MEMORANDUM
Comfort Lake-Forest Lake Watershed District

Date: December 8th, 2025
To: CLFLWD Board of Managers
From: Mike Kinney, District Administrator
Subject: 2025 Aquatic Invasive Species (AIS) Report

District Wide

Background/Discussion:

The Comfort Lake-Forest Lake Watershed District performs a wide variety of services to the community to limit the spread of 2025 Aquatic Invasive Species (AIS). These services include survey work, treatment, and watercraft inspections which focus primarily on seven lakes: Moody Lake, Little Comfort Lake, Lake Keewahtin, Comfort Lake, Bone Lake, Shields Lake, and Forest Lake.

The activities conducted, and their associated costs, are listed in the attached 2025 AIS report. The draft report is available for review, and the board will consider a vote on approving the report at the January 22nd meeting.

Attached
2025 AIS Draft Report
2025 AIS Program Summary Presentation

2025 Aquatic Invasive Species Program Yearend Summary

Forest Lake

Bone Lake

Comfort Lake

Shields Lake

Moody Lake

Little Comfort Lake

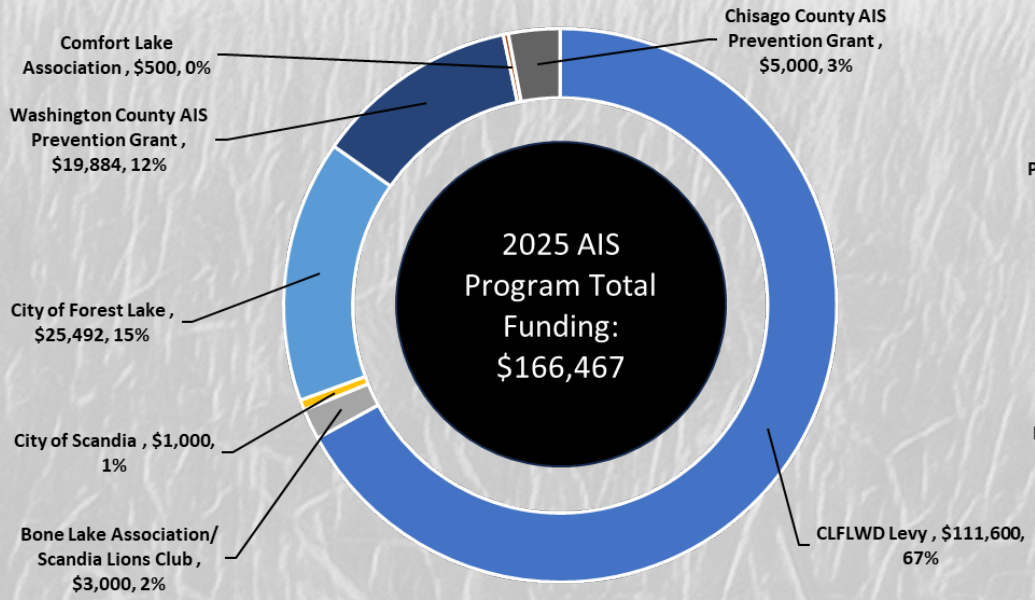
Lake Keewahtin

CLFLWD
WATERSHED DISTRICT

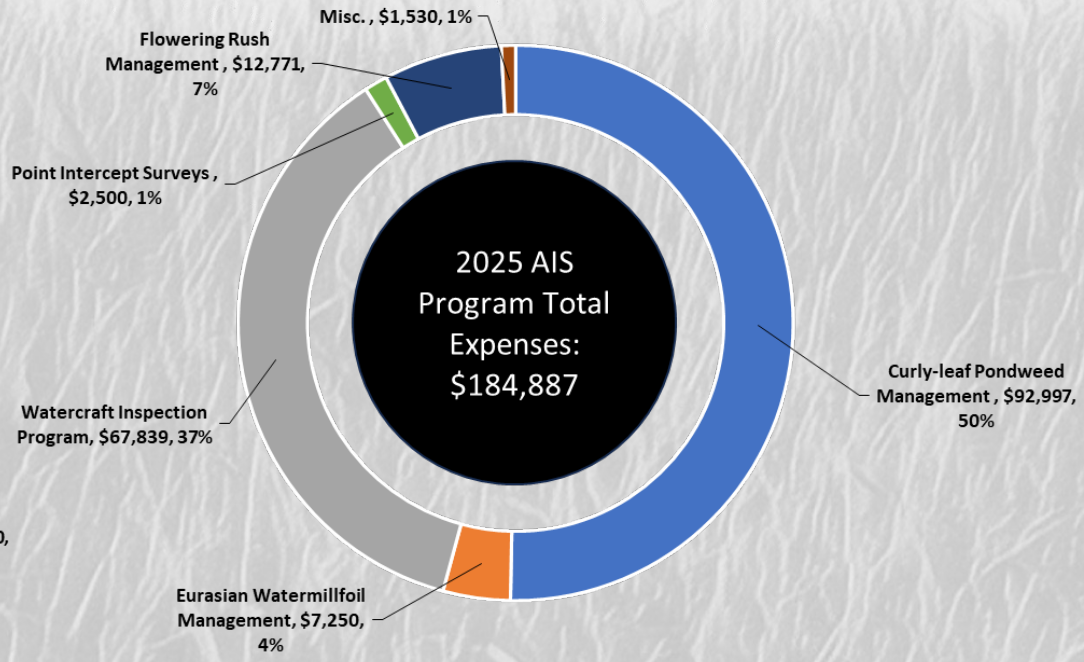
District Wide AIS Budget

2025 Yearend Summary

CLFLWD's 2025 District-Wide AIS Program Funding



CLFLWD's 2025 District-Wide AIS Program Expenses



Moody Lake

2025 Yearend Summary

Aeration System

- **Monitoring:** Oxygen levels were monitored throughout the winter, once dissolved oxygen approached the 5mg/L threshold the aeration system was activated.
- **Operation:** The District continued operation of the aeration system in winter months (2/13/25—3/17/25) to increase dissolved oxygen, reduce winter fish-kills, and support a healthy fishery that suppresses invasive fish populations. This was the 10th consecutive winter the District has run the aerator.

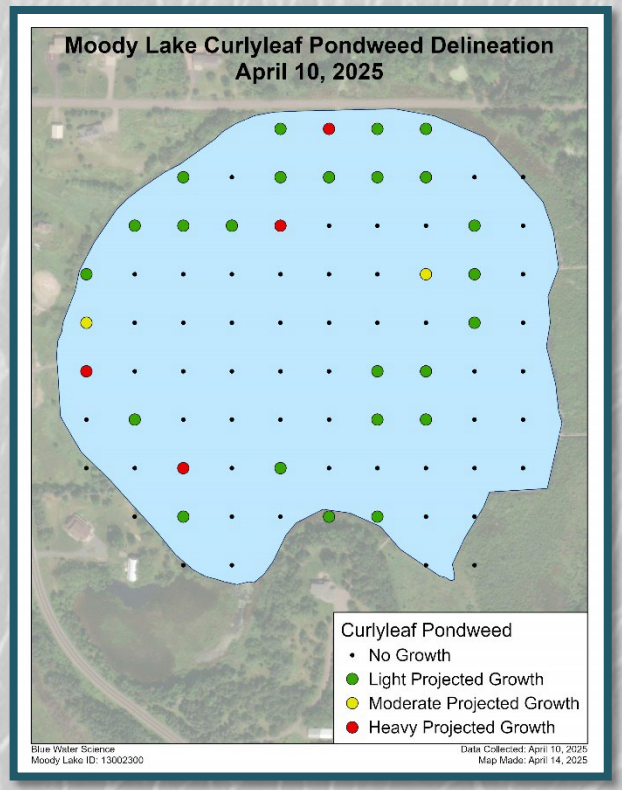
Curly-leaf Pondweed (CLP)

- **Delineation:** On April 10th, Blue Water Science (BWS) conducted a delineation point intercept survey to assess the CLP population. Growth was primarily light, and no treatment was recommended again this year
- **History:** no CLP has been treated on Moody Lake 2021-2025
  2019: 7.81 acres
  2020: 3.1 acres

Native Aquatic Plant Transplanting Project – 2023

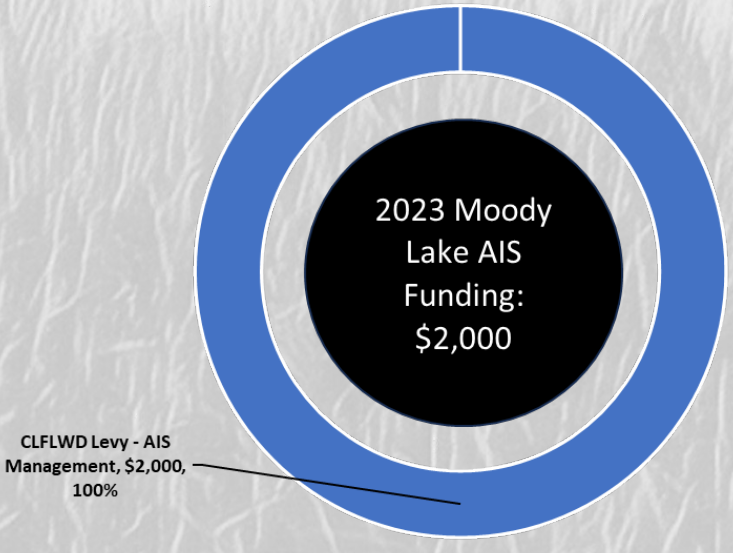
- **History:** District staff and a researcher from the University of Minnesota implemented a native aquatic plant transplanting project on Moody Lake. A variety of native species were collected from Keewahtin Lake and planted in Moody Lake.
- **Monitoring:** District staff performed visual assessments of the transplant locations. Of the sites observed had dense stands of native Coontail, though additional aquatic plants were present potentially indicating successful transplantation

Curly-leaf Pondweed (CLP)

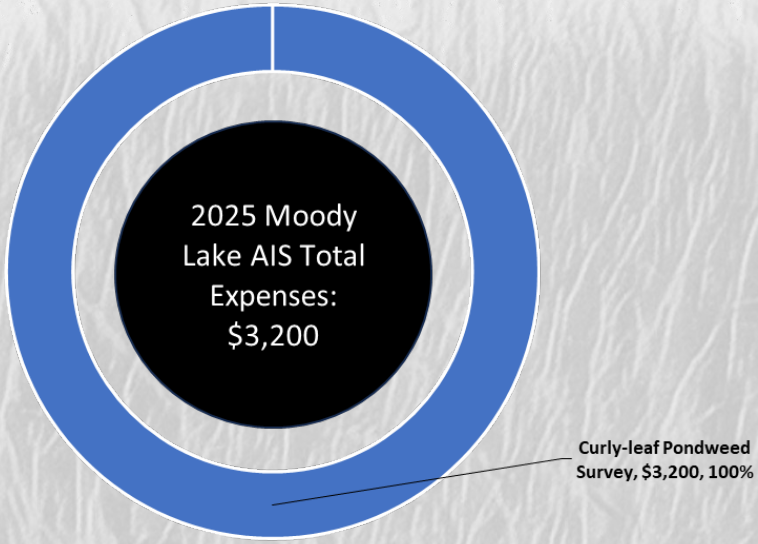


Moody Lake - 2025 Budget Summary

CLFLWD's 2025 Moody Lake AIS Funding



CLFLWD's 2025 Moody Lake AIS Program Expenses



Bone Lake

2025 Yearend Summary

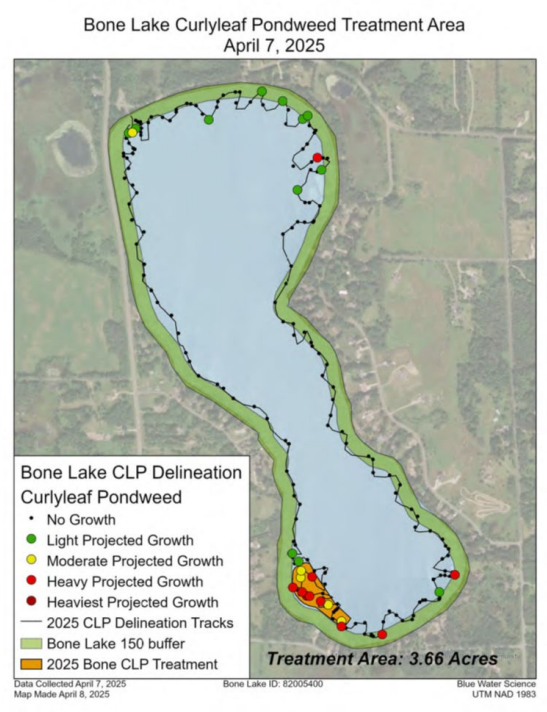
Curly-leaf Pondweed (CLP)

- **Delineation**: Performed April 7th by Blue Water Science (BWS), detected 3.66 acres of moderate to heavy CLP growth that was recommended for treatment.
- **Treatment:** Lake Management Inc (LMI) conducted the recommended 3.66-acre treatment May 8th
- **Assessment:** Performed in July by BWS determined that treatment area had good control

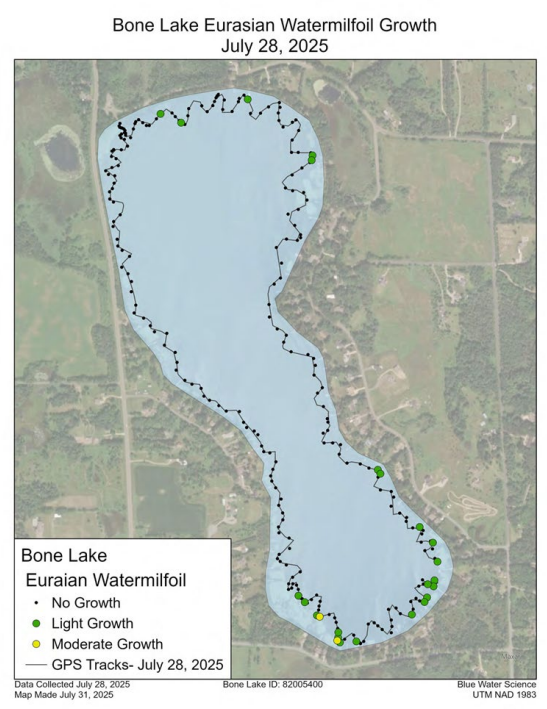
Eurasian Watermilfoil (EWM)

- **Delineation:** Performed July 28th by BWS detected several locations of light EWM growth which would not impede water quality or recreational enjoyment .
- **Treatment:** No treatment was recommended or performed
- **Assessment:** Performed by BWS (see BWS summary report)

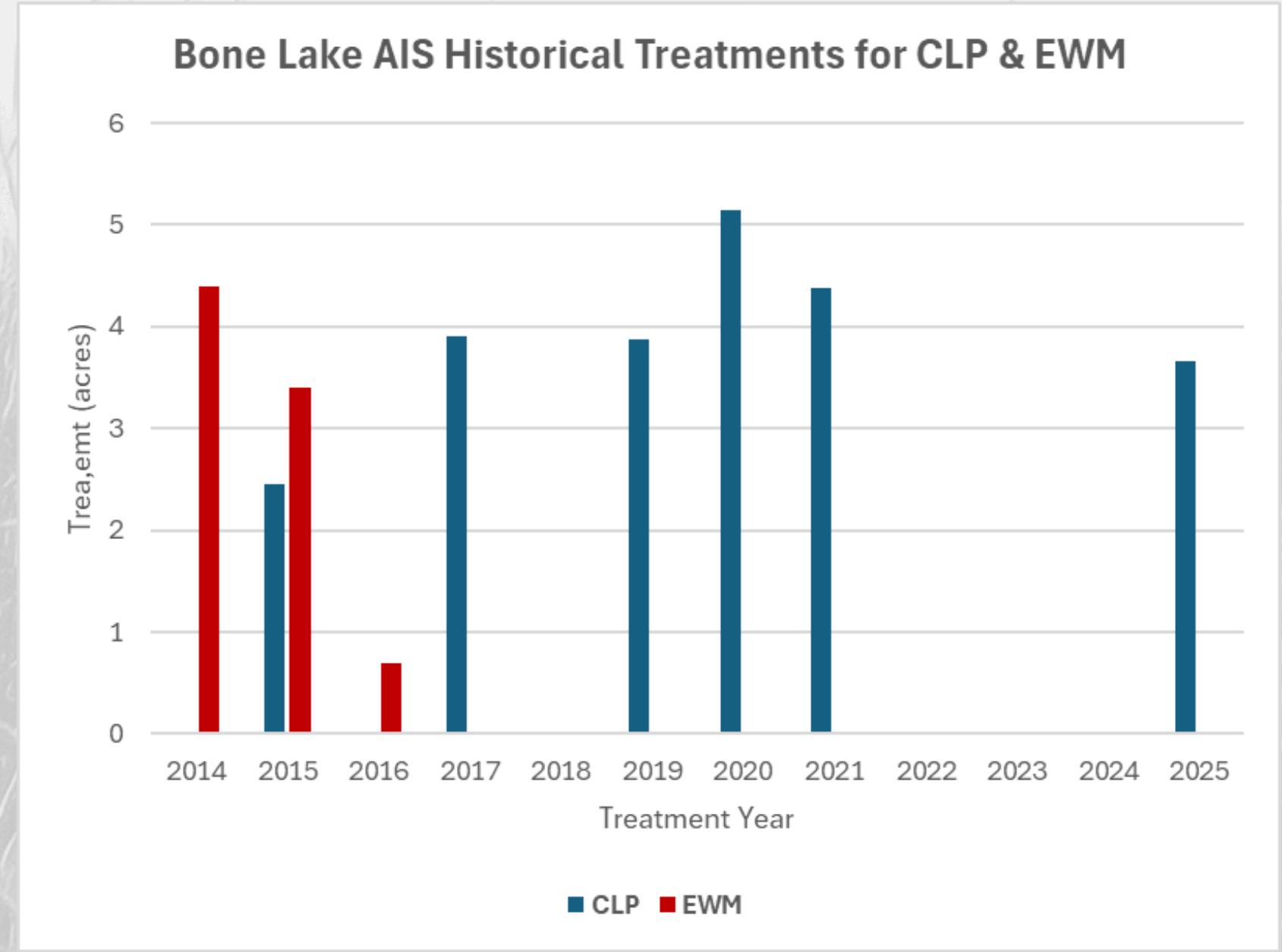
Curly-leaf Pondweed (CLP)



Eurasian Watermilfoil (EWM)



Bone Lake – Historical AIS Treatment Area



Bone Lake – 2025 Yearend Summary

Zebra Mussels

- **Sampler Plates:** In 2025, several Bone Lake residents volunteered to host a sampler plate on their property, No zebra mussels were found on sampler plates or water related equipment.

- **History:** On May 28, 2019, six juvenile zebra mussels were discovered near the Bone Lake public access dock. Following this discovery, an eradication attempt was conducted by the District and partners. However, on July 20, 2023, BWS found 3 juvenile zebra mussels while performing a point intercept survey. The discovery was communicated to the DNR and long-term population monitoring resumed.

Rough Fish Management

- **Fish Barrier:** Staff maintained and managed the stop logs for the inlet barrier and cleared debris as necessary for both the inlet and outlet of Bone Lake.

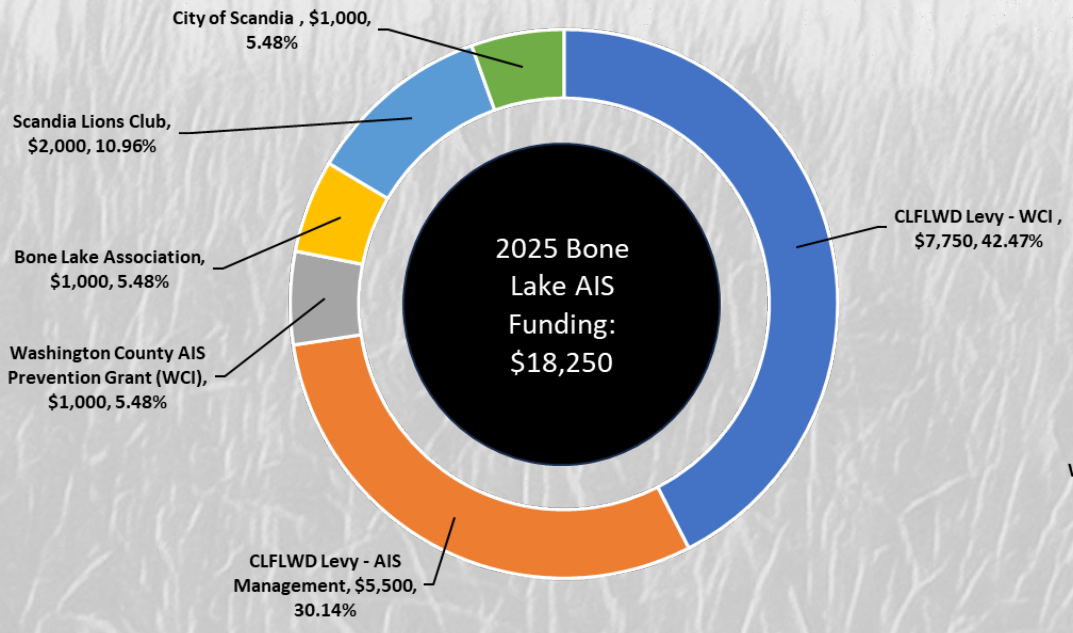
Watercraft Inspections (brief overview)

- **Hours:** 542 hours were worked at Bone Lake
- **Surveys:** 535 inspection survey were performed at Bone Lake
- **Reports:**
  - **Chisago County:** 2025 AIS Prevention Report (Expected in early 2026)
  - **CLFLWD:** See 2025 Watercraft Inspection Program Report

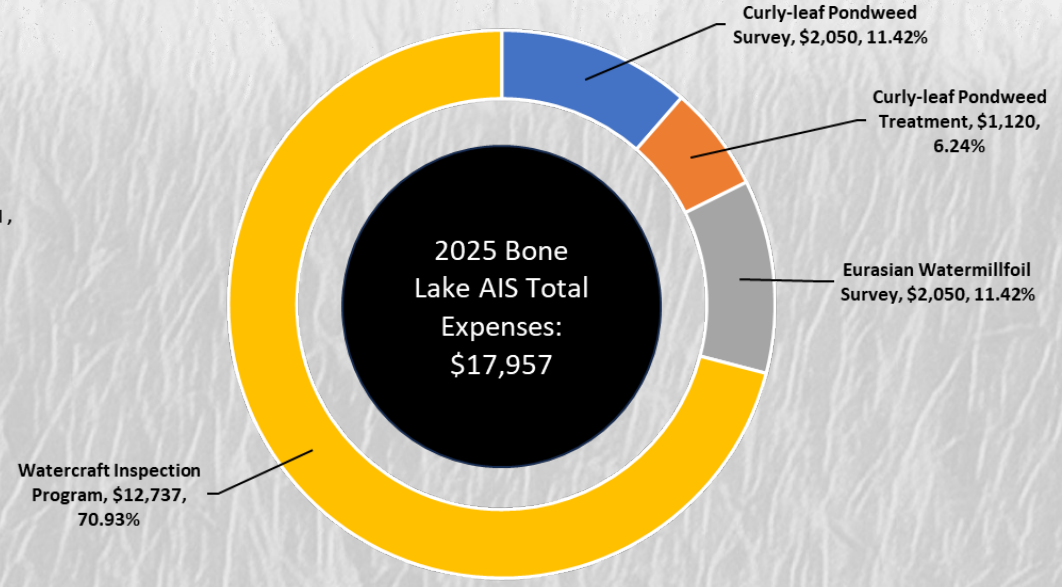
Sunset at Bone Lake Public Access

Bone Lake - 2025 Budget Summary

CLFLWD's 2025 Bone Lake AIS Funding



CLFLWD's 2025 Bone Lake AIS Program Expenses



Little Comfort Lake

2025 Yearend Summary

Macrophyte Meander Survey

- **Overview:** On August 1st BWS and District staff conducted a meandering survey to assess aquatic plant biodiversity. Both CLP and EWM were observed but in limited quantities. Whereas many of the points contained high densities of native Coontail.

- **Report:** See Blue Water Science Delineation Report (Summary distributed in December, full report in January 2026).

Curly-leaf Pondweed (CLP)

- **Overview:** Given the historical sparse growth in the lake, no removal was deemed necessary or budgeted for in 2025.

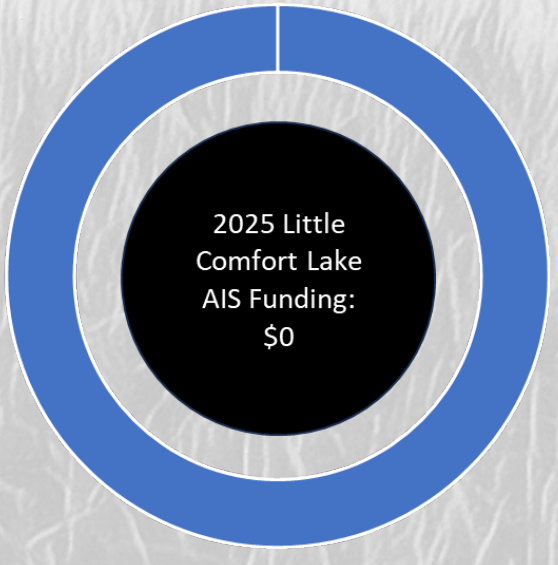
Eurasian Watermilfoil (EWM)

- **Overview:** Given the sparse growth observed during the macrophyte delineation survey, no removal was deemed necessary in 2025.
- **History:** EWM was first discovered in Little Comfort Lake in 2021 by the MN department of Natural Resources Invasive Species Program, though no treatments have been deemed necessary due to low population density

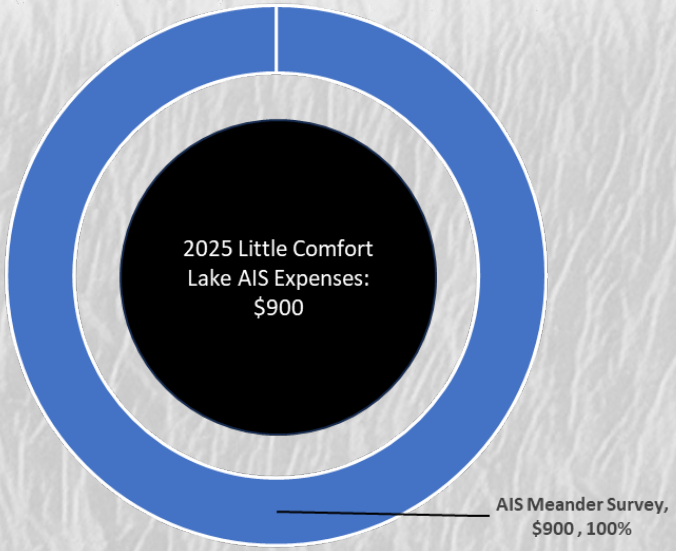
Mike Sandager performing aquatic plant identification

Little Comfort Lake - 2025 Budget Summary

CLFLWD's 2023 Little Comfort Lake AIS Funding



CLFLWD's 2023 Little Comfort Lake AIS Program Expenses



Shields Lake

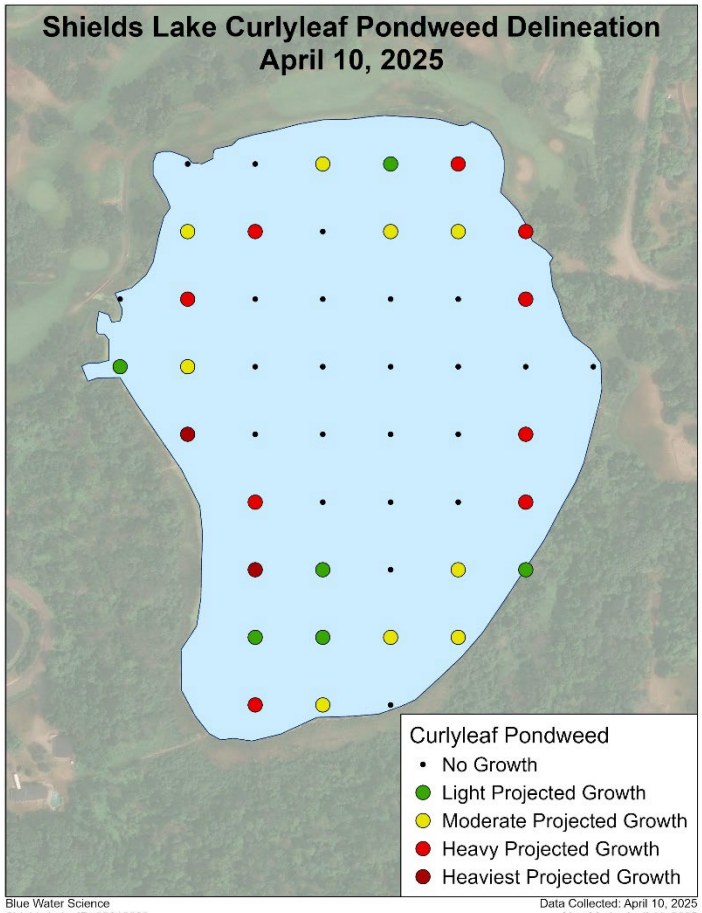
2025 Yearend Summary

Aeration System

- **Operation**: The District continued operation of the aeration system in winter months (2/13/25—3/17/25) to increase dissolved oxygen, reduce winter fish-kills, and support a healthy fishery that suppresses invasive fish populations. This was the 10th winter the District has run the aerator.
- **Monitoring:** Oxygen levels were monitored throughout the winter and were found to be at healthy levels for the whole season.

Curly-leaf pondweed (CLP)

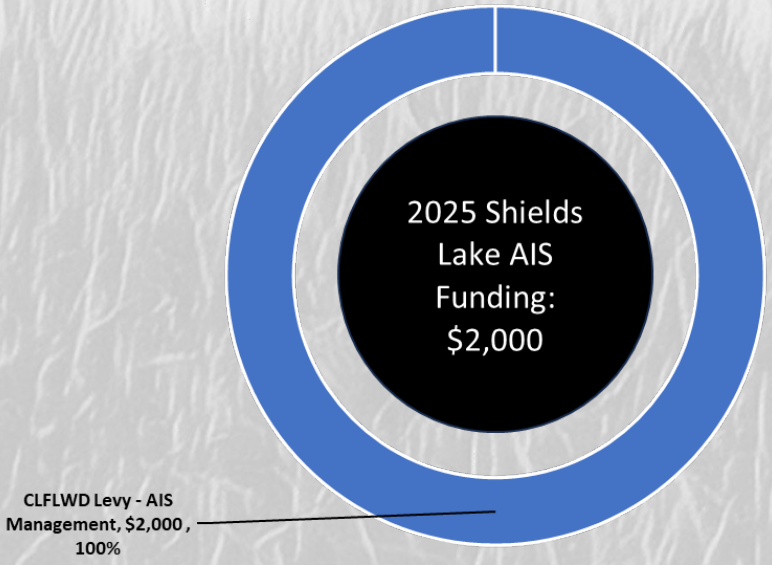
- **Delineation:** Performed on April 25th, BWS observed potential areas with heavy growth but did not recommend any treatment to promote native aquatic plant growth.
- **Report:** Blue Water Science Delineation and Assessment Report (Summary distributed in December, full report in January 2026).



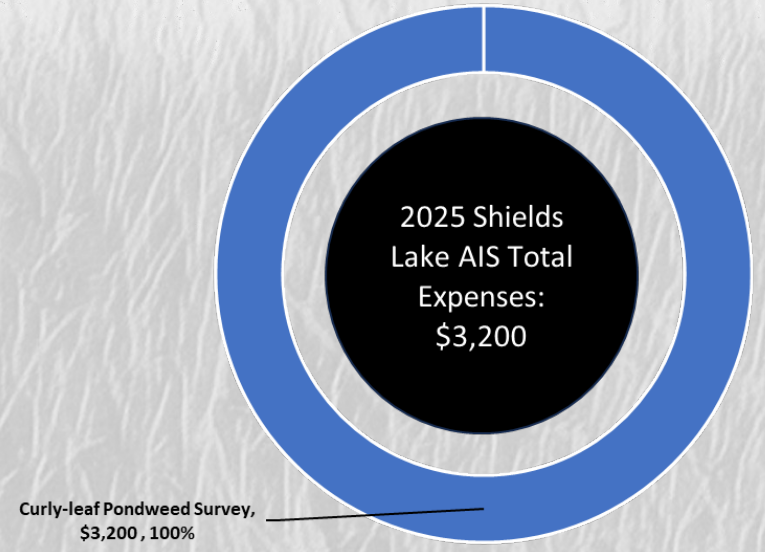
Curly-leaf Pondweed (CLP)

Shields Lake - 2025 Budget Summary

CLFLWD's 2025 Shields Lake AIS Funding



CLFLWD's 2025 Shields Lake AIS Program Expenses



Lake Keewahtin

2025 Yearend Summary

Macrophyte Delineation Survey

- **Overview:** On August 12th BWS and District staff conducted a Macrophyte Point Intercept survey to assess aquatic plant biodiversity.
- **Observations:** Overall Keewahtin has a great amount of biodiversity of native aquatic vegetation.
- **Report:** See Blue Water Science Macrophyte Delineation Survey (Summary distributed in December, full report in January 2026).

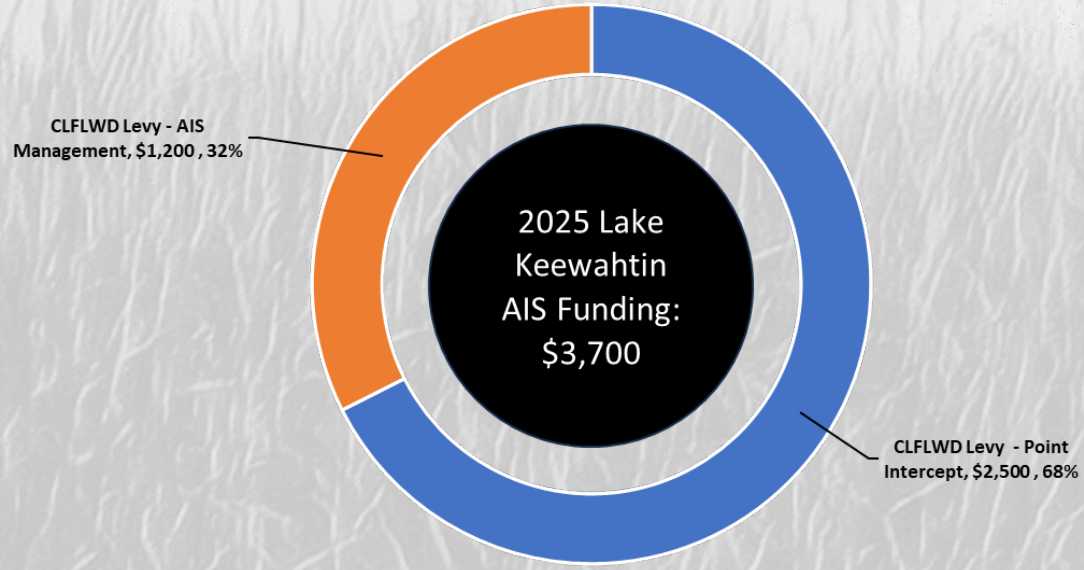
Purple Loosestrife (PL)

- Staff performed a shoreline assessment of purple loosestrife with the purpose of locating future sites suitable for biocontrol management efforts.

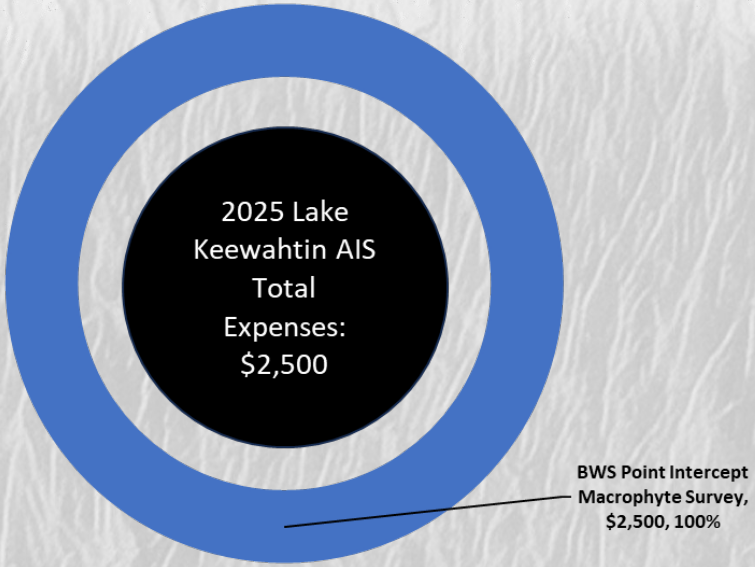
Kathrine Miller performing
Purple loosestrife identification

Lake Keewahtin - 2025 Budget Summary

CLFLWD's 2025 Lake Keewahtin AIS Funding



CLFLWD's 2025 Lake Keewahtin AIS Program Expenses



Forest Lake – BWS Delineation/Assessment

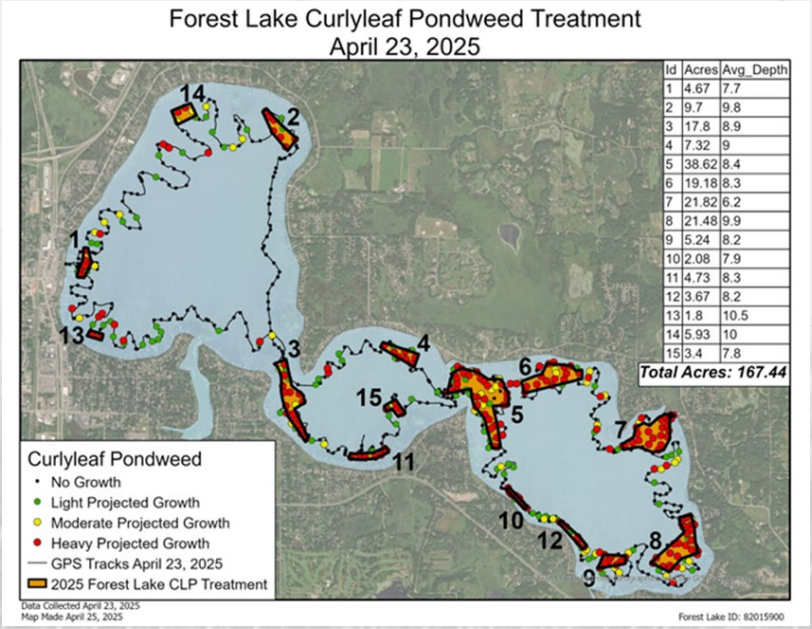
Curly-leaf Pondweed (CLP)

- **Delineation:** Performed on April 23rd, fifteen treatment locations totaling 167.44 acres were identified for treatment.
- **Treatment:** Treatment performed on May 22nd on all 167.44 acres. Flumioxazin was required to be used as a new strain of walleye fry which are susceptible to Diquat had been stocked by DNR Fisheries. Note: this nearly doubles the cost of any treatment area.
- **Assessment:** Performed on June 20th and found it had excellent control.

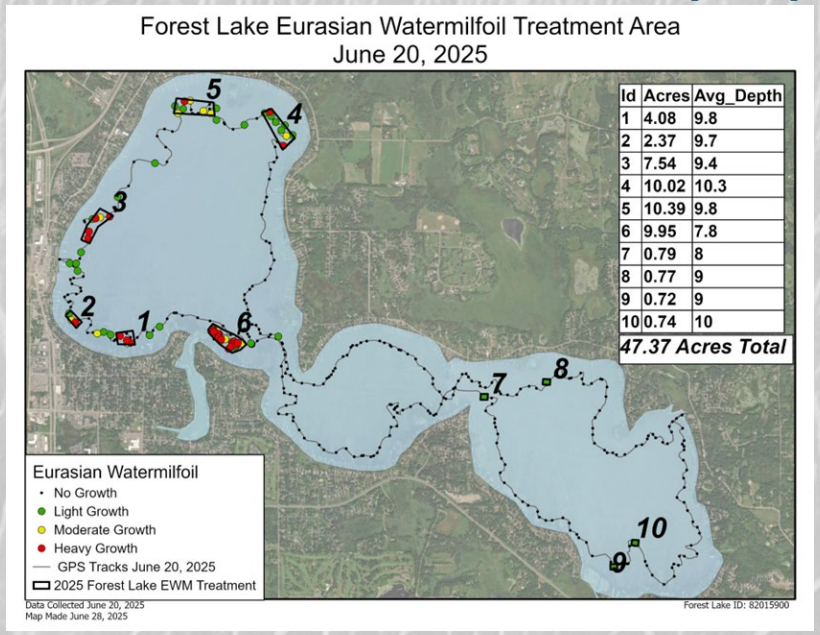
Eurasian Watermilfoil (EWM)

- **Delineation:** Performed on June 20th detected 47.37 acres that were recommended for treatment. Majority of the EWM observed was in basin 1. However, several survey points detected EWM for the first time in basin 3.
- **Treatment:** The Forest Lake Lake Association (FLLA) performed a treatment for all 47.37 acres of EWM.
- **Assessment:** Performed by BWS September 15th and October 24th determined good control in treatment areas, but several new sites were observed.

Curly-leaf Pondweed (CLP)



Eurasian Watermilfoil (EWM)



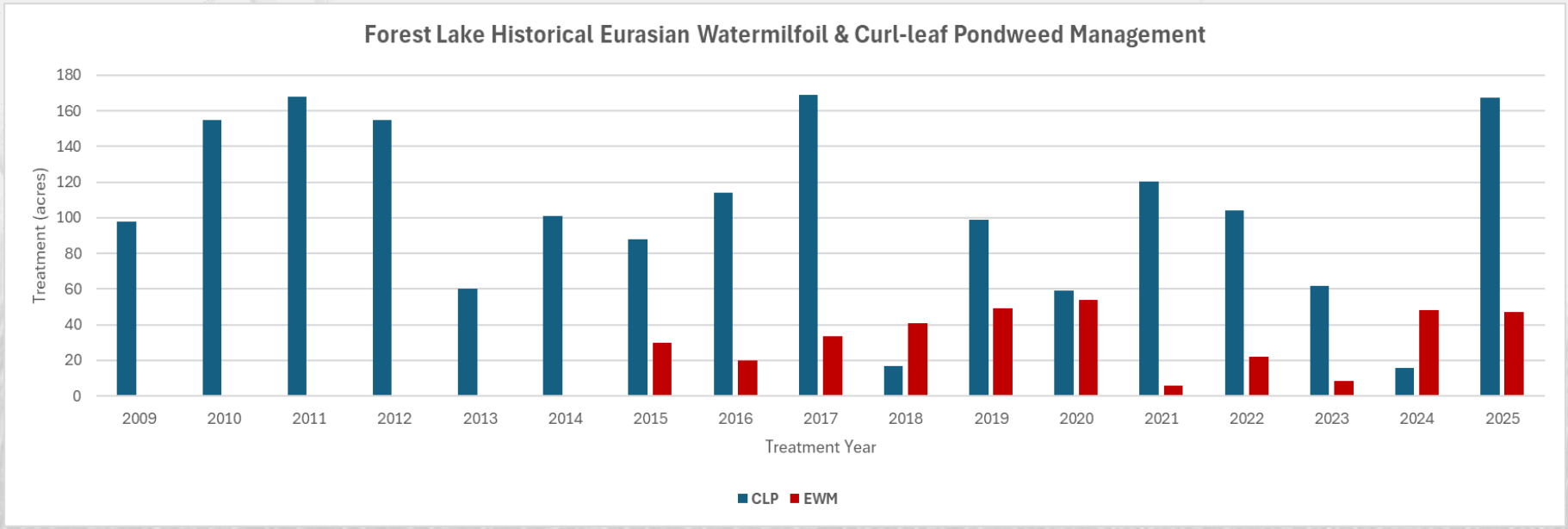
Forest Lake – 2025 Flowering Rush (FR)

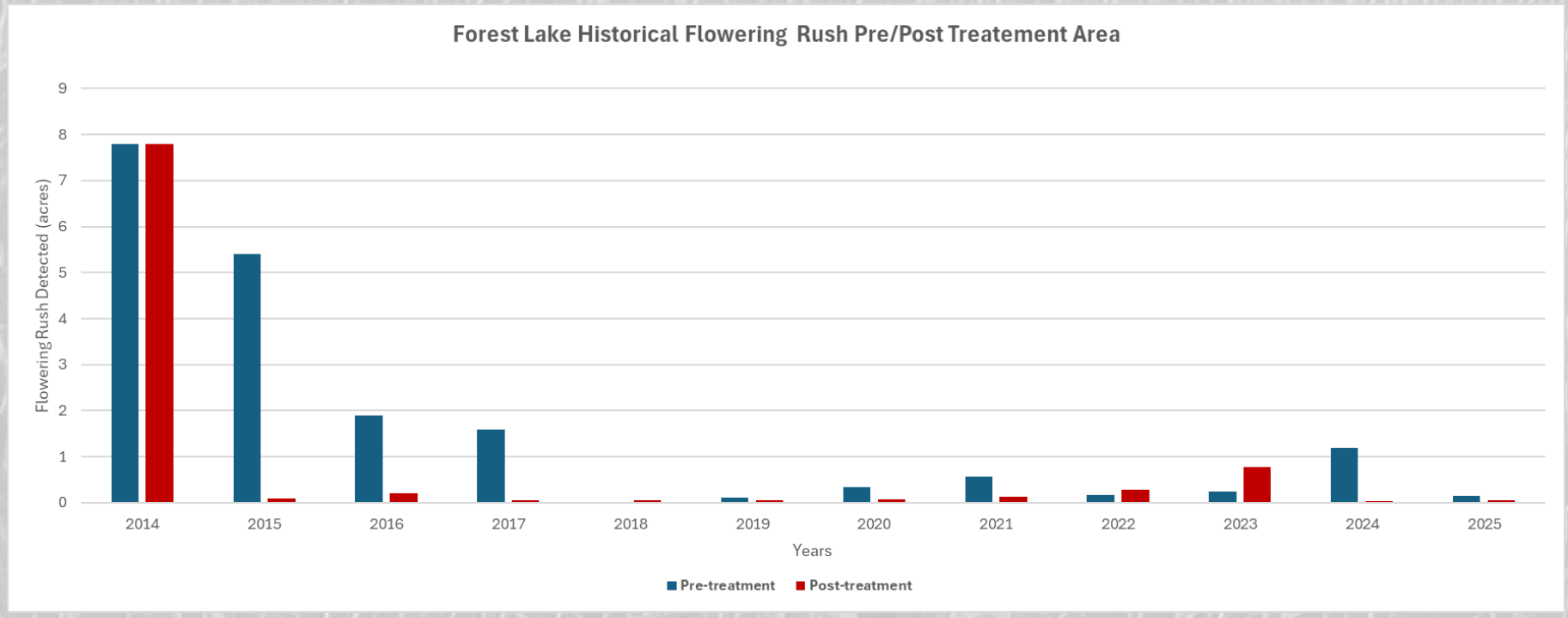
Flowering Rush Management Activities

- **Delineation:** Initial survey performed July 11th by BWS detected 69 flowering rush sites (5,970 sq ft) including 5 sites with flowers.
- **Treatment #1**: Spot and Area Treatments performed by PLM on August 13th.
- **2nd Delineation/Assessment:** performed by BWS September 15th identified 63 flowering rush sites (8070 sq ft) including 2 with flowers. Overall control in treatment areas was good with some observed regrowth and new sprouting.
- **Treatment #2**: Spot and Area Treatments performed by PLM on September 29th.
- **Final Assessment Survey:** performed October 24th by BWS observed 28 flowering rush sites (2,670 sq ft) with no flowers.
- **Flower Removal:** District staff performed 29 hours of seedhead removals throughout the growing season and collected 591 seedheads.

Assessment: Overall Flowering rush growth was reduced throughout the 2025 growing season likely due to higher water levels resulting in decreased suitable growing conditions. Additionally, treatments combined with seed head clippings provided good control.

Forest Lake – Historical AIS Annual Treatment Area





Forest Lake

2025 Yearend Summary

Purple Loosestrife

- Staff performed a shoreline assessment of purple loosestrife with the purpose of locating future sites suitable for biocontrol management efforts. The Forest Lake #3 Public Launch would potentially be a suitable location due to population density and ease of access.

Zebra Mussels

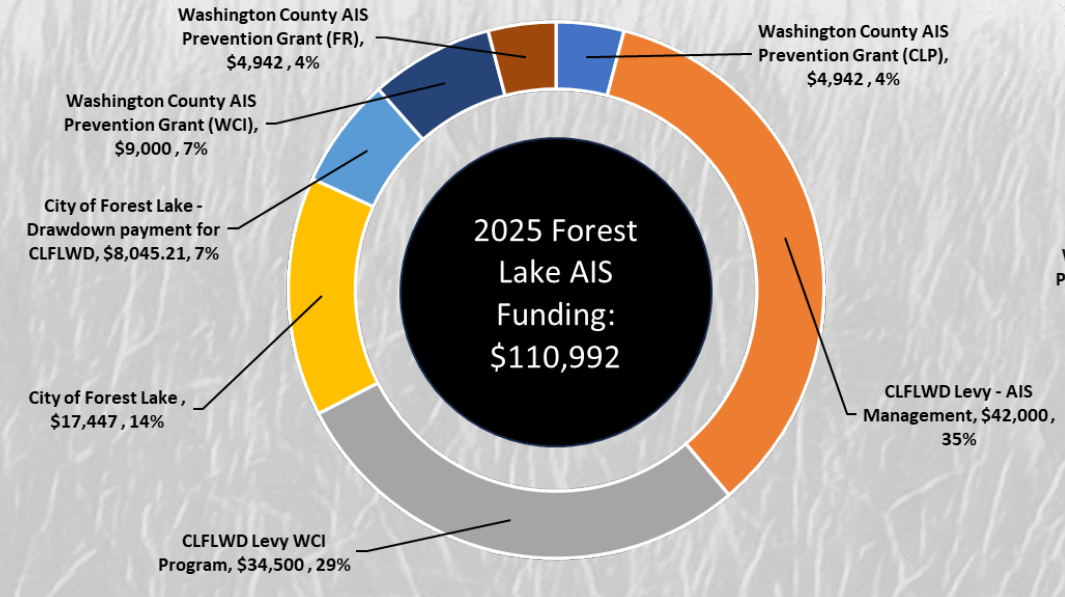
- Overview: Five zebra mussel sampling plates were deployed on Forest Lake this year. Initial observations indicate that both population density and size have reduced from previous years. Zebra mussels were first discovered in Forest Lake in 2015. Previous reports have stated that it is expected densities will continue to rise over the upcoming years, then potentially crash after reaching a peak. Continued long term monitoring may be necessary to determine if we have reached that peak.

Watercraft Inspections
(brief overview; see full report for more details)

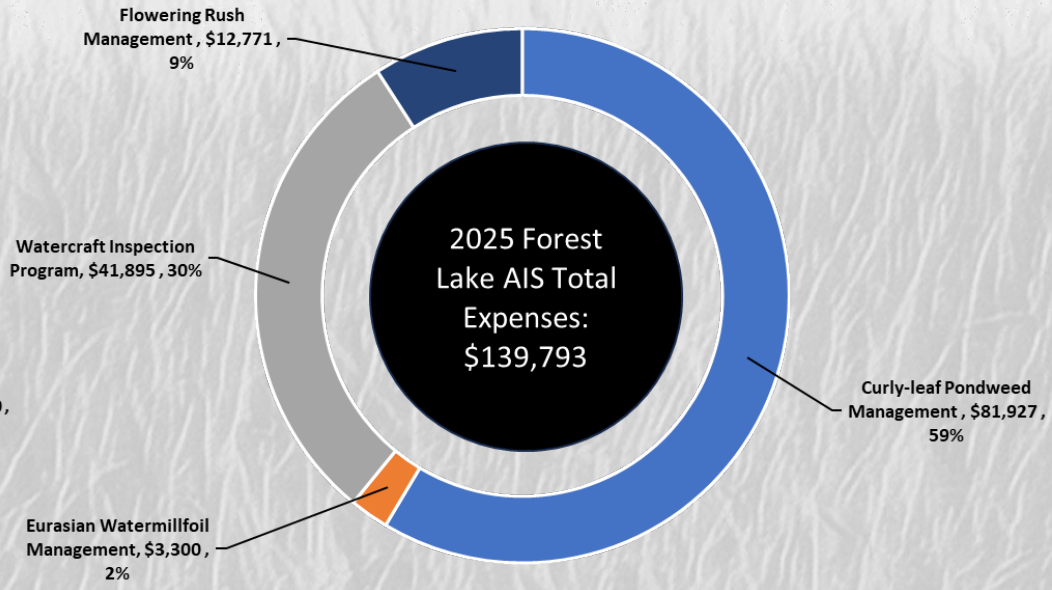
- **Hours**: 2458.75 hours were worked at Forest Lake accesses
- **Surveys**: 4743 inspection survey were performed at Forest Lake accesses
- **Reports**:
  - Chisago County: 2025 AIS Prevention Report (Expected in early 2026)
  - CLFLWD: 2025 Watercraft Inspection Program Report

Forest Lake - 2025 Budget Summary

CLFLWD's 2025 Forest Lake AIS Funding



CLFLWD's 2025 Forest Lake AIS Program Expenses



Tri-Party Agreement Purpose and Partners

Successful aquatic invasive species management requires a community wide effort. CLFLWD received considerable support across the district in it's efforts. This community partnership is codified on Forest Lake between CLFLWD, the City of Forest Lake, and the Forest Lake Lake Association (FLLA) in the Tri-Party agreement. The agreement ensures the financial cost of AIS management is shared by all three parties in a fiscally responsible manner which ensures stability and flexibility through reserve funds and equal contribution. The main points are listed below but is not an exhaustive list.

1. The district will carry out AIS management on Forest Lake according to its Watershed Management Plan
2. The city will carry out native plant harvesting and other activities to support recreation on Forest Lake
3. FLLA will assist with AIS management
4. The city will contribute $63,750, the district $63,750, and FLLA $22,500
5. A shared agreement of expenditures
6. A reserve fund will be created if necessary
7. Each party determines and is responsible for its own activities

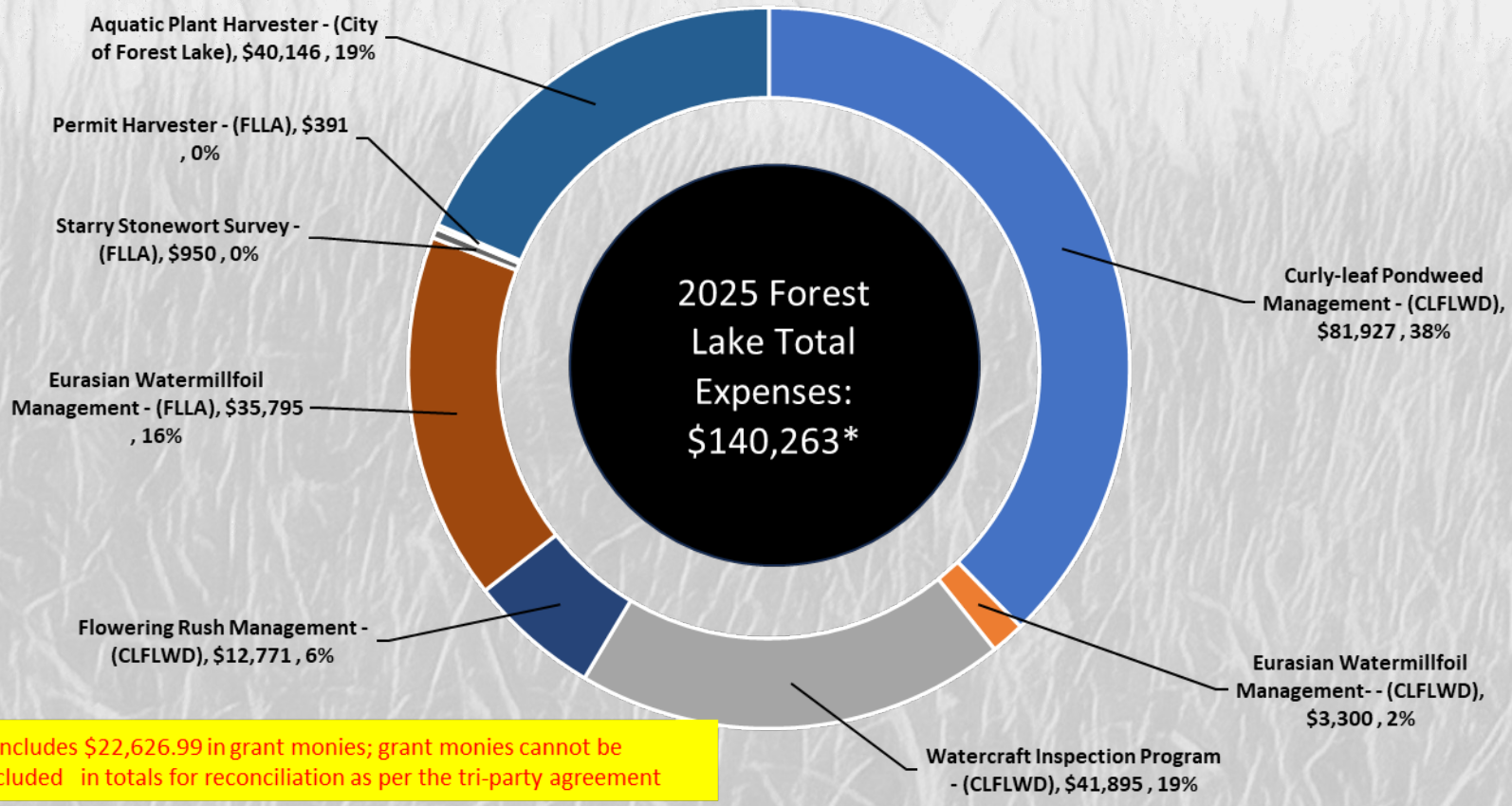
Tri-Party Agreement 2025 Activities

	Category	2025 expenditures	2025 Grant Monies	Subtotal	Total Cost Share
City of Forest Lake					
	Weed Harvester	N/A			**Total**
	Seasonal Operator Wages	$14,096.50	$0.00	$14,096.50	
	FTE Wages	$4,228.95	$0.00	$4,228.95	
	Maintenance Costs	$16,694.53	$0.00	$16,694.53	
	Fuel Costs	$4,775.61	$0.00	$4,775.61	
	Flags	$350.00	$0.00	$350.00	
	EWM Treatment	$0.00	$0.00	$0.00	
				$40,145.59	**$63,750**
					42.50%
Forest Lake Lake Association					
	EWM treatment	$35,795.28	$4,942.33	$30,852.95	
	Starry Stonewort survey	$950.00	$0.00	$950.00	
	Permit for Harvester	$391.00	$0.00	$391.00	
				$32,193.95	**$22,500**
					15%
Comfort Lake Forest Lake Watershed District					
	Watercraft Inspections	$36,642.38	$7,800.00	$28,842.38	
	FTE Wages	$9,528.37		$9,528.37	
	Flowering Rush	$12,770.85	$4,942.33	$7,828.52	
	Curly-leaf Pondweed	$81,927.24	$4,942.33	$76,984.91	
	EWM Surveys + Treatment	$3,300.00		$3,300.00	
	Purple Loosestrife			$0.00	
	Point Intercept Macrophyte Survey			$0.00	
	Common Carp Population Assessment			$0.00	
	Trash/Recycling Service	1,639.87		$1,639.87	
				$128,124.05	**$63,750**
					42.50%
Total Lake Expenditures	Total before subtracting grants ->	**$223,090.58**	Total after subtracting grants	**$200,463.59**	**Total**

Tri-Party Expenses

2025 Forest Lake AIS with Partner Lake Management Expenses

Tri-Party Funding Support Agreement : City of Forest Lake, Forest Lake Lake Association, Comfort Lake Forest Lake Watershed District



* Includes $22,626.99 in grant monies; grant monies cannot be included in totals for reconciliation as per the tri-party agreement

2025 Financial Result of the Tri-Party Agreement

The triparty agreement covers the first $150,000 spent on Forest Lake AIS. Any additional expenses beyond that are the responsibility of the spending party. The 2025 agreement combined with the drawdown resulted in the City of Forest Lake paying the Forest Lake Lake Association $8,997.16 and the CLFLWD $25,491.95.

Tri-Party Agreement – planning for the future

For 2026 the triparty financial amounts will remain the same

- Potential increase in 2027 to account for rising expenses.
- Discussion on creating a 3-year agreement with escalation
- Partners discuss the reduction of CLP acreage treatment if necessary
- Weed harvester usage – 2027 decision

Comfort Lake

2025 Yearend Summary

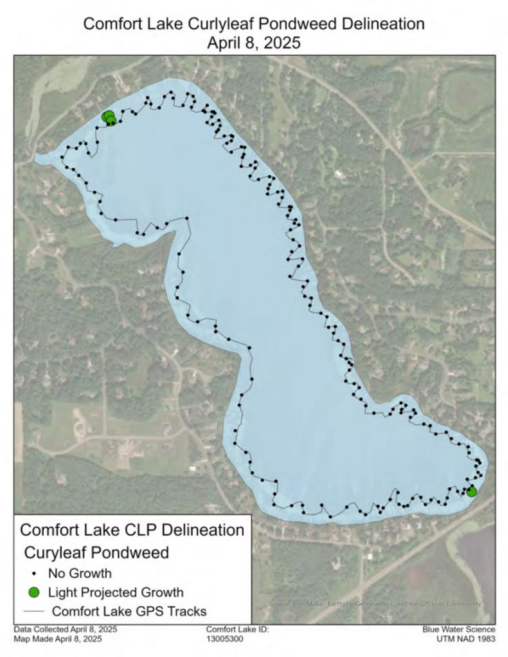
Curly-leaf Pondweed (CLP)

- **Delineation:** Performed on April 8th, a majority of the sample points detected no CLP with a few light potential growth areas identified.
- **Treatment:** No treatment was recommended or performed
- **Assessment:** Performed by BWS (see BWS summary report)

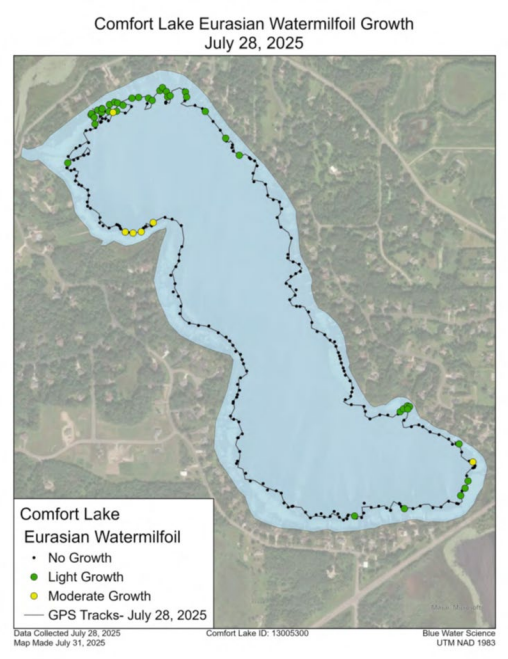
Eurasian Watermilfoil (EWM)

- **Delineation:** Performed July 28th detected several areas of light EWM growth which would not impede water quality or recreational enjoyment .
- **Treatment:** No treatment was recommended or performed
- **Assessment:** Performed by BWS (see BWS summary report)

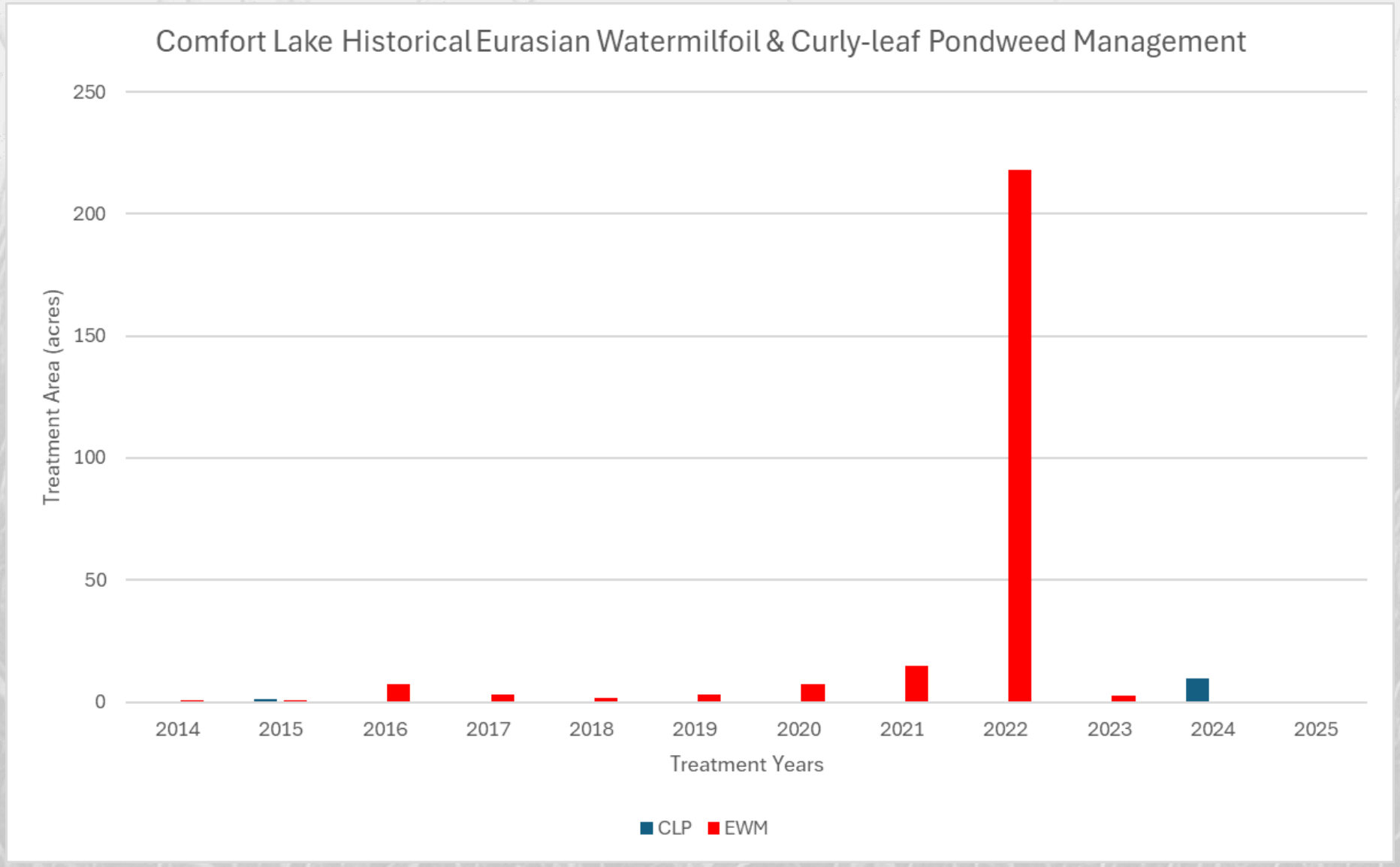
Curly-leaf Pondweed (CLP)



Eurasian Watermilfoil (EWM)



Comfort Lake – Historical AIS Treatment Area



Comfort Lake – 2025 Continued

Zebra Mussels

- **Overview:** In 2025, the Comfort Lakes Association participated in a zebra mussel monitoring program being piloted by the University of Minnesota. Instead of hand counting zebra mussels at the end of the season, researchers hope to develop technology to count them from a photograph of the sampler plate.

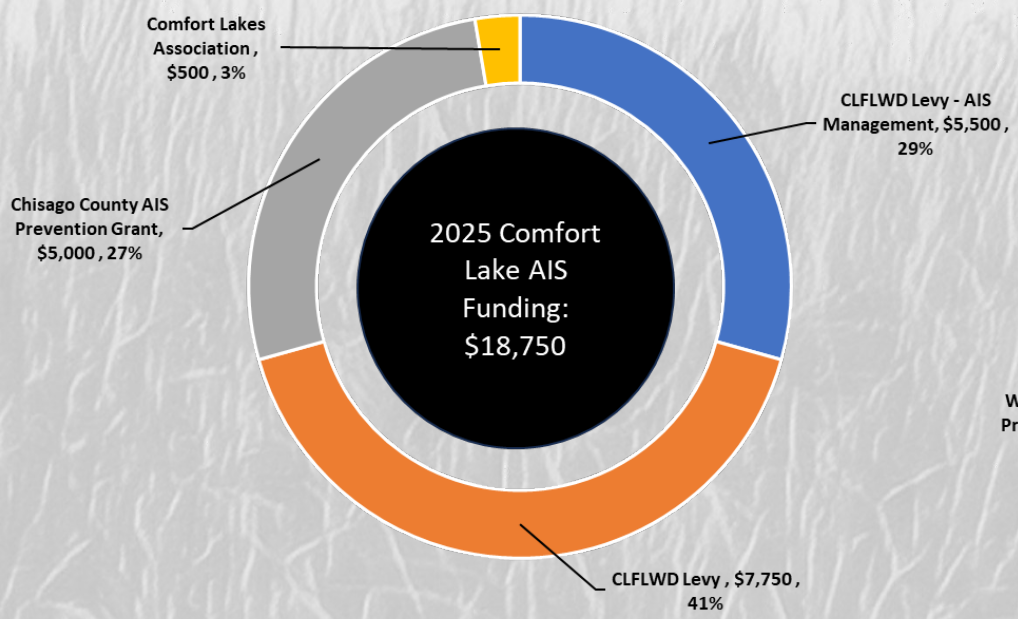
Watercraft Inspections
brief overview; see 2025 WCI report

- **Hours:** 562 hours were worked at Comfort Lake
- **Surveys:** 775 inspection surveys were performed at Comfort Lake
- **Reports:**
  Chisago County: 2025 AIS Prevention Report
  (Expected in early 2026) CLFLWD: 2025 Watercraft Inspection Program Report

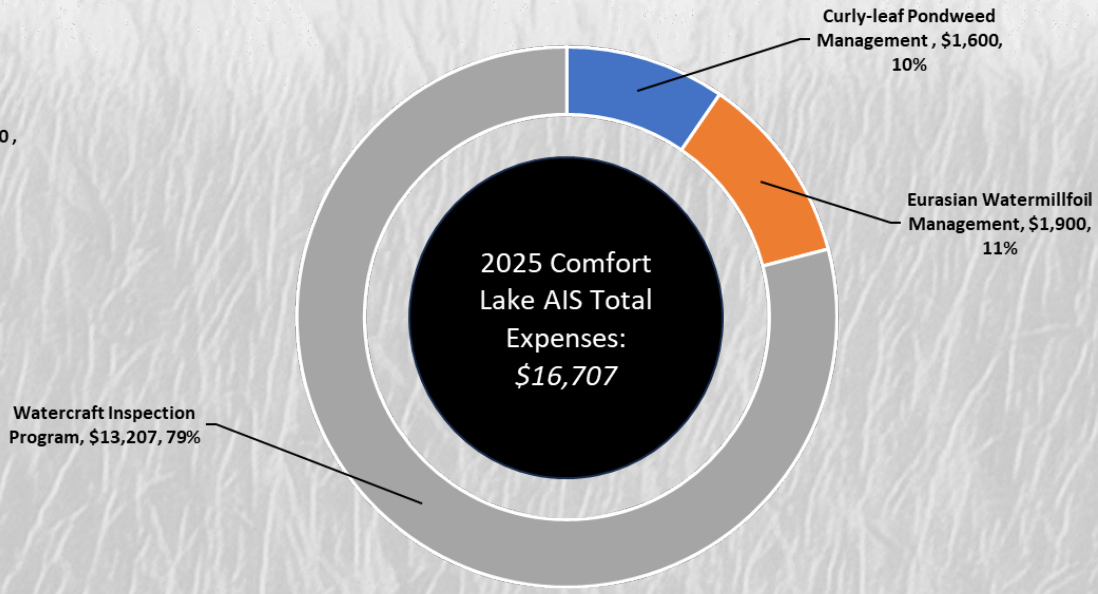
Sunrise river outlet at Comfort Lake

Comfort Lake - 2025 Budget Summary

CLFLWD's 2025 Comfort Lake AIS Funding



CLFLWD's 2025 Comfort Lake AIS Program Expenses



District Wide - Purple Loosestrife

Purple Loosestrife

- District staff performed purple loosestrife assessment surveys well out in the field with the purpose of implementing a future loosestrife beetle biocontrol management following DNR guidelines.

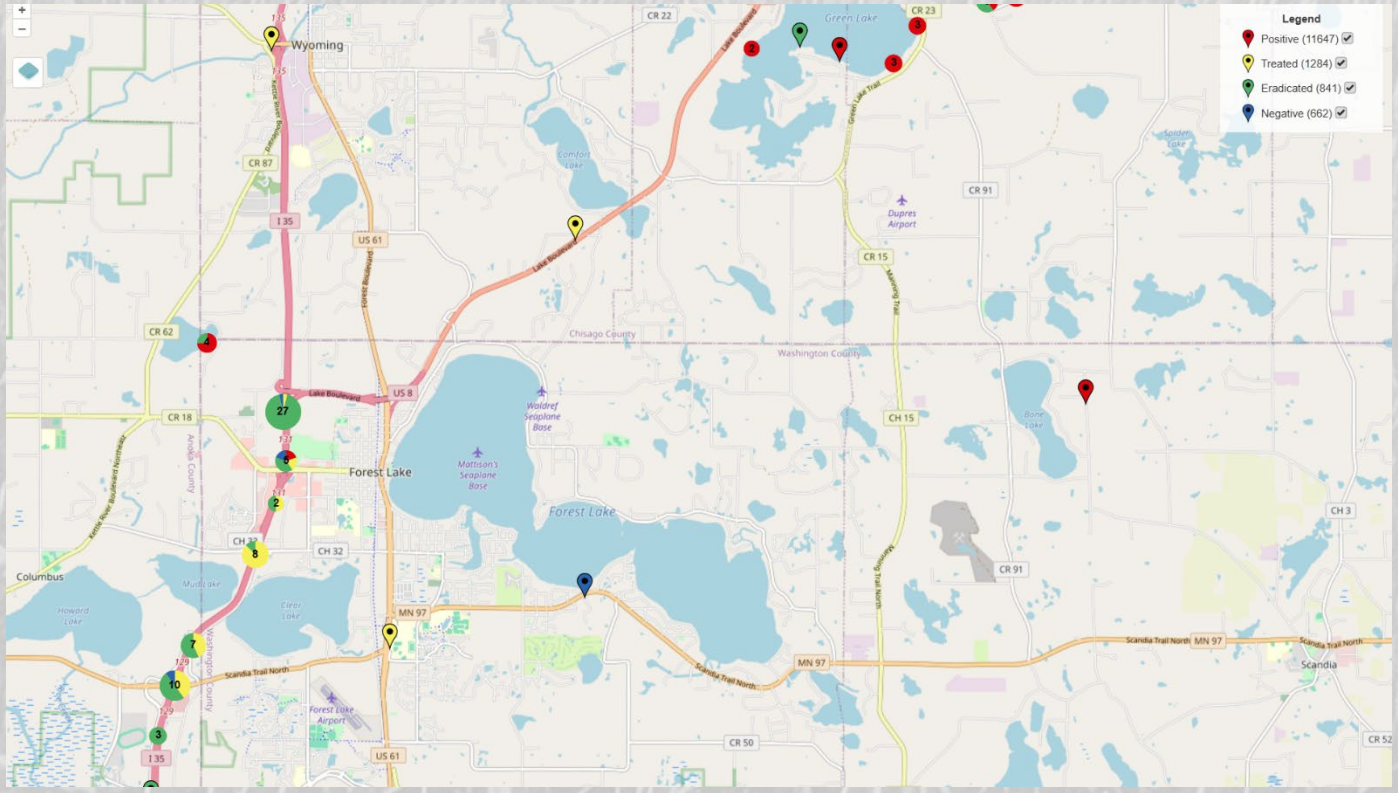
Purple loosestrife along Keewahtin Ave

- Three sites with suitable conditions have been identified with large stands for sustaining beetle populations and easy access locations
  - **Forest Lake Public Launch 3**
  - **Keewahtin** (southern bay along Highway 97)
  - **Shallow Pond** (adjacent to Hawk Meadow Park trail system)

District Wide - Phragmites

Nonnative Phragmites

- District staff have confirmed and identified several native & nonnative phragmites populations while out in the field.
- Nonnative phragmites stands have been reported on the EDDmaps application that the DNR & MAISRC use for determining potential future treatment locations.



EDDmaps image with observed phragmites locations for CLFLWD & surrounding areas