Waseca County

Aquatic Invasive Species Prevention Plan

Photos: The Free Press, University of Minnesota

Plan Overview

1.0 Introduction

Aquatic invasive species (AIS) are defined as aquatic organisms that:

- Are non-native,
- Tend to invade ecosystems beyond their natural, historic range,
- Lead to economic and/or environmental harm; and
- Pose potential harm to human health.

Aquatic invasive species such as Eurasian watermilfoil, carp, zebra mussels, and starry stonewort, are currently threatening Minnesota waters.

Zebra Mussels. *(Source: The Nature Conservancy. 2016)*

1.1 Waseca County Infestations

There are currently two lakes within Waseca County that are listed as infested due to Eurasian watermilfoil, Clear and Reeds Lakes. In addition, curly-leaf pondweed is found within Clear, Loon, Sibert, and St. Olaf Lakes.

Eurasian watermilfoil is a submersed invasive aquatic plant that was introduced to the Great Lakes from Europe via ballast tanks. Between the 1950s and 1980s, the invasive plant had reached Midwestern states, primarily spreading by boats. It was first seen in Lake Minnetonka in 1987. This species is classified as a prohibited invasive species, and is unlawful to possess, import, purchase, transport, or introduce in Minnesota.

Invasive Eurasian watermilfoil *(left)* compared to native northern watermilfoil *(right)*. *(Source: Brant Lake Milfoil Control.)*

Eurasian watermilfoil forms dense mats on the water surface. These thick mats can interfere with swimming and entangle propellers which negatively impacts recreational opportunities. The mats also harm local ecosystems by out competing and displacing native aquatic plants which in turn negatively impacts fish and wildlife. Due to its high reproduction rate through stem fragmentation, recreationalists should be on the lookout for Eurasian watermilfoil on boats, trailers, lifts, docks, water sports equipment, or other items on which the plant can become entangled, and promptly remove when found. When inspecting these items for the plant's presence it is important to be able to distinguish it from its native counterpart, Northern watermilfoil. The invasive Eurasian watermilfoil typically has 12 to 21 pairs of leaflets, whereas the Northern watermilfoil plant has between 5 and 9 leaflet pairs.

In 2022 the County, with support from the DNR, Waseca Lakes Association and the City of Waseca treated the entirety of Clear Lake with Fluridone to decrease the abundance of Eurasian Watermilfoil. In the future only spot treatments will be needed to control the population.

Curly-leaf pondweed is a submersed invasive aquatic plant that was first observed in Minnesota in 1910 and can be found in 70 out of 87 Minnesotan counties. The plant was introduced to North America in the 1880s by hobbyists for use as an aquarium plant. Like Eurasian watermilfoil, curly-leaf pondweed is classified as a prohibited invasive species, and is unlawful (a misdemeanor) to possess, import, purchase, transport, or introduce in Minnesota.

Curly-leaf pondweed also forms dense mats of vegetation in water up to ten feet in depth, causing problems for recreationalists and aquatic ecosystems. Curly-leaf pondweed crowds out of native aquatic plants and die-off in mid-summer releases nutrients that lead to large algal blooms and low water clarity in lakes. A single plant fragment can cause a new infestation, so it is important that lake users ensure curly-leaf pondweed is not transported via boats, trailers, lifts, docks, water sports equipment, or other items on which the plant can become entangled.

Curly-leaf Pondweed (Source: USGS)

To more effectively address curly-lead pondweed populations the County acquired an aquatic weed harvester in 2021. A pilot program was created for Clear Lake and harvesting began in 2022 where 230 tons of curly leaf pondweed were removed from the waterbody during the first season. In 2023, 65 tons were removed and in 2024, 213 tons of curly leaf pondweed were removed.

Non-native Phragmites are also found in Waseca County. Phragmites is a tall, perennial grass that grows in wetlands, riparian areas, shorelines, and roadside ditches. It can alter the hydrology of wetland systems, lower plant diversity, impact food webs and reduce the density and abundance of

invertebrates, fish, and waterbirds. A state-wide, coordinated response is currently underway by the DNR to remove non-native Phragmites.

Flowering Rush: flower & submerged vegetation

Non-native Phragmites

1.2 Surrounding County Infestations

Many other lakes within the County are at risk of becoming infested due to the unintentional transport of AIS through aquatic recreationalists. The following table shows the infestations that are present in counties adjacent Waseca:

1.2.1 - Table 1. Infestation Profile: Surrounding Counties

County	Number of Water Bodies Infested	Infested By
Blue Earth	4	Eurasian Watermilfoil
Le Sueur	12	Eurasian Watermilfoil
Le Sueur	3	Flowering Rush
Rice	7	Eurasian Watermilfoil
Rice	3	Flowering Rush
Steele	1	Eurasian Watermilfoil
Freeborn	0	N/A
Faribault	1	Eurasian Watermilfoil

*Does not include curly-leaf pondweed infestations.

An overview of water resources in the County that have the potential to be impacted by AIS can be found in 4.1 Appendix A: County Water Resources.

1.3 Local AIS Prevention Aid

In 2014, the State of Minnesota Legislature authorized an annual funding stream in Local Prevention Aid “to prevent the introduction or limit the spread of AIS at all access sites within the county,”

(Minnesota Statute 447A.19). Statewide distributions were $4.5 million in 2014 and have been prescribed to be $10 million each year thereafter.

Funds are allocated based on each county's share of watercraft trailer launches (50%), and each county's share of watercraft trailer parking spaces (50%). A map of public water accesses within Waseca County can be found in Appendix B. Annual allocation information for Local AIS Prevention Aid funds received by Waseca County is available via the Minnesota Department of Revenue website under Aquatic Invasive Species Prevention Aid.

This plan acts as a tool for linking Waseca County Water Plan initiatives with local goals for optimizing the use of the Local AIS Prevention Aid funds. In 2014 and 2015, Waseca County met statutory requirements by structuring the County AIS Prevention Plan to provide guidelines for the use of prevention aid proceeds, titling the plan according to the year it was submitted to the Department of Natural Resources. Beginning in 2016, the annual plan was retitled according to the year following the December 31 deadline to outline expenditures for the reporting period, as well as actions to be taken in the following year.

Section 2.0 outlines efforts that Waseca County may undertake to help prevent and manage the spread of AIS within Minnesota.

2.0 County Implementation Actions to Address Aquatic Invasive Species Threats and Damages

2.1 Increase Understanding of Associated Risks and Spreading Pathways		
Action Item	***How Action Supports AIS Prevention***	***Element in State Plan***
Use MNDNR's Infested Waters List to identify County linkages to water bodies both inside and outside County limits.	Some AIS may travel or be more easily transported between infested waters and other connected water bodies; knowing these linkages will help prioritize prevention resources.	Prevention – Understand Risks
Install traffic counters at public accesses to determine most frequented sites.	Install traffic counters at public accesses to determine most frequented sites. Use results in prioritization efforts.	Prevention – Understand Risks
Utilize risk models to inform prevention and management activities.	Assessing potential for species introduction coupled with habitat suitability will optimize efforts.	Prevention – Understand Risks
Create a GIS mapping application that identifies high priority pathways from waters outside of the County limits as well as local pathways. Evaluate and rank the risk level of pathways annually.	Publishing user friendly resources for public and staff to utilize will allow for the development of focused plans for targeted pathways.	Prevention – Understand Risks
Identify established and new AIS of concern. Develop a County ranking/classification system for species, utilizing the State Rankings list. Publish information on the County website and consider creating a seasonal AIS newsletter for species updates.	Providing readily available information on species and their tiered risks will promote public and staff understanding of what species warrant the highest dedication of prevention efforts.	Prevention – Understand Risks
Maintain electric fish barriers on identified high priority pathways of invasive fish species.	Preventing upstream migration of invasive fish will foster an aquatic environment that is less likely to facilitate additional AIS.	Prevention – Research and Technologies

2.2 Develop and Implement Activities that Address Identified Pathways		
Action Item	***How Action Supports AIS Prevention***	***Element in State Plan***
Invest in decontamination units to be stationed at high priority water bodies.	Decontamination units will limit AIS introduction to non-infested water bodies and will stop the transport of AIS to other water bodies from infested lakes.	Prevention – Research and Technologies
Continue inspection program to include a minimum of three Level 1 Watercraft Inspectors. Conduct 600 hours of inspections during the inspection season.	Watercraft inspectors are primary units for ceasing the introduction of AIS to water bodies. In addition, inspectors help spread accurate outreach messages to boaters.	Early Detection, Rapid Response, and Containment – Public Awareness
Install invasive species disposal stations at public accesses.	Disposal stations encourage boat inspections and manual decontaminations by members of the public while inspectors are on- and off-duty.	Prevention – Research and Technologies
Ensure that local authorities are aware of state regulations that prohibit transport of prohibited invasive species, aquatic plants, and water from designated infested waters. Convene authorities once per inspection season to discuss regulatory updates.	Consistent enforcement of AIS regulations aimed at containment will help to prevent further spread of AIS.	Early Detection, Rapid Response, and Containment – Enforcement

2.3 Increase Awareness of and Participation in Prevention and Management Activities		
Action Item	***How Action Supports AIS Prevention***	***Element in State Plan***
Train County field staff (e.g., zoning, ditch inspector, highway, public health) on practices to avoid spreading invasive species. Coordinate with the MNDNR to hold 1 prevention presentation session during the spring season.	County staff can take simple steps to prevent AIS spread or new introductions and can also set an example for businesses and individuals in the County.	Prevention – Research and Technologies
Annually inspect lake service providers to ensure DNR certification. Distribute certified providers list to County residents.	Lake service providers are primary agents for ceasing the spread of AIS. Ensuring certification reduces introduction and spread potential.	Prevention – Research and Technologies
Develop methods and local training sessions to reduce the risk of invasive species introduction through government and business operations.	The county will help prevent AIS spread by developing and sharing new risk-reduction methods and by identifying actions and operations that could contribute to AIS spread.	Prevention – Research and Technologies
Develop curricula for schools and education materials for events, such as the Waseca County Fair, to support youth education about AIS.	Young people can help prevent the spread of AIS through their own actions and by modeling their knowledge and actions to their families.	Prevention – Public Awareness
Develop and distribute AIS prevention messages targeting riparian landowners who launch watercraft from private residential accesses.	Many watercrafts enter water bodies via private residential properties and are not reached by education and prevention efforts. Increasing contact with this audience will expand local knowledge of AIS prevention.	Prevention – Public Awareness
Coordinate with the MNDNR and adjacent counties to host a day long workshop during Minnesota's Invasive Species month.	Large scale educational events result in the expansion of knowledge, communication networks, and potential volunteers.	Prevention – Public Awareness
Explore partnership opportunities with existing outreach efforts developed by the MNDNR and the Minnesota Sea Grant Program.	Leveraging existing communications materials ensures that the public receives accurate messages about rules and best practices related to AIS prevention.	Early Detection, Rapid Response, and Containment – Public Awareness

Continue collaboration with adjacent counties, watershed groups, and/or jurisdictions whose water bodies connect to the County's to develop a regional approach to AIS prevention.	Because AIS and the individuals who could transport them do not stay inside county borders, effective coordination is necessary to prevent AIS spread.	Prevention – Regional Approaches
Train County field staff (e.g., planning and zoning, public health) on management practices that will maintain and/or create diverse, native landscapes that are resilient to invasive species.	AIS are more likely to thrive in degraded habitats. Stabilizing ecosystems through promotion of native landscapes allows water bodies to be more resistant to AIS.	Prevention – Manage for Prevention
Seek individuals for participation in the MNDNR AIS Volunteer/Ambassador program to distribute educational materials at selected public access points, particularly at high priority landings, including those at Clear, and St. Olaf Lakes.	Targeting educational efforts to the users of a water body may help prevent AIS spread from or into that water body.	Early Detection, Rapid Response, and Containment – Public Awareness
Work with the Stop Aquatic Hitchhikers and Clean, Drain, Dispose campaigns to strengthen awareness of AIS issues in Waseca County. Continue to stock educational brochures at landings, planning and zoning office, and license bureau.	Consistent messaging such as that from the Stop Aquatic Hitchhikers and Clean, Drain, Dispose ads may help educate individuals about their role in AIS prevention.	Early Detection, Rapid Response, and Containment – Public Awareness
Coordinate with the MNDNR to publicize new infestations at access sites, in lake association newsletters, and other local publications. Continue to publish MNDNR Infested Waters list on County website.	Timely and accurate notice of new AIS infestations empowers the public to help prevent the further spread of AIS.	Early Detection, Rapid Response, and Containment – Public Awareness
Develop tailored messages aimed at lake-related businesses (e.g., home builders, developers) and local government staff (e.g., county planners) regarding AIS prevention.	Ensuring that individuals are aware of AIS prevention measures that they can take in the course of their daily work will help to reduce the risk of AIS spread.	Early Detection, Rapid Response, and Containment – Public Awareness
Conduct field surveys for priority AIS and monitor populations using MNDNR protocols.	Surveying and monitoring results on County waters will act as a foundation for prioritizing efforts.	Early Detection, Rapid Response, and Containment

Coordinate with local partners to develop and periodically revise Integrated Pest Management Plans for high priority invasive species in the County.	Integrated Pest Management Plans outline specific actions that result in long-term prevention of AIS while upholding ecological integrity.	Early Detection, Rapid Response, and Containment – Management of Invasive Species
Use integrated pest management to control populations of high priority aquatic invasive plant species.	Effective management of existing AIS populations may reduce the likelihood of further spread.	Management of Invasive Species – Implement IPM Plans
Develop annual request for proposal to award a portion of County Prevention Aid to cities, lake associations, schools, non-profit organizations, or management agencies for actions supporting this plan.	Supporting community involvement in AIS prevention and management activities will maximize awarded Prevention Aid funds and County resources.	Leadership and Coordination – Local

2.4 Broaden Knowledge of and Participation in Early Detection and Rapid Response Activities		
Action Item	***How Action Supports AIS Prevention***	***Element in State Plan***
Obtain and distribute Watch ID cards from the Minnesota Sea Grant Program. Consider partnership with heavily frequented resorts.	Finding new infestations of AIS early is important for preventing further spread. Ensuring that recreationists know what AIS to look for maximizes the chance of early detection.	Early Detection, Rapid Response, and Containment – Detection
Develop a comprehensive system for reporting sightings/presence of high priority AIS within County.	Identifying high priority species and responding with a prompt and coordinated response can reduce the establishment, spread, and negative impacts seen with invasive species.	Early Detection, Rapid Response, and Containment
Encourage County staff, businesses, and individuals to submit samples of suspected AIS to the MNDNR.	The County can support early detection and prevention efforts by helping the MNDNR to quickly confirm new infestations of AIS.	Early Detection, Rapid Response, and Containment – Detection
Augment communication and reporting mechanisms for citizen monitoring of lakes and rivers.	Ensuring that local discoveries of AIS are quickly communicated to the right people will maximize prevention efforts related to new infestations.	Early Detection, Rapid Response, and Containment – Detection
Cultivate partnerships with organizations interested in AIS prevention (e.g., lake associations) to support AIS surveys in water bodies (infested and non-infested) and on docks and lifts.	Leveraging the resources of existing organizations will help to find new AIS infestations more efficiently and to prevent further spread of those AIS.	Early Detection, Rapid Response, and Containment – Prioritize
Coordinate with the MNDNR for information on management of AIS, and adopt control plans utilizing safe and cost-effective techniques.	Effective management of existing AIS populations may help prevent further spread.	Management of Invasive Species - Coordination/ Communication

2.5 Increase County Enforcement Resources		
Action Item	***How Action Supports AIS Prevention***	***Element in State Plan***
Officially designate the Waseca County AIS Task Force through a resolution.	This group will provide a forum for communication, education, and technical planning for County prevention measures.	Prevention – Understand Risks
Ensure that the County's peace officers, including water safety patrol staff, have been trained to enforce AIS laws.	This action will extend the capacity of local enforcement to ensure compliance with AIS laws.	Prevention – Enforcement
Ensure that local authorities are aware of state regulations that prohibit transport of prohibited invasive species, aquatic plants, and water from designated infested waters. Convene authorities annually to discuss regulatory updates.	Consistent enforcement of AIS regulations aimed at containment will help to prevent the further spread of AIS.	Early Detection, Rapid Response, and Containment – Enforcement

2.6 Increase Available Resources and Leverage Partnerships		
Action Item	***How Action Supports AIS Prevention***	***Element in State Plan***
Seek additional funds to implement unfunded actions in this plan.	The effectiveness of AIS prevention actions can be limited by inadequate financial resources.	-Prevention – Funding -Early Detection, Rapid Response, and Containment – Funding
Assist with funding local outreach and monitoring efforts by entities other than the County, including lake associations.	Overall, AIS prevention efforts can be strengthened by supporting the capacity of other local organizations to conduct AIS outreach and monitoring activities.	Early Detection, Rapid Response, and Containment – Detection
Develop and maintain contacts with other local organizations, businesses, and government entities to coordinate efforts.	The participation of local partners is necessary for the County's AIS prevention plan to be effective.	Leadership and Coordination - Local
Facilitate the establishment of local organizations such as County Coalitions of Lake Associations to create partners in implementing the County's AIS prevention plan.	Additional partnerships among local organizations will increase the county's capacity to implement its AIS prevention plan.	Leadership and Coordination - Local
Evaluate AIS prevention efforts and cooperative relationships for possible improvements. Annually update this plan.	Annual plan updates facilitate program growth. Local input contributes to prioritization of plan efforts.	Management of Invasive Species - Coordination/ Communication
Pursue further staff training and certification to increase organizational capacity.	Increases opportunities for staff to utilize new and developing resources for aquatic invasive species early detection and assessment.	Early Detection, Rapid Response, and Containment – Detection
Investigate and pursue additional equipment purchases to increase County's capacity.	Equipment purchases will allow staff to directly evaluate current AIS prevention and treatment efforts and investigate potential new infestations.	Early Detection, Rapid Response, and Containment – Detection
Partner with neighboring counties to develop and implement AIS biological control programs.	Biological control of AIS allows for a cost effective, natural method of control.	Early Detection, Rapid Response, and Containment – Management of Invasive Species

3.0 Updating and Amending the Plan

3.1 Statement of Statutory Requirements.

This plan will be submitted annually to the MNDNR to meet MN Statute 477A.19 requirements, which states, "Each county must submit a copy of its guidelines for use of the proceeds to the Department of Natural Resources by December 31 of the year the payments are received." Each year of submission, the plan will outline expenditures through the funding year, as well as actions to be implemented for the following planning year.

3.2 Document Versioning.

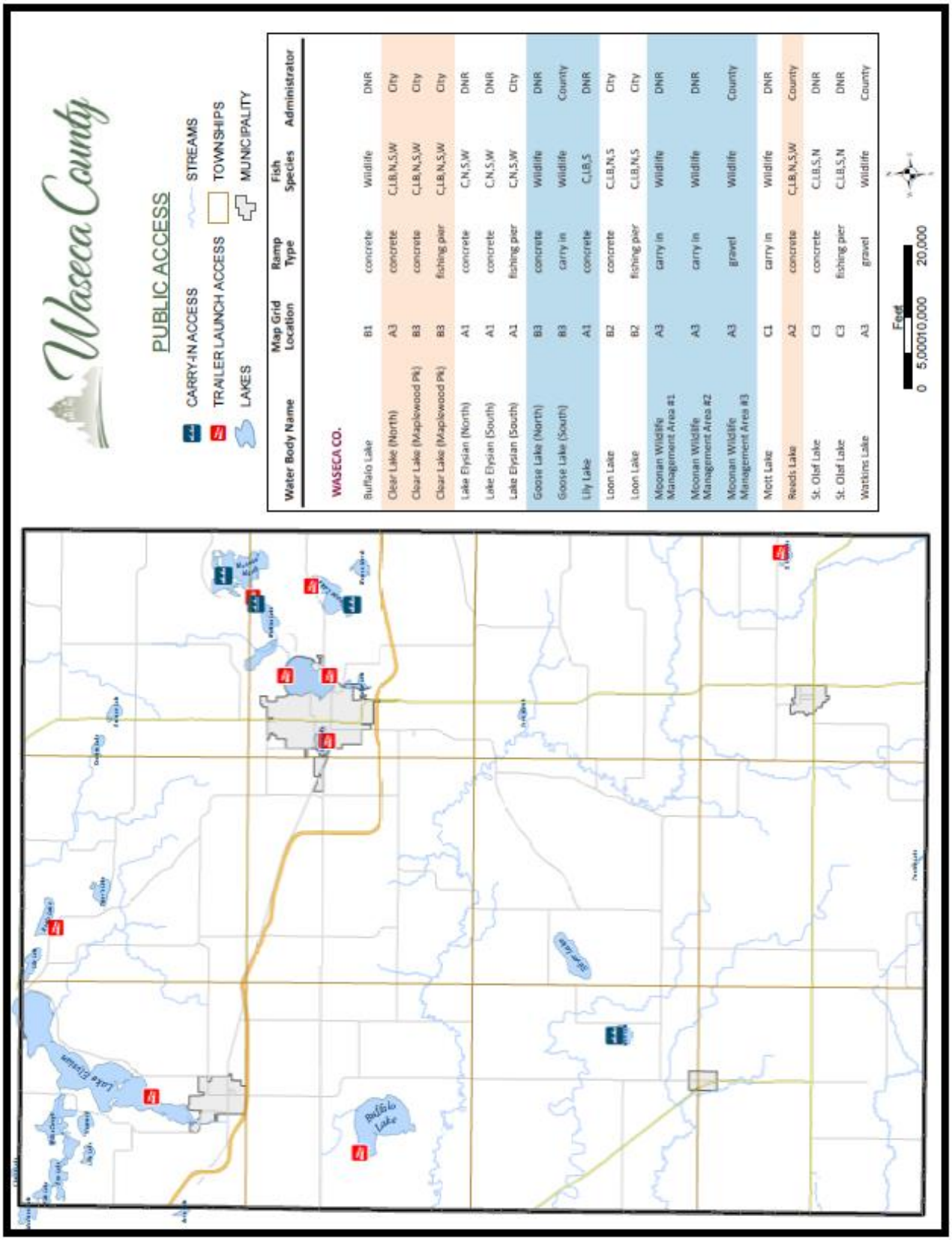
- Original version of this document created by Haley Byron, Waseca County Planning and Zoning, 2018.
- Updated by Eric Miller, Waseca County Land and Water Resources, November 2023.
- Updated by Brian Zabel, Waseca County Land and Water Resources, November 2024.

4.0 Appendices

4.1 County Water Resources, Table 2 - Characterization of Lakes in Waseca County

Number of lakes more than 10 acres in size	26
Number of lakes designated as infested with aquatic invasive species	2
Total number of public water accesses	20
Number of public water accesses with the MNDNR listed as the administrator	8
Number of public water accesses with MnDOT listed as the administrator	0
Number of public water accesses with Waseca County listed as the administrator	6
Number of public water accesses with the township listed as the administrator	0
Number of public water accesses with the city listed as the administrator	6
Estimated number of non-public water accesses*	158

*This number is based off a survey of private docks that are utilized within the County.



Water Body Name	Map Grid Location	Ramp Type	Fish Species	Administrator
WASECA CO.				
Buffalo Lake	B1	concrete	Wildlife	DNR
Clear Lake (North)	A3	concrete	C,LB,N,S,W	City
Clear Lake (Maplewood Pk)	B3	concrete	C,LB,N,S,W	City
Clear Lake (Maplewood Pk)	B3	fishing pier	C,LB,N,S,W	City
Lake Elysian (North)	A1	concrete	C,N,S,W	DNR
Lake Elysian (South)	A1	concrete	C,N,S,W	DNR
Lake Elysian (South)	A1	fishing pier	C,N,S,W	City
Goose Lake (North)	B3	concrete	Wildlife	DNR
Goose Lake (South)	B3	carry in	Wildlife	County
Lily Lake	A1	concrete	C,LB,S	DNR
Loon Lake	B2	concrete	C,LB,N,S	City
Loon Lake	B2	fishing pier	C,LB,N,S	City
Moonan Wildlife Management Area #1	A3	carry in	Wildlife	DNR
Moonan Wildlife Management Area #2	A3	carry in	Wildlife	DNR
Moonan Wildlife Management Area #3	A3	gravel	Wildlife	County
Mott Lake	C1	carry in	Wildlife	DNR
Reeds Lake	A2	concrete	C,LB,N,S,W	County
St. Olaf Lake	C3	concrete	C,LB,S,N	DNR
St. Olaf Lake	C3	fishing pier	C,LB,S,N	DNR
Watkins Lake	A3	gravel	Wildlife	County

4.2 Appendix B

4.3 Appendix C: Prioritization of Water Bodies for Watercraft Inspection Program

Waseca County intends to continue inspection program to include a minimum of three Level 1 Watercraft Inspectors, conducting a minimum of 600 hours of inspections during the inspection season.

The County Watercraft Inspection Program began May of 2015, and focused on water bodies and accesses that were identified as priorities by the County. Prioritization was given to both heavily trafficked lakes and those with known infestations of AIS.

The prioritization scheme for 2025 is reflected below, based on: inspector to recreationist contact; the likelihood of facilitating AIS spread; and upholding non-infested waters.

4.3.1 Table 3 - Public Access Prioritization Scheme for Level 1 Watercraft Inspectors

Access	Water body	Infested?	Species	Priority Level	Inspection Times
South Public Access – Maplewood Park	Clear Lake	Yes	Eurasian Milfoil	High	Weekdays: Mid-morning to evening Weekends: Early morning to evening
Public Access – St. Olaf Lake Park	St. Olaf	Not listed	N/A	High	Weekdays: Mid-morning to evening Weekends: Early morning to evening
Public Access	Reeds Lake	Yes	Eurasian Milfoil	Medium	Weekends
South Public Access – Lakeview Park	Lake Elysian	Not listed	N/A	Low	Weekends, if staffing allows