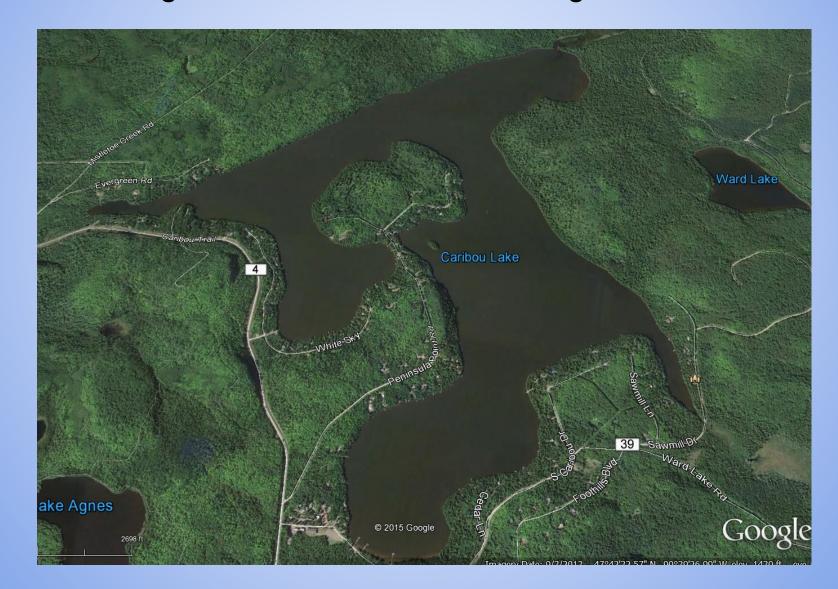
### Caribou Lake Property Owners' Association August 31, 2024 Annual Meeting



Caribou Lake Property Owners' Association Annual Meeting August 31, 2024, 10:00-11:50 AM

#### AGENDA

#### Introduction of Board Members

- Guest Speaker, Bob Thompson, Cook County Assessor (10:00 10:30)
- Reports and official business
  - Approve Minutes of 2023 Annual Meeting (10:30 10:35)
  - Nomination and Election of Board Members (10:35 10:40), nominees: Tom Rider, Karl Karst, Lisa Miller Johnson , Tom Flink
  - Treasurer's report Charlie Austin (10:40 10:50)
    - link for paying dues online: https://caribou.mnlakesandrivers.org/membership/
- CCCoLA report Irene Mullen (10:50 11:00)
- Water quality and AIS reports
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# **CLPOA Treasurer's Report**

9/1/23 to 8/31/24

### Statement of Activities

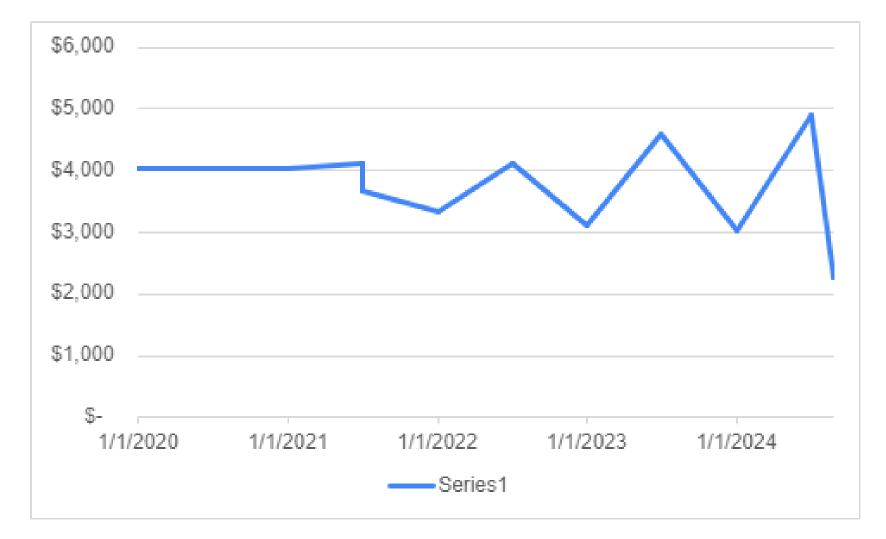
9/1/22 to 8/31/23

Income	
dues and donations	\$2,949
SSD reimbursement	\$1,830
interest	\$1.
total income	\$4,780
Expenses	
shipping, postage	\$231
WQ testing	\$1,709
events	\$528
membership dues & donations	\$100
wake surfing ordinance	\$472.20
website	\$210.00
misc	\$375.00
Total	\$3,404.02
Net	\$1,357
AIS (rusty crayfish)	\$3,903
Net	(\$2,546)

#### Change in Cash Position 9/1/22 to 8/31/23

<b>Opening balance 9/1/22</b>	\$4,823
additions	\$4,780
subtractions	\$7 <i>,</i> 330
Ending balance, 8/31/23	\$2,273
difference	(\$2,550)

## Cash Balances 2020 to today



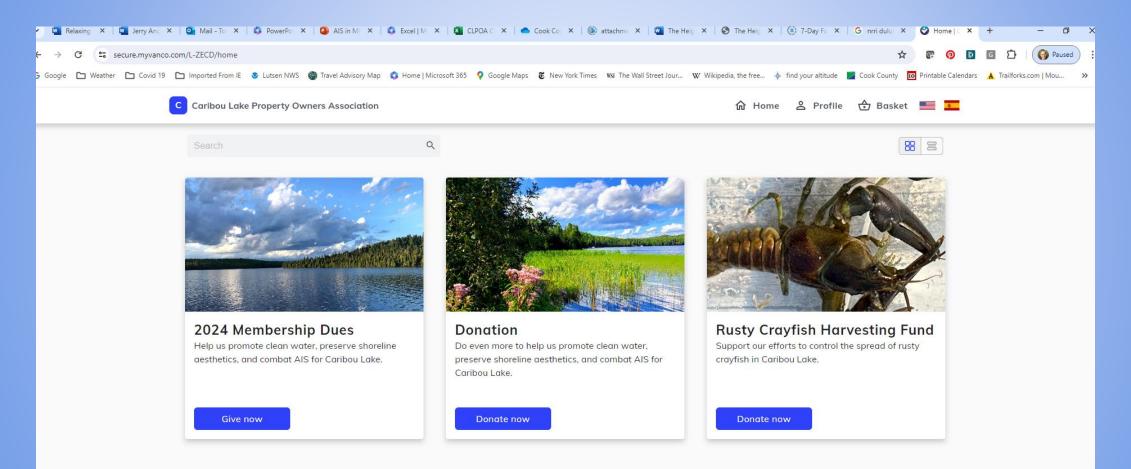


## How to pay dues

- Pay to me today. I can look up your contribution history if you are not sure when you paid last.
- Mail to PO Box 11, Lutsen MN 55612
- Pay with credit card on our website:

## https://caribou.mnlakesandrivers.org/

#### Caribou.mnlakesandrivers.org



# Cook County Coalition of Lake Associations

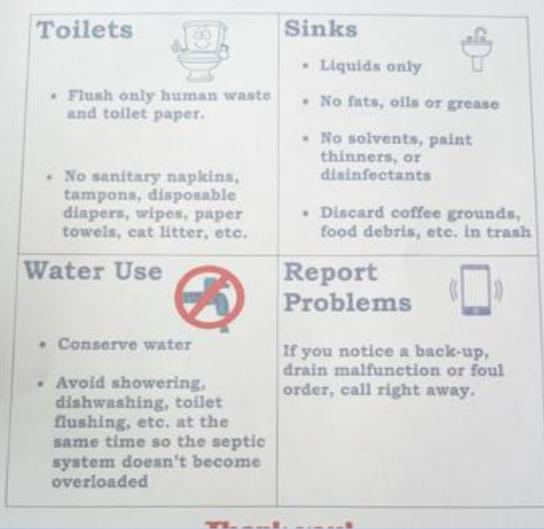
18 board members made of Lake Associations, Road Associations and individuals Protect Preserve Participate - Lakes of Cook County

#### What's Happening

- Get the Lead Out Bucks is still collecting old tackle
- Fisherman's Picnic Booth with a spinning game where kids and their families tried to answer questions about AIS, Shoreline Protection, Septic Use – great way to talk to others about best practices
- Septic Workshop Cook County Higher Ed video is on CCCoLA website flyer – given to Cascade Rentals and others who rent out their cabins.
- AIS -Other lakes are now putting up signs like Caribou's
- Wake Surfing Pike Lake and Poplar Lake have asked to see Fred's binder
- Shoreline Protection best practice
- Ilena Hansel, CCSW shared budget and funding resources, \$60,000 from County, the same for the last 6 years
- Ann Sullivan, Cook County Commissioner, has been attending our meetings and is our liaison with the County.



This property uses a septic system and we need <u>your</u> help to keep it working property.



# Water Quality Report

Phosphorus Chlorophyll–a Secchi Disk Oxygen

## **5** Sampling Sites

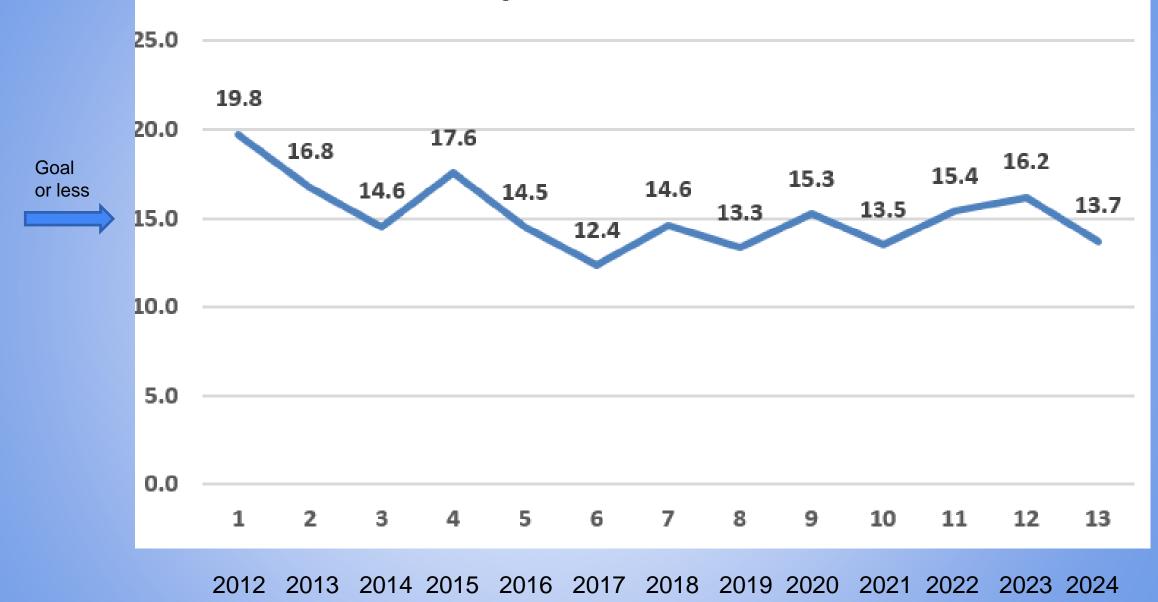
(Used Historically)



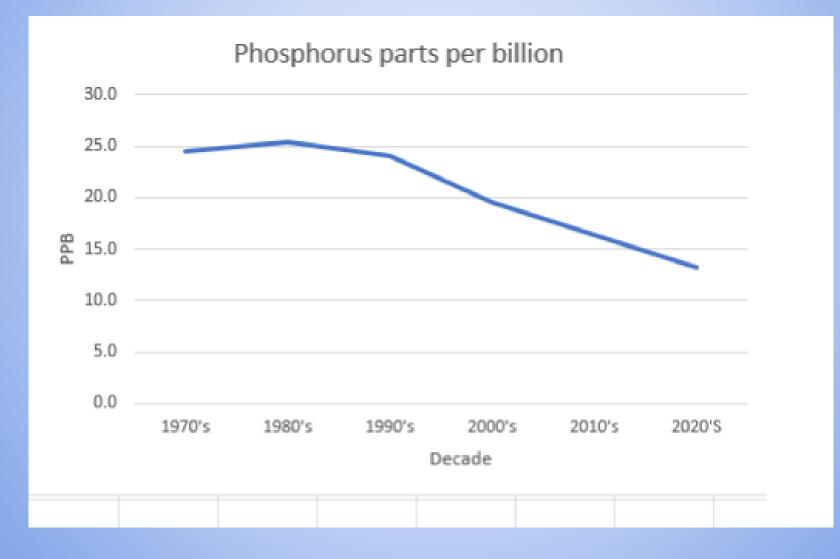
## Phosphorus Goal 15 PPB or less

<u>Site</u>	<u>5/29</u>	<u>6/26</u>	<u>7/31</u> Sept		<u>Ave</u>
203 (Camp)	14.5	13.8	14.9		<b>14.4</b>
210 (Island)	9.1	14.3	13.4		12.3
205 (Fosters)	<b>11.6</b>	17.4	12.9		<b>14.0</b>
103 (Landing)	21.8	11.0	15.0		15.9
201 (Isthmus)	11.0	13.9	11.4		<b>12.1</b>
Average	13.6	14.1	13.5	0.0	13.7

#### Phosphorus 13 Year Trend



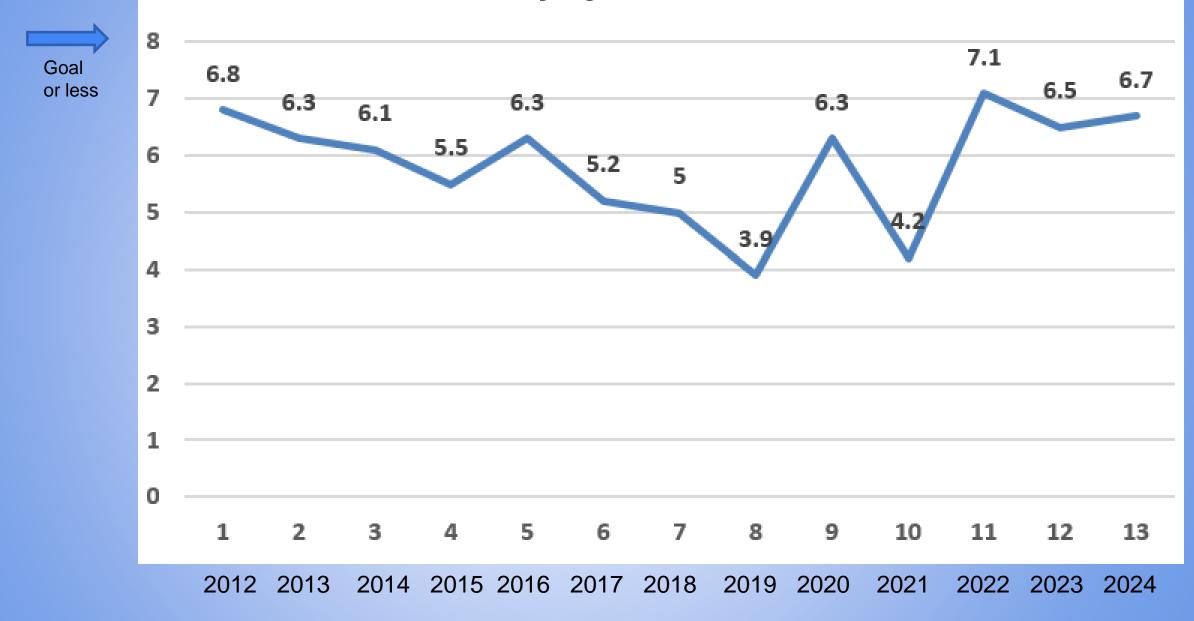
## Phosphorus Testing History - site 205



## Chlorophyll-a Goal 8 PPB or less

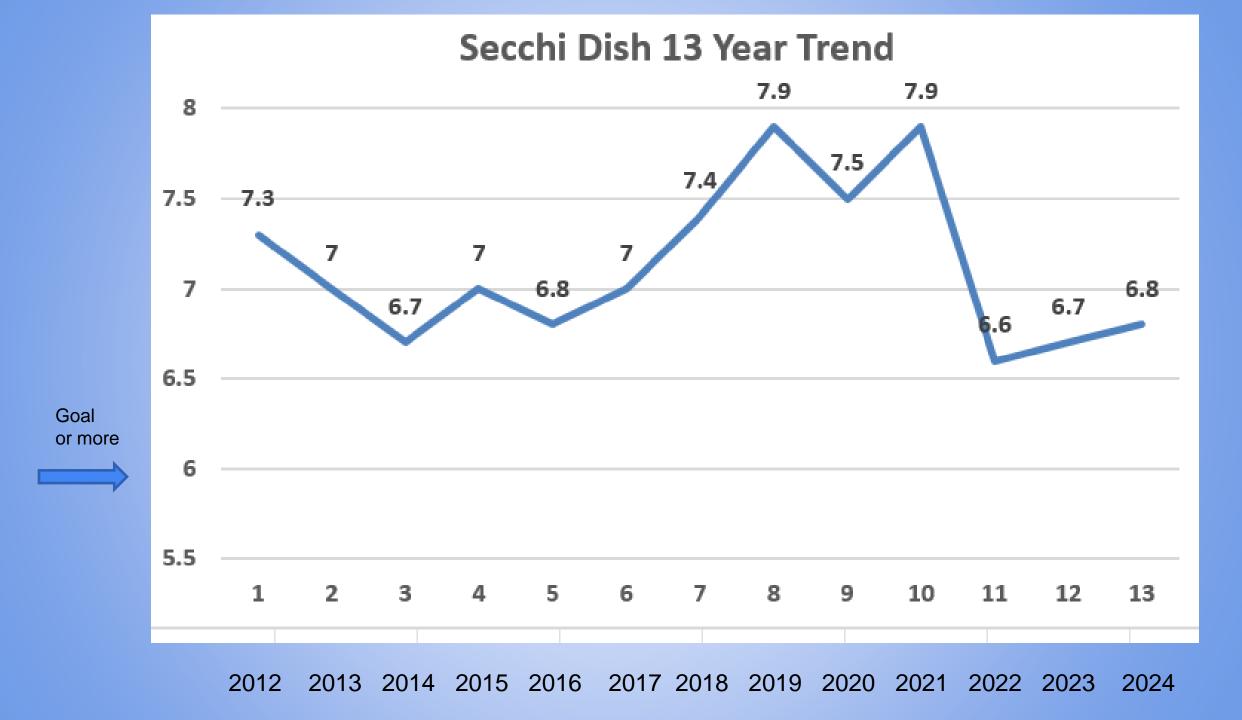
203 (Camp)	NA	7.5	8.0		7.7
210 (Island)	6.4	7.5	10.7		8.2
205 (Fosters)	6.4	8.0	8.0		7.5
103 (Landing)	5.9	3.3	4.7		4.6
201 (Isthmus)	6.4	4.6	5.3		5.4
Average	5.0	<mark>) 6.2</mark>	9.2	0.0	6.7

#### Chlorophyll-a 13 Year Trend



## Secchi Disk Goal 6 feet or more

Secchi (Feet) Goal is 6 or more					
203 (Camp)	7.5	7.0	7.0		7.2
210(Island)	7.0	7.0	6.0		6.7
205 (Fosters)	7.5	7.0	6.5		7.0
103 (Landing)	7.0	7.0	6.0		6.7
201 (Isthmus)	7.0	6.5	6.0		6.5
Average	7.2	6.9	6.3	0.0	6.8

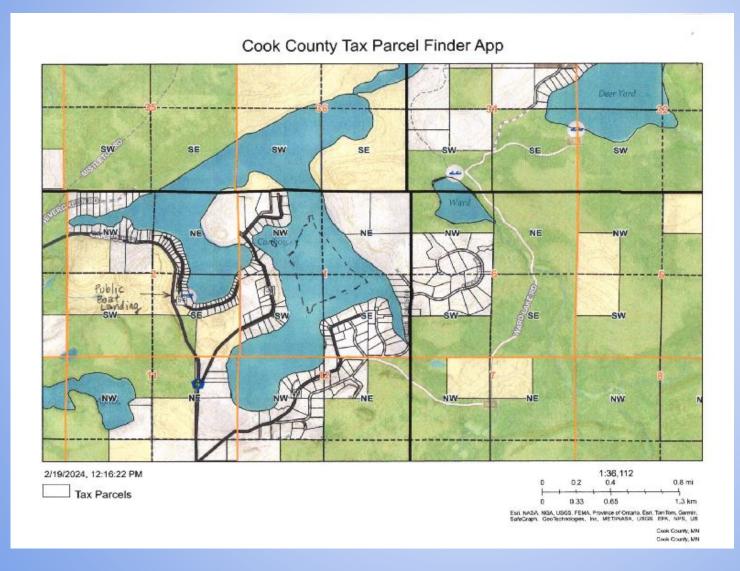


### Oxygen and Temperature - Site 205 (Bottom 28 feet) Surface water normal 8 milligrams per liter or more

Date	3 feet		12 feet		24 feet	
	<u>Temp</u>	Oxy mg/l	Temp (	Dxy mg/l	Temp	<u>Oxy mg/l</u>
8/20/2024	70.3	9.2	69.4	8.5	66.2	3.4
8/08/2023	73.3	9.0	72.1	7.5	59.5	0.3
7/21/2021	74.0	8.7	73.0	8.5	67.0	1.0
8/11/2019	74.0	8.6	72.0	8.7	66.0	4.0
8/07/2018	71.0	8.3	70.0	8.0	68.0	4.0
8/01/2016	75.0	8.3	74.0	7.8	71.0	3.5
8/13/2015	73.0	8.9	72.0	8.0	69.0	4.9

## **Rusty Crayfish**

• How did they get here? Where are they now?



- What is the harm caused?
  - Native crayfish eliminated
  - Native grasses eliminated
    - Trap sediment
    - Absorb nutrient pollution
    - Add disolved oxygen
    - Nursing environment for fish
  - Fish population declines
  - Property values?

- What can we do about it?
  - Nothing
  - Harvesting
  - Physical barrier not allowed
- Is there evidence that Harvesting will work?
  - Yes!
  - Pike Lake (anecdotal)
  - Woman Lake

## What did we do this summer?

- Hired Crawdaddies to harvest for 6 weeks
- NRRI, harvested two weeks
- Volunteer effort to supplement

#### Harvest Totals for Summer 2024

- Crawdaddies, contract = 28,768 (8 lines, 60 traps, 6 weeks)
- Crawdaddies, on their own = 5,094
- NRRI: 133 lbs = 6,650 (2 weeks)
- Volunteers = 4,000
- Total 2024 = 44,512 crayfish
- Total harvest, 2023:
  - Larry 6,037
  - 。 NRRI 5,100
  - Volunteers 1,500
  - Total 2023: 12,637 crayfish

# What should we do next summer and beyond?

- What we are doing this summer is not sustainable
  Costs > revenue
  - If we harvest, most sensible funding mechanism is SSD – all lakeshore landowners participate
  - Current SSD: \$60 every five years, \$12/year
    - For WQ and AIS
  - There was strong support among membership at spring meeting to increase SSD to address AIS

#### New SSD Options Worksheet

# of private riparian landowners138cost/week Crawdaddies625

<u># weeks</u>	total cost	WQ costs	<u>total</u>	<u>SSD levy per</u> <u>taxpayer</u>	<u>SSD levy,</u> <u>cost/year</u>	
current			8280	60	12	
2	1250	1600	2850	103	21	
4	2500	1600	4100	149	30	
6	3750	1600	5350	194	39	
8	5000	1600	6600	239	48	

## **Proposal for SSD - \$250 Every Five Years**

. That's \$50/year.

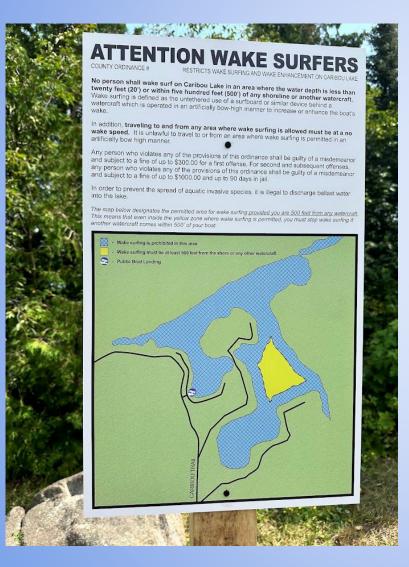
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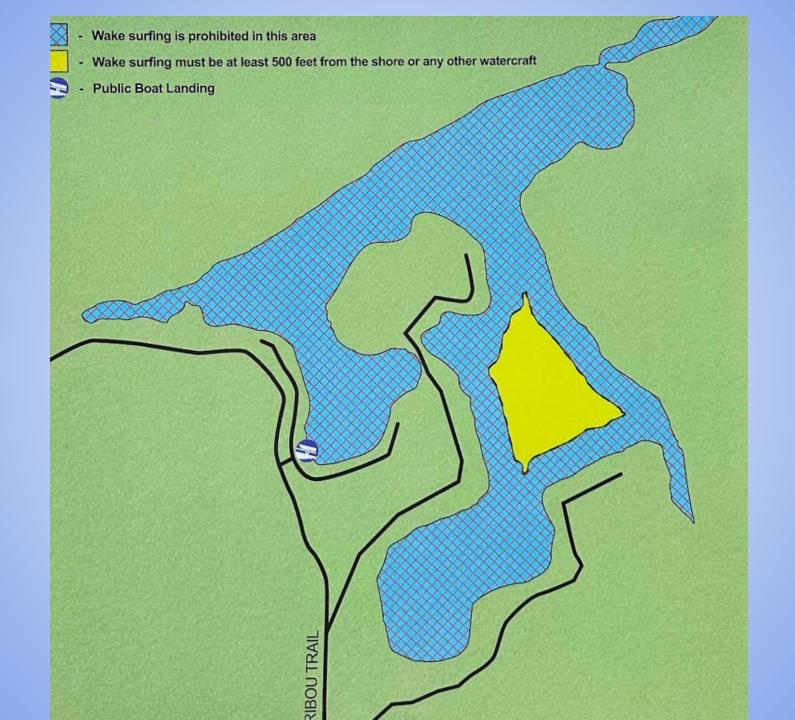
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### New Wake Surfing Sign at Caribou Public Boat Landing









### **Rusty Crayfish**

- An Invasive Species
- **Discovered first in Caribou Lake by the USFS in 2020**
- Suspected to have migrated from Pike lake where they were suspected to have been transported and released by anglers who were using them as bait.
- Large and aggressive
- Because of size, hard to be preyed upon by native species of fish
- They destroy fish habitat by eating aquatic plants and insects causes fish populations to decline by losing nesting substrate, rob shelter from small fish and invertebrates, and increase erosion of sediment.
- They displaces the native crayfish population
- 1087 harvested in 2021
- 3,942 harvested in 2022
- 6037 harvested plus NRRI harvest in 2023

## Varying Sizes and Approximate Percent of Total



# Rusty and Rice Caribou & Bigsby Lakes NRRI, UMD, USFS, SWCD

## Methods

#### Traps

- Standard minnow traps
- Extra large minnow traps
- PVC refuge traps
- 3 pods containing: 1 standard trap, 1 extra large trap, 1 large mesh box trap

#### Bait

- 3 flavor pack of meow mix pate seafood wet cat food
- Hot dog pellet cup
- Smelt pellet cup







