

Agenda of the Lake Anasagunticook Association (LAA) Annual Meeting Canton Historical Society Sunday August 15, 2021

In Attendance were:

Tim Kirwan Liz Rothrock Tom Hamilton Mike McCluskey Diane Ray Judy Hamilton Mike Lara Maryellen Kirwan Biff Atwater Mel Barron Gary Dougherty Mary Atwater Richard Ray Cyndi Phillips Peg McClusky Tim Bernard Jean Williams Jeff Sterm

Margaret Taylor Dick Williams

President's Report:

• Summer Activity- BiCentennial was an amazing event – Chicks with Stick the crowning event!!

- Water Quality Report Tom Hamilton in attached handout
- Jeff Sterns provided a Watershed Mitigation Grant update in attached handout
- Fundraising treasurers report in attached handout

Annual Meeting 2020 Minutes were reviewed and approved.

Treasurer's Report – in attached handout

Lake Smart: Working to get into the system

Slate of Officers/Election: see attached

The State of the Lake: Tom Hamilton presented an enlightening and thorough set of data and insights. Take – away: The Lake is healthy but there are a lot of cautions due to run-off into the lake and warming temperatures

Details in the attached handout. Respectfully submitted,

Diane Ray Secretary

Lake Anasagunticook Assn. Annual Meeting



August 15, 2021

Agenda

Call To Order

Remembrance of Members who have passed

Membership Recognition

Review Minutes from Annual Meeting 2020

Treasurer's Report

President's Report for 2020 - 2021

Watershed Mitigation

Water Quality/Climate Change

Elections: Directors, Officers

New Business





Membership Recognitions



Osprey Award: 25 years



Loon Award: 10 years

Thank you for your steady support!

Review Annual Meeting 2020 Minutes

- **❖**Any revisions?
- Motion to accept?
- **❖**Second?
- ❖ Vote on the motion



	LAKE ANASAGUNTICOOK ASSOCIATION				
	Treasurer's Report Budgets 2020 through 2021				
	INCOME	BUDGET	BUDGET		
	7/1/2020-6/30/21	7/1/2020-6/30/2021	7/1/2021-6/30/2022		
INCOME					
Dues	\$990.00	\$1,840.00	\$1,200.00		
Unencumbered Donations	\$350.00	\$889.43			
Water Quality Monitoring Fund	\$250.00		\$200.00		
Dividends	\$11.00	\$4.72	\$11.00		
Fundraising Events - cash/wd			\$1,800.00		
Watershed Survey Grants	\$2,000.00				
Watershed Donations					
Misc receipts transfer from savings		\$875.00			
raffle receipts	\$500.00	\$251.00	\$200.00		
Adjusting Entry		\$0.01			
TOTAL INCOME	\$4,101.00	\$3,860.16	\$3,411.00		



	LAKE ANASAGUNTICOOK ASSOCIATION Treasurer's Report Expenses 2020 through 2021				
EXPENSES	EXPENSES	BUDGET	BUDGET		
	7/1/2020-6/30/21	7/1/2020-6/30/2021	7/1/2021-6/30/2022		
Newsletters	, ,,,	, ,,, -	,, = =,==,=		
Membership Communications					
Insurance for Board	\$698.00	\$698.00	\$698.00		
Annual Report	\$35.00	\$35.00	\$35.00		
LAA Membership Dues Maine Lakes	\$200.00		\$200.00		
Contributions to Tax Exempt		\$250.00			
Lake Stewards of Maine			\$100.00		
Prizes for events - raft race					
Canton Recreation					
LAA Website	\$250.00	\$228.00	\$228.00		
Web maintain					
Office /Misc Expenses	\$100.00	\$77.00			
Sales Taxes					
Fundraising - Bucket Caps/Patch		\$539.40	\$50.00		
Special Projects					
Annual Meeting - Chewonki Fund.					
Watershed Survey	\$2,000.00	\$2,000.00	\$2,000.00		
Awards - plaques etc					
Logo Update - T shirts	\$350.00				
Water Quality Monitoring	\$400.00	\$99.75	\$100.00		
Adjusting Entry		\$0.01			
TOTAL EXPENSES	\$4,033.00	\$3,927.16	\$3,411.00		



Fund Balances	Unencumbered		
Checking	\$	543.74	
Savings	\$	2,895.64	
	\$	3,439.38	

Presidents Report

To say Fiscal Year '20-'21 for the LAA was eventful is truly an understatement. With COVID impacts, Bicentennial activities, Watershed mitigation and caring and concerns for friends and family it feels like whirlwind even as we slowed to a crawl.

I AM happy to say our endeavors are successful across the board with continued networking with both town leadership teams and adherence to our administrative, legal and procedural responsibilities. With the minimizing of our social activities and personal contact the board, and membership, have done a great job from water testing (thank you Tom), to Audubon Loon Counts, to supporting the mitigation grant efforts to fund raising initiatives – the lake is well and our membership is active.

Looking forward we look forward to the next ~18 mos. of grant implementation improvements to minimize run-off/erosion.

Thank you all for your assistance and continued support. Onward & Upward!

Tim Kirwan - President





Watershed Mitigation Work Plan

Task	Overall Timing
Project Administration	Jan 1, 202 – Dec 31, 2022
Steering Committee (OCSWCD, LAA, ARWC, DEP, Towns of Canton & Hartford, Lake Shore Drive, Canton Mountain Wind, Pine Shores Subdivision, other watershed residents)	Jan 1, 202 – Dec 31, 2022 Meet semi-annually
 NPS Abatement Projects At least 14 high and medium impact sites identified in the 2019 Watershed Survey) Technical assistance and up to 50% cost sharing for construction costs Cost sharing agreements that detail the costs, match and maintenance requirements in place prior to any work 	Mar 1, 2021 – Nov 15, 2022
 Technical Assistance Project partners provide for at least 22 sites Reduce soil loading by at least 5 tons per year 	Apr 15, 2021 – Nov 30, 2022
 Residential Matching Grants Steering Committee will offer 50/50 cost share grants to at least 7 residential properties Cost sharing agreements and permits must be in place prior to work 	April 15, 2021 – Nov 30, 2022
Education and Outreach	Jan 1, 2021 – Dec 31, 2022
Pollution Load Reduction Estimates	Apr 30, 2021 – Dec 31, 2022

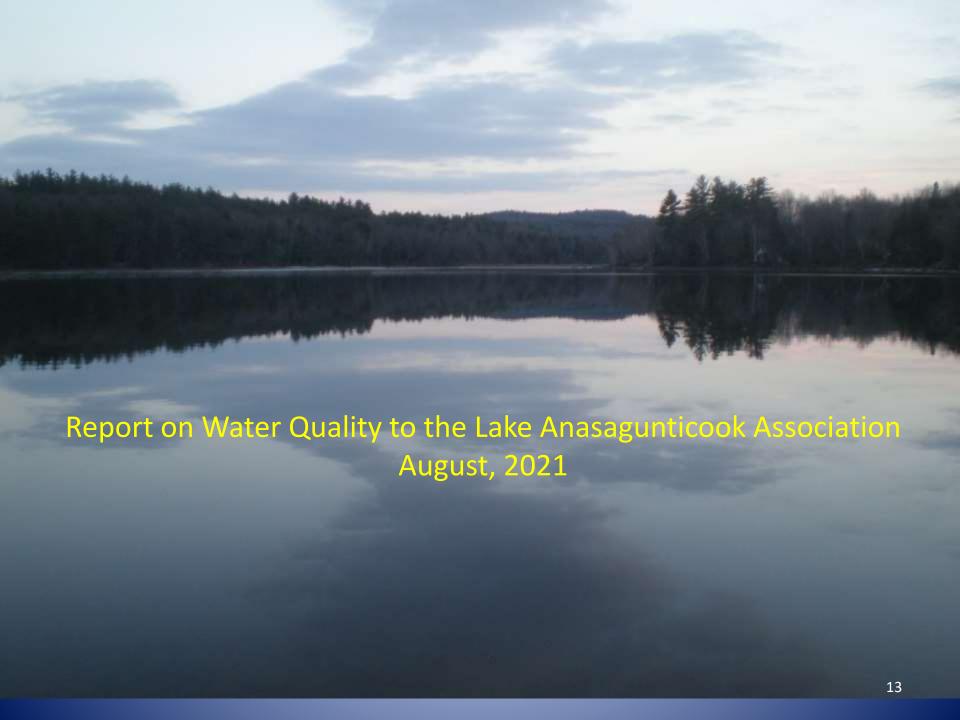
Watershed Mitigation Deliverables

Deliverables (electronic copies)

- 1. Grant agreement between OCSWCD, DEP, sub-contract with ARWC, semi-annual progress reports, final project report, NPS site tracker
- 2. NPS site reports of NPS Abatement Projects, including pre-[post photos
- 3. Summary of technical assistance provided description, recommendations, outcome
- 4. Summary of residential matching grants, pre/post construction photos
- 5. Copies of all newspaper articles, press releases, web and Facebook postings
- 6. Pollutants controlled report each year until project completion

Lake Anasagunticook Watershed Protection Project, Phase II - Quick Summary of Grant Progress

Task	Required in Grant	Done So Far	Notes
Steering Committee Mtgs	2	1	2/4/21
NPS Abatement Projects	14	0	Planned for 2021: 6-03, 6-07, 3-04, 1-01, 1-04, and 2-02. Planned so far for 2022: 2 state road sites, Dearborn Road in Canton, 1-03, 1-08, 1-08a
Technical Assistance	15	10	Rothrock, McCluskey (2 properties), Kirwan, Barron, Hartford town sites with ACE, Bryant Road (Noyes), Dearborn Road, D. Ray, Bill & Carolyn Gray
Residential Matching Grant Installation	5	1 (2 in progress)	Done: Rothrock.
Education & Outreach	 a) 2 annual mtgs of LAA b) 1 mtg w/Hrtford SB c) 1 mtg w/ Canton SB d) Press releases & web postings (unspecified #) e) 2 workshops f) 1 house meeting g)1 final project brochure 	1 (8/15/21) 0 0 2 0 0	As of 7/6/21, LAA has done a web posting, OCWSCD has done a press release, and OCSWCD is working on a web posting to their website.
Workshops	2	0	
House meeting	1	0	
Matching contributions	\$34,444	\$8,931	This is 26% of the total required in the grant. On tap the next few months: at least \$10,000 from the Town of Hartford, \$500 in-kind from residents of Lake Shore Drive.
Buffer planting	50'	22' (Rothrock)	This is 44% of the total required in the grant.
Soil loss avoidance for <u>NPS</u> sites	50.00 tons/year	0.00 tons/year (Planned in 2021: 18.86 tons/year)	This is 38% of the total required in the grant.



Annual Report on Water Quality to the Lake Anasagunticook Association



August, 2021

Annual Report on Water Quality to the Lake Anasagunticook Association

Clarity

Gloeotrichia

Phosphorus

Dissolved Oxygen

Temperature Trends

Ice-out Date Trends

Invasive Plants and Animals

Homework Assignment

Belted Kingfisher



Spotted Sandpiper

Kevin Cole CC BY-SA 2.0



Secchi Disk for Measuring Water Clarity Estimates of Gloeotrichia Concentration Surface Grab for Phosphate Analysis

Dissolved Oxygen
Water temperature
Air temperature
Cloud cover, wind
Thought for the day

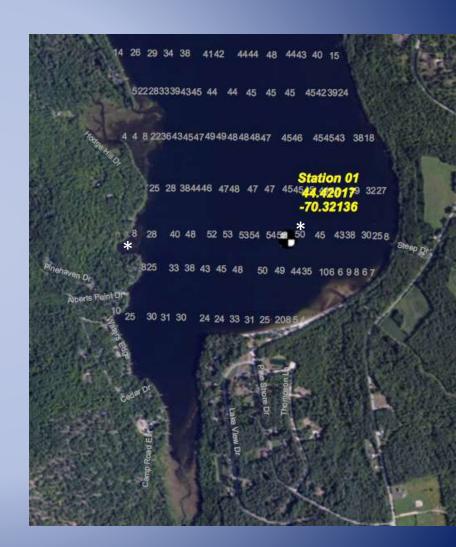










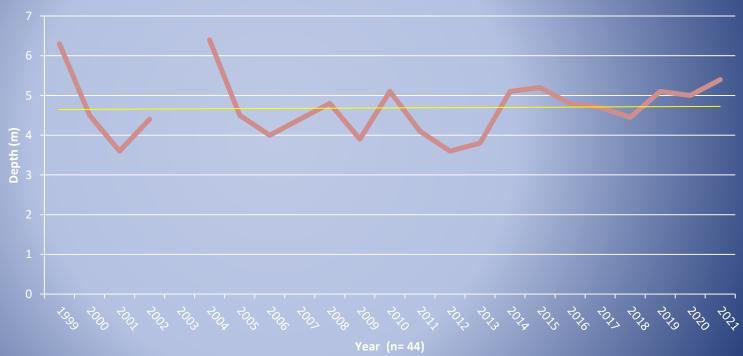


The lake is about 43 feet deep at sampling site16



Lake Anasagunticook Mean Secchi Readings for June 1999 - 2021







Lake Anasagunticook Mean Secchi Readings for July 1999 to 2021

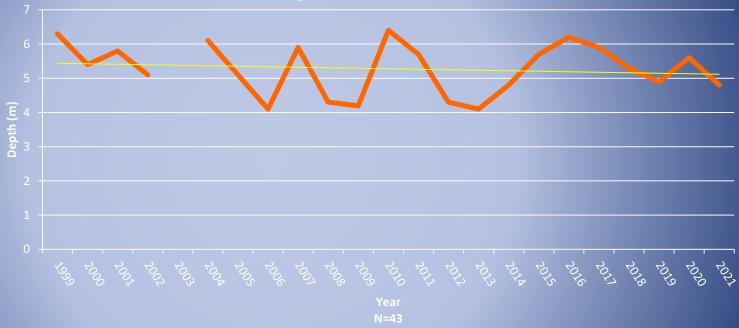






Lake Anasagunticook Mean Secchi Readings for August 1999-2021*

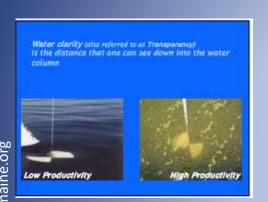




Hamilto

The data show that clarity has decreased on average about one foot since 1999.

1 m = 3.3 ft.





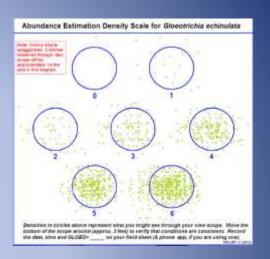




Gloeotrichia (pronounced "glee-oh-tricky-ah") echinulata

Lake Anasagunticook
Relative Concentrations of Gloeotrichia
1999, 2020, 2021*

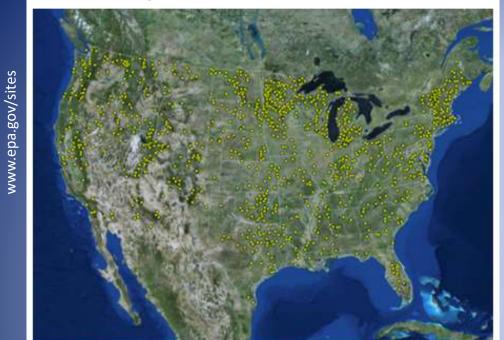




Data are averages of two readings each month except August 2021 one reading (and Sept, Oct)

EPA National Lakes Assessment

NLA 2012 Sampled Sites





- · 56% of Nation's Lakes: Good
- 44% Fair or Poor
- Degraded shoreline habitat determined to be the biggest problem in 36% of lakes
- · Most significant of all problems assessed





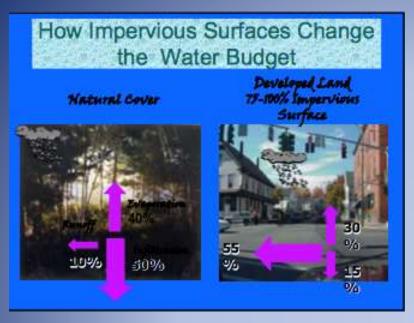


John Picken CC BY 2.0

EPA National Lakes Assessment

lakestewardsofmaine.org



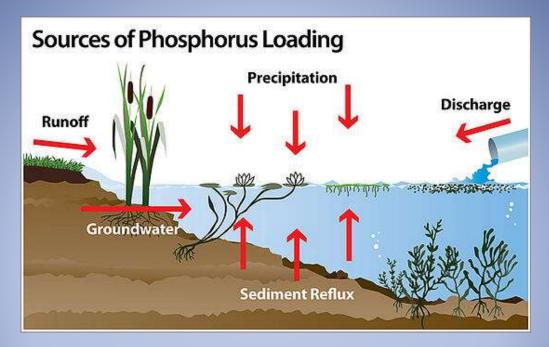




NLA Conclusions

- · Removal of critical buffer vegetation, including trees and shrubs along shoreline areas contributed to findings
- Conclusion: "Poor biological health is three times more likely in lakes with poor shoreline habitat."





What can we control?

Total Phosphorus for Anasagunticook (Surface Grab) 2013 to 2021*

<u>Year</u>	June	July	August	September	October .
2013			8 ppb	9 ppb	7 ppb
2015			4 ppb	5 ppb	6 ppb
2017		7 ppb	6 ppb	5 ppb	6 ppb
2018			6 ppb	4 ppb	4 ppb
2019		6 ppb	5 ppb	6 ppb	
2020					
2021					

How small is one part per billion?

Total Phosphorus for Anasagunticook (Surface Grab) 2013 to 2021*

<u>Year</u>	June	July	August	September	October .
2013			8 ppb	9 ppb	7 ppb
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2020					
2021					

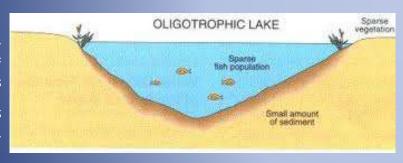
How small is one part per billion?

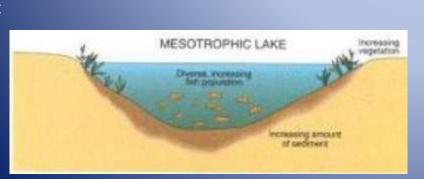
1 penny in 10 million dollars

1 second in 32 years

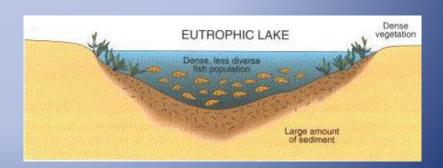
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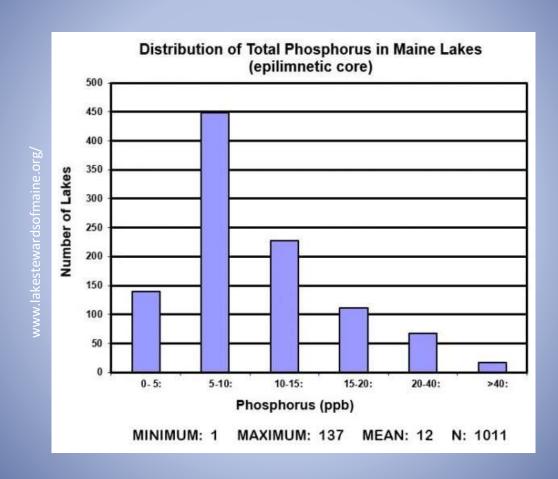
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2020					
2021					





Oligotrophic 5-10 ppb Mesotrophic 10-30 ppb Eutrophic 30-100 ppb





https://www.lakestewardsofmaine.org/distribution-of-water-quality-data/#Total Phosphorus

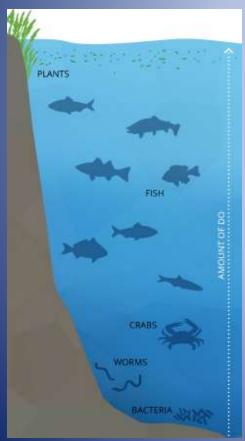
www.fondriest.com/

Dissolved Oxygen

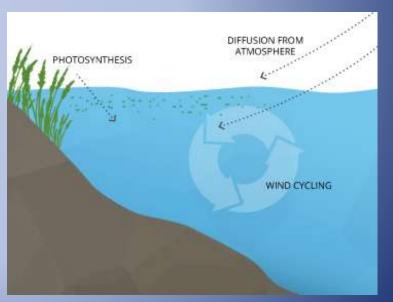
Water is H₂O

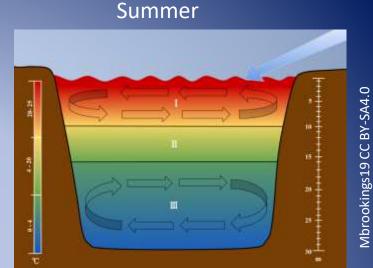
Dissolved oxygen is O₂



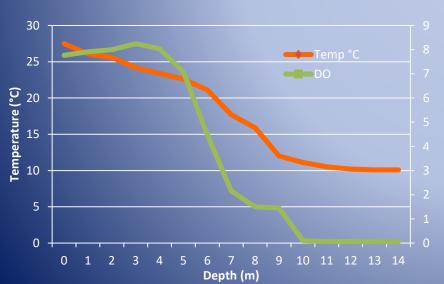


www.fondriest.com

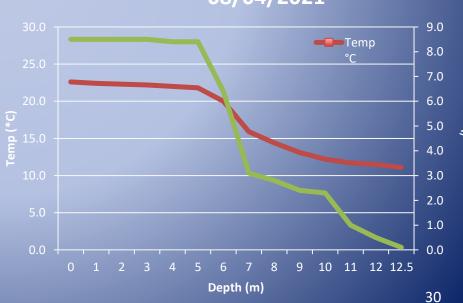








Anasagunticook Profile 08/04/2021

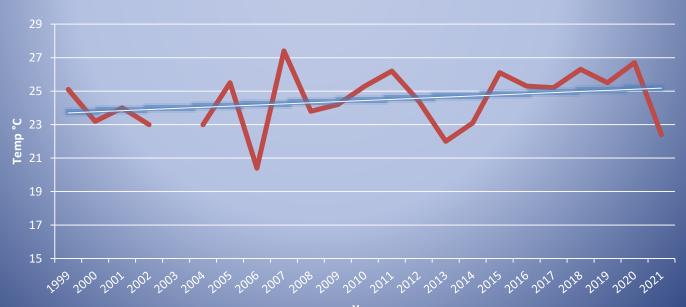




The Trend: the lake's water is warmer, but not this year.

About 3.2°F over twenty years.

Lake Anasagunticook
Temperature at One Meter (3.3ft) Below Surface in Early August
1999-2021

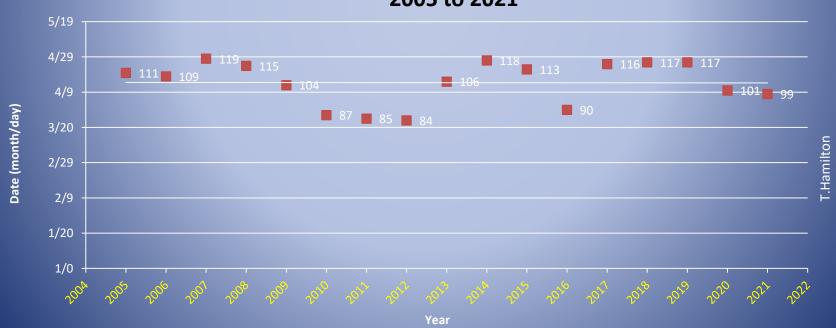






Lake Anasagunticook Ice-out Dates

2005 to 2021



June 2020





The infested area reached The head of Whitney Brook (aka Mill Stream) in August, 2021 however the population seems to be thinner along the shoreline.



Lake Anasagunticook Mystery Snail Survey

Stop the Invaders







Directors Proposed for 2021 – 2022

Name War	EXP.
Tim Kirwan*	2021
Mike McCluskey	2022
Biff Atwater*	2020
Diane Ray*	2021
Bill Gray*	2021

Name	EXP.
Mary Ellen Baron*	2021
Christine Carrigan	2022
Carolyn Gray*	2021

Nominations accepted from the floor....

^{*}Agreed to extend one additional year

Officers Proposed for 2021-2022

Tim Kirwin – Pres.
Mike McCluskey - VP
Diane Ray – Sec.
Biff Atwater – Treas.

Upaning Meeting Dates



Proposed	Date
Fall Board Meeting	Sept. 28, 2021 4pm
Fall Newsletter	September
Winter Board Meeting	Dec 14 th , 2021 4pm
Early Spring Board Meeting	Feb 8th, 2022, 4pm
Spring Newsletter	March/April
Early Summer Board Meeting	April 12 th , 2022 4 pm
Summer Board Meeting	June 14 th , 2022 4pm
Summer Newsletter	August
Dog Days of Summer Board Mtg.	Aug 2 nd , 2022 4pm
Lake Days	August 13, 2022
Annual Meeting	August 14, 2022