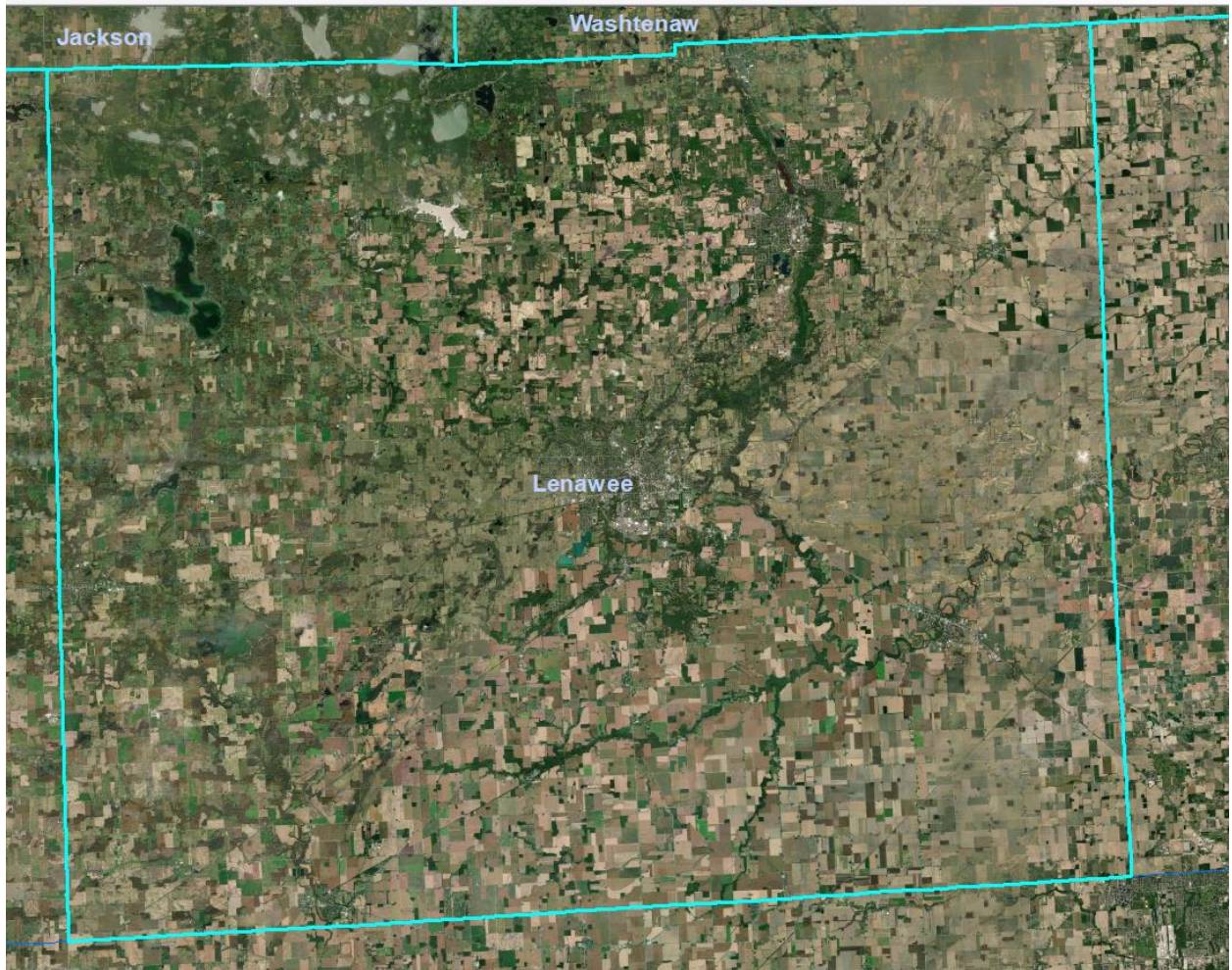
Appendix E: HUC 8 Watersheds in Michigan



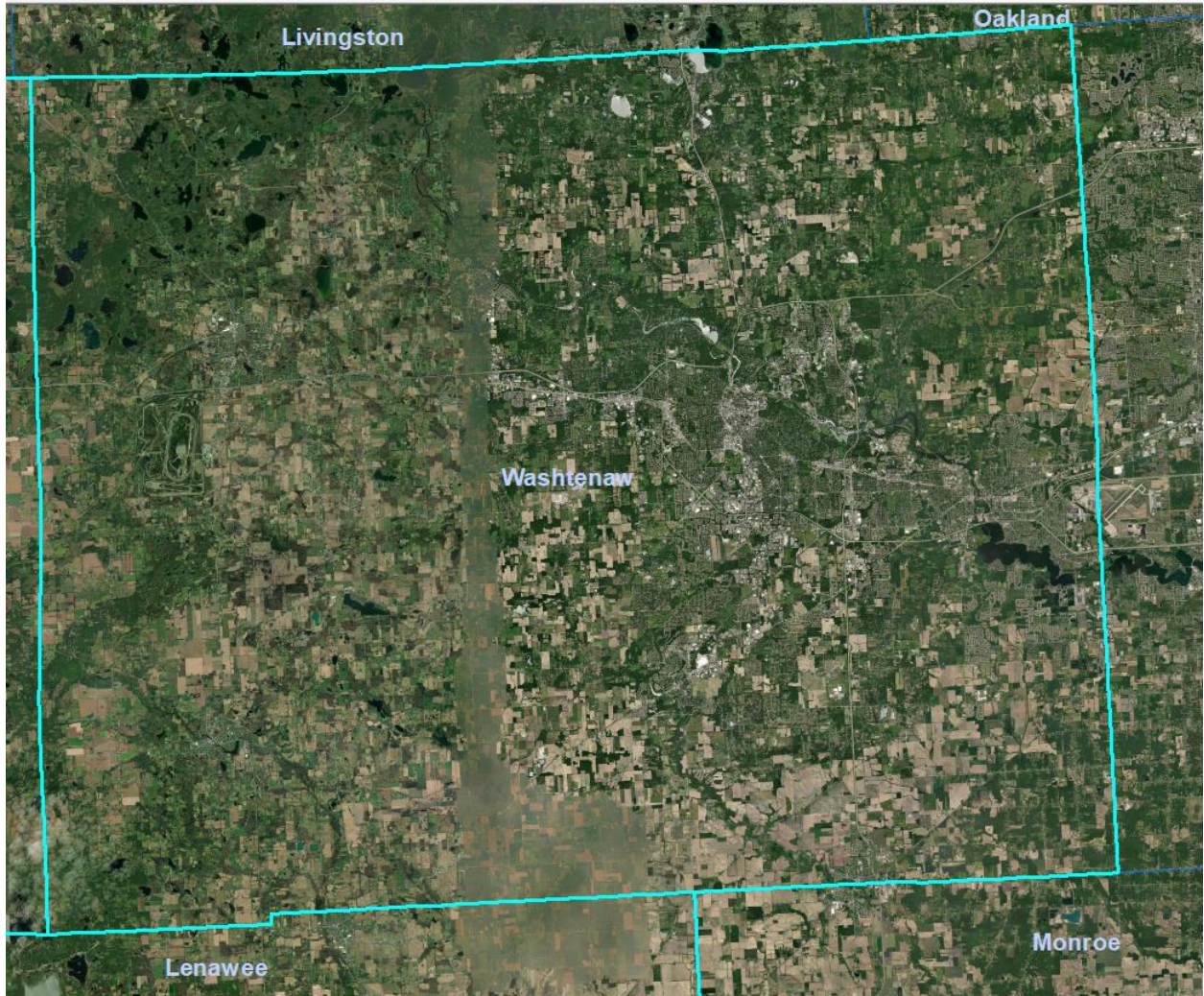
Appendix F: Ariel view of Jackson County



Appendix G: Ariel view of Lenawee County



Appendix H: Ariel view of Washtenaw County



VIII. References

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