# Seneca Lake PURE WATERS Association

2019-2020 Fiscal Year Annual Report

PRESERVE, PROTECT, AND PROMOTE SENECA LAKE WATER QUALITY



# TABLE OF CONTENTS

01	—— Executive Summary
02	—— President's Message
05	——— Strategic Planning
07	<b>Results</b> Water Quality Programs
20	—— <b>Results</b> Operations
24	—— Financial Report
26	—— Board of Directors

### About Pure Waters

Seneca Lake Pure Waters
Association incorporated in
1990 as a Section 501(c)3
nonprofit corporation
dedicated to understanding,
preserving, and improving
Seneca Lake through
research, public education,
and advocacy.

In its 30-year history, the association has adapted its focus and addressed a variety of threats to the lake. Over the years, studies and informational efforts have covered a wide range of topics such as: identifying varied contamination and pollution threats; supporting research studies; developing watershed management plans; and informing municipal practices.

Today Seneca Lake Pure Waters is a vibrant and growing organization. We are also an important partner in the latest watershed management plan development process.

Pure Waters is committed to improving and adapting to meet Seneca Lake watershed's future needs.

Pure Waters Vision: Be the premier lake association in the state

### **EXECUTIVE SUMMARY**

The 2019–2020 fiscal year was an exciting period of transition and growth. Jake Welch took the reins as President as the board conducted an extensive strategic planning review, which will guide the next 3 years of growth and improvement. Many new programs were started and existing programs improved.

To support our growth, the association developed new approaches to fundraising, hired a new part-time Administrative Coordinator, focused on streamlining and reinvigorating operating processes, and aggressively expanded its board with new talent and passion.

Working closely with the Seneca Lake Watershed Association (SWIO), Pure Waters helped move the Nine Element Watershed Management Plan development effort aggressively forward. Pure Waters multi-year investment in the stream monitoring program is paying off as the data is being vetted to use in the Nine Element plan, accelerating the analysis.

In collaboration with nearby lake associations, Pure Waters developed a common mid-Finger Lakes *Lake Friendly Living* program that kicked off in Spring 2020. This exciting program will help energize support for lake-friendly practices at residential properties.

Pure Waters collaborated closely with Canandaigua and Keuka lakes to help them improve their Harmful Algal Bloom (HAB) surveillance programs as well as our own.

Pure Waters partnered with Hobart and William Smith Colleges (HWS) and the Finger Lakes Institute (FLI) to start a new aquatic invasive species program through the FLI PRISM office.

Through a generous grant from the Tripp Foundation, Pure Waters partnered with HWS to start a program that put weather stations, time-lapse cameras, and water temperature gauges to search for and learn about HABs at eight dock locations around the lake. With FLI, Pure Waters also conducted weekly nutrient sampling at four locations.

Finally, the association's life blood is its volunteers and they stepped up big time this year. Over 200 volunteers participated in various water quality programs and management efforts—contributing an estimated 3,400 hours directly to helping the lake. They deserve our heartfelt thanks.

So, 2019–2020 was a very good year for Pure Waters. Momentum is building and the future looks bright. Despite the pandemic, Pure Waters will continue to grow and be a leader for Seneca Lake water quality.



Jacob Welch
Association President

### PRESIDENT'S STATEMENT

It would be a major understatement to say it has not been an extremely busy, challenging, and interesting past year at Seneca Lake Pure Waters. We kicked off the fiscal year with a strategic review that we called "Compass". Board members shared their visions as well as thoughts as to how Pure Waters could be improved and more focused. All of these thoughts were compiled into a new strategic plan for the organization.

A big part of improving our organization included the hiring of Kaitlin Fello, our administrative coordinator. She has proven herself to be a tremendous asset. Kaitlin has a strong educational background in environmental science. She also has excellent skills in electronic marketing vital to doing business as we know it today.

Bob Shrader, and the Membership Committee, helped us embark on an extensive membership drive. This included mailings to the populations of Watkins Glen and Geneva. You may have also seen our billboards along the roadside. A strong membership base is critical for us, not just economically, but to also give us a greater voice with political leaders who may otherwise choose not to be concerned with environmental issues.

We also launched Lake Friendly Living. This is a program where individuals not just on the lakeshore but all around the lake can personally take steps to control unwanted nutrients going into our lake. Our newest board member, Maura Toole, worked with three of the other Finger Lake associations to bring us this worthwhile program. Things like the Lake Friendly Living program really get out our essential message: that Seneca Lake is a precious resource that is threatened and that we all must strive to preserve.

Our VP of Water Quality, Dan Corbett, has continued his efforts to driveforward the Nine Element plan. A technical group hired to gather essential data is performing an in-depth study of the watershed we share with Keuka Lake. Nine Element goals include achieving a widespread community effort, and potentially millions of dollars in federal aid, to keep our waters from being further harmed by ever increasing harmful algal blooms (HABs). We also seek to maintain the surrounding natural landscapes from turning into unsightly housing developments. I am proud to say that our organization

# PRESIDENT'S STATEMENT, CONTINUED

was pivotal in raising the local contribution of \$90,000 that the state later matched for a total of some \$360,000, which was required to start up this highly important program. Both Dan Corbett and I will regularly be working with the plan's executive board as it progresses.

One of our newer board members, Rich Adams, helped us launch yet another program, this one to stop invasive species from coming into our lake. Rich has had a career at the Pennsylvania version of our New York State Department of Environmental Conservation (NYSDEC). His knowledge is proving invaluable in protecting our lake. Rich has assumed the mantle of being the head of our water quality committee. Before the pandemic, the committee was regularly meeting with the various county soil and water representatives as well as other partners that could help us with our goals. When the virus settles down a bit, we have plans to pursue remedial projects. One of them includes studying a select stream on the lake to find how we can best work with farmers and set up erosion controls that will help minimize runoff. One stream, in particular, has already been studied with this type of plan in mind.

We also have reinvigorated our newsletter, LAKEWATCH. Our plan is to have it go out at least eight times per year. Our Vice President of operations, Frank DiOrio, and Kaitlin Fello have been busy implementing this project. This newsletter, in addition to the Bloom Watch newsletter which focuses on harmful algal blooms (HABs), will serve as an excellent way to keep our members abreast of threats to the lake, their development, and what we are doing to stop them on your behalf.

It's also important to mention that our annual appeal was the most successful one on record! Our head of membership and fundraising, Peggy Focarino, and her erstwhile committee did an amazing job and almost doubled what we received on our annual appeal from years before. For those who so generously gave—a big thank you.

Our harmful algal bloom (HABs) monitoring program remains one of the best in our state. In October 2019 its leader, Bill Roege, made a presentation at Hobart and William Smith Colleges. Leaders of other lake organizations were busy taking notes on how our volunteers provide information which is then instantly placed on our website to alert the public where poisonous blooms may have arisen on the lake. On a personal level I was very proud that it was our lake organization handpicked for this academic presentation.

We also learned this year that the State of New York will no longer pay for our testing of harmful algal blooms. Likewise, they cut by three fourths their assistance in testing mid lake waters we obtain under our CSLAP program. So, this means we've had to put more effort into picking up the slack.

# PRESIDENT'S STATEMENT, CONTINUED

Of course, one of the biggest stories of the year involved COVID-19. Since March 2020, our board had to meet by electronic means only. We had to figure out how to do all that so we could to quickly reassess economic concerns. We also had to assess health issues tied to having our volunteers come together for stream studies, educational seminars, and the like. To deal with this crisis, the board gave significant freedom to our executive committee to make decisions understanding they had to occur at a high rate of speed. Our organization responded to the call with several contingency plans.

Unfortunately, with all the uncertainty and health concerns afoot we had to cancel our annual dinner. Committees have been formed to come up with alternative plans needed to fill in a big economic gap as the annual dinner traditionally brings in a significant portion of our annual revenue. Over the next few weeks and months, you will start seeing announcements for other events. Each will allow for proper social distancing and will be either fun, educational, or otherwise very worthwhile. We ask that you please continue to help us with some of these alternative routes we have chosen to raise funds.

Finally, when I took over as President last year, I had no idea how much was coming my way in the year to come. We have tackled some very big things under tough conditions. We have also shifted our focus from just talking about problems to doing something to make them better. As you might expect, that means a lot more commitment, time, money, and work. Fortunately, we have a hard-working board and a great administrative assistant to, as they say, "git'er done."

One other element, however, is missing. That includes the people reading this message. Please remember that we also really need your support—be it through volunteerism, financial assistance, or signing up for the programs, events, or webinars we will be putting on during the new fiscal year. If we add your support together with what we already have going for us we are truly unstoppable, pandemic or not. If you have so generously given us that support in the past, please do not stop now. If you are new to doing that, please jump in and help the cause. Threats to this lake are real and will be getting even worse in the years to come. We need you too.

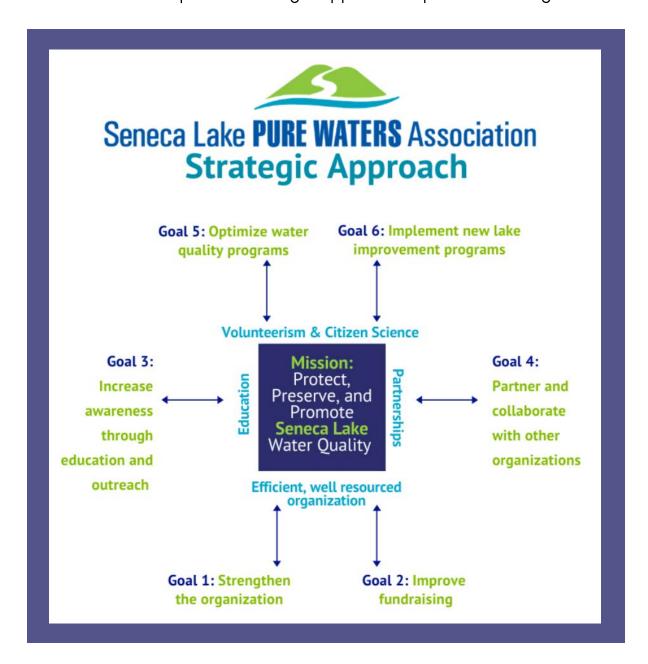
Tacob Welch,

President

Seneca Lake Pure Waters Association

### STRATEGIC PLANNING

The Pure Waters board conducted a strategic planning effort starting in Spring 2019 and culminating in the fall. An update was conducted in late Spring 2020. The result was an updated strategic approach captured in the figure below.



We use four supporting principles—volunteerism and citizen science, education, partnerships, and an efficient, well-resourced organization—to directly impact mission accomplishment. Each is enhanced by one or two strategic goals.

During this fiscal year, the board made significant progress on many fronts. Goal 1, Strengthen the Organization, has been substantively completed with the hiring of the new paid Administrative Coordinator, adding new board members, invigorating the committee structure, and strengthening management processes.

### STRATEGIC PLANNING, CONTINUED

Many aspects of Goal 2, Improve Fundraising, have also been accomplished, but more needs to be done especially with respect to business engagement and building a solid financial base.

The launch of Lake Friendly Living is a good example of starting to move forward on Goal 3, Increasing Awareness through Education and Outreach. This will be a growth area for the future.

The association has been stressing partnerships (Goal 4) this year and will continue to do so. We conducted an extensive review of potential partners and developed processes to ensure we become more closely connected. In particular, the important relationship with SWIO will be strengthened and harmonized to ensure maximum benefit from the Watershed Steward.

Goals 5 and 6 continue the association's recent focus on volunteerism and citizen science programs that directly inform research, planning, and policies concerning the Seneca Lake watershed. We will continue to review, refine, and improve our programs.

### FISCAL YEAR 2019-2020 RESULTS

The association has two Vice Presidents: one for Water Quality Programs and one for Operations. This results section is organized around the same concept.

### Water ouality programs

Pure Waters water quality programs implement three of the four strategic principles: volunteerism and citizen science, education, and partnership. Pure Waters has a strong water quality program portfolio in concert with our many partners. The programs cover a wide range of topics and purposes education, planning, research, and observations. Three were new this fiscal year: Invasive Species, Lake Friendly Living, and the dock monitoring project. The following sections provide more detail on each program.

### Nine Element Watershed Management Plan

The project to update the Seneca Lake Watershed Management Plan (WMP), in the form of a Nine Element Plan, was initiated in 2018. Occurrences of Harmful Algal Blooms (HABs) during summer and early fall seasons have heightened the concerns of nutrient loading in all the Finger Lakes. Seneca Lake Pure Waters took a leadership role kicking off this project effort, finding \$90,000 in "local match" funding and pursuing a New York Department of State (DOS) grant of \$270,000 to cover the planned costs of the project.

The United States Environmental Protection Agency (EPA) and the New York State Department of Environmental Conservation (DEC) require Nine Element plans for preferred status in funding watershed remediation projects that are defined by these plans. Keuka Lake joined our project as they constitute a large portion of the Seneca Lake watershed and the issues facing these two lakes appear to be largely shared. An



### Nine Element Management Plan, Continued

In the last year we were approved for the DOS grant, officially kicked off the project, and began to spend the DOS and the matching funds. EcoLogic LLC, a technical consulting firm with experience in these plans, and their sub-contractor, Anchor QEA, have been contracted and begun the detailed work of collecting/updating watershed information and math modeling of nutrient loading into the lakes.

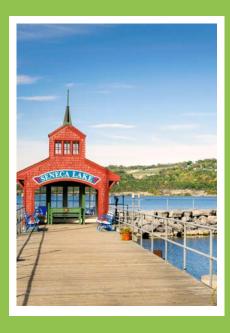
A Technical Advisory Committee made up of the watershed managers, DEC researchers, and the technical consultants have been active in steering the technical components of the project. Pure Waters and KLA citizen science program data on tributary and lake water quality from previous years are being used as inputs for the math modeling efforts, and the 2020 sampling plans have been adjusted to meet the needs of the project.

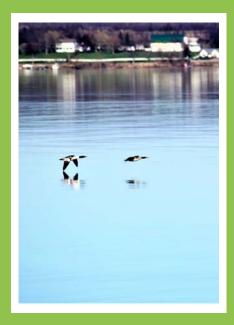
Pure Waters maintains a significant volunteer workforce (about 50 people) and funding (about \$20,000) for the Stream Sampling and CSLAP efforts. These programs are being executed throughout the spring, summer, and fall seasons.

A Project Advisory Committee has been established and has met for the first time. This group represents key stakeholders in the watershed and will be critical to communication linkages and eventually seeing remediation projects approved and executed. Partners in execution of project elements include the Finger Lakes Institute (FLI), Cornell University, Cornell Cooperative Extension, and all the County Soil and Water Conservation Districts.

This project has an aggressive timeline to complete the Water Management Plan (WMP) in three years, and 2020 is a critical year to accomplish a bulk of the work.

Completing this plan and executing its recommendations will be critical to preserving and protecting the water quality of Seneca Lake, while maintaining a healthy balance of agriculture, tourism, and growth in our communities. The first of the public outreach meetings will occur in fall 2020, allowing the public to become more informed and participate in the process. We encourage members to engage.







### Stream Monitoring

Seneca Lake Pure Waters Association's stream monitoring is now in its 7th year. The Stream Monitoring Team has more than 50 dedicated volunteer members who assist in collecting water samples at Catharine Creek, Big Stream, Kashong Creek, Keuka Outlet, Reeder Creek, and Glen Eldridge Creek. Most streams have multiple sampling sites that cover the headwaters to the stream mouths at Seneca Lake. Pure Water's partner in this monitoring, Community Science Institute of Ithaca, NY, performs laboratory tests for water quality and assists in interpretation of results. The team's efforts for 2019 added up to more than 250 hours of volunteer time and included 101 water samples, with 715 laboratory tests at a total cost of \$24,100.

Each of the streams have unique conditions and characteristics that contribute valuable information to the monitoring program, and nearly all have shown adverse effects from intense storms in recent years, including bank erosion and high waters bringing increased bacteria and nutrient loads from upstream runoff.

### Streams comply with bacteria limits for swimming only some of the time.

Shown below are percentages of stream samples that fail to meet E. coli bacteria limit of 235 cfu/100 mL, results from 2014-2019.

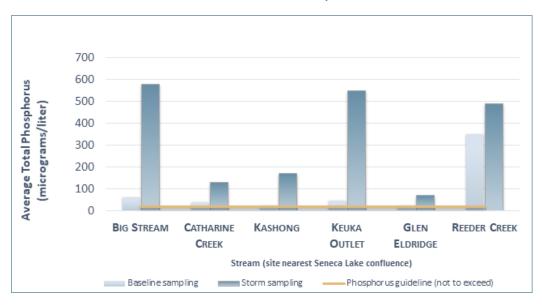


Map of sampled streams on Seneca Lake (stream subwatersheds are shaded).

BIG STREAM	CATHARINE CREEK	Ka shong Creek
73% of samples fail to meet limits	42% of samples fail to meet limits	50% of samples fail to meet limits
KEUKA OUTLET	GLEN ELDRIDGE	REEDER CREEK
62% of samples fail to meet limits	33% of samples fail to meet limits	76% of samples fail to meet limits

### Stream Monitoring Programs, Continued

For example, high levels of nutrients and bacteria are evident in Big Stream downstream of the Dundee WWTP. Similarly, Keuka Outlet has very good water quality near Keuka Lake, but shows very high levels of nutrients and bacteria at downstream locations, especially during heavy rain flows. Penn Yan wastewater treatment plant (WWTP) effluent, which discharges to the Keuka Outlet has very high levels of both nutrients and bacteria. Reeder Creek has persistently elevated phosphorus, due in part to munitions disposal at the former Seneca Army Depot and to upstream wastewater treatment discharges—though there is a reduced wastewater influence due to the recent closure of some facilities there. In contrast, Glen Eldridge Creek is relatively pristine, with lower bacteria and nutrient concentrations, with few municipal or agricultural inputs upstream. Catherine and Kashong Creeks fall somewhere in between, with more moderately elevated concentrations.



Phosphorus levels are elevated after storm events, and most streams exceed the phosphorus guideline of 20 micrograms per liter (orange line). Shown are average total phosphorus samples collected during baseline and wet weather, results from 2014–2019.



Our findings on the major streams feeding Seneca Lake continue to show high levels of phosphorus, which can lead to algae overgrowth and contribute to harmful algal blooms. High levels of E. coli bacteria are also found in all streams, which is an ongoing concern for the quality of recreational and drinking water resources.

Pure Waters continues this effort to better understand pollution in Seneca Lake, and to bring about further improvement actions. A special thanks to the Seneca Lake Pure Waters volunteers that make this data gathering effort possible.

# Citizen Science Lake Assessment Program (CSLAP)

CSLAP has a history dating back to 1986, and was recently reinstated by Pure Waters in 2017 under a grant from the U.S. Environmental Protection Agency (EPA). Currently the state program encompasses 180 statewide sites, none of which are deeper than Seneca Lake's four sites. The purpose of this program remains the monitoring of lake health and trophic status (biological productivity based on nutrient levels) compared to past and current statewide trends. Water samples are captured from the lake's center for overall representation. CSLAP is administered statewide by the New York State Federation of Lake Associations (NYSFOLA) with DEC's expenses being nearly \$1 million dollars.

On Seneca Lake a group of 8–12 volunteers make 32 seasonal trips to their respective sites, spending around 185 total hours collecting, transporting, and processing water samples. Samples are taken above 500 feet of water, so weather conditions figure heavily when planning sample collection trips. Volunteers have lab work on board their boat as well as lab work on shore. Lab analysis is done by Upstate Freshwater Institute (UFI) in Syracuse. Through this fiscal year, DEC has funded the Pure Waters CSLAP sites. In the future (summer 2020 and beyond), DEC will only fund one site. Pure Waters has decided to

fund its share of the other 3 sites because of the importance of this program for Seneca Lake health. The DEC supplies the of funds for training, equipment, and lab analysis. Compiled data points help assess lake status and identify potential problems if issues are left unchecked.





CSLAP Site locations on Seneca Lake

11

### Citizen Statewide Lake Assessment, Continued

Seneca Lake trophic status profiles have remained consistent in recent years, now classified as mesotrophic, or moderately productive, based on moderate water clarity, moderate algae levels (chlorophyll a), and moderate nutrient (phosphorus) levels.

Seneca Lake	Seneca Lake Pure V Association	Waters Town of Geneva			Seneca County		
		Lake		Surface area (ac/ha)		42648 / 17259	
North Site (1)				Max depth (ft/m)		191 / 58	
AND ADDRESS OF THE AND ADDRESS OF THE ADDRESS OF TH				Mean depth (ft/m)		291 / 89	
		Charac	teristics	Retention tir	ne (years	16.70	
				Lake Classification		AATS	
	<b>学</b> 是1000年		Dam Class		cation	С	
<b>国政策的证据</b>	C. H. T.			Watershed ar	rea (ac/ha	455772/184441	
<b>阿尔克里</b>				Watershed / Lake ratio		11	
		Watershed		Lake & wetlands %		15.4%	
		Characteristics	Agricultural %		40.1%		
			Forest, shrub, grasses %		% 38.0%		
The state of the s				Residential	Residential		
PILA	136			Urban		0.1%	
NOT L	ALC: NEEDS	CSLAP		Years	1991-19	996, 2017-2019	
	V	Partici	pation	Volunteers	(2) Jacob Dan and I Larry and David You	on and Diane Mason and Karen Welch, Laurie Corbett, (3) I Susan Martin, (4) ust, Faye Phillips, and Mary Ann Marks, kerson	
Trophic state	HABs	HABs In		nvasive		PWL	
	Susceptibility		Vulnerability			Assessment	
Mesotrophic	Frequent bloor susceptibil			ives present, Vulnerability		Threatened	

This status represents a degradation to a more productive (more weed and algae growth) water body compared to historical information, and is consistent with the occurrence of Harmful Algal Blooms (HABs). The DEC just made the 2019 data reports available. This body of work has been helpful in justifying the Nine Element Watershed Management Plan now launched for the Seneca Lake watershed, specifically addressing the issue of nutrient loading.

The 2020 group of volunteers contains many new citizen scientists eager to gather lake data at our four sites included in this program. We remain committed to this long-term monitoring to track the health of Seneca Lake, and are hopeful that remediation projects will reverse the trend in productivity over time.

### Harmful Algal Bloom (HAB) Shoreline Survey Program

The Pure Waters Harmful Algal Bloom (HAB) Shoreline Monitoring Program was established in 2014 as a hotline response effort. Over the last 6 years, the program has grown and matured into the preeminent HAB shoreline monitoring program in New York state. The association partners with the Department of Environmental Conservation (DEC), the Finger Lakes Institute (FLI) and others to monitor, document, and sample Seneca Lake to determine when and where blooms occur and test for toxins.



Cyanobacteria bloom along the shoreline

The shoreline monitoring program is designed first with a public notification mission in mind and secondarily for providing critical data for research efforts.

In 2019, there were over 120 shoreline monitor volunteers surveying 85 zones looking for HABs. The zones stretched over 60 of the approximately 75 miles of Seneca Lake shoreline. After training, the volunteers spent an estimated 3,000 hours looking for

HABs, found 130 blooms and took 96 samples. The primary bloom season ran from August through early October, although blooms were detected as late as October 21st.

The Finger Lakes Institute, using the fluoroscope Pure Waters and the Canandaigua Lake Watershed Association purchased in 2018, screened the samples for blue-green chlorophyll, the cyanobacteria's fingerprint. Eighty-six samples were above the NYS DEC "bloom" criteria of 25  $\mu$ g/L. FLI also did visual inspections to document the types of cyanobacteria present.



### Dock Monitoring and Sampling Project

Pure Waters received a generous grant from the Tripp Foundation (\$15,140) to partner with Hobart and William Smith Colleges and the Finger Lakes Institute to conduct a demonstration project using instrumentation and sampling at eight locations around the lake.

The purpose was to see what sort of variation in weather and water conditions exists around the shoreline and over time as well as provide data to compare to mid-lake data collected by other research efforts. We also wanted to determine whether cameras could reliably detect blooms.

The dock stations consisted of a weather station, a time-lapse camera and a water temperature sensor (or string of sensors) temporarily fixed to docks at eight locations distributed around the lake. At four of the locations, Pure Waters volunteers took weekly samples for water quality analysis. These activities started in late June and lasted into early October.



Water Temperature Gauge



Weather Station and Camera Mounted on Dock

The results were very encouraging. Therefore, the dock monitoring portion of the program will continue in 2020 in an effort to further our knowledge on how HABs might be triggered near shore.

The cameras captured many blooms that the volunteer at the location did not see. In particular, there were many blooms detected in August, when volunteers saw very few. Cameras caught blooms on days when no other blooms were reported on the lake. A future effort will aim to develop image recognition software to automate bloom detection from cameras (when coupled with cellular-enabled cameras).

### Dock Monitoring, Continued

Shallow water temperature varied significantly from night to day, sometimes up to 9°F (5° C). However, the average temperatures at all locations were closely in sync with the mid-lake buoy 3.3 feet (1meter) temperature. Wind speeds and direction varied quite a bit from spot to spot and with the mid-lake buoy.

Nutrient levels varied significantly and depended on local, transient conditions more than trends over time. On average, nutrient levels were higher at the shore than mid-lake CSLAP samples (mid-lake nutrient levels tend to be steady over time).



Dock Sampling Gear

Some of these nutrient variations appeared to generally track with bloom activity, but that was not always the case.

Blooms seem to happen when water temperature drops and when winds are strong one day and calm the next (these two may be related along with the nutrients rising near shore). Further analysis of the Dock Monitoring and Sampling project data is ongoing.

### Invasive Species Monitoring

In the 2019 summer season, Pure Waters joined regional efforts to better characterize invasive aquatic plant species in Seneca Lake. We coordinated the work of 12 volunteers to perform macrophyte (aquatic plant) surveys as a part of the New York State PRISM (Partnership for Regional Invasive Species Management) efforts that are managed through the Finger Lakes Institute (FLI), at Hobart and William Smith Colleges.

The macrophyte survey process utilizes citizen scientists to identify invasive macrophyte (weed) species of concern. Volunteer citizen scientists are identified and coordinated by the lake association. Training of volunteers and collation/analyses of captured data is done by FLI/PRISM staff members.

### Invasive Species, Continued

Volunteers are provided with the tools and materials needed to perform the "rake toss" surveys and to aid in the plant identification process. Surveys are performed every two weeks throughout the growth season and reported to the PRISM staff. Several invasive species of significant concern are highlighted, but volunteers are urged to identify all species that come in with their rake tosses. It is interesting and educational to learn about the variety of plants that make up the flora of the lake shore area.

Findings of this program in its first year include:

- No findings of Hydrilla, one of the most aggressive invasive aquatic plants threatening our lake. Hydrilla has been present in our neighbor, Cayuga Lake, where a multimillion-dollar effort to eradicate it has been underway since 2011.
- A predominant invasive aquatic plant present in Seneca Lake is Eurasian Milfoil.
- 2019 data on the aquatic plants present establishes a baseline of information for comparison in future years.

Pure Waters will continue this program in 2020 and will increase emphasis on high risk locations of potential Hydrilla introduction.

Additionally, Pure Waters assisted PRISM in obtaining a \$1,500 dedicated grant to construct invasive plant disposal boxes at key boat launches on the lake, supply two "Watercraft Stewardship" stations, and update invasive control signage at the launches.

### Lake Friendly Living

As a welcome to summer on Seneca Lake, during Memorial Day weekend, the Seneca Lake Pure Waters Association launched a reinvigorated Lake Friendly Living program to its members and the residents of the Seneca Lake watershed.



With the call to action to Take the Pledge, the program is designed to engage and educate residents to adopt Lake Friendly Living practices around their homes that help preserve and protect our lake. The pledge includes basic practices, such as disposing of hazardous wastes properly,

### Lake Friendly Living, Continued



Lake Friendly Medallion

maintaining septic systems, and committing to less harmful lawn care practices. Households that take the pledge will help keep excess nutrients and sediment from entering the lake, discouraging the growth of harmful algal blooms and other threats to water quality.

The program is simple and easy to utilize with many resources available online at a newly released Lake Friendly Living website: <a href="mailto:senecalake.org/lakefriendlyliving">senecalake.org/lakefriendlyliving</a>.

Residents and businesses can register their pledge and receive recognition on the website. New printed materials are also available and include a pledge card, a comprehensive how-to guide and a Lake Friendly Living sign for residents to display in their yards. Pure Waters Lake Friendly Living volunteers will also offer workshops and participate in other community events to help engage watershed residents.

Pledges who are interested in advanced landscaping and gardening projects can move on to become Lake Stewards. Lake Stewards look for ways to practice Lake Friendly Living through practices such as installing a rain barrel, creating rain gardens that capture and filter pollutants, and developing natural erosion buffers using native vegetation.

The Seneca Lake Pure Waters Association is also working with other lake associations, including Canandaigua, Keuka, and Cayuga to expand the Lake Friendly Living program to help support the water quality of the entire Finger Lakes Region. The committee of representatives shares information, ideas, and events to promote Lake Friendly Living.

The program release is a result of several hundreds of volunteer hours by a 6-person committee and approximately \$3,000 in expenses for the development and production of materials and the website.

### Water Quality Partnership Committee

The mission of the Water Quality Partnership Committee (WQPC) is to actively engage with "partners" in the lake watershed in order to facilitate actions and programs that will ultimately result in improved water quality and overall lake environment improvement and protection.

"Partners" include other lake associations, municipal and county agencies (notably organizations like Seneca Watershed Intermunicipal Organization and the County Soil and Water Conservation Districts), regional watershed associations (like the Finger Lakes Regional Watershed Association), educational and research entities (Finger Lakes Institute, Hobart William Smith Colleges), the New York Department of Environmental Conservation (NYDEC), land trust organizations, and others.

By interacting with partners, Pure Waters is:

- able to communicate our concerns and share data;
- learn of available and feasible programs and shared opportunities;
- better facilitate the procurement of grants to implement water quality improvement projects; and
- improve our public/member education and outreach efforts.

Although COVID-19 restrictions (particularly the shut-down of state and county agencies) slowed down the progress of the WQPC in late spring and early summer 2020, the Committee, from summer of 2019 through March of 2020, was actively engaged in developing goals and objectives. These include structuring partner contact relationships, establishing roles for Committee members, and personally meeting with several partners including the NYDEC, the New York Department of Agriculture and Markets, Yates County Soil and Water Conservation District, and the Cornell Cooperative Extension Agriculture program.

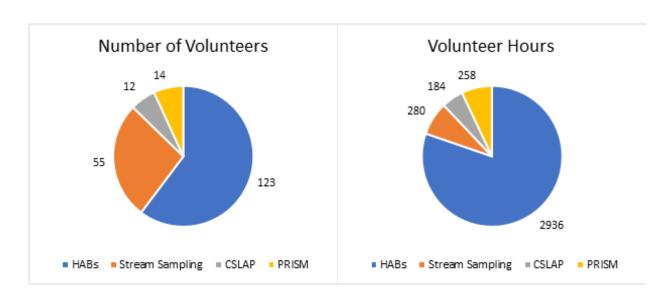
The Committee established a list of members who will be "Key Partner Liaisons" to individual partner groups, and developed the roles and responsibilities for those "KPLs". The Committee was, and will be, instrumental in setting a Pure Waters initiative to become aware of all potential grant opportunities, in raising the issue of the state of Seneca

### Water Quality Partnership, Continued

Lake fishery, and in providing key policy input into the Nine Element nutrient and sediment reduction plan now being formulated for the lake. With the hopeful re-opening of the state and county agencies this summer, and the personal accessibility of other partners, the Committee's intention for the remainder of 2020 is to re-start the Key Partner Liaison process. Additionally, it is working to diligently take actions to facilitate water quality improvement, education/outreach programs, and shared opportunities.

### Volunteers

Volunteers are the key to most Pure Waters programs. In this fiscal year, over 200 volunteers contributed over 3,400 hours of their time working on water quality monitoring programs. The 3,400 hours equates to \$68,000. This does not count the many hours volunteers spent helping manage the association. These two graphs show the volunteer contributions by monitoring program.





### **OPERATIONS**

The Vice President for Operations oversees the business end of the association, in particular the committees. The committees are key to implementing the strategic principle of an efficient, well-resourced organization. The operations committee structure is shown below:

Pure Waters conducted an extensive benchmarking exercise as part of the strategic planning process. This resulted in many best practices related to management, fundraising, membership, and communications that the association decided to adopt.

Reinvigorating the board and committees was a key initiative through the fall and winter. Pure Waters expanded the board adding new directors elected at the annual meeting as well as others recruited during the winter. All the committees were expanded and have established regular meeting and activity structure. The Executive Committee assumed a more prominent role meeting regularly to prepare issues for the board and streamline decision-making.

For the last few years, the association has had no paid administrative support. In September 2019, Pure Waters recruited Kaitlin Fello (see below) to be our Administrative Coordinator. Kaitlin brings a vast amount of experience and talent to our Pure Waters team and works closely with all committees.





Pure Waters Committee Organizational Chart

### OPERATIONS, CONTINUED

After an extensive search, Pure Waters changed its membership management platform and website host to Wild Apricot. This is the number one rated membership software platform available. This change has helped automate many activities, although we are still learning its capabilities.

### Membership and Fundraising

To support our growing organization, the Fundraising and Membership Committee spearheaded new approaches to fundraising and membership. The resulting tiered giving and membership structures have increased revenues from individuals by 60 percent over previous experience. In the process, membership increased 30 percent from June 2019 to May 2020. In the future, there are plans for more aggressive campaigns with businesses and corporations.

### Communications

The association has a multi-faceted communications platform. The online presence has been extensively upgraded this year as has the social media presence. Emails sent via Wild Apricot are distributed to audiences of 1,400 or more. The association gets monthly play on a local radio station and is often highlighted in the local media. Our more technical information was disseminated by hosting a water quality forum in the fall and presenting at the Finger Lakes Institute HABs conference in the winter.

The HAB program sent weekly "Bloom Watch" updates in the summer, which were widely read. This winter, Pure Waters started producing its LAKEWATCH newsletter on a monthly basis. This extra effort would not be possible without the Administrative Coordinator on board.

### Meet Kaitlin Fello

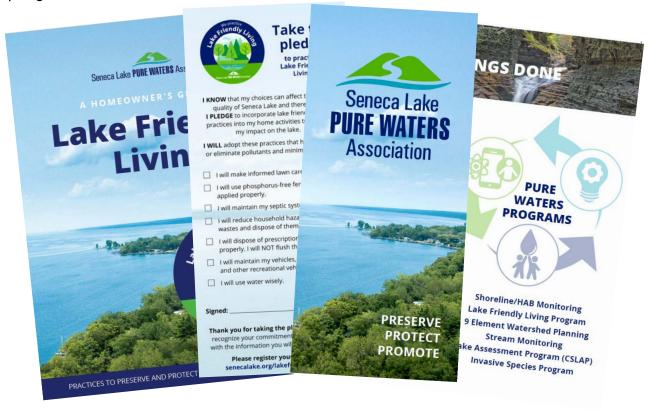


Administrative Coordinator Pure Waters member since 2017 Residence: Seneca Lake Northwest quadrant

After receiving a Masters in Water Resources Engineering at the State University of New York College of Environmental Science and Forestry (SUNY-ESF), Kaitlin moved back home to Seneca Lake. Having grown up around the lake, the converging threats to Seneca's water quality were more apparent than ever, which brought Kaitlin to support Pure Waters. She has a background in communications and management, and her focus with Pure Waters includes membership and marketing in addition to communications and fundraising.

### Communications, Continued

The Communications Committee, in conjunction with the Lake Friendly Living program manager, conceived a new portfolio of collateral material and brochures that would support the overall organization and highlight individual programs.



### **Events**

The 2019 annual dinner and fundraiser took place at Climbing Bines Hop Farm and Brewery where over 200 people attended. In spring 2020, planning had begun on the summer 2020 event, but the reality of COVID-19 had become apparent by late spring and the event was canceled. The Events Committee will be developing alternative smaller and virtual events for the foreseeable future.

### **Finance**

The Finance Committee reviewed and revised the association's financial policies and procedures to strengthen financial controls and improve efficiency. In addition, the committee implemented a new, disciplined budgeting process to better forecast revenues and expenses into the next fiscal year. This paid off when the implications of COVID-19 came into focus. The committee and board built a conservative, balanced budget for the beginning of the 2020-2021 fiscal year (June 1).

### Governance

The Governance Committee reviewed the bylaws and proposed a few changes. Most important was the term for officers and board members. Officers are appointed for three-year terms and may succeed themselves up to three more years. Board members may now serve an unlimited number of 3-year terms, if elected by the membership. Another key change was to implement "rolling" membership periods. Instead of a single fiscal year membership, i.e., June 1 through May 31, membership now runs for one year from the date of contribution (membership dues).

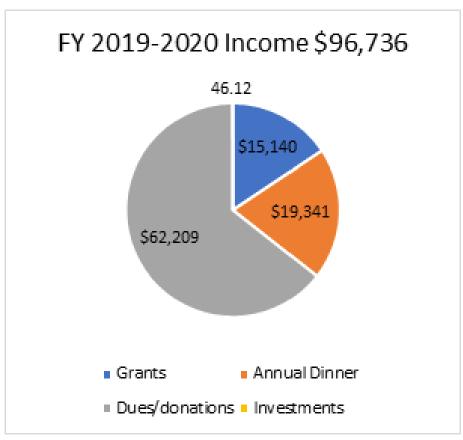
Pure Waters is not finished improving its operations. The board and operations committees will continue to look for improvement opportunities. The initiatives implemented this fiscal year will be continually improved and more initiatives will be implemented. COVID-19 will produce challenges that will need innovative solutions. Plans are already in the works for multiple new fundraising approaches as well as new branding, communications, and merchandise projects.





### FINANCIAL REPORT

The fiscal year runs from June 1st to May 31st each year. The tables that follow show the financial status of the Association as of May 31, 2020.

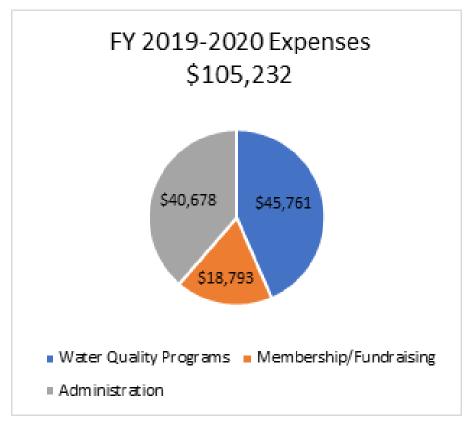


2019–2020 Income by Category for Seneca Lake Pure Waters Association

Balance Sheet	2019-2020	2018-2019
Assets		
Bank Accounts	\$122,478.69	\$110,382.08
Accounts Receivable		\$1,200.00
Other Current Assets	\$4,284.56	\$5,106.47
Fixed Assets	\$2,101.48	\$2,791.12
Totals	\$128,864.63	\$119,479.67
Liabilities and Equity		
Current Liabilities	\$23,837.16	\$4,756.43
Restricted and Unrestricted Funds	\$113,523.24	\$130,490.41
Net Income	-\$8,495.77	-\$15,767.17
Total Liability and Equity	\$128,864.63	\$119,479.67

## FINANCIAL REPORT, CONTINUED

The Association continues to grow. Increases in individual giving overcame most of the income shortfall from the annual dinner. Efficiencies in planned water quality programs, in particular the Stream Monitoring Program, helped offset new, unbudgeted, expenses due to the Administrative Coordinator coming on board in September 2019.



2019-2020 Expenses by Category for Seneca Lake Pure Waters Association

Profit and Loss	2019-2020	2018-2019
Income		
Grants	\$15,140.00	\$0.00
Annual Dinner	\$19,341.00	\$31,041.00
Dues/Donations	\$62,209.00	\$41,720.21
Investments/Interest	\$46.12	\$47.45
Total Income	\$96,736.12	\$72,808.66
Expenses		
Water Quality Programs	\$45,760.97	\$43,523.90
Membership/Fundraising	\$18,792.82	\$22,219.29
Administration	\$40,678.10	\$22,755.30
Total Expenses	\$105,231.89	\$88,498.49

### BOARD OF DIRECTORS

The association is governed by a board of directors. Directors are elected by the active membership each year at the annual meeting for 3-year terms. Hence, there are three director "classes" based on their year of expiration. Bold names are in their second term.

### Class of 2020

### Richard Ahola (Dundee)

Robert Barton (Mecklenburg)

Jim Bromka (Fayette)

### **Dan Corbett (Himrod)**

Sayre Fulkerson (Himrod)
William McAdoo (Geneva)
Robert Shrader (Himrod)
John Socha (Himrod)

### Class of 2021

Thomas Burrall (Geneva)

Frank Case (Romulus)

Frank DiOrio (Himrod)

Jacob Welch (Himrod)

Class of 2022

Rich Adams (Geneva)

Kelly Coughlin (Geneva)

Peggy Focarino (Penn Yan)

Larry Martin (Penn Yan)

Peter Muller (Dundee)

Bill Roege (Penn Yan)

This year the director election will be held via an online poll in association with the virtual annual meeting. In the past, directors were limited to two consecutive 3-year terms. This year, the board amended the bylaws allowing directors to serve consecutive 3-year terms with no limit.

The current class of 2020 directors' terms expire at the annual meeting. All of the class of 2020 directors, except Jim Bromka, have expressed their desire to continue serving and are standing for election again. Jim has been a tremendous asset for the organization and thank him for his service.

# BOARD OF DIRECTORS, CONTINUED

In addition to the seven returning candidate directors, the nominating committee has selected four new nominees, listed below, to expand the board.

John Cooley M.D. (Dundee)

John Cooley is a family physician who moved from Rochester to Yates County in 1994 to work in the Dundee Family Health Center and Soldiers and Sailors Hospital in Penn Yan. He continues to serve as school physician for Dundee Central School and lives nearby. He has sailed his Penguin class dingy on Keuka and Seneca Lakes and on Lake George.

Catharine McCracken (Geneva)

Catharine has been in media sales and sales management for 22 years, and started Trellis Marketing in 2006, specializing in supporting small and mid-size companies accelerate revenue with strategic marketing. Catharine began Trellis Properties of the Finger Lakes in 2018 and has recently moved to the Seneca Lake watershed full time.

James McGinnis (Watkins Glen)

Jim lives in Watkins Glen and has been a Seneca Lake watershed resident for 5+ years. Jim worked for Corning Incorporated for 37 years as a Manufacturing Engineer and New Production Innovation Manager. Now retired, Jim is the President of America's Boating Club of the Finger Lakes and a Boating Instructor at the Finger Lakes Yacht Club.

Maura Toole (Lodi)

Seneca lake has been an important part of Maura's and her family's lives for many years. After 30 years in corporate sales and marketing roles, Maura made Seneca lake her full time residence and operates Cabins on the Spur in Lodi, NY.