



City of Shorewood

August 11, 2025
City Council Meeting



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1. Convene City Council Regular Meeting
 - A. Pledge of Allegiance
 - B. Roll Call
 - C. Review and Adopt Agenda

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2. Consent Agenda

- A. City Council Work Session Minutes of July 28, 2025
- B. City Council Regular Meeting Minutes of July 28, 2025
- C. Verified Claims List
- D. Freeman Park Trail Improvements – Final Acceptance & Payment, City Project 22-05

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2. Consent Agenda
 - E. Recruitment for Community Center Attendants
 - F. New Hire: Administrative Assistant
 - G. Freeman Park Field 1 Fence Replacement
 - H. HVAC Maintenance Agreement
 - I. Accept Resignation of Senior Accountant and Approve Recruitment

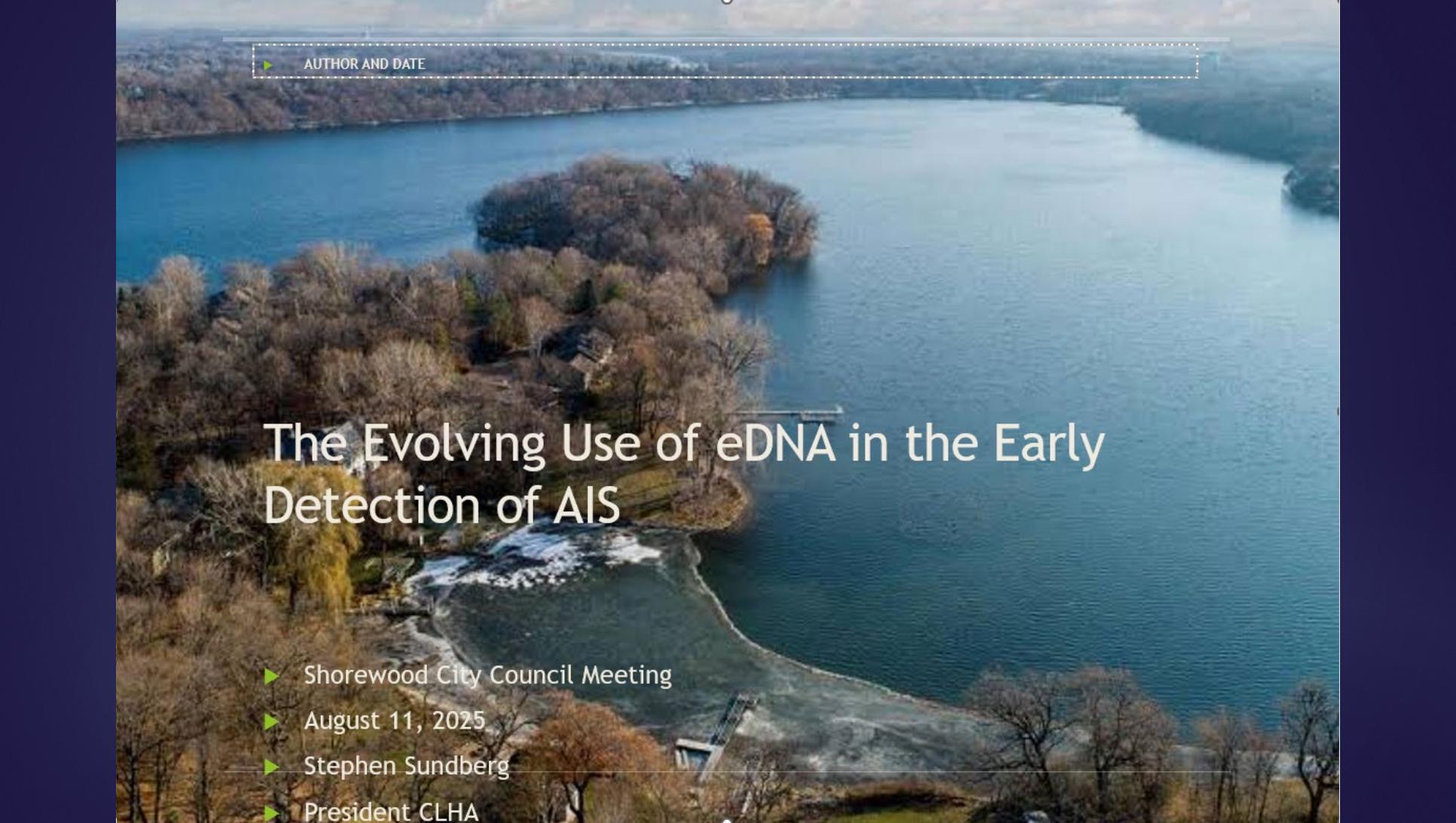
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3. Matters from the Floor

No Council action will be taken.

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4. Reports and Presentations
 - A. Christmas Lake AIS Program Update



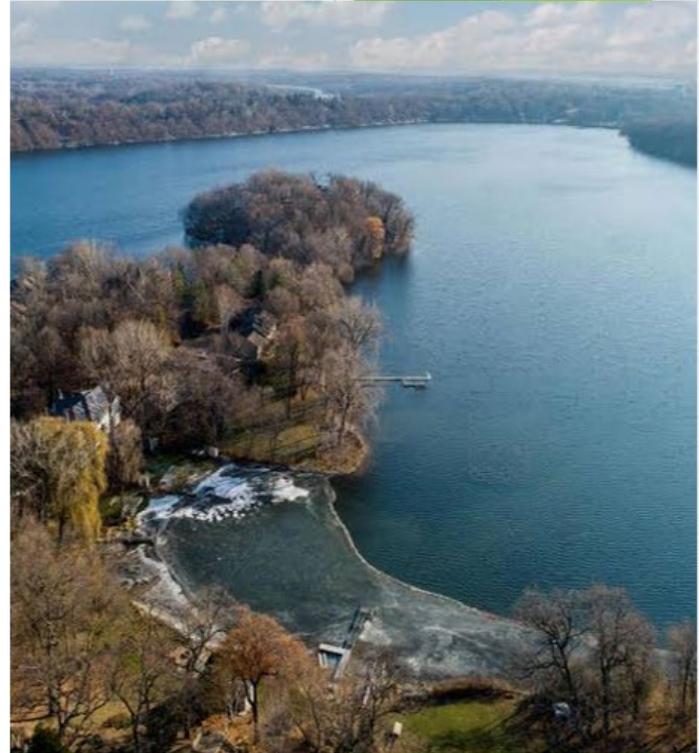
▶ AUTHOR AND DATE

The Evolving Use of eDNA in the Early Detection of AIS

- ▶ Shorewood City Council Meeting
- ▶ August 11, 2025
- ▶ Stephen Sundberg
- ▶ President CLHA

CLHA Mission Statement 2024

- Purpose: To protect and improve the quality of Christmas Lake for all lake users to enjoy today and for future generations
- **Participation in and support of scientific Research**



Caption

Why Should We Be Concerned About AIS in 2025?

- ▶ Christmas Lake has a long history of protecting this body of water.
- ▶ Boat ramp inspections/decontamination program
- ▶ Dock/lift installation and removal services
- ▶ Eurasian Milfoil Weevil project 2018
- ▶ Zebra mussel treatment - persist
- ▶ **Why worry?**

What is Happening Around Us?

- ▶ Eurasian Milfoil first identified in Lake Minnetonka in 1987
- ▶ 8% of Minnesota Lakes are now infested with AIS, with no end in sight
- ▶ MAISRC has identified 11 current AIS in Minnesota
- ▶ 51 AIS have been identified in the US
- ▶ Worldwide estimates 1500-6500 non-native/invasive species
- ▶ Yikes! Now what? Give up or continue the fight?
- ▶ What are we most at risk of encountering next?

Starry Stonewort

- ▶ Lake Koronis 2015
- ▶ Now found in 31 water bodies in the state
- ▶ Medicine Lake - first urban lake infested 2018
- ▶ If Lake Minnetonka becomes infested our risk increases significantly.
- ▶ Very difficult to treat. Early detection, aggressive treatment important. Eradication is unlikely.
- ▶ Cost to control
 - ▶ Lake Koronis > \$170,000/year
 - ▶ Lake Sylvia. \$20 K/year



Caption

Hydrilla

- ▶ Originated in Asia
- ▶ Introduced into the USA in the 1950's - aquarium suppliers in Florida
- ▶ Northern and western migration is occurring. Now found in Michigan
- ▶ Eurasian milfoil on "steroids"
- ▶ Can grow up to 8'/day!
- ▶ May be transmitted by birds



What Is eDNA

- ▶ eDNA is “environmental” DNA
- ▶ Genetic material left by organisms in the environment
- ▶ Has been used for years to identify aquatic animal/fish species
- ▶ Repurposed in 2020 track Covid-19 virus in sewage waste
- ▶ Use in identifying aquatic plant species has exploded in the past 2-3 years
- ▶ Why is this of interest to us?

eDNA Testing

- ▶ Board commitment to supporting scientific research
- ▶ If we cannot prevent the next AIS from entering our lake how do we identify the presence of a new invasive species at the earliest time possible, allowing aggressive management
- ▶ Interest in the evolving role of eDNA testing to identify early AIS infestations
- ▶ MAISRC collaboration in conjunction with the Lake Minnetonka Association
- ▶ Agreed to support a research program overseen by Dr. Lynn Waterhouse
- ▶ **“Improving Sample Design for Detecting Aquatic Invasive Plants with DNA”**

Dr. Waterhouse



- ▶ Nanosphere MinION - portable, inexpensive DNA tool
- ▶ Rapid ability to test for multiple aquatic species at the same time, utilizing the same water sample. Plant localization still required if eDNA for a new AIS is identified.
- ▶ Research will focus on how to best obtain samples, when to collect and will require construction of a genomic database allowing us to screen for all AIS that have been identified anywhere in the US
- ▶ Goal is to aid in the early detection of new AIS allowing rapid treatment response
- ▶ Begin June 26, 2025. Samples obtained monthly for 5-6 months for 2 years

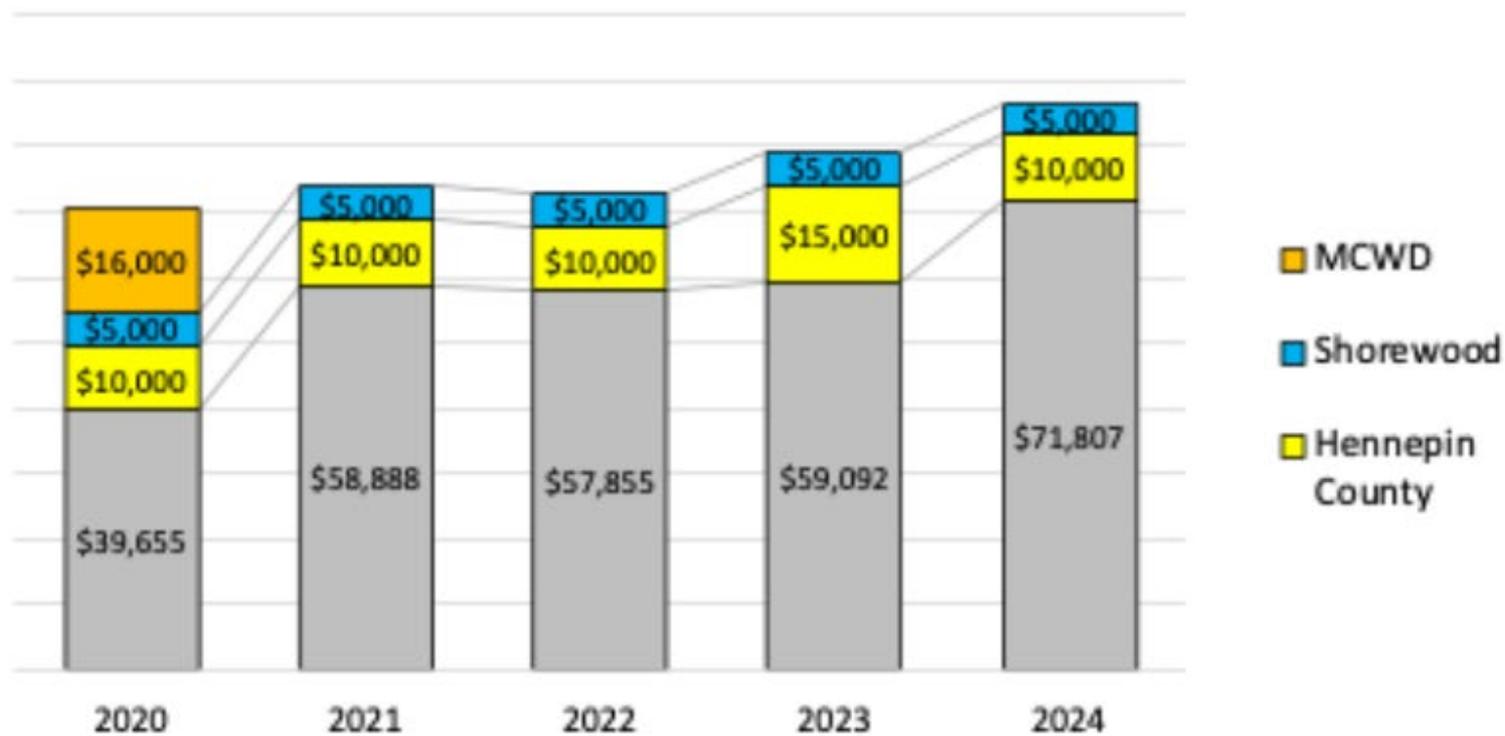
Caption



RESEARCH SUPPORT

- ▶ CLHA board has agreed to support the research financially as well as with staffing assistance
- ▶ We have committed to contributing \$20,000 over the 2 year period of this study. Board members and lake association members have committed to support this important research effort.
- ▶ Thank You

Cost Share by Entity



We thank you for your long-term commitment to our partnership...

We will be funding the gate repairs

We are asking the City to commit to repair the asphalt around the gates as soon as possible

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5. Parks

A. Report by Commissioner Wenner on
07-22-25 Park Commission Meeting

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7. Engineering/Public Works
 - A. SE Area Water Treatment Contract, City Project 24-08

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7. Engineering/Public Works
 - B. Surplus Items

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9. Staff and Council Reports

A. Staff

1. Response Matters from the Floor 7/28/25

B. Mayor and City Council

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10. Adjourn