

FRIENDS OF THE



TAY WATERSHED



Photo: D. Zimmerly

## Founding Board celebrates 20th Anniversary of the Association

Left to Right: Don Boyle, Susan Brandum, Roger Nuttal, Orion Clark,

David Crowley, Carol Dillon, Lynn Preston, David Taylor

# 2021 ANNUAL REPORT

[www.taywatershed.ca](http://www.taywatershed.ca)  
[friends@taywatershed.ca](mailto:friends@taywatershed.ca)

*We All Live Downstream*



## *Our Mission*

The Friends of the Tay Watershed deliver activities, and cooperate with other organizations with complementary interests, to ensure the health of the water and related natural resources of the Tay Watershed for present and future generations.

## President's Message

“Water is life”. “Water is our best friend”. These two statements were shared with me recently by an Indigenous friend. What more could be said about their significance to sustaining the health of the Tay watershed. Water is life to all living organisms that inhabit the watershed and indeed to those who depend on water for their domestic wells and municipal water supplies. Water is a friend to all those who enjoy the aquatic and the shoreland attributes and amenities that the watershed provides to waterfront property owners, visitors, businesses and industries and tourists alike. Indeed, we all need water to survive.

The health and sustainability of our watershed provides the context for our mandate as an association. The scope of the educational webinars, our Watershed Discovery Day, our environmental and bursary programs are the tools we use to raise public awareness and educate our youth on the importance of the watershed to our daily lives and the conservation of fish and wild-life habitat.

Appreciation for the natural environment has increased this past year as an offset of the coronavirus pandemic. Travel re-

strictions, more people working at home, and self-isolation have generated a new focus on the out of doors and the use of the natural environment for leisure, recreation and mental health. This trend is encouraging as the renewed interest has also fostered initiatives to renaturalize and revegetate shorelines and retrieve garbage from the riverbed.

Sharing the message of wise stewardship of the watershed is achieved through our partnership not just with our members and the residents and communities in the watershed, but also with a number of organizations such as the Rideau Valley Conservation Authority, Watersheds Canada, Climate Network Lanark, Parks Canada, Lake Associations and the Federation of Cottage Associations and also with our sponsors. We appreciate the financial and services of the Little Stream Bakery, Lake 88.1, H & R Block, Top Shelf Distillers, Maximilians Restaurant, Perth Farmers' Market, The Factory and Stor-N-Lock. I would like to take his opportunity to thank everyone for their continued interest and support in the work of the Friends of the Tay Watershed.

### **Folks we partnered with in 2021 for a healthier watershed:**

Rideau Valley Conservation Authority – Educational Sessions  
 Town of Perth – Rock Ramps Advisory Committee; Last Duel Advisory Committee  
 Watersheds Canada – Interactive Online Resource Package for Planners and Municipalities  
 Tay Net Program Volunteers/Christie Lake Association - Eyes on the river  
 Climate Network Lanark – Land Use Policies and Strategies for climate change mitigation and adaptation  
 Citizen Scientist – Phragmites Invasive Species Mitigation  
 Parks Canada – Water Level/flows Control Monitoring  
 Tay Valley Township  
 Drummond/North Elmsley Township  
 Lake Networking Group

All photos credit The Friends of the Tay Watershed Association unless otherwise noted.

# Another Busy Year in 2021

## Education and Outreach

*To encourage public interest and participation in the protection of water resources and the Tay Watershed's natural environment, through the provision of information and the delivery of supportive events.*

### 2021 Virtual Webinars

Virtual meetings have become the conventional tool for organizations to conduct meetings and seminars. Friends of the Tay Watershed conducted a series of virtual educational webinars in 2021 for our audience.

#### January 20, Webinar on Conservation Areas and Land Donations

Our first session focused on the role of the Rideau Valley Conservation Authority (RVCA) and connecting with nature through access to conservation areas. The session started with a history of conservation authorities in Ontario. The RVCA is one of 22 conservation authorities and administers some 7,000 acres, 42 km of trails and 11 managed conservation areas. RVCA estimates that over 300,000 people visited these conservation areas in 2021 and that some 10,000 children participate annually in outdoor education activities. In addition to the conservation areas administration, Dan Cooper, Director of Conservation Areas and Stewardship also talked about the numerous programs sponsored by RVCA such as the Shoreline Naturalization Program (includes planting of 10,000 plants annually), Forestry Program (100,000 trees planted annually), Butternut Recovery Program and the Rural Clean Water program which provides financial incentives to improve water quality on riparian lands.



#### March 24, Webinar on Shoreline Planting ~ Impacts, Benefits and Available Assistance.

Our second webinar was piggybacked to our Annual General Meeting in March and featured a presentation on the Renaturalization of Shorelines. Meghan McDonald, who administers the program sponsored by the Rideau Valley Conservation Authority described the function of naturalized shorelines in acting as a buffer to sediment and phosphorus discharges into lakes, therefore protecting water quality. Shorelines also provide important habitat for wildlife for refuge, a source of food and as a travel corridor. The presentation provided a summary of best practices in shoreline plantings designed to prevent erosion, provide flood abatement, act as a deterrent to unwanted gees and replace lawns with “no-mow” vegetation. A series of before and after photos emphasized the benefits of a renaturalization program.

#### April 22, Invasive Phragmites ~ a special Earth Day 2021 Webinar In Partnership with the Otty Lake Association



Photo: Ontario Invasive Plants Council

On this occasion Dave Overholt, Citizen Scientist teamed up with Michelle Vala, Climate Environmental Coordinator for Lanark County in a presentation on the invasive species known as phragmites. This invasive species has been identified in over 70 locations on county roads in Lanark. Phragmites has the effect of crowding out all other vegetation and coincidentally reduces available habitat for waterfowl and other wildlife. Mitigation measures require the removal of all surface growth and the use of special spades to cut the underground rhizomes or tubers. A beneficial outcome of the webinar saw a team of Otty Lake residents tackle the elimination of a stand of phragmites this past fall having taken advantage of a grant from FOCA to purchase a variety of tools designed for the removal.

## 2021 Environmental Awards

The Friends of the Tay Watershed Environmental Awards were presented at our virtual AGM, 24 March 2021

### **1. Contribution to the Tay Watershed (contribution to water resources specific to the watershed):**

**Irv Dardick, Eagle Lake** - for providing tireless leadership, focus on execution, and engagement on the lake and with other stakeholders, making a huge impact not just on the lake but on the entire watershed.

### **2. Contribution to Water Resources at the provincial, national or international level (person or organization, either local or outside area, whose activities have an impact on water resources on a wider basis):**

**RVCA and MVCA (Rideau Valley Conservation Authority and Mississippi Valley Conservation Authority) representing all Ontario Conservation Authorities** - for their efforts to protect people and property from flooding and other natural hazards and to further the conservation, restoration, development and management of our natural resources for economic, social and environmental benefits.

### **3. Contribution to the General Environment (a local person or organization whose activities are aimed at the environment but impact on our water resources):**

**Paul Lehman** - for his foresight and leadership in developing a suite of research into the effects of climate change on the Mississippi River Watershed and the surrounding area including the Tay River Watershed.

## Awards in Celebration of the Friends of The Tay Watershed 20th Anniversary

### **Contribution to the Friends of the Tay Watershed Association:**

**Annie Dalton** - for enriching the local environment and beyond as well as being an example of good citizenship by sharing her talents and time for the benefit of all.

**Carol Dillon** - for her dedicated and professional contribution of over 22 years to the development of this organisation from its inception and to the safekeeping of our water resources.

### **Special Environmental Award:**

**Don Sherwin** – for his report: *‘Geology, Mineral Deposits and History of Mining in the Tay River Watershed’*

[https://www.taywatershed.ca/documents/geology\\_report/geology\\_report.htm](https://www.taywatershed.ca/documents/geology_report/geology_report.htm)

This report provides a better understanding of the creation history and ecological framework of the Watershed. It assists in assessing the past, present and future impact of human occupation and economic activity in the region.

## 2021 Water Guardian Bursary Winners

In 2021, the Friends of the Tay Watershed awarded bursaries to two watershed students. The bursary sponsored by the Little Stream Bakery was won by Ryleigh Rioux, a graduate of Granite Ridge Education Centre in Sharbot Lake. The bursary committee was impressed with Riley’s academic achievements and volunteer activities as well as her interesting work with drone mapping and analysis for the benefit of the environment and the local community. Ryleigh’s plans were to pursue an Honours Bachelor of Science with a major in Physical Geography and Geomatics at the University of Ottawa.

The second bursary was sponsored by the Friends of the Tay Watershed in celebration of its 20<sup>th</sup> anniversary. This bursary was awarded to Drew Brennan, a graduate of Smiths Falls District Collegiate. Drew holds a Bachelor of Arts degree in Economics from the University of Guelph and is currently in second year of the Master of Urban and Regional Planning at Queen’s University. In his application, Drew expressed his desire to bring a holistic approach to community planning that can mitigate infringement on the natural environment.



Drew Brennan, left, and Ryleigh Rioux, right, winners of the 2021 Water Guardian Bursary.

Photo: Donna Walsh

# Watershed Care and Protection Programs

*To contribute to the development of the information base and infrastructure required for the understanding and protection of the Tay Watershed taking climate change into account in our programs*

Monitoring the health of the watershed is ongoing and our Tay Net program is designed to encourage our volunteer river watchers to report river conditions and concerns that can impair the ecology of the Tay River. More “eyes on the river” means greater care of this vital waterway through our communities, including removing garbage that pollutes the waterway.

## Tay Waterway: A 2021 Review

David Taylor

*Note: An explanation of the sources of the information on which this review is based is provided at the end of this report.*

Over the past 12 months, water levels along the Tay waterway experienced substantial, and often unseasonal, fluctuations, which some long-term residents have described as unprecedented.

For the first eight months of January to August 2021, water levels from Bobs Lake to Port Elmsley were extremely low. Most prominently, Christie Lake was consistently near, and often below, its minimum historic low level, and Perth experienced periods when the flow was as low as 50% under normal. The initial cause was the low snowpack of the 2020/2021 winter, followed by below normal precipitation in the spring. During this period, the flow from Bobs Lake Dam was not increased, and the lake level was maintained at close to its historic average.

In early August, the flow from Bobs Lake Dam was suddenly doubled, which caught the attention of downstream residents when some docks ended up under water. This happened at a time when the level in the Rideau Canal was dropping, and presumably additional water was needed to maintain the canal’s 5-foot target draft.

A quick turnaround in the fall, beginning in October, brought extremely high water levels, which were maintained through December in most parts of the waterway. In November, Christie Lake was close to its Historic High. In Perth, high rainfall in December raised the flow to 100% over average.

Since entering the New Year with the winter freeze, levels have dropped substantially - in some areas, to below average.

The foregoing level fluctuations would not be significant if more were known about where climate change is taking us. To summarise, for most of 2021, Parks Canada maintained the Bobs Lake level at close to its Historic Average. Because there have been major dry and wet spells affecting Christie Lake and the rest of the waterway, this can only happen if a priority is being given to maintaining levels at Bobs Lake, to feed the Rideau Canal system, rather than to care for the 45 km waterway as a whole. Of note, this was also the case in late 2020, when the waterway was high, while Bobs Lake was maintained at a normal level. This situation was certainly exacerbated by Parks Canada withdrawing daily public access to Bobs Lake flow data.

Information and updates on the Tay Net Program may be seen on the website at

<https://www.taywatershed.ca/documents/streamflow.php>

*Sources: This review of water levels along the Tay waterway is based in part on information gathered by this association’s nine ‘Tay Watcher’ volunteers, who take measurements as required at selected sites along the 40 km waterway between Bobs Lake and Port Elmsley. Their findings add to the valuable online data on water levels and flow from five electronic gauges, managed by Rideau Valley Conservation Authority and the Federal MNR Department. A sixth gauge is being installed by MNR on the Tay River near Bolingbroke Road. Data from a flow gauge operated by Parks Canada at Bobs Lake Dam is no longer made available to the public by that agency.*



## Community Services Program Cleans Up the Tay River

Leah Craig, of Tay Valley Township, a Grade 11 student at Perth & District High School, is taking the school's Community Services program to 'new depths' – and providing a much-needed upgrade to the area's Tay River.

As a paddle-boarder, Leah had observed first-hand the need for a trash clean-up of the Tay and decided to direct her Community Services Program obligation to a creative project. Beginning in early July, she has been paddling and picking up trash on the Tay River upstream of Perth, in Tay Valley Township. Later, she and friend Sadi Gibson combined to tackle a clean-up of the canal at the Last Duel Park area in Perth.

The shocking result of this dedicated work is shown in the attached photo, a graphic indication of what is not normally seen in the river. It is also evidence of a regrettable disregard by some for our area's otherwise pristine waterway. Leah advises that, so far, she has collected 16 tires, 72 cans, 25 pieces of plastic, and a



The Shocking Result

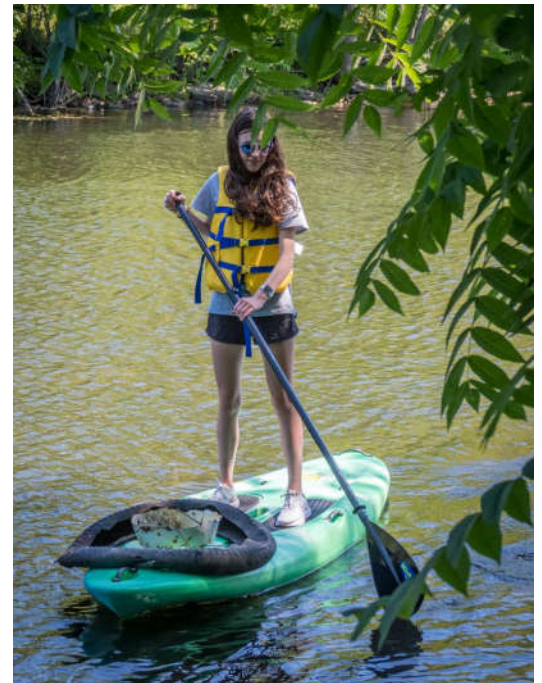
Photo: Matt Craig

range of garbage that includes two chairs, 5 shoes, two frisbees, amongst other items - and, unfortunately, is still counting.

Leah's concern for the river is not unusual.

Her father is Manager of Planning for the *Mississippi Valley Conservation Authority*, and a volunteer Riverwatcher for the Tay Net Program, of the *Friends of the Tay Watershed Association*.

Others who have contributed to cleaning trash along the Tay this past year include PDHS student Sadie Gibson, who accompanied Leah on the Tay clean up, and Riverwatchers Gary Waterfield, on the Perth section to Last Duel Park, and Denis Myers, of Port Elmsley.



Leah cleans up

Photo: David Zimmerly

## Cooperation with Partner Organizations

*To build partnerships with community organizations and government departments and agencies for the production and delivery of effective programs for the care of water resources (we currently have partnership arrangements with 31 organizations and events)*

### Last Duel Advisory Committee

FOTW was also represented on the Town of Perth Last Duel Park Advisory Committee. The committee assessed the scope of uses that should be permitted in the park, the spatial layout of activity areas and the timing and actions of the redevelopment of the park. The park is well used by the public for a variety of leisure activities and community events. The committee recommended an upgraded recreational trail along the river, a winter trail, a fenced dog park, better facilities for users such as additional park benches, bike racks, waste facilities and washrooms, an expansion of the allotment gardens and an arboretum and an amphitheatre for outdoor educational programs, an entertainment and cultural centre. Improved signage would also be an asset to identify special habitat areas. Preservation of the memorial forest to celebrate Indigenous history was also viewed as important. The committee's report has been submitted and acknowledge by Town Council.

### Lake Associations

FOTW has a well established working relationship with lake associations and has worked with these associations this past year in a dialogue with Parks Canada on maintaining water levels that sustain boating and aquatic activities.

## Rocky Ramps

FOTW was represented on the Town of Perth's Rocky Ramps Advisory Committee, whose mandate was to assess the impacts of Rocky Ramps on river flows through the core of the Town around Cockburn Island. The work of the committee concluded with recommendations for the redesign of the rocky ramps to improve water levels and water flows.



Little Tay Ramp



Main Tay Ramp

## Addressing Climate Change

*To be aware of global climate studies and anticipate how the effects of climate change impact the Tay Watershed*

FOTW is represented on the Climate Network Lanark (CNL), an organization devoted to working with area municipalities, the agricultural community and the public on recognizing the significance of climate change and developing policies and programs to mitigate and adapt to the impacts of climate change. All of the municipalities in Lanark County are in various stages of reviewing their official plans as is the County and CNL is working to encourage municipalities to adopt policies that will establish a framework for climate change activities. CNL is also working directly with the County in the development of a climate change mitigation plan. While we are blessed that we have not encountered severe weather events (i.e., flooding, fire), Lanark is not immune from the impacts of climate change. The reduction in green house gas emissions is a contribution members of the public and organizations can and must make to minimize global warming, and something as simple as planting more trees is part of the solution.



## Friends Build a New Facebook Page

We have launched a new Facebook page with the following objectives:

- To create a social media platform to reach out in a fresh and lively interactive format;
- To create a forum where people can share their inspirational photos and artwork that highlight the experience of getting outdoors and capturing the scenery, flora and fauna of the Tay Watershed;
- To promote special events such as Watershed Discovery Day; Paddle the Tay; Membership Drives; FoTW AGM etc.;
- To be designed with current branding and to direct users to the FOTW website.

To view our Facebook page, go to our web site <https://www.taywatershed.ca/> and click on the logo to the right, which also appears on the left side of almost every page of this website below our "Donate Now" button.



# Plans for 2022

## Provision of Education and Community Outreach Activities:

**Annual General Meeting** - Friends of the Tay Watershed Association will host the Annual Meeting through a virtual format starting at **2:30 pm., March 24, 2022**. The business meeting will be followed by the educational webinar on Water Quality Stewardship noted above.

### Educational Program—Webinars:

- February 24, 7 pm – Gypsy Moths – Mitigation Measures** – with Citizen Scientist Eric Boysen
- March 10, 2:30 pm – Jebbs Creek Embayment Project** – presentation by Jennifer Lamoureux, Aquatic and Fish Habitat Biologist, Rideau Valley Conservation Authority
- March 24, 3:00 pm – Water Quality Stewardship in the Tay Watershed** – presentation by Sarah MacLeod-Neilson, Planner and Haley Matschke, Acting Surface Water Quality Coordinator, Rideau Valley Conservation Authority (combined with Annual General Meeting)
- April 21, 2:30 pm – Forest Bathing – Healthy Lives Through Healthy Forests**
- May 19, 2:30 pm - Turtle Habitat Conservation – Tammy the Turtle Lady** – presentation by **Tammy MacKenzie**
- September 22, 2:30 pm - Tay Net – Sustaining a Healthy River**

### Community Outreach Program:

**Annual Environmental Award** - recognizing citizens who have made significant contributions to sustaining our natural environment

**Water Guardian Bursary** - financial awards to students aspiring to careers in environmental management. Awards will be made at the Watershed Discovery Day

**Watershed Discovery Day Saturday, August 20<sup>th</sup>, 8 am -1 pm at the Perth Farmer’s Market, Crystal Palace** – annual environmental exhibition for all generations featuring exhibits by conservation organizations, a youth education and discovery program.

**Tay Paddle Day** - featuring a guided paddle down the Tay River from Perth to the Beveridge Locks  
Publish updated **Tay Watershed Paddling Brochure**

## Delivery of Watershed Care and Protection Programs:

Promote understanding, on the part of the public and policy-makers, of the importance of the targeted issues (listed in ‘Outreach’), of the work of **Conservation Authorities**, and of the need for maintaining a priority for **protection of the environment and water resources in economic development programs**

- Participate in **Source Water Protection Committee & RVCA Rural Clean Water Program**
- Participate in **Perth Climate Change Action Clean up Event** – with association display building community awareness for maintaining a clean Tay River (April)
- Participate in **Lake Links 2022** organisation & delivery (October 22)
- Continue to monitor stream flow data sources as related to Tay waterway management
- Review status of **groundwater information base** and research in Tay watershed area
- Maintain ‘**Tay Net**’ waterway monitoring network; expand ‘**Riverwatch**’ component
- Consider participation in **National Clean Up Day/Ocean Conservancy** (mid-September)



# Financial Summary \*

## Year Ending December 31, 2021

\* Unaudited

ASSETS	2021	2020
Bank Acct	\$10,436.42	\$11,401.75
GIC	0.00	0.00
Petty Cash	23.15	23.15
Other Assets	450.40	842.41
<b>TOTAL ASSETS</b>	<b>\$10,909.97</b>	<b>\$12,267.31</b>
<b>LIABILITIES</b>	<b>0.00</b>	<b>0.00</b>
<b>NET WORTH</b>	<b>\$10,909.97</b>	<b>\$12,267.31</b>

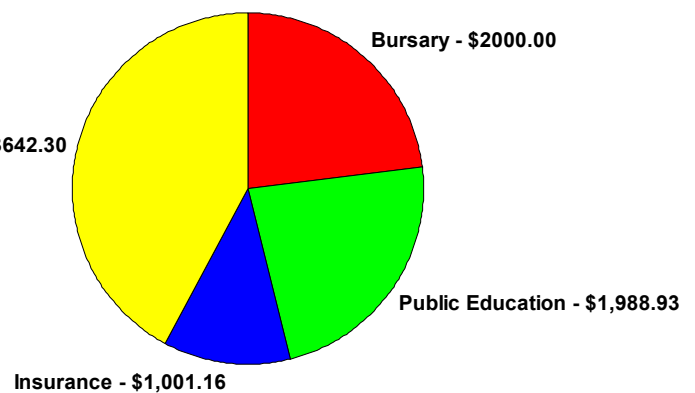
REVENUES	2021	2020
Donations	\$5,935.05	\$7,815.83
Memberships	1,125.00	770.00
Other Income	25.00	0.00
T-Shirt Sales	190.00	150.00
<b>TOTAL</b>	<b>\$ 7,275.05</b>	<b>\$ 8,735.83</b>

EXPENSES	2021	2020
Education/Outreach	\$1,988.93	\$1,715.89
Bursary	\$2,000.00	\$1,000.00
Admin & Management	\$3,642.30	\$1,172.93
Insurance	\$1,001.16	\$1,001.16
<b>TOTAL</b>	<b>\$8,632.39</b>	<b>\$4,889.98</b>

**REVENUE 2021**



**EXPENSES 2021**



## **BOARD OF DIRECTORS for 2021**

### **Executive Committee**

<b>President</b>	Glenn Tunnock
<b>Past President</b>	David Taylor
<b>Secretary</b>	Judy Buehler
<b>Treasurer</b>	Marion Letts
Member	Carol Dillon
Member	Richard Schooley

### **Directors**

Taro Alps	Upper Tay Watershed; GB&CL Association
Annie Dalton	Perth
David Kroetsch	Perth
Colin Stephenson	Glen Tay/Webmaster
Donna Walsh	Christie Lake Association

### **ADVISORY PANEL**

Susan Brandum	Port Elmsley, Past Board Member
David Crowley	Perth, Past Board Member
Karen Hunt	Perth, Lake Networking Group, Past Board Member
Doug James	Perth, Past Board Member
Barbara King	Executive Director, Watersheds Canada
Dale MacEachern	External Relations Mgr., Parks Canada, Ont. Waterways Unit, Smiths Falls
Derek Matheson	Mgr., Rural Clean Water Program, R.V.C.A.
Brady McGlade	Planner, Drummond North Elmsley Twp.
Amanda Miller	Student, Queen's University School of Environmental Studies
Frank Roy	Perth, Past Board Member
Alyson Symon	Watershed Planner, M.V.C.A., Past Board Member

### **SUSTAINING MEMBERS**

H & R Block, Perth, Smiths Falls, Arnprior, Renfrew  
Little Stream Bakery of Glen Tay  
Top Shelf Distillers, Perth  
Stor - N - Lock, Perth  
The Factory, Perth  
Maximilian Dining Lounge, Perth  
Perth Farmers' Market  
Lake 88.1, Perth