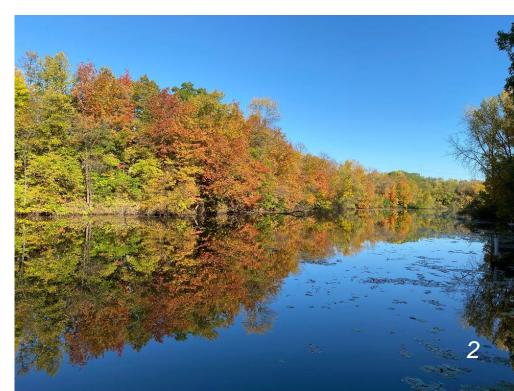


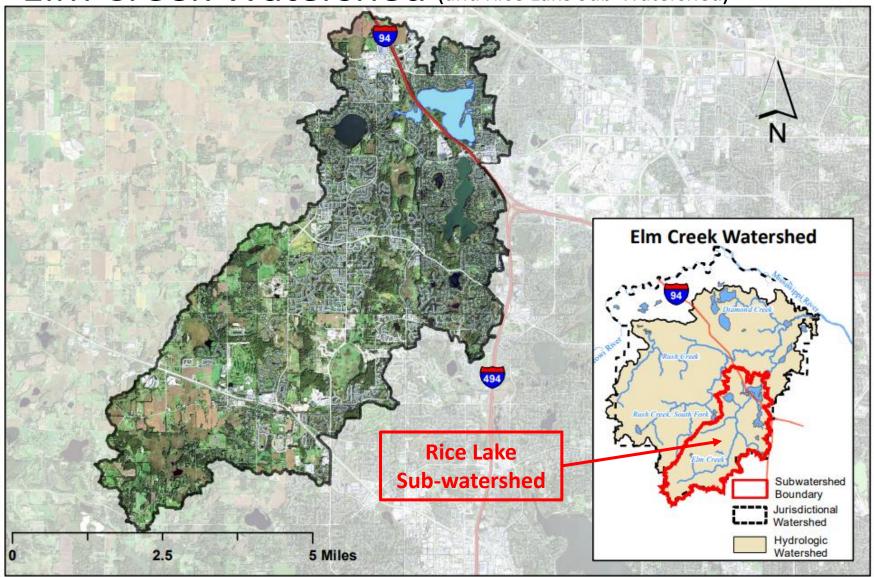
### Rice Lake Area Association

email: <u>ricelakeassoc@comcast.net</u>

- RLAA is one of Minnesota's many volunteer, non-profit, lake associations
- Lake associations work with citizens, other lake associations, researchers, city, county, state, and federal agencies and programs
- RLAA encourages stewardship of water, soil, and vegetation for recreation and wildlife habitat
- RLAA Volunteer Board Members:
  - Hente Braam, President
  - Jeremy Coenen, Vice President
  - Mark Ellingson, Director (re-enlist?)
  - Luke Johnson, Director (re-enlist?)
  - Nick Mannel, Director
  - Curt Putland, Director (re-enlist?)
  - Scott Roeglin, Director
  - George Schneider, Secretary
  - Rick Stulac, Director (re-enlist?)
  - Michael Thiede, Treasurer



Elm Creek Watershed (and Rice Lake Sub-Watershed)



www.ricelakemn.com

## Dam and Spillway

- Elm Creek is an MPCA impaired waterway
- The spillway controls were vandalized in 2022, so the City is using sandbags to restrict spillway discharge to the minimum DNR required 1 ft<sup>3</sup>/second
- The City will attempt to repair the spillway mechanism the next time a drawdown is done
- Drought and evaporation are the primary drivers of low lake levels
- Lake level is not very sensitive to spillway discharge:
  With no water flowing in and 1 ft<sup>3</sup>/second draining out, the lake level would drop just 2.3 inches per month
- More questions? publicworks@maplegrovemn.gov

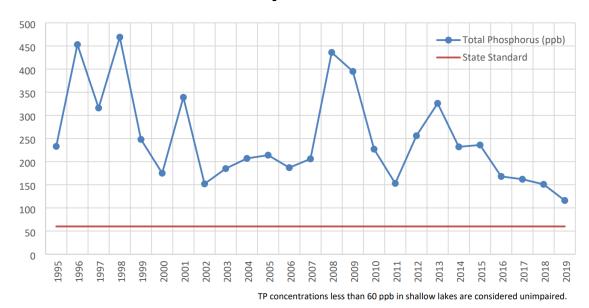


### Rice Lake

- 307 acre, 7ft avg, 10ft max depth reservoir created by Elm Creek dam,
  52:1 upstream watershed
- 16,092 acre Rice Lake sub-watershed within the 66,400 acre Elm Creek watershed
- Public carry-in boat launch (for kayaks, canoes, and paddleboards)
- No public access for trailered boats
- Wildlife habitat (northern pike, bass, sunfish, perch, crappie, carp, bullhead, painted turtles, snapping turtles, frogs, toads, snakes, muskrat, squirrels, mink, beaver, fox, coyotes, racoons, deer, rabbits, bats, cormorants, hawks, eagles, loons, turkeys, ducks, geese, osprey, gulls, heron, swans, egrets, turkey vultures, pelicans, cranes, kingfishers, coots, . . . )
- Rice Lake is significantly impaired (eutrophic) with excess phosphorous and nitrogen from chemical fertilizers and decaying organic matter
  - ➤ 32.5% Maple Grove storm drains
  - ➤ 22.6% Plymouth, Medina, Corcoran storm drains
  - > 2.0% County and State highway storm drains
  - ➤ 26.6% internal load (produced within the lake) and atmosphere
  - ➤ 16.3% shore and upstream drainage (not via storm drains)



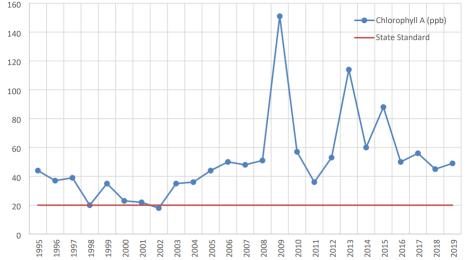
## Rice Lake Impairment Trends



#### Harsh Reality:

- Alum treatment cost for the whole lake would exceed \$800K
- The average annual Total Phosphorous load 2010-2012 was 12,632 lbs
- The 10 best Maple Grove storm sewer projects would cost \$1.5M and reduce TP by just 54 lbs/yr

Source: Rice Lake Subwatershed Assessment. City of Maple Grove, March 2023



### **Invasive Zebra Mussels**

- Zebra mussels are living in Fish Lake, so they are likely in Rice Lake too
- Rice Lake is being monitored, but there is no way to undo the Fish Lake invasion
- Properly cleaning and drying boats, lifts, and docks from other waters remains important to prevent starry stonewort and other invasive species
- Zebra mussels outcompete native species for microscopic food particles, resulting in clearer water and less food for native species
- Plants thrive in clearer water with more sunshine available
- Zebra mussels significantly change the ecological balance, but the long term effects in other lakes have not proven as dire as feared
- Zebra mussel shells are razor sharp, so be careful
- Zebra mussels don't eat cyanobacteria\*
  - \*Blue/green algae isn't algae it is a cyanobacteria



## June 2022 Plant Survey

2021 Curlyleaf Pondweed Delineation Rice Lake (# 27-0116)







- The 2021/2022 winter drawdown drastically reduced invasive Curlyleaf Pondweed and Eurasian Watermilfoil!
- Expect continued summer algae blooms (and cyanobacteria blooms) due to fertilizer runoff

#### 2021 Eurasian Watermilfoil Delineation Rice Lake (# 27-0116)



Rice Lake (# 27-0116) 2022 Curlyleaf Pondweed & Eurasian Watermilfoil Delineation



## September 2022 Fish Survey

- Strong black crappie, largemouth bass, and yellow perch populations
- Plenty of predators for bullhead, black crappie, and juvenile carp; but who is going to eat 30" adult carp?
- Stocking 1,500 young bluegill sunfish (2"-4") to replace the generation that died during the 2021/2022 drawdown



# 2022 Fish Survey

Good

Table S1. Rice Lake trapnet results for fish surveys conducted in 2008, 2014, 2022 by Blue Water Science and in 1979, 1985, 1994 by the MnDNR. Fish data are shown as fish/trapnet. YOY = young of the year.

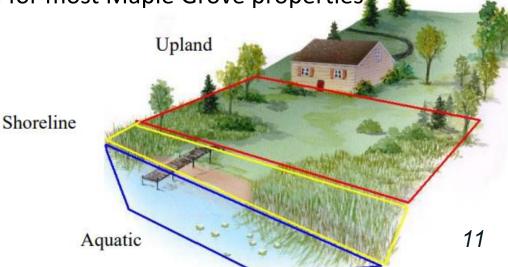
		1979 July 12 (5 nets) (MnDNR)	1985 July 9 (8 nets) (MnDNR)	1994 July 11 (9 nets) (MnDNR)	2008 Aug 19-21 (12 nets) (BWS)	2014 July 17-18 (12 nets) (BWS)	2022 Sept 7-8 (12 nets) (BWS)	DNR Range	Typical Size
L	Bullhead - Black	99	116	1.7	177	7.6	49	0.7 - 26	1
_	Bullhead - Brown			0.1				1.4 - 6.6	
Ļ	Bullhead - Yellow	0.4	2.8	0.4	0.9	1.0	5.3	0.8 - 6.2	
L	Carp		2.1	0.3	3.8	0.3	125		8"-10" (30" adults!)
	Crappie - Black	1.4	17	35	46	2.8	58	1.8 - 21	4
	Crappie - White			0.4				2.5 - 11.6	
	Dogfish (Bowfin)		0.3	1.1	0.2			0.5 - 1.7	
	Golden Shiner				1.8	16	0.1	NA	
	Largemouth Bass		0.1	0.4	1.8	0.5	3.8		12"-14"
	Northern Pike	0.4	3.1	0.3	0.1	1.3	0.5	NA	
	Sunfish - Bluegill	2.6	42	40	37	62	7.8	7.5 - 63	6"-8"
	Sunfish - Green		0.4	0.6		0.1		0.2 - 2.0	
	Sunfish - Hybrid		9.3	1.9			0.5	NA	
	Sunfish - Orangespot			0.1				NA	
	Sunfish - Pumpkinseed		2.1	10	1.0	0.1	0.1	0.8 - 8.4	
	Tadpole madtom (small bullhead)	0.2						NA	]
	Walleye						0.1	NA	
	White Sucker		2	0.2	6.5	0.1	0.2	0.3 - 2.2	1
	Yellow Perch	3.6	21	8.9	4.2	0.7	8.1	0.5 - 3.4	8"-10"
_	Bullhead - Black YOY				16	654	94	NA	]
Į	Carp YOY					405	4.2	NA	Winter
L	Crappie - Black YOY					1.3	174	NA	2021/2022
	Largemouth bass YOY						0.6	NA	drawdown
	Sunfish - Bluegill YOY					2.7	4	NA	fishkill
	Yellow perch YOY						0.4		1 1

www.ricelakemn.com

## Lake Stewards Program

- Available to RLAA members via the statewide
  Minnesota Lakes and Rivers Advocacy mnlakesandrivers.org
- "Shoreland Guide to Lake Stewardship" booklet available from Amazon (\$10)
- Provides educational resources and statewide representation
- Storm sewers are expressways from yards and pavement to lakes

The curb is essentially lakeshore for most Maple Grove properties.



## Maple Grove Citizens for Sustainability

- mgc4s.club
- Potential RLAA environmental partner
- Community green team
- U of M student project sponsor
- Community gardens
- Rain gardens
- Lawn reduction and aeration
- Storm drain medallions?
- Keeping fertilizer and yard waste out of storm drains
- More frequent street sweeping and catch basin cleanout?
- Other initiatives?



www.ricelakemn.com

#### **RLAA** Initiatives

- Deploy no-wake buoys to reduce erosion and encourage boating safety
  - Upgrading several aging buoys and adding some new ones
- Coordinate fish, vegetation, and water quality surveys and remediations
- Coordinate drawdowns (when recommended) to disrupt invasive vegetation
- Maintain and operate winter aerator to reduce fish kill
  - Experienced vandalism during the winter
  - Issues with City maintenance of storm drain outfall
- Coordinate grants and cost shares
- Coordinate shared private boat ramp access
- Plant evergreens to fill I-94 noise barrier gaps?
- Coordinate with other groups to implement best practices for a healthy lake



## Some Boating Reminders

- Be considerate (speed, noise, wildlife, etc.)
- Open water speed limit: 40mph day, 15mph night
- No wake speed limit: 5mph
  - · All channels and within 100ft of shore, anchored or non-motorized watercraft, or swimmers
- Life jackets available for everyone. Kids <10 must wear them.
- Personal (motorized) Watercraft (Jet Ski, Sea Doo, Wave Runner, . . .)
  - 9:30 am until one hour before sunset
  - Life jackets must be worn
  - 5 mph no wake speed in channels and within 150 ft of shore, anchored watercraft, non-motorized watercraft, or swimmers
  - Wake jumping, weaving through traffic, chasing wildlife, and destroying vegetation are prohibited
  - 14-17 year olds must have an operators permit or someone at least 21 on board
  - 13 year olds must have an operators permit and be continually watched by someone at least 21 or have someone at least 21 on board
  - Children under 13 are prohibited from operating personal watercraft



## Shared private boat ramp access

- A very generous RLAA member continues to grant RLAA shoreline residents gated access to their private boat ramp at 14212 87<sup>th</sup> Ave N
- RLAA boaters are issued boat stickers and unique gate access codes each year (please lock the cable again when you finish)
- The ramp pavers have been widened to reduce lawn damage



15









MILITARE







### **Income Statement**

1	23			
Revenue				
Membersh	Membership Dues		,331.32	
Total Inc	Total Income			\$7,331.32
Expenses				
Excel Er	Excel Energy		455.24	
Plant Su	Plant Survey		315.00	
MN Lakes & River	MN Lakes & Rivers membership		150.00	
Aerator Ex	Aerator Expenses		723.96	
D&O Insurance	D&O Insurance (2 years)		.,396.00	
Administration	Administration expenses		225.00	
Total Exp			\$3,265.20	
Total Incon			\$4,066.12	

www.ricelakemn.com 4/19/2022 **17** 

### **Balance Sheet**

	1/1/2022	1/1/2023
Assets		
RLAA Bank Accounts		
Checking	\$ 12,206.95	\$ 16,247.60
Savings	\$ 3,057.71	\$ 3,058.66
Total current assets	\$ 15,264.66	\$ 19,306.26
Liabilities		
Fish Survey	\$ 1,125.00	
AIS Plant Survey	\$ 315.00	
Aeration	\$ 300.00	
Fish Stocking	\$ 3,000.00	\$ 627.60
Insurance	\$ 700.00	\$ 698.00
New buoys		\$ 1,239.27
Administration expenses		\$ 40.00
Total Liabilities	\$ 5,440.00	\$ 2,604.87
Overall Total Assets	\$ 9,824.66	\$ 16,701.39

www.ricelakemn.com 4/19/2022 18

## **Treasurer's Report**

#### Thus far this year

- ❖ We've collected \$5,605 in member dues from 54 members for the 2023 boating season.
- This is down from \$5740 from 56 members by this time last year

#### Contact Database

 Our database has about 250 street addresses of potential member, almost all of them with email addresses

#### Expenses Explained

- New Buoys (total \$3,138; City of MG to cover \$2,510 for the actual buoys)
- That leaves \$628 for RLAA to pay for new buoys, plus \$311 for ancillary supplies and \$300 for insurance and permits
- Fish Stocking; \$3,138 total with \$2,510.being covered by the City of MG

#### 2023 Goals

Our goals include increasing our membership in 2023

www.ricelakemn.com 4/19/2022 19

