

**Keoka Lake Association  
PO Box 97, Waterford ME 04088**

**Board of Directors Meeting Friday May 24, 2024 -- 7:00-9:00 pm**  
In person and Zoom

President Richard Orr called the meeting to order at 7:00pm.

Rich asked everyone to introduce themselves. There were 13 people present, virtually and in person.

Board members present: Riley Hasson, Kim Struck, Charlie Tarbell, Melissa Tarbell, Jim Flynn, Andy Tabor, Joanne Eaton, Ting Ting Doore, Al Struck, Bill Robichaud, Richard Orr, Brenda Hambleton, Liz Stockwell, Paige Nalipinski

Board members non attending: Ginger Eaton, Tom Hammett, Arne Klepinger

Non-board members attending: Tom Schaefer

Non-board members attending on zoom: Jonathan Hasson

**Meeting Business:**

**Secretary's Report – Riley Hasson**

Richard Orr asked for a motion to waive the reading of the October minutes which have been posted on the website and to approve the minutes. Motion was approved unanimously.

**Treasurer's Report – Liz Stockwell**

Overall, balances are in good shape. The KLA has an operating profit of just under \$5000 last year and our operating expenses are around \$15,000. The KLA has a healthy cash balance, and a small amount was transferred to the Main Community Foundation as it was associated with the KLA50 campaign. At MCF, we have a balance of around \$216,000. \$170,000 is in the capital campaign fund and \$45,830 is in the unrestricted fund. KLA50 collection should be wrapping up at the end of this year. We have 6 outstanding pledges but believe one of those will not be collected.

**Invasives – Charlie Tarbel**

Courtesy Boat Inspectors (CBI)

We received funding again this year from the Town of Waterford (\$3,400) and from the DEP (\$1850). Each year the DEP grant is questionable, but we were successful this year. The KLA will need to contribute around \$4,000 toward the total \$9,000 bill. This is more than the KLA has contributed before, but we have enough cash flow and assets to continue to do this, especially with more than half covered by grants.

Lake Survey

The Lake Survey was done in August and they looked at 5 potential hotspots. There were 3 divers from the LEA and they spent a lot of time in the water. (They also found way less trash than the previous year!) The divers found nothing to be concerned about. This cost \$300 and Charlie recommends that we continue to do it in 2024.

Richard asked for a motion to retain the divers up to \$400 and it was unanimously approved.

**Water Testing**

Last year was a bad year but not an outlier year because of the rain. The phosphorus levels were up and clarity was way down. The woman who did the testing said it was not off trend and thinks Keoka will go back to trend with things be stable going forward.

Rich said that the LEA has adjusted their normal water sampling samples from four to three and made a corresponding price adjustment. It is essentially the same as last year and Rich recommended that we follow their recommendation. The breakdown is the table below.

Rich asked for a motion to approve the \$1500 proposal for water testing, and it was unanimously approved.

<b>Service</b>	<b>2023</b>	<b>2024</b>
3 water samples analyzed over the summer to determine and document Algae (2023 - new service, 4 samples. 2024 proposal - same service but reduced to 3 samples)	600	450
2 winter monitoring trips for ice and water quality conditions (same as 2023)	700	700
Temperature sensor buoy - deploy retrieve and analyze data (same as 2023)	175	175
Obtain 5 fluorometric chlorophyll profiles and analyze data (same as 2023)	175	175
<b>Total</b>	<b>\$1650</b>	<b>\$1500</b>

**Stream Survey – Kim Struck and T’ing T’ing Doore**

Kim shared their report attached below.

Andy asked how they collect samples and Kim explained they use gloves and a plastic water bottle.

**Education and Outreach – Joanne Eaton reporting for Ginger Eaton**

Ginger has created two large signs for the side of the truck driven in the parade that will advertise the website. The expenditure for the truck signs was \$400 and Rich previously approved it. Ginger is going to the Maine Lakes Symposium on June 14 to share information about the event at the Keoka Beach Campground last summer.

Lake Smart may be taken over by Doss Hasson.

**Membership – Paige Nalipinski**

The full report is attached. The KLA has more than doubled the number of memberships year over year, but this is largely due to the fact that couples are now paying per person. We have 80 memberships so

far in 2024 and we expect many to be paid in July. We take membership payments all year. Paige noted that many of our donations come in the same checks as the membership dues so when we shift to online payment, we want to make sure donations can be made online at the same time as the payment of dues, so we don't lose out on additional donations.

Online Dues – Brenda Hambleton reported that we are working on an online payment system, which is in high demand. Brenda created a draft of what we hope it looks like and the requirements, but we need outside support to build the payment system to those specifications.

### **Communications – Brenda Hambleton**

The Newsletter has kicked off and they are working on the June newsletter. It will come out in early June then mid-month after that. We are getting new subscribers. Al Struck highlighted an article from John Bell in the last newsletter that was very informative. Brenda shared that there is a new calendar of events posted on the website and that our social media pages are active.

### **Merchandise Sales – Joanne Eaton**

Joanne shared that she made a huge order last year and sold the majority of it. She made a second order, but it didn't come in until December 2023, so she plans to sell all of that this year. An inflatable paddle board was donated by a friend of the KLA to raffle off. The ticket pricing will be the same as previous years. There will be a second table on the green at the 4<sup>th</sup> of July Parade this year and Joanne could use support at that table as well as at the merch table during the October Road Race. Rich encouraged attendees to volunteer at the merch table as those profits can help offset the cost to keep the Courtesy Boat Inspectors and keep the lake safe.

### **Water Safety – Charlie Tarbel and Andy Tabor**

Charlie reported that they are working on getting the lake to the right level. It is a little too high right now. In addition to Charlie, Nick Archer and Glen Merrill manage the dam. It was noted that the loon's nest floated toward Kokosing and Charlie plans to get it in the morning.

Andy reported that there is a gathering to put the dock in at Town Beach on Saturday 5/25 at 1 pm. The buoys are in. Last fall they were retrofitted with lights that are powered by solar panels on the top to keep the lights flashing. They blink once every three seconds. There are red and green ones at the boat launch lane and amber ones around Sunken Island and Rock Island. The board discussed that there has been a complaint about light pollution but that we should mention that the buoys are best practice in the newsletter. Additionally, the buoys were funded by a donor, not the KLA.

### **Events – Al Struck, Bill Robichaud, and Brenda Hambleton**

Al Struck reported on the 11<sup>th</sup> Regatta. It will be on July 27<sup>th</sup> and this will be the 5<sup>th</sup> anniversary of the Camp Cup. Al is contacting the camps this week for their participation and hopes to have representation from the Keoka Beach Campground in the race this year. Al noted that we need a volunteer for the committee boat and Bill and Jim volunteered. The only expense to the KLA is for engraving and posters.

Bill reported that the timing of the Boat Parade is moving up to 7 pm so that it can be done all in the daylight. It will start at the Keoka gas stop and go counter clockwise and judging will be done at the beginning at the gas dock. There will be a band at the Campground for an after party from 7:30 pm – 10:30 pm. The lead boat will take care to make sure people on shore can see the boats and Brenda

mentioned we hope to have programming for kids at Town Beach. She also mentioned that we need a photographer. It will be on August 3<sup>rd</sup> and Bill will speak to the owner of the Campground about parking. Brenda agreed to be the judge from KLA

### **Board and Officer Nominations – Rich Orr**

All incumbent directors whose terms expire in July are standing for election except Rich Orr. Jonathan Hasson will be nominated as a director as a replacement.

Rich mentioned that the board is proposing a slate of officers to the members who will vote at the annual meeting.

The proposal includes:

Brenda Hambleton for President

Jonathan Hasson for Vice President

Riley and Liz to remain as Secretary and Treasurer, respectively.

The new offices begin at the end of the annual meeting.

Joanne asked if someone can be new to the board and become an officer and Rich confirmed yes as per the bylaws.

There was a motion to approve this slate of board nominations at the Annual Meeting and it was approved unanimously

### **Liability Insurance Renewal – Rich Orr**

The KLA got a renewal notice and the premium went up to about \$1,100. This is on a 3-year cycle. This insurance covers the dam. The KLA has general liability insurance to cover injuries caused by our negligence.

### **Donations to recommend at the Annual Meeting – Rich Orr**

These proposals are the same as 2023. Rich recommended that we carry last year's slate forward.

There was a motion to approve the donations as listed below and it was unanimously approved.

Recommended donations:

- Lakes Environmental Association \$1,200
- Lake Stewards of Maine: \$100
- Maine Lakes Society: \$200
- Wilkins Community House: \$100
- Waterford Fire Department: \$50
- Stoneham Rescue Unit: \$50
- **Total: \$1,700**

### **Review of Maine Community Foundation and Potential Future CBI Costs – Rich Orr**

Liz and Rich took time to create a comprehensive memorandum of how the account works to create a point of reference for the Board. We raised a lot of money with the KLA50 Campaign, and that money is continuing to grow. At MCF we have two buckets:

1. The KLA50 Campaign money that is tagged for protection of the lake in a crisis (i.e. milfoil) and for prevention.
2. An unrestricted fund, which is accumulated surplus, kept separate because it was not from donations raised with a specific tagged usage.

The KLA brings in more money than it spends yearly, so if the Board gets in a situation that we need to tap into the KLA50 bucket to cover the cost of the CBI, the Board can determine that it is considered prevention under the policy the Board put in place. This policy could be changed in the future. There is a yearly available number for distribution – roughly 4% of average asset value in over 12 quarters. The funds available for distribution accumulate, but we are under no contractual obligation to spend this money. The 4% distribution rate is a MCF policy, but if circumstances required it, the Board could ask MCF for a larger distribution. To date there have been no distributions from either the KLA50 campaign fund or the unrestricted fund.

There was discussion around the Board policy and if CBI counts as prevention, but no changes were proposed or made to the current policy around the usage of KLA50 funds.

There was a motion to adjourn the board meeting and it was unanimously approved.

#### Attached documents

- Membership Report
- Treasurer's Report
- Brook Report

## **Membership Report**

May 24, 2024

Paige Nalipinski

Membership numbers more than doubled in 2023, largely due to members paying per person versus per family or couple. The increase was from 63 to 141 individual memberships.

It should be noted that most of our donations above and beyond membership dues, did come in attached to membership renewal checks (\$1795 renewals and \$4250 donations) and not as separate donation checks. (We got 6 checks for donations unattached to membership vs. 32 attached to membership).

We are seeing a significant increased membership in the younger generations although most of those are gift memberships.

To date in 2024 we have 47 members who have paid annual dues.

TO: KLA Board Members  
FROM: Liz Stockwell, Treasurer  
DATE: May 15, 2024

### **Financial Update**

The KLA ended 2023 with an operating profit (\$4.8k) and a strong cash balance.

Total operating expenses were \$15.3k, with primary contributors being CBI, program operations, and grants. 2022 expenses were significantly higher (\$23.3k) due to the costs associated with the KLA50 celebration. Note that beginning in 2023, we separated LEA services associated with water testing from our grant to LEA, driving the program operations line item higher, and the grants line item lower.

Total operating income was \$20.1k, which is significantly higher than it was in 2022 (\$17.5k). Primary drivers of income were dues/donations, CBI grants, and merchandise, all of which were higher in 2023 than in 2022.

Currently, our Key Bank operating account has a cash balance of \$23,852.48. Of that, \$1,700 will need to be transferred over to Maine Community Foundation after our October meeting.

As of the end of Q124, our total balance at Maine Community Foundation was \$216,176.57. Of that total, \$170,346.03 was in the Capital Campaign fund, and \$45,830.54 was in the Unrestricted fund. Historic gift value for the two funds combined is \$175,326.52.

### **YE23 Financial Statements**

#### **BALANCE SHEET**

#### **Assets Liabilities & Surplus**

Cash - Key Bank 19,182.00 Reserves Payable:

Investments: Other Reserves 198,677.85 Maine Community Foundation  
208,677.85 Liability Provision 10,000.00 **Total Liabilities** 208,677.85

Surplus 19,182.00

**Total Assets** 227,859.85 **Total Liabilities & Surplus** 227,859.85

**INCOME STATEMENT**  
**2023 YE 2022 YE**

**INCOME**

**Operating Income**

Dues, Donations, & Memorials 9,287.32 8,088.51 Merchandise Sales  
4,111.00 3,249.00 *Keoka Lake* Book Sales 1,085.00 773.00 Raffles -  
545.00 CBI 5,650.00 4,600.00 Miscellaneous - 250.00 **Total Operating  
Income 20,133.32 17,505.51**

**Other Income**

KLA50 Capital Campaign 2,300.00 10,480.12 **Total Other Income  
2,300.00 10,480.12**

**TOTAL INCOME 22,433.32 27,985.63**

**EXPENSES**

**Operating Expenses**

Program Operations 3,857.15 871.06  
Merchandise 1,505.25 1,104.95  
CBI 7,299.00 8,208.00  
Insurance 933.18 917.73  
Grants 1,700.00 2,700.00  
KLA 50 Administration - 8,848.24  
*Keoka Lake* Book Publishing - 12.68  
Miscellaneous - 658.28  
**Total Operating Expenses 15,294.58 23,320.94**

**Other Expenses**

Transfer to MCF 2,310.12 23,141.96  
**Total Other Expenses 2,310.12 23,141.96**

**TOTAL EXPENSES 17,604.70 46,462.90**

**Operating Income/(Loss) 4,838.74 (5,815.43) TOTAL INCOME**

**(LOSS) 4,828.62 (18,477.27)**

**Update on KLA50 Campaign**

The KLA50 Capital campaign comes to a close at the end of 2024. There are six outstanding pledges that remain, from which \$800 total is anticipated:



- Three pledges (totaling \$200) due by the middle of July
- Two additional pledges (totaling \$600) due by the end of the year
- One pledge that remains uncollected since the first year of the campaign – \$4,000 remains on this pledge

### **Funding Increased CBI Costs**

In 2023, KLA operations resulted in a healthy operating income buffer. With a relatively conservative 2024 forecast, operating income should still cover operating costs, even with the increased CBI burden. The below table uses 2022-23 averages for dues/donations and merchandise, assumes stable program operation and grants costs, and shows actual insurance and CBI figures.

	<b>2023</b>	<b>2024 forecast</b>
<i>Operating income</i>		
Dues/donations	\$9,287	\$8,688
Merchandise (net)	\$2,606	\$2,392
Book sales	\$1,085	\$0
Total operating income	\$12,978	\$11,080
<i>Operating expenses</i>		
Program operations	\$3,857	\$3,857
Insurance	\$933	\$1,151
Grants	\$1,700	\$1,700
CBI (net)	\$1,649	\$3,750
Total operating expenses	\$8,139	\$10,458
<b><i>Net income</i></b>	<b><i>\$4,839</i></b>	<b><i>\$622</i></b>

Furthermore, KLA maintains a healthy cash balance in its operating account at KeyBank, which provides a buffer should we need to cover unanticipated increases in costs. Current cash balance as of 05/01/2024 is just under \$24k.

## **Brook Report**

It's hard to believe that a few short weeks ago, we were still worrying about frost, the challenge of when and what to start growing, the usual spring clean-up of homes and yards, the dreary days interspersed with some absolutely gorgeous days as a tease of things to come. And then this week, like magic, we have heat and humidity, bright sunshine, green, magnificent lush and verdant, leafing out. The daffodils, tulips, and forsythia of early spring are giving way to the blooming lilacs, which are taking their glorious but short turn in the spotlight. The entire village smells and looks stunning. It's at this resurgence of life throughout our peaceful village that we once again turn our attention to our beloved lake and its affluents.

This year our report of the usual observations, we have an opportunity to pose a couple of questions about what is living in our brooks. The two species we wanted to start with are frogs and salamanders. We will then narrow that down to one species of each that are most abundant in our particular watershed.

We are learning how to take the samples of water from each brook and look for environmental DNA (eDNA), we will take two samples one upstream and one closer to the mouth of each brook. We will be able to determine from this environmental DNA (eDNA), with the help of Professor Michael Kinnison and his graduate students from his Evolutionary Applications Lab at the University of Maine, Orono what the species are. The samples sent to the lab will give us results in 6 months.

Our goal is to keep a running tab on the bigger species in the brooks to monitor decline or growth. Next spring, we want to invite people to give suggestions on what species to track with new samples.

Climate change has brought more extreme rain, snow to Maine. The brooks have taken a pounding from this severe weather. For example, Kedar Brook has flooded its banks and completely changed course.

According to the new National Climate Assessment, the number of extreme rain or snow events in the Northeast is up 62%, the largest increase in the nation. Two-inch rain days were up 49% when comparing averages between 1958 and 2022, while 5-inch days were up 102%.

How does Maine stack up? The assessment's conclusions about the Northeast are based on data from 13 states, from Maryland and West Virginia to Maine. It doesn't specify how many heavy rain days any one state within the region has racked up.

An independent review of five long-term weather stations in Maine conducted by the state climatologist, Sean Birkel, shows some of the regional extreme precipitation trends hold true in Maine: The number of 2-, 3-, and 4-inch rain days are increasing.

National Climate Assessment <https://nca2023.globalchange.gov/>

As of April 16, 2024 the US Drought Monitor map shows Maine to be out of drought. <https://droughtmonitor.unl.edu/CurrentMap.aspx>

For both of these sites' reports more in depth please refer to the websites.

## **Kedar Brook**

Since last May Kedar Brook has overflowed its banks below the Struck's house with each major storm. There is now a new channel at the first bend that has been cut straight across to the third bend. There is an increase of a sandy bottom after the third bend and the pools have become quite deep. Due to the intense burst of each storm the brook didn't have time to undercut the banks, rather the water just flooded the land. There isn't any debris constricting the flow of the brook upstream by Charlotte and John's home.

At the mouth of the brook the beaver lodge has gotten bigger with the rise in water level though there isn't much beaver activity noted. The channel leading out into the lake is very deep even for this time of year.

## **Sucker Brook**

Sucker Brook is running very dark with tannin, while this is not unusual for spring, per se, in most pools this year it is difficult to see to the bottom. There is quite a lot of debris from the storms, but water is still flowing, and the extra channels are drying up. Surprisingly, the overflow has not changed any undercuts in the banking. This brook always needs a clean up throughout the year due to trash ending up on the banks or in the brook itself.

## **Johnson Brook**

Starting at the culvert and going up stream past the horse farm the channel has widened considerably since the storms over the winter. Many trees are down but since the water has subsided the trees are not blocking the downflow. Overflow is marked at 20 feet on each side of the brook, very little undercut. I noticed rust colored patches of water this year. This coloring is due to iron-oxidizing bacteria which is not harmful to water quality.

Starting from the culvert going towards the lake there is now a small island that has been carved out from the water. The alders have taken a beating this year, the banks are not undercut. The water is running clear and is deep in some of the channels and I saw fish! There is very little debris on this side of the brook, I'm happy to report the fort remains standing near Charlie's home.

## **Stony Cove Brook**

This year the water is very deep at the mouth of this brook and dark from the tannin as well, which is a normal occurrence on this side of the lake. There are small tributaries this year that are still running. Unless we have another wet summer, they will dry up. Moving up the brook the moss is quite thick and healthy, in the water is a flowing green substance which turns out to be green algae: green algae often look like strands of green hair flowing in the current. Spirogyra is a common green alga. Under a microscope its chloroplasts are clearly seen as spirals.<sup>1</sup> This algae growth has not been observed before. The rest of the brook continues to follow the expected course of disappearing under rocks and trees. One must be careful where stepping moving upstream, as falling into a hole is a real danger.

## **Lenassi Brook**

This year, the water flow is quite high! The boulders at the mouth haven't shifted much, despite the heavy rains. The streambed of most of the brook is sandy and there are numerous frogs this year. Because of the landscape there is some debris in the brook but not enough to impede flow. The pools are deeper than normal at this time of year, again due to the winter storms.

This brook rarely undercuts, the overflow is about 20 feet on both banks.

If the Association would like to learn more about eDNA, Mike Kinnison is willing to come and give a short presentation in July depending on his schedule or perhaps in the fall.

Respectfully submitted,

Kim Struck  
T'ing Doore

### **1. What are algae?**

Algae are simple, aquatic, plant-like organisms that do not have true roots, stems and leaves. Many are single-celled so can only be seen using a microscope, while others grow in filaments or mats that are quite conspicuous. Algae have chlorophyll and can make their own food through the process of photosynthesis.

Although algal growths can often be seen in the water, a microscope is required to appreciate their beauty and complexity.

### **Why are algae important?**

Algae produce oxygen as a waste product of photosynthesis. Cyanobacteria are amongst the most ancient forms of life and they have been contributing oxygen to the world's atmosphere for the last three billion years.

Cyanobacteria are able to fix nitrogen from the atmosphere. All organisms require large amounts of nitrogen for their metabolism and cyanobacteria play an important role in making atmospheric nitrogen available in nutrient cycles.

Algae help to 'purify' water by absorbing nutrients and heavy metals from streams and rivers.

Algae are the basis of most aquatic food webs. They are food for many small aquatic invertebrates, and in turn, these small creatures are food for larger animals such as fish. Algae also provide important habitats for invertebrates and fish. Without organisms that can capture energy from the sun by photosynthesis, none of the higher organisms would exist.

Algae can be valuable indicators of environmental quality. Many are sensitive to changes in pH, in nutrient levels or in temperature. Monitoring species abundance and composition can be useful to identify changes in water quality caused by changes in surrounding land use.

Where are algae found?

Freshwater algae are found growing underwater on rocks and mud in streams and rivers. They are usually more abundant in slower streams than in fast flowing rivers. Didymo, the exotic pest alga commonly known as 'rock snot', is one of the few species that grow well in swift rivers. However, even didymo cannot withstand turbulent flood waters.

### **What types of freshwater algae are there?**

The main groups of algae found in streams are the green algae (Chlorophyta), red algae (Rhodophyta), blue-green algae (Cyanobacteria) and diatoms (Bacillariophyta).

Green algae: Green algae often look like strands of green hair flowing in the current. Spirogyra is a common green alga. Under a microscope its chloroplasts are clearly seen as spirals.

Red algae: Red algae, such as Audouinella, uses a different part of the light spectrum it is able to grow in places where the other algae can't, so tends to be found in shaded places such as under rocks or banks.

Blue-green algae: The chlorophyll in the alga Cyanobacteria is not in chloroplasts but diffused throughout the cell. Pigments, other than chlorophyll, contribute to their colouration so cyanobacteria are not usually bright green. Nostoc is another cyanobacteria that is often conspicuous in streams. It looks like bubbles of firm jelly attached to the rocks. The 'bubbles' are masses of small chains of cells. .

Diatoms: Mats of brown growth, fluffy masses or slimy layers on rocks are some of the ways diatoms appear to the naked eye. Gomphoneis forms thick, glistening, light-brownish mats on river substances and is often mistaken for didymo. However, didymo has much larger cells and grows in tougher, more fibrous mats.

**Can algae be bad?**

Excessive nutrients in runoff from land used for intensive agriculture will alter the natural composition of algae in streams and rivers. If the natural balance is disturbed algal blooms may occur, causing undesirable discolouration, scum and odors and even toxic effects.

Didymo (*Didymosphenia geminata*) is an example of an introduced organism that has grown into unsightly mats over stream and river bottoms. In many places it has out-competed the native algae and destroyed invertebrate and fish habitat. Be fastidious in taking measures to stop the spread of didymo. Follow the simple rules – Check, Clean, Dry – when moving from one waterway to another.

Department of Conservation NZ