



Chisago Lakes Lake Improvement District
Department of Environmental Services/Zoning
Chisago County Government Center
313 North Main Street, Center City, Minnesota 55012
(651) 213-8380 or benjamin.elfelt@chisagocountymn.gov

CHISAGO LAKES LAKE IMPROVEMENT DISTRICT (LID) ANNUAL MEETING AGENDA

Monday, February 6, 2023, 6:30 pm

In-Person and Virtual Meeting

Room 150B, Chisago County Government Center, Center City

LID BOARD MEMBERS

Jill Behnke

South Center, Ogren, Linn,
Bloom and Swamp Lakes

Travis LaMotte

Green/Little Green, School,
and Mattson Lakes

Margaret LeVasseur

North Lindstrom, South
Lindstrom, and Wallmark
Lakes

Mike Mergens

Chair

North Center, Little, and
Pioneer Lakes

Todd McBride

At Large

Steve Paquay

Chisago, Kroon, and
Spider Lakes

Gary Schumacher

Vice Chair

At Large

Staff

Ben Elfelt

Administrator

Monica Kinny

Water Resource Specialist

*****Notice of Participation via Teams*****

Pursuant to Minnesota Statutes Section 13D.02, Lake Improvement District (LID) Board member Gary Schumacher will remotely attend the LID Board meeting on Monday, February 6, 2023 at 6:30 pm via Microsoft Teams. LID Board member Schumacher will be seen and heard via electronic means and will participate from 8840 98th Street, Road Unit C, Ocala, FL 34481, a location open and accessible to the public.

Pursuant to Minnesota Statutes Section 13D.02, Lake Improvement District (LID) Board member Steve Paquay will remotely attend the LID Board meeting on Monday, February 6, 2023 at 6:30 pm via Microsoft Teams. LID Board member Paquay will be seen and heard via electronic means and will participate from, 4318 Butler Hill Road St. Louis Missouri 63128, a location open and accessible to the public.

Pursuant to Minnesota Statutes Section 13D.02, Subd. 3, persons interested in monitoring the meeting electronically from a remote location may view the meeting through the Microsoft Teams meeting link below.

Virtual Meeting Audience Attendance Instructions

Please enter the link below to join the meeting:

https://teams.microsoft.com/l/meetup-join/19%3ameeting_MWUyYWJhYWYtNGYzZS00YTE2LThiN2ItYzQyNjA1N2YzMTQy%40thread.v2/0?context=%7b%22Tid%22%3a%22e9a76457-1011-43ee-bad1-c10216f16152%22%2c%22Oid%22%3a%226f0e5b76-8666-4b6d-9e7f-2eee2be15a22%22%7d

Meeting ID: 259 805 286 297

Passcode: FTDBnr

Or call in (audio only)

[+1 612-428-8763](tel:+16124288763), 759786737# United States, Minneapolis

Phone Conference ID: 759 786 737#

Join on your computer, mobile app or room device

[Click here to join the meeting](https://teams.microsoft.com/l/meetup-join/19%3ameeting_MWUyYWJhYWYtNGYzZS00YTE2LThiN2ItYzQyNjA1N2YzMTQy%40thread.v2/0?context=%7b%22Tid%22%3a%22e9a76457-1011-43ee-bad1-c10216f16152%22%2c%22Oid%22%3a%226f0e5b76-8666-4b6d-9e7f-2eee2be15a22%22%7d)

- 6:30 pm 1) Convene, Pledge of Allegiance**
- 6:31 pm 2) Approval of Agenda**
- 6:32 pm 3) Consent Agenda**
- a. Approval of Minutes: January 9, 2023
 - b. Financial Report
 - c. Approval of Invoice Payments
- 6:35 pm 4) Citizen's Forum**
- 6:37 pm 5) Annual Business Meeting**
- a. **Review LID Election Results**
 - i. *Area 1 Applicant* - Mike Mergens
 - ii. *At Large Applicant*– Gary Schumacher
 - b. **Oaths of Office:**
 - i. Travis LaMotte – Area 5 (replacement)
 - ii. Mike Mergens – Area 1
 - iii. Gary Schumacher – At Large
 - c. **Board Chair and Vice Chair Appointments***
 - d. **LID Workgroup Assignments***
 - i. Aquatic Invasive Species
 - ii. North Center North Lindstrom Channel Maintenance
 - iii. Planning & Budget
 - iv. Channel and Weir – Operations and Maintenance Plan
 - e. **2023 Water Resource Management Plan**
 - f. **2023 Budget**

7:30 pm 7) Old Business

- a. Chisago Lakes Home & Business Expo Staffing Schedule (February 25-26, 2023)
- b. Municipal Snow Storage, South Center Lake
- c. Green Lake Villa Permit Monitoring & Reporting

7:45 pm 8) Staff Reports

- a) Chisago County Water Resources
 - a. AIS Management 101 Course Registration*
 - b. Lower St. Croix, Comprehensive Watershed Management Plan (1W1P)

8:00 pm 9) Adjournment

**UNAPPROVED MINUTES
CHISAGO LAKES LAKE IMPROVEMENT DISTRICT
OFFICIAL PROCEEDINGS
Monday, January 9, 2023**

The Chisago Lakes Lake Improvement District (LID) Board of Directors met for their monthly meeting at 6:30 p.m. Monday, January 9, 2023 via both an in-person and virtual meeting held at the Chisago County Government Center, Room 150B, in Center City, MN with the following Directors present: Margaret LeVasseur, Todd McBride, Mike Mergens, Steve Paquay, and Gary Schumacher. **ABSENT:** Travis LaMotte and Jill Behnke

Pursuant to Minnesota Statutes Section 13D.02, Subd. 3, persons interested in monitoring the meeting electronically from a remote location viewed the meeting through the Microsoft Teams meeting link.

Others present attended the in-person or virtual meeting at a location of their choice through a personal device (e.g., laptop, tablet, cell phone, or personal computer). Each LID Board Director and others present were allowed to view documents presented during the in-person and virtual meeting via their devices and to participate in discussion through microphones located in their devices.

Also present: Chisago Lakes LID Administrator Ben Elfelt, Chisago County Water Resource Manager Susanna Wilson Witkowski, Chisago County Commissioner Marlys Dunne, EOR engineer Greg Graske, EOR Environmental Scientist Jimmy Marty, and one citizen.

Chair Mike Mergens called the business meeting to order at 6:30 pm and lead the assembly in the Pledge of Allegiance.

Director LeVasseur offered a motion to approve the agenda for the LID meeting. Motion seconded by Director Schumacher and, upon a roll call vote being taken thereon, the motion **carried** as follows: **IN FAVOR THEREOF:** Margaret LeVasseur, Todd McBride, Mike Mergens, Steve Paquay, and Gary Schumacher. **OPPOSED:** None **ABSENT:** Travis LaMotte and Jill Behnke

Director Paquay offered a motion to approve the items on Consent Agenda for the LID meeting, including a) Approval of Minutes: from December 5, 2022, and the December 15, 2022 Special Meeting and b) Financial Report and c) Approval of Invoice Payments. Motion seconded by Director LeVasseur and, upon a roll call vote being taken thereon, the motion **carried** as follows: **IN FAVOR THEREOF:** Margaret LeVasseur, Todd McBride, Mike Mergens, Steve Paquay, and Gary Schumacher. **OPPOSED:** None **ABSENT:** Travis LaMotte and Jill Behnke

January 2023 LID Invoices Received		
Invoice Detail	LID Budget Category	Amount
CC Press	Legal Ad - Area 5 Announcement	985.68
ODP Business Solutions	Office Supplies (Toner)	151.85
Chisago Lakes Community Ed	Home & Business Expo Booth Rental	195.00
Lindstrom Hardware	Hook, Line & Sinker Collector supplies	20.37
Washington Cons. District	4th Quarter Water Resource Educator Program	1,671.40
Monthly Expense Total		3,024.30

The Chair opened the Citizen's Forum at 6:35 p.m. No citizens offered comment. The Chair closed the Citizen's Forum at 6:35 p.m.

NEW BUSINESS

Elfelt introduced a new method of sharing agendas and documents. The LID Board was in favor of moving to OneDrive as the main mechanism for filesharing.

Elfelt updated the Board on the County adoption of the Baker Tilly Wage Study for all exempt positions, and the anticipated adoption for union positions pending contract resolution. Elfelt will update the LID Board with final budget implications once the union contract is finalized.

Elfelt updated the LID Board on the appointment of Commissioner Dunne as the County Board Liaison to the LID Board, and Commissioner Greene as the alternate. Commissioner Dunne introduced herself to the LID Board.

Elfelt updated the Board on the upcoming LID Board Election on February 6, 2023, for Areas 1 & 6. Candidate Mike Mergens submitted an application for Area 1 and candidate Gary Schumacher submitted an application for Area 6.

Director McBride left the meeting.

Elfelt updated the Board on the Minnesota Department of Natural Resources (MNDNR) issuance of the Green Lake Villas well permit, permit number: 2021-2835. The LID Board directed Elfelt to follow up MNDNR staff about the monitoring requirements of the permit.

Elfelt updated the Board on the renewal of the Little Green Lake and Lake Ellen carp barrier permit, permit number: 80239.

Director LeVasseur offered a motion to approve funding for garbage cans to be placed at the main public accesses on North Center, South Center, Chisago, and Big Green Lakes, for fourteen days, coinciding with fish house removal deadline, not to exceed three hundred dollars. Motion seconded by Director McBride and, upon a roll call vote being taken thereon, the motion **carried** as follows: **IN FAVOR THEREOF:** Margaret LeVasseur, Todd McBride, Mike Mergens, Steve Paquay, and Gary Schumacher. **OPPOSED:** None **ABSENT:** Travis LaMotte and Jill Behnke

Elfelt updated the Board on the municipal snow storage site near South Center Lake. The Board approved chloride testing of one sample to be used for estimating total chloride load of the snow pile.

Director Paquay offered a motion to approve funding fifty percent (50%) of the cost for four new promotional posters, in partnership with County Water Resources, LID share not to exceed five hundred dollars. Motion seconded by Director LeVasseur and, upon a roll call vote being taken thereon, the motion **carried** as follows: **IN FAVOR THEREOF:** Margaret LeVasseur, Todd McBride, Mike Mergens, Steve Paquay, and Gary Schumacher. **OPPOSED:** None **ABSENT:** Travis LaMotte and Jill Behnke

OLD BUSINESS

Director LeVasseur offered a motion to approve LID funding to provide a ten-dollar discount coupon to residents within the LID to be used when purchasing a rain barrel from the Chisago County Soil and Water Conservation District, total coupon expense not to exceed seven hundred and twenty dollars. Motion seconded by Director McBride and, upon a roll call vote being taken thereon, the motion **carried** as follows: **IN FAVOR THEREOF:** Margaret LeVasseur, Todd McBride, Mike Mergens, Steve Paquay, and Gary Schumacher. **OPPOSED:** None **ABSENT:** Travis LaMotte and Jill Behnke

Elfelt updated the Board on the North Center / North Lindstrom channel project, stating that the Minnesota Department of Natural Resources (MNDNR) is still reviewing the EOR models and requested data, and will update LID staff when review is complete.

STAFF & ENGINEERING REPORTS

Chisago County Water Resources

Wilson Witkowski informed the Board that East Metro Water Resource Education Program (EMWREP) staff met with County and LID staff to discuss planning for 2023. Smart salting was discussed as a potential subject for future trainings and outreach events.

Wilson Witkowski shared with the Board that the We Are Water Exhibit committee has formed two subcommittees, one to apply for the grant and one to research and explore host sites.

Wilson Witkowski updated the Board on the outcome of the American Recovery Plan Act Proposals brought before the Chisago County Board of Commissioners Budget and Finance Committee.

Following the expiration of their three-year terms, Director Mergens volunteered to be the Policy Committee LID Citizen At-Large, and Director Paquay volunteered to be the alternate appointee for the Lower St. Croix, Comprehensive Watershed Management Plan (1W1P)

Director LeVasseur offered a motion to adjourn the meeting at 7:46 p.m. Motion seconded by Director Schumacher and, upon a vote being taken thereon, the motion **carried** as follows: **IN FAVOR THEREOF:** Margaret LeVasseur, Mike Mergens, Steve Paquay, and Gary Schumacher. **OPPOSED:** None **ABSENT:** Travis LaMotte, Todd McBride, and Jill Behnke

Mike Mergens, Chair

Attest: _____

Benjamin Elfelt, Administrator

Chisago Lakes Lake Improvement District

2023 Budget Summary - January

LID 618	Description								
Goal 1 Water Quality 6828		2023 Reserve Spending	2022 Allocated Unspent	2023 Approved Budget	Total Funds 2022-23	2022 Commitments	2023 Actuals	Uncommitted Balance	2022 Allocated Unspent
Obj 1	Lake Water Quality Monitoring			\$ 9,500.00	\$ 9,500.00		\$18.00		
Obj 2	Lake Water Quality Monitoring Report	\$ 5,000.00		\$ 6,000.00	\$ 11,000.00		\$2,697.50		
Obj 3	Lower St. Croix 1W1P			\$ -					
	Subtotal	\$ 5,000.00	\$ -	\$ 15,500.00	\$ 20,500.00	\$ -	\$2,715.50	\$ 20,500.00	\$ (2,715.50)
Goal 2 Ditch & Weir System, Water Levels 6813		2023 Reserve Spending	2022 Allocated Unspent	2023 Approved Budget	Total Funds 2021-22	2022 Commitments	2023 Actuals	Uncommitted Balance	2022 Allocated Unspent
Obj 1	Maintain Ditch & Weir System				\$ -			\$ -	\$ -
Obj 1a	Master Services Agreement			\$ 40,000.00					
Obj 1b	Channel maintenance and spraying	\$ 3,000.00							
Obj 2	Monitor Water Supplies, Lakes and Ground water Observation								
Obj 3	Equipment/Supplies/Publications	\$ 500.00							
	Subtotal	\$ 3,500.00	\$ -	\$ 40,000.00	\$ 43,500.00	\$ -	\$0.00	\$ 43,500.00	\$ -
Goal 3 Land Use Practices 6893		2023 Reserve Spending	2022 Allocated Unspent	2023 Approved Budget	Total Funds 2021-22	2022 Commitments	2023 Actuals	Uncommitted Balance	2022 Allocated Unspent
Obj 1	Uniform Water Protection Ordinances (MIDS)								
Obj 2	Matching funds - Install Projects								
Obj 2a	SWCD FY 2022 Match	\$ 45,000.00							
Obj 2b	SWCD FY 2023 Match			\$ 45,000.00					
Obj 3	Best Management Practices Maintenance			\$ 8,000.00			\$3,640.00		
	Subtotal	\$ 45,000.00	\$ -	\$ 53,000.00	\$ 98,000.00	\$ -	\$3,640.00	\$ 98,000.00	\$ (3,640.00)
Goal 4 Recreational Use 6454		2023 Reserve Spending	2022 Allocated Unspent	2023 Approved Budget	Total Funds 2021-22	2022 Commitments	2023 Actuals	Uncommitted Balance	2022 Allocated Unspent
Obj 1	Recreation and safety recommendations								
Obj 2	Waterway Trail System	\$ 150.00							
Obj 3	Parks adjacent to lakes	\$ 150.00							
Obj 4	Special needs docks	\$ 150.00							
	Subtotal	\$ 450.00	\$ -	\$ -	\$ 450.00		\$0.00	\$ 450.00	\$ -
Goal 5 Navigation Channels 6834		2023 Reserve Spending	2022 Allocated Unspent	2023 Approved Budget	Total Funds 2021-22	2022 Commitments	2023 Actuals	Uncommitted Balance	2022 Allocated Unspent
Obj 1	North Center North Lindstrom Channel	\$ 80,000.00			\$ 80,000.00				
Obj 2	Weir Maintenance & Repair	\$ 50,000.00			\$ 50,000.00				
	Subtotal	\$ 130,000.00	\$ -	\$ -	\$ 130,000.00	\$ -	\$ -	\$ 130,000.00	\$ -
Goal 6 Shorelines 6827		2023 Reserve Spending	2022 Allocated Unspent	2023 Approved Budget	Total Funds 2021-22	2022 Commitments	2023 Actuals	Uncommitted Balance	2022 Allocated Unspent
Obj 1	Lakeshore and Urban Restoration			\$ 10,000.00			\$3,152.50		
Obj 2	Landowner Cost Share Program			\$ 10,000.00					
	Subtotal	\$ -	\$ -	\$ 20,000.00	\$ 20,000.00	\$ -	\$3,152.50	\$ 20,000.00	\$ (3,152.50)
Goal 7 Environmental Education & Stewardship 6881		2023 Reserve Spending	2022 Allocated Unspent	2023 Approved Budget	Total Funds 2021-22	2022 Commitments	2023 Actuals	Uncommitted Balance	2022 Allocated Unspent
Obj 1	Children's Water Festival			\$ 1,000.00	\$ 1,000.00				
Obj 2	Water Resource Education Collaboration EMWREP			\$ 7,000.00	\$ 7,000.00				
Obj 3	Education/Outreach			\$ 1,500.00	\$ 1,500.00				
Obj 4	Hook Line & Sinker	\$ 150.00			\$ 150.00				
Obj 5	Support Area COLAs				\$ -				
Obj 6	Boat Launch Garbage & Recycling	\$ 250.00			\$ 250.00				
	Subtotal	\$ 400.00	\$ -	\$ 9,500.00	\$ 9,900.00	\$ -	\$ -	\$ 9,900.00	\$ -
Goal 8 Aquatic Invasive Species 6840		2023 Reserve Spending	2022 Allocated Unspent	2023 Approved Budget	Total Funds 2021-22	2022 Commitments	2023 Actuals	Uncommitted Balance	2022 Allocated Unspent

Obj 1	Lake Association partnerships			\$ 30,000.00	\$ 30,000.00				
Obj 2	Rapid Response	\$ 5,000.00			\$ 5,000.00				
Obj 3	Develop and Implement Carp Control Plan	\$ 7,000.00			\$ 7,000.00				
Obj 4	Survey Aquatic Plants/Animal Monitoring			\$ 6,000.00	\$ 6,000.00				
Obj 5	Invasive Phragmites Roadside Treatment	\$ 10,000.00			\$ 10,000.00				
	Subtotal	\$ 22,000.00	\$ -	\$ 36,000.00	\$ 58,000.00	\$ -	\$ -	\$ 58,000.00	\$ -
Staff & Administrative Support		2023 Reserve Spending	2022 Allocated Unspent	2023 Approved Budget	Total Funds 2021-22	2022 Commitments	2023 Actuals	Uncommitted Balance	2022 Allocated Unspent
Obj 1	Contractor meeting attendance 6886			\$ 3,000.00	\$ 3,000.00				
Obj 2	Per diems 6111			\$ 4,500.00	\$ 4,500.00				
Obj 3a	County Staff Support 6105			\$ 160,000.00	\$ 160,000.00				
Obj 3b	Technology	\$ 6,000.00			\$ 6,000.00				
Obj 4	Miscellaneous Expenses				\$ -				
	Postage 6205			\$ 250.00	\$ 250.00		\$ 7.47		
	Publications and brochures 6235	\$ 750.00		\$ 750.00	\$ 1,500.00				
	Conferences, dues, training 6245	\$ 500.00		\$ 500.00	\$ 1,000.00				
	Gas & oil 6561			\$ 1,000.00	\$ 1,000.00				
	Truck/Boat Maintenance 6482			\$ 2,000.00	\$ 2,000.00				
	Mileage 6330			\$ -	\$ -				
	Office Supplies 6400				\$ -		\$ 151.86		
	Totals	\$ 7,250.00	\$ -	\$ 172,000.00	\$ 179,250.00	\$ -	\$159.33	\$ 179,250.00	\$ (159.33)
Totals		2023 Reserve Spending	2022 Allocated Unspent	2023 Approved Budget	Total Funds 2021-22	2022 Commitments	2023 Actuals	Uncommitted Balance	2022 Allocated Unspent
		\$ 213,600.00	\$ -	\$ 346,000.00	\$ 559,600.00	\$ -	\$ 9,667.33	\$ 559,600.00	\$ (9,667.33)

*** Chisago County ***



REVENUES & EXPENDITURES BUDGET REPORT

Report Basis: Cash

Page 2

From: 01/2023 Thru: 12/2023

Percent of Year: 100%

18 Fund
Lake Imprvmnt Distr Maint

618 Dept
Lake Improvement District Maintenance

<u>Account Number</u>	<u>Description</u>	<u>Status</u>	<u>12/2023 Amount</u>	<u>Selected Months</u>	<u>2023 Bdgt Adptd Orig</u>	<u>% Of Budget</u>
--- Revenues ---						
18-618-000-0000-5001	Current Taxes		.00	3,123.33 -	327,520.00-	1
18-618-000-0000-5004	Delinquent Taxes		.00	273.20 -	0.00	0
18-618-000-0000-5007	Mobile Home Current		.00	22.28 -	0.00	0
--- Expenditures ---						
18-618-000-0000-6103	Salaries And Wages - Permanent		.00	7,188.66	0.00	0
18-618-000-0000-6105	Salaries And Wages - Parttime		.00	1,401.52	141,520.00	1
18-618-000-0000-6111	Per Diem In Lieu Of Salaries		.00	200.00	4,500.00	4
18-618-000-0000-6153	Insurance		.00	3,908.97	0.00	0
18-618-000-0000-6163	Retirement (Pera)		.00	644.27	0.00	0
18-618-000-0000-6175	Fica		.00	585.60	0.00	0
18-618-000-0000-6176	Medicare Match		.00	136.95	0.00	0
18-618-000-0000-6205	Postage		.00	0.00	250.00	0
18-618-000-0000-6235	Publications, Brochures, Subs.		.00	1,347.17	750.00	180
18-618-000-0000-6245	Conferences, Training And Dues		.00	0.00	500.00	0
18-618-000-0000-6301	Vehicle Repair And Maint		.00	0.00	2,000.00	0
18-618-000-0000-6561	Gas And Oil		.00	0.00	1,000.00	0
18-618-000-0000-6802	Miscellaneous Expenses		.00	85.71	0.00	0
18-618-000-0000-6813	Water Levels		.00	0.00	40,000.00	0
18-618-000-0000-6827	Shorelines		.00	3,152.50	20,000.00	16
18-618-000-0000-6828	Water Quality		.00	0.00	15,500.00	0
18-618-000-0000-6840	Invasive Species		.00	0.00	36,000.00	0
18-618-000-0000-6881	Education		.00	195.00	9,500.00	2
18-618-000-0000-6886	Contract Administration		.00	0.00	3,000.00	0
18-618-000-0000-6893	Land Use Practices		.00	6,337.50	53,000.00	12
618 Dept	TOTALS Lake Improvement District Maintenance	Revenue	.00	3,418.81 -	327,520.00-	1
		Expend.	.00	25,183.85	327,520.00	8
		Net	.00	21,765.04	.00	0
18 Fund	TOTALS Lake Imprvmnt Distr Maint	Revenue	.00	3,418.81 -	327,520.00-	1
		Expend.	.00	25,183.85	327,520.00	8
		Net	.00	21,765.04	.00	0
FINAL TOTALS:	23 Accounts	Revenue	.00	3,418.81 -	327,520.00-	1
		Expend.	.00	25,183.85	327,520.00	8
		Net	.00	21,765.04	.00	0

February 2023 LID Invoices Received

Invoice Detail	LID Budget Category	Amount
SWCD	Goals 1, 3, 6: Tech Assist & Water Quality Report	9,490.00
Alliance (Lab)	Chloride Sample Invoice	18.00
Chisago County	Postage for Ballots	7.47
Monthly Expense Total		9,515.47

CHISAGO SOIL & WATER
CONSERVATION DISTRICT
38814 THIRD AVENUE
NORTH BRANCH, 55056
651-674-2333

Invoice

DATE	INVOICE#
1/9/2023	3966

BILL TO
Chisago Lakes Lake Improvement District 313 N Main Street, Room 243 Center City, MN 55012

QTY	DESCRIPTION	RATE	AMOUNT
56	Goal 3 Land Use Practices 6893 Obj 3 Matching Funds Technical Assistance: Pahl, Pine View Shores, Swanson, Olmshenck	65.00	3,640.00T
41.5	Goal I Water Quality 6893 Obj 2 Lake Water Quality Monitoring Report	65.00	2,697.50T
48.5	Goal 6 Shorelines 6827 Obj 1 Lakeshore and Urban Restoration Technical Assistance: Posner, Maine, Raedeke	65.00	3,152.50T
	Sales Tax	0.00	0.00
Total			\$9,490.00

PO: Salt Test – Fairview Snow Pile
Date: 01/17/2023

Vendor:
Alliance Technical Group
4500 Ball Road NE
Circle Pines, MN 55014-1819

Please test the sample provided on 1/17/2023, for Chloride.

Ben Elfelt

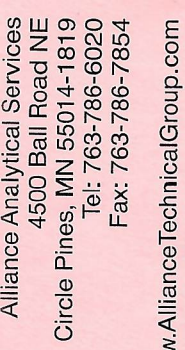


Benjamin Elfelt | CLLID Administrator
Environmental Services
313 N Main St
Suite 240
Center City, MN 55012
Benjamin.Elfelt@chisagocountymn.gov
Phone: 651-213-8383

18.00

Wait on Inv. from
Alliance

6828



CHAIN-OF-CUSTODY RECORD

Analytical Request

Page of

Version 22.0

COUNTY OF CHISAGO

Bridgitte Konrad, County Auditor/Treasurer
Chisago County Government Center
313 North Main Street, Room 274
Center City, MN 55012-9663
Phone: 651-213-8500 Fax: 651-213-8510

February 1, 2023

Chisago County Zoning & Env Services
313 N. Main St
Center City, MN 55012

RE: Lake Improvement District

STATEMENT

Mail postage charges for January 1-31, 2023:

611-6205 \$ 7.47

Total Due \$ 7.47

2022 Water Resources Annual Reports

Chisago Lakes Lake Improvement District
Lake Water Quality Monitoring
Aquatic Invasive Species Prevention
Chisago County Water Resources

1

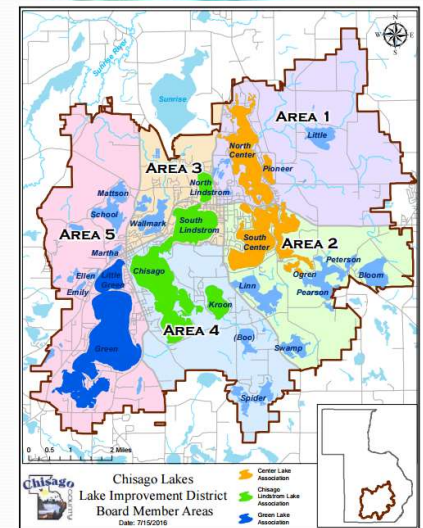
Chisago Lakes Lake Improvement District

2

Mission:
**Restore, preserve, protect and
enhance the water resources
of the Chisago Lakes Chain
of Lakes Watershed**

3

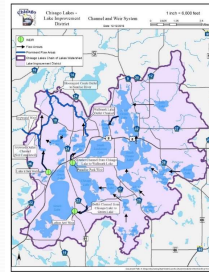
Board Member Areas & Lake Associations



4

Channel & Weir Operation & Maintenance

- Approved Operation & Maintenance Plan
 - Infrastructure, maintenance and operating rules
- Weekly inspections during times of high water
- System well maintained and functioning properly



5

North Center – North Lindstrom Channel Maintenance

- Channel open to navigation
- 2019 first time in many years
- 2020 & 21 bog maintenance projects
- Low water 2022



Above: North Lindstrom outlet, 2020
Right: North Center inlet, 2022

6

Swamp Lake Culverts Maintenance

- Minor culvert cleanout completed
- Normal flow conditions

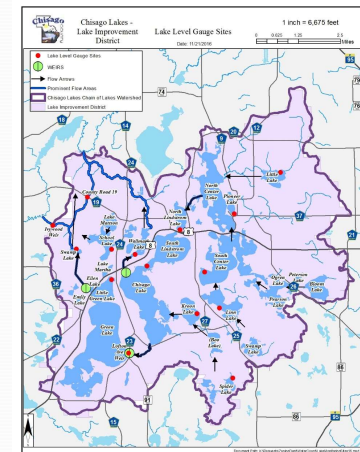


7

Lake Level Monitoring

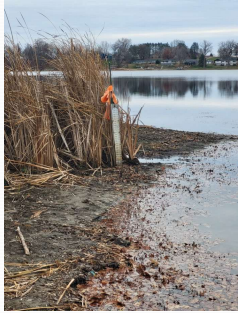


- 15 gauges monitored weekly during open water season



8

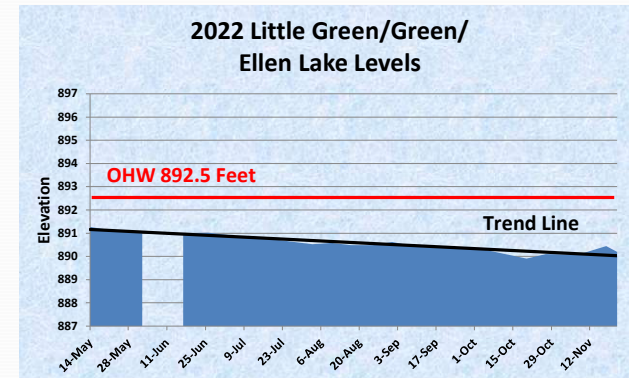
Lake Level Monitoring



- Low water in 2022

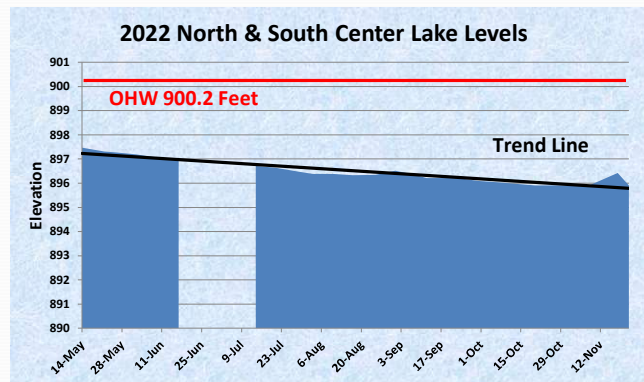
9

Lake Level Monitoring



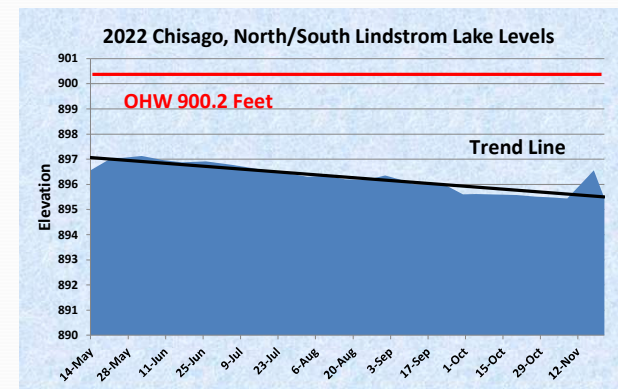
10

Lake Level Monitoring



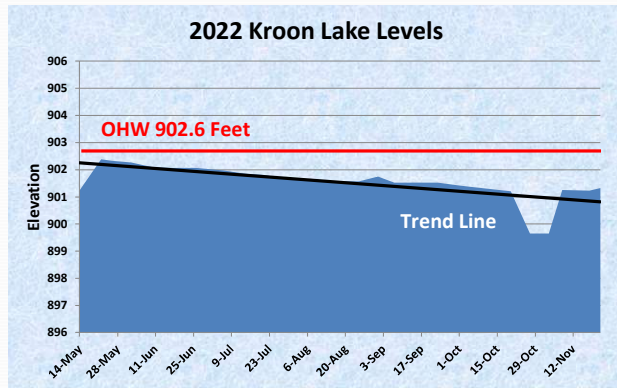
11

Lake Level Monitoring



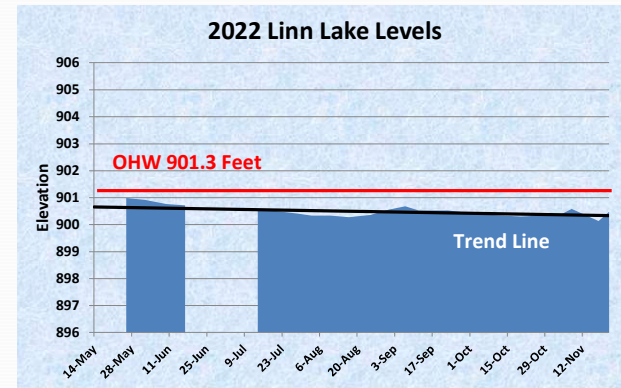
12

Lake Level Monitoring



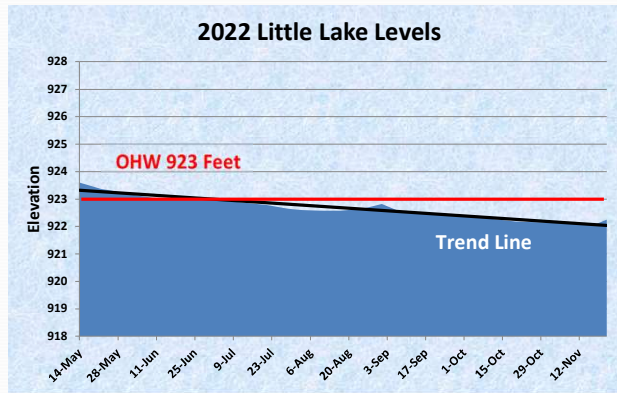
13

Lake Level Monitoring



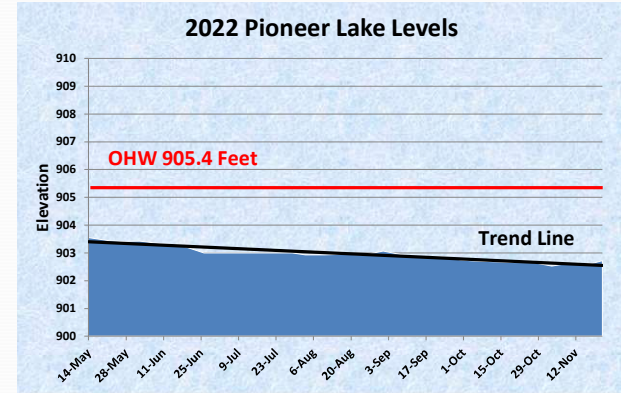
14

Lake Level Monitoring



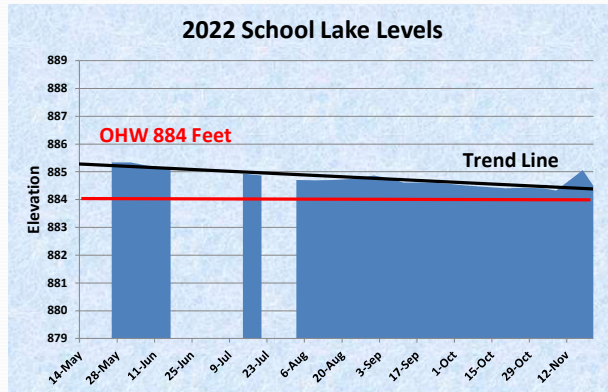
15

Lake Level Monitoring



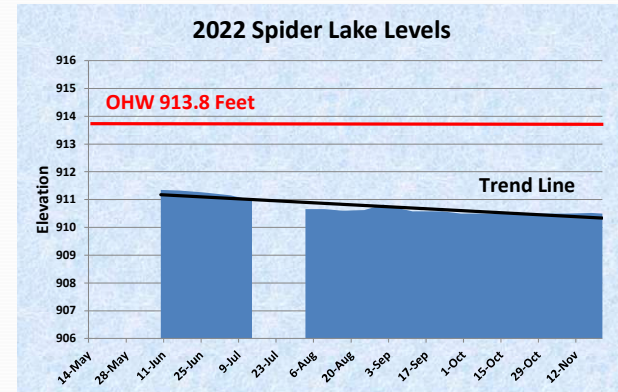
16

Lake Level Monitoring



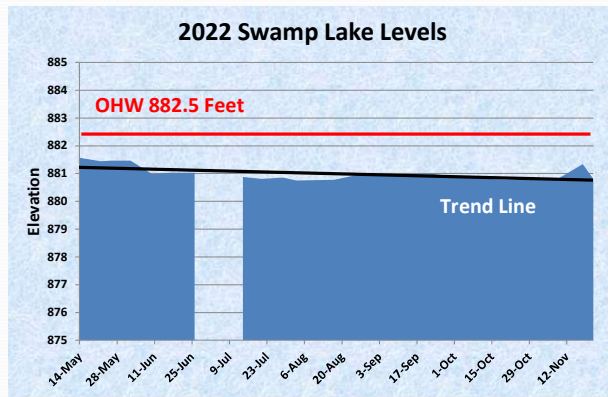
17

Lake Level Monitoring



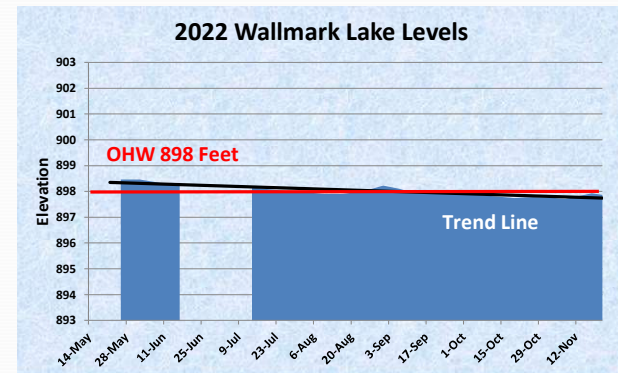
18

Lake Level Monitoring



19

Lake Level Monitoring



20

Public Outreach and Awareness

- Partnership with Lake Associations
- Community Events:
 - Home & Business Expo
 - Lakes Appreciation Night
 - Karl Oskar Days
 - Ki-Chi-Saga Days
- Community Presentations:
 - Green Lake Association
 - Chisago-Lindstrom Lakes Association
- Water Monitoring Video for Chisago Lakes Chain of Lakes

<https://www.youtube.com/watch?v=oAyrgsPx3GA>



21

Hook, Line & Sinker

- Collectors at 8 boat landings & HHW Facility
- Fishing line takes 500 years to decompose
- Lead sinkers toxic or fatal to waterfowl
- Fishing line recycled by Berkley into fish habitat, tackle boxes & spools for fishing line
- Fishhooks & lead sinkers recycled at HHW

Items collected in 2022:

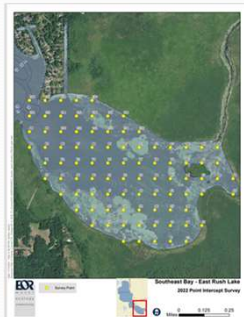
- Large amount of fishing line
- Variety of old lures
- 20 lbs. of lead tackle!



22

Aquatic Plant Point-Intercept Surveys

- Lakes Surveyed in 2022:
 - Southeast Bay of East Rush
 - Lake Emily
 - Peterson
 - Swamp



- Methodology
 - Frequency of occurrence
 - Track trends over time
 - Compare areas within lakes
- Florisitic Quality Index

23

Aquatic Invasive Species Treatment

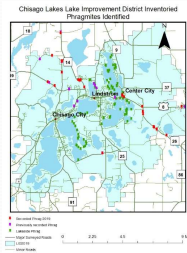
- Curlyleaf Pondweed
- Eurasian Watermilfoil
- Invasive Phragmites
- Improve navigation
- Funding allocated based on littoral zone
- Lakes Treated
 - Chisago, Green, Little Green, North Center, North Lindstrom, South Center, South Lindstrom, Pioneer



24

Invasive Phragmites Control

- Semi-Aquatic invasive perennial grass
- Area Lake Associations have taken the lead
- Lakeshore and roadside populations treated
- Control
 - Herbicide treatment (fall)
 - Cut & burn (early winter)



25

Stormwater Best Management Practices

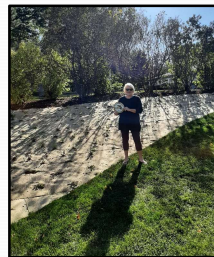
- Pine View Shore
 - Rain Garden
 - Lindström



26

Stormwater Best Management Practices

- Lawns to Legumes Demonstration Neighborhood
 - Pollinator Shoreline Buffers



27

Stormwater Best Management Practices

- Enhanced Street Sweeping
 - City of Lindström
 - Chisago City



28

Best Management Practices Maintenance

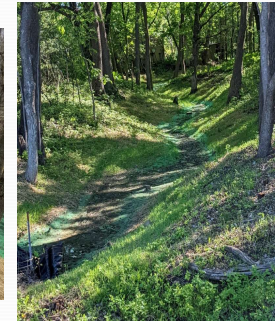
- Prah! Erosion Control Project
 - Targeted Water: Chisago Lake
 - Gully Stabilization
 - November 2022



29

Best Management Practices Maintenance

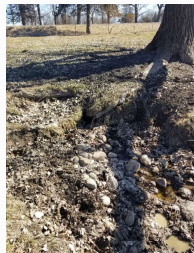
- Raedeke Gully Project
 - Targeted Water: North Center Lake
 - Gully Stabilization
 - June 2022



30

Best Management Practices Maintenance

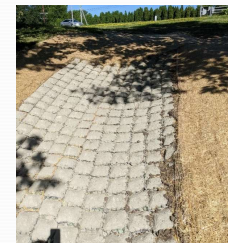
- Schultz WASCOD Control Project
 - Targeted Water: Chisago Lake
 - Water and Sediment Control
 - May 2022



31

Best Management Practices Maintenance

- Swanson Runoff Control Project
 - Targeted Water: South Center Lake
 - Near Lake Erosion
 - August 2022



32

Best Management Practices Maintenance

- Weiss Gully Project
 - Targeted Water: North Center Lake
 - Near lake erosion
 - June 2022



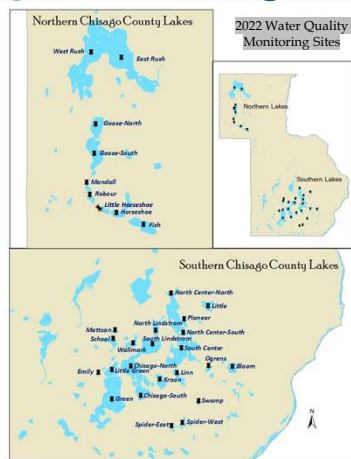
33

Chisago County Water Quality Monitoring Lakes

34

Water Quality Monitoring

- 22 Staff sites
- 6 Volunteers at 6 sites
 - Greg Ankla, Steven Bratrud, David Gerty, Scott Mower, Peter Storlie, and Scott Thelen
- Once per month
 - May – September
- Chlorophyll, Color, Invasive Plants, Nitrogen, Phosphorus, Physical Condition, Recreational Suitability, Temperature & Transparency



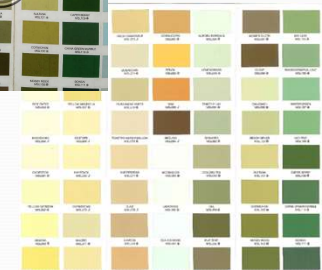
35

Lake Water Quality Predicted Using Water Color

- Jerry Spetzman's Project
 - 2014 - 2021
- Chlorophyll A – amount of algae growing in a waterbody
- MPCA – Record lake water color at sampling site
- Martha Stewart Living Complete Color Palette
 - Color comparisons
- Possible to predict overall TSI based on color of filtered water sample
- <https://www.chisagocounty.mn.gov/363/Water-Quality>



"Beach Grass"



36

Color Name	Chlorophyll-a TSI	Secchi Transparency TSI	Total Phosphorus TSI	Overall TSI	Number of Samples
Macadamia	36	43	54	44	18
Heavy Cream	36	45	53	45	18
Rice Paper	39	45	53	46	31
Chopstick	41	46	51	46	80
Toasted Marshmallow	44	49	53	49	58
Shortbread	47	51	53	50	33
Malted	48	48	57	51	57
Bamboo	52	49	55	52	31
Elderdown	51	50	58	53	24
Dune	54	51	56	53	30
Parchment Paper	57	53	57	56	82
Calibash	61	48	58	56	19
Dried Chamomile	58	55	61	58	109
Carton	59	57	60	59	17
Beach Grass	62	57	60	60	202
Sultana	64	58	62	61	63
Cornichon	67	61	68	65	213
Cornucopia	67	61	68	66	23
Mossy Rock	77	68	79	75	20
Bay Leaf					8

Total Number of Samples: 1,136

37

Chisago County Aquatic Invasive Species Prevention (AIS)

38

AIS Prevention, Early Detection, Rapid Response

- Inspection and prevention most important
- Water Monitoring Video for Chisago Lakes Chain of Lakes Watershed
- <https://www.youtube.com/watch?v=oAyrgsPx3GA>

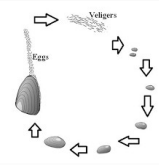




39

Zebra Mussel Veliger & Spiny Water Flea Monitoring

- Zebra Mussels
 - Microscopic, free-living larvae
 - Form shells
- Spiny Waterfleas
 - Eat native fish food
 - Form clumps on fishing line
- Lakes & rivers monitored
 - Comfort, Fish, Horseshoe, Kroon, Little, Little Green, North Center, North Goose, Rush, South Lindstrom, Spider, Sunrise River at Kost Dam, St. Croix Interstate Park



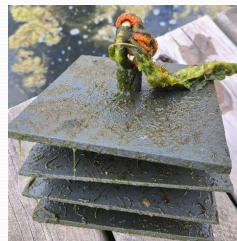


Spiny water fleas on Lake George 9/16/12 photo courtesy Emily DeBoit

40

Zebra Mussel Watch Program

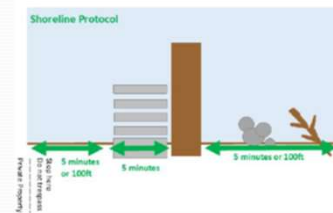
- 72 volunteers installed monitoring plates on their docks
- Lakes monitored:
 - Chisago, Fish, Green, Horseshoe, Kroon, Little, Little Green, Little Horseshoe, Mandall, North & South Center, North & South Goose, North & South Lindstrom, Rabour, Spider, and East & West Rush Lakes.
- Volunteers observed **NO** zebra mussels



41

Water Access Monitoring Program

- Monitored for new AIS infestations at public water accesses
- AIS Specialist and Watercraft Inspectors
- Followed shoreline protocol
- Monitored **16** lakes:
 - Chisago/North & South Lindstrom, Comfort, Fish, Goose, Green, Horseshoe, Kroon, Little, Little Green, Little Horseshoe, North & South Center, Rabour, Spider, East & West Rush Lakes
- **NO** new observations of AIS



42

Communication and Education

- AIS Outreach:
 - 23 AIS events
 - 1,850 residents reached
 - 425 children educated
- Handouts at boat launches, community festivals and 7 bait shops
- Display at 12 festivals
- Information at 3 parades
- Presentation to 8 community groups
- Aquatic Plant Scientist and Boat Invaders sessions at Children's Water Festival and North Branch Sunrise Elementary



43

Bait Disposal Partnership

- AIS Behavior Change Grant for Bait Disposal Partners
 - Comfort Lake – Forest Lake Watershed District (CLFLWD)
 - Chisago County
 - Minnesota Department of Natural Resources
- Chisago County received six bait bins (From CLFLWD)
 - Chisago/South Lindstrom, Green, East & West Rush, North & South Center
- The county will **NOT** participate in 2023 due to unsanitary and hazardous conditions



44

AQUATIC INVASIVE SPECIES PREVENTION WORKSHOP

- May 17th, 2022:
 - Wild Rivers Conservancy, with partners in MN & WI
 - 15 participants learned about invasive phragmites, flowering rush, starry stonewort, and how they affect waterbodies
 - Best management practices
 - Permits required
 - Treatments options to reduce infestations



45

Decontamination Blitz

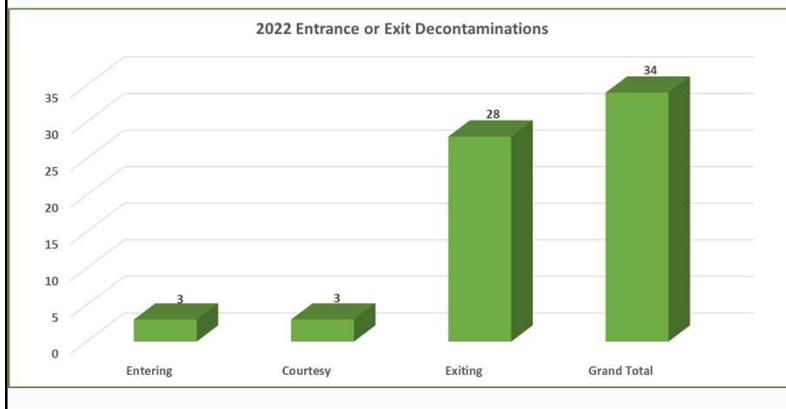
- August 5-7th, 2022
- Partners
 - Chisago County
 - Wild Rivers Conservancy
 - Minnesota Department of Natural Resources
- Stationed at public water accesses along the St. Croix River



46

Aquatic Invasive Species Prevention

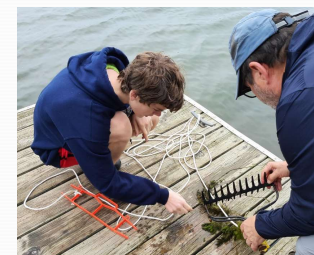
- 34 Total Watercraft Decontaminations
 - 14 Exiting Decontaminations completed by DNR Watercraft Inspectors



47

Starry Trek

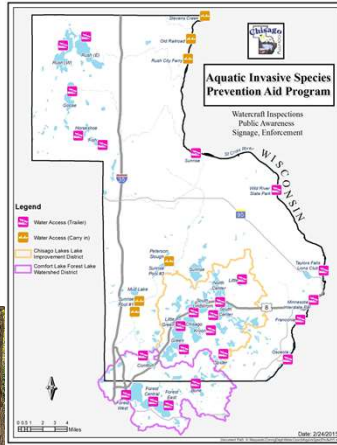
- August 20, 2022:
 - Wild Rivers Conservancy, Minnesota Aquatic Invasive Species Research Center, U of M Extension
 - Invasive algae found in MN in 2015
 - 10 volunteers searched 12 lakes for starry stonewort and other invasive species
 - Volunteers did not find starry stonewort



48

Aquatic Invasive Species Prevention

- Watercraft Inspections
 - Chisago & Northern Washington Counties
 - 24 Accesses



49

Aquatic Invasive Species Prevention

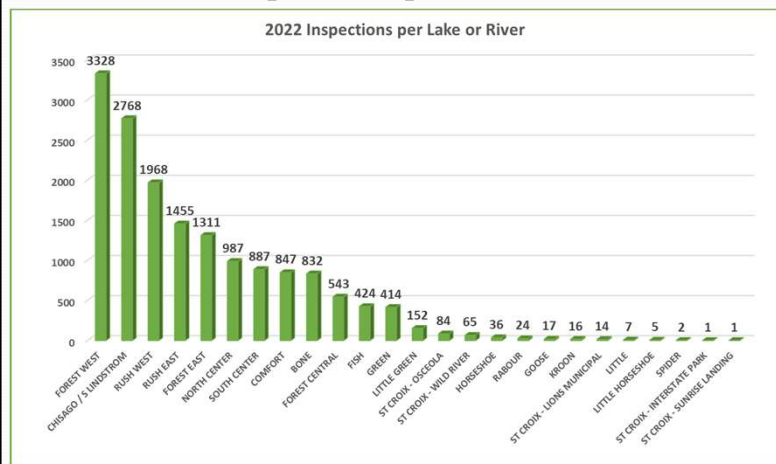
- 16,188 Watercraft Inspections



50

Aquatic Invasive Species Prevention

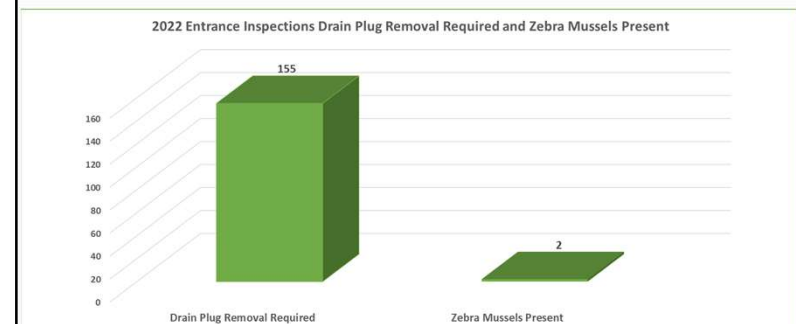
- Watercraft Inspections per Lake or River



51

Aquatic Invasive Species Prevention

- Entrance Inspections
 - Zebra Mussels and Drain Plug Removal



52

Aquatic Invasive Species Prevention

- Exit Inspections
 - Zebra Mussels Present



53

Aquatic Invasive Species Prevention

- Enforcement Inspections



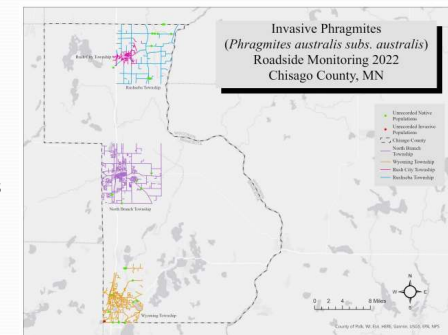
54

Chisago County Water Resources

55

Invasive Phragmites Planning and Surveys

- Planning Team:
 - Starting in February 2022
 - Meets monthly to identify, map and implement treatment strategies
- Surveys:
 - Partnership with Wild Rivers Conservancy
 - Roadside populations identified & mapped
 - North Branch, Rush City and Wyoming
 - Rusheba Township
 - Zero new
 - 1 Invasive Hybrid in Wyoming



56

Slow-No-Wake Ordinance

- Approved in 2015
- Temporarily restricts boat speeds within 300 feet of shore during high water for lakes that exceed OHW
- Permanently restricts boat speeds in many channels
- Fish, Goose, Horseshoe, Little, Rush, School, Wallmark under restrictions in 2022
- Restrictions are posted on the Chisago County website at www.chisagocountymn.gov/347/Lake-Levels

Slow-No-Wake Ordinance Restrictions (temporarily restricts boat speeds within 300 feet of shore during high water conditions)

Slow-No-Wake Restrictions

Slow-No-Wake Ordinance Restrictions (temporarily restricts boat speeds within 300 feet of shore during high water conditions)

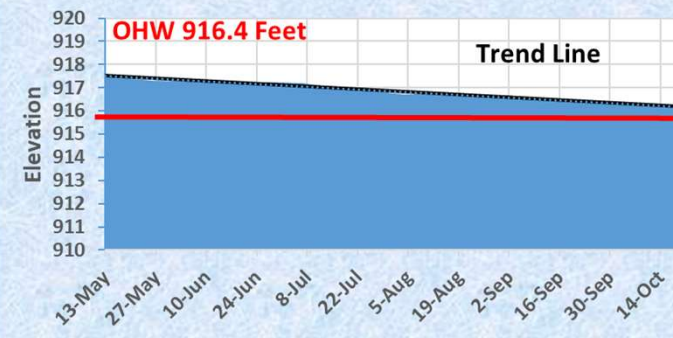
LAKE	NOTES
School	October 20 Slow-No-Wake restrictions in effect.



57

Lake Level Monitoring

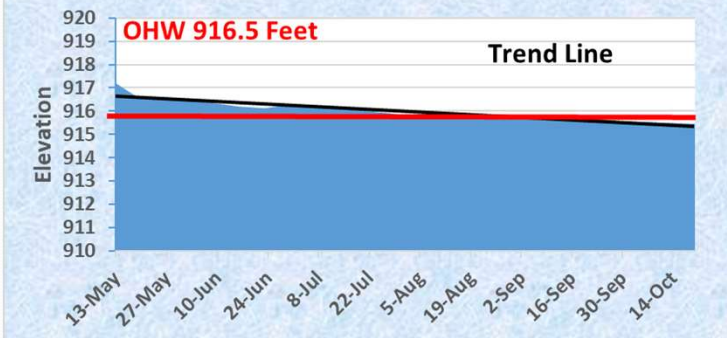
2022 Fish Lake Levels



58

Lake Level Monitoring

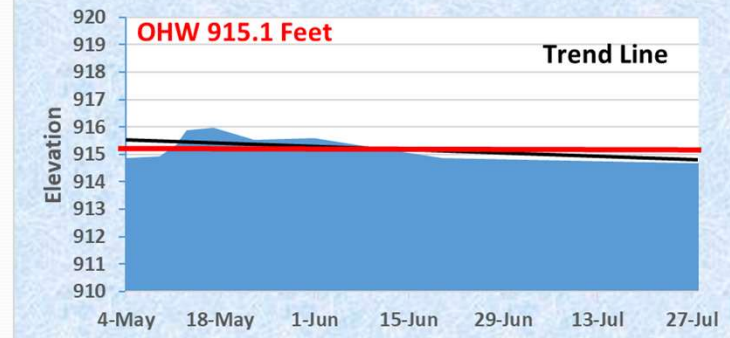
2022 Goose Lake Levels



59

Lake Level Monitoring

2022 Rush Lake Levels

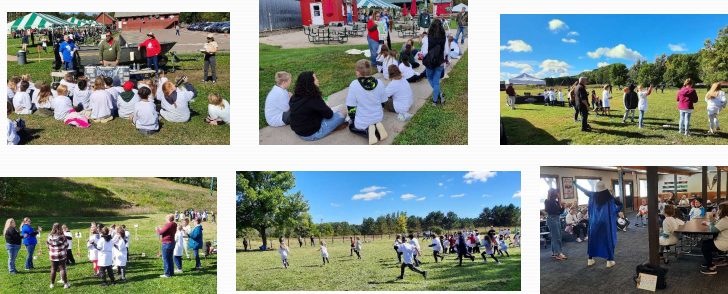


60

20th Annual Children's Water Festival

20 Years Strong ~ Thank You for Your Efforts.

- View the 20th Annual video produced by Jack Doepeke with Chisago Lakes TV
<https://www.youtube.com/watch?v=83mFTIZtycA>



61

Adopt-a-Drain

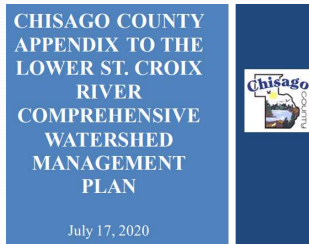
- Chisago County joined in 2022!
- Program sponsored by HU, funded through Chisago SWCD and Lower St. Croix Partnership
- Residents clean drains regularly
- Prevent litter, leaves, grass clippings & dirt from going into lakes and rivers
- Sign up at:
<https://mn.adopt-a-drain.org/>



62

Chisago County Water Plan Policy Team

- Since 1998 has set county watershed priorities
- Nine members
 - Five Citizen At-Large
 - Policy and Technical Team
- Since 2017, provided recommendations to County Board for new Comprehensive Watershed Management Plan and County Appendix
- New Team Purpose & Mission in 2022
- Continue to develop a revised Framework in 2023



63

One Watershed One Plan (iWiP)

- January 18, 2017 County Board resolution
- Local Government Units develop a new watershed-based management plan
- Basin-wide priorities and goals
- November 18, 2020 County Board approved 10-year Comprehensive Watershed Management Plan & County Appendix
- Lower St. Croix Partners received over \$1 million for projects in 2021 and 2022
- Lower St. Croix Partnership held two workshops for community leaders and provided education in 2022
- Partnership 2022 Education Video
https://www.youtube.com/watch?v=i_LL28QnKyc



64

Chisago County Water Resources Facebook Page

- @ChisagoCountyWaterResources
- Upcoming water related activities, recent projects and programs in the LID and in Chisago County
- How to protect water quality in Chisago County
- 51 Total Posts:
 - 25 AIS
 - 26 LID and Water Resources



65



Thank you

Copies of the report are
available at:

<https://www.chisagocountymn.gov/364/Water-Resources-Annual-Reports>

We look forward to
working with you
in 2023!

66

Chisago Lakes Home and Business Expo 2023
February 25 & 26
LID/Lake Associations Booth Staffing Schedule

SATURDAY, FEBRUARY 25, 10:00 am - 4:00 pm

TIME SLOT	VOLUNTEER	# OF VISITORS
5:00 – 7:00 pm Friday <u>or</u> 7:00 – 9:00 am Saturday (set up)	1. Monica Kinny 2.	
10:00 am – 12:00 pm	1. 2.	
12:00 pm – 2:00 pm	1. 2.	
2:00 pm – 4:00 pm	1. 2.	

SUNDAY, FEBRUARY 26, 11:00 am – 3:00 pm

TIME SLOT	VOLUNTEER	# OF VISITORS
11:00 am – 1:00 pm	1. 2.	
1:00 pm – 3:00 pm	1. 2.	
3:00 pm – 4:00 pm (tear down)	1. Monica Kinny 2.	



Chisago Lakes Lake Improvement District
Department of Environmental Services/Zoning
Government Center
313 North Main Street, Center City, Minnesota 55012
(651) 213-8380 or benjamin.elfelt@chisagocountymn.gov

Re: Immediate Opportunity to Enhance Water Quality on South Center Lake

To: City of Lindström

February 6, 2023

CLLID BOARD MEMBERS

Jill Behnke
South Center, Ogren, Linn,
Bloom and Swamp Lakes

Travis LaMotte
Green/Little Green, School,
and Mattson Lakes

Margaret LeVasseur
North Lindström, South
Lindström, and Wallmark
Lakes

Mike Mergens
Chair
North Center, Little, and
Pioneer Lakes

Todd McBride
At Large

Steve Paquay
Chisago, Kroon, and
Spider Lakes

Gary Schumacher
Vice Chair
At Large

STAFF

Ben Elfelt
Administrator

Monica Kinny
Water Resources Specialist

Residents of the Chisago Lakes Lake Improvement District (CLLID), and thus the City of Lindström, have consistently expressed that water quality standards are a high priority. The most obvious benefit of water quality standards and resulting high water quality is the protection of water for drinking, swimming, fishing, irrigation, and much more. Water quality standards also have other less obvious but significant tangible and intangible benefits. High-quality water boosts property values, increases the standard of living for residents, and enhances the identity of the communities that evolve around the lakes.

In 2008, North and South Center Lakes were added to the Minnesota Pollution Control Agency (MPCA) Impaired Waters list, for nutrient pollution. Upon the impairment listing, stakeholders within the Chisago Lakes area began investing heavily in projects to remediate the pollution. After 10+ years, countless conservation projects, and thousands upon thousands of grant and taxpayer secured dollars, the CLLID community was successful in reducing the pollutant load to acceptable levels and North and South Center Lakes were delisted from the Impaired Waters list in 2021 – a major accomplishment.

Today, the lakes area is again at risk of impairment from a common pollutant, one that is virtually impossible to remove once introduced – chloride (salt). Sources of chloride include road salt, fertilizers, and water softener salt. Proactive road salt management, safe salting, and responsible snow storage have the highest yield in chloride reduction, as these are the primary sources of pollution.

To address the risk of the South Center chain of lakes chloride pollution, the Lake Improvement District asks the City of Lindström to review and change its current road salt and snow storage practices. More specifically, it is noted that routine use of the city lot near the Fairview Cemetery/Sylvan Avenue for municipal snow storage is a large and concentrated contributor to chloride pollution of South Center Lake. The salt laden meltwater from this snow storage pile drains directly into South Center Lake, which flows into most lakes within the CLLID. To quantify and estimate the chloride content and impact of the snow storage pile, samples from three different locations of the snow pile were collected and provided for chloride concentration testing by Alliance Analytical Systems. The

test results are attached, the samples came back at 350-milligrams of chloride per liter (**350 mg/L**).

To give some context on the impact of these high chloride test levels, please know that the State threshold for chloride impairment in freshwater is **230 mg/L**. For added context, the Minnesota Pollution Control Agency reports the suggested maximum allowable chloride contaminant level for wastewater treatment plant (sewer plant) discharge is **230 mg/L**. Unfortunately, the meltwater from the current City of Lindström municipal snow storage pile has tested at *1.5-times greater than the State thresholds for general impairment and sewer plant discharge*.

Direct Impacts & Observations:

- A chloride concentration of 350 mg/L equates to roughly ½-pound of salt per cubic yard of meltwater.
- The current City of Lindström snow storage pile is comprised of materials of different densities – snow, slush, ice, so it is difficult to estimate how much meltwater would result.
- At the time the samples were collected, the volume of the City of Lindström snow storage pile was estimated at 2000 cubic yards of snow, slush, and ice.
- Depending on the true total density of the material in the City of Lindström snow storage pile, the current total salt load impact draining directly to South Center Lake is estimated at 500 to 700 pounds.

The City of Lindström can greatly reduce the seasonal salt load into South Center Lake by discontinuing the use of the Fairview Cemetery site for snow storage. It is highly recommended and requested on behalf of the CLLID Board that the City of Lindström's snow storage practices change and that the existing snow storage pile be relocated to a site that is in line with the standards outlined in the [*Minnesota Stormwater Manual – Guidance and Recommendations for Storing Transported Snow \(MPCA, 2022\)*](#).

Please feel free to contact me directly with any questions or concerns about this important water quality request. The CLLID Board and staff aim to be a resource to assist with water planning and education and welcome opportunities to help communities like Lindström prioritize and implement positive water quality practices. Thank you in advance for your anticipated cooperation on this impactful snow storage practices policy change and project!

Respectfully,

Chisago Lakes Lake Improvement District
Ben Elfelt (Administrator)