# **S** Ontario Streams 2022 Annual Report

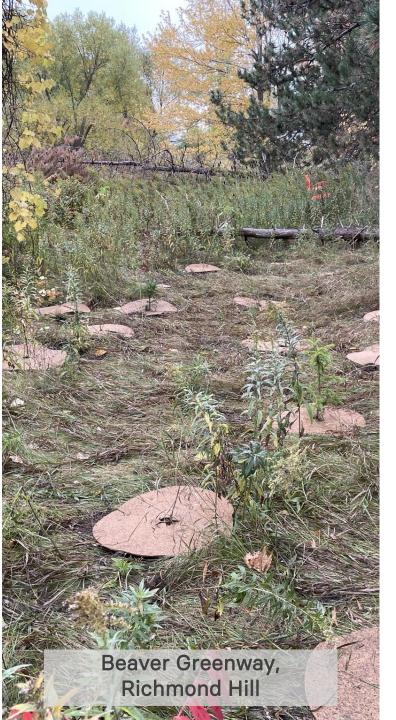
A highlight of the achievements made possible by our supporters

Monitoring for Redside Dace on Irvine Creek



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### Thank you for your support!

Ontario Streams is a registered environmental charity dedicated to the conservation and rehabilitation of streams and wetlands, through education and community involvement. Established in 1995, we have worked closely with numerous organizations, corporations, communities, landowners, and school groups to develop lasting partnerships in education and environmental stewardship.

### Our achievements in 2022

- Installed 66 in-stream habitat enhancement structures to improve 620 metres (m) of riverbanks
- Removed **270** contractor-sized garbage bags filled with litter from **58** hectares (ha) of riparian habitats
- Removed **11** detrimental in-stream woody material blockages
- Planted 7,579 native trees and shrubs over 2.7 ha of land
- Released 7,467 Atlantic Salmon fry
- Evaluated 191 ha of wetlands
- Engaged **1,358** volunteers in **43** stewardship programs contributing **3,172** hours of in-kind support valued at **\$49,172**
- Delivered **29** environmental outreach programs where we reached **1,157** community members, professionals, and students

### A letter from our Board of Directors...

Change can be difficult, but it can also bring excitement. Being open and flexible to change allows you to keep pace with a world that continuously changes around you, whether you like that change or not. In 2022, Ontario Streams decided that it was time to make some significant changes of our own, mainly to the organization's external appearance, or "brand". This will be the first time Ontario Streams has done this in it's near 30-year existence, so perhaps a bit of change is overdue.

Going through a rebrand is no simple task. An organization's "brand" is not developed overnight, and it is not a single individual who shapes it. Ontario Stream's brand has been a projection of all the people who have touched this organization, whether it be current or former staff, volunteers, or board members.

Is an organization defined by its logo? Or its slogan? Or the colour of a staff tshirt? I would argue no. If I'm telling someone about Ontario Streams for the first time, I'm not describing these things during the conversation. I tell people about the hard work being done, and the passion of the people who work there, and all of that is staying exactly the same.

**Electrofishing in Mad River, Alliston** 



Pete Davis

# **Our Logo Story**

Founded in 1995, Ontario Streams has maintained the same logo over the years, with one minor change occurring early on to change our slogan from "Friends of the Resource" to "Helping People and Their Rivers" to better reflect our mission. During our strategic planning process in 2022, an idea blossomed around starting our next chapter with a rebrand of the logo. Over the years, we have experienced challenges with our logo including scaling, legibility, and incompatibility for various uses.

In the fall of 2022, we began exploring options for graphic design support. To maintain our funding focus on our charitable work, we looked towards skilled volunteers on <u>Patagonia's Action Works</u> platform to connect with graphic designers. We pitched our rebranding project and matched with <u>Joe Cooper</u>, a Graphic Designer and Content Coordinator based in Colorado. Joe provided expert insight towards our rebrand and patiently worked with us to maintain our values while creating a modern logo.

Over the course of several months, Joe gathered feedback from Ontario Streams staff and board of directors to better understand our wants and needs for a new logo. We knew we wanted our values of community-based, grassroots, and reliability captured in our new logo and branding. We also hoped for something that was more modern but still timeless and Joe found a way to bring this all to life.

We love our new logo and how versatile it will be for all of our needs. Joe ensured that we had something unique within our community of partner organizations that reflects our position in the field of environmental organizations. We are so excited to start this new chapter and share our updated identity with you!



Original logo since 1995

S Ontario Streams

New logo launched fall 2023

### Meet Our Team

**Doug Forder** GENERAL MANAGER & RESTORATION ECOLOGIST



Doug has a B.Sc. and a M.Sc. specializing in wetland ecology and restoration. He has worked for Ontario Streams since 1996 in a variety of roles and responsibilities. As General Manager, Doug guides Project Biologists and Field Supervisors in the planning and implementation of all of Ontario Streams' field projects by providing technical advice and project management. Krystal Athanassiou PROJECT BIOLOGIST & FIELD SUPERVISOR



Krystal has a B.A. and a post-graduate diploma in Ecosystem Restoration. She has worked for Ontario Streams since 2015. Krystal supervises the project management, fundraising, reporting, and implementation of Ontario Streams' field projects and provides guidance and training to junior staff members. Madeline Michaud PROJECT BIOLOGIST



Madeline has a B.Sc. and a post-graduate diploma in Ecosystem Management Technology. Madeline was promoted from Habitat Technician to Project Biologist in 2021. Madeline's responsibilities include project management, fundraising, reporting, data collection and interpretation, and stream and wetland restoration.

### Kat Lucas

OUTREACH & COMMUNICATIONS COORDINATOR



Kat has a B.Sc. and a MES. Kat is an experienced science communicator, and her responsibilities include coordinating and delivering in-person and virtual programs, creating educational content for social media, fundraising, developing partnerships with community groups and corporations, and supporting stream and wetland projects.

### Meet Our Team

### **Corey Stinson**

**GIS SPECIALIST** 



Corey has a H. BSc in Conservation and Environmental Biology from the University of Toronto. Corey spent 6 years working in applied plant ecophysiology before joining the team as our GIS Technician. An OMNRF certified wetland evaluator, Corey's role focuses primarily on wetland mapping and GIS support for projects.

### **Mark Heaton**

SR BIOLOGIST & PARTNERSHIP SPECIALIST

### **Eric Buiter**

PROJECT TECHNICIAN

#### Habitat Technicians SUMMER CONTRACT



Mark was one of the founding members of Ontario Streams in 1995. He retired from MNRF after 34 years of service. He now works with Ontario Streams where he focuses on his passions of protecting the endangered Redside Dace, restoring Atlantic salmon to several Lake Ontario watersheds, and leading Jefferson Salamander habitat restoration projects.



Eric graduated from the Niagara College, School of Environment and Horticulture, Environmental Technician program, and continued his studies in Ecosystem Restoration. In summer 2021, Eric started at Ontario Streams as a Habitat Technician where he progressed in his role and was promoted to Project Technician in 2022.



Each summer Ontario Streams hires six contract positions who gain handson working experience in the restoration field that not only helps to build their careers, but also encourages sustainable behaviour and instills a sense of environmental stewardship into the future.

### What We Do

Our 2022 Projects were conducted in areas heavily impacted by factors such as:









#### **Erosion Control**

Stream bank erosion in the GTA is caused by the increased runoff of water from impervious surfaces such as paved roads and parking lots. Fast-moving water carves out riverbanks and widens channels. Erosion is also linked to sediment loading. To reduce erosion, we secure fallen trees and branches to the banks to create a protective barrier from quick-moving storm flows.

### **Sediment Loading**

Sediment loading occurs when excess soil enters the stream. causing it to become cloudy. Many fishes rely on their vision to catch their prey and cloudier water can impact a fish's ability to hunt. Some fishes especially are sensitive to sediment loading, such Redside as the Dace, an endangered minnow, which require clear water to hunt terrestrial insects.

### **Reducing Pollution**

Pollution sources such as litter (especially plastics), fertilizers, herbicides, and pesticides all contribute to decreased stream health. An ideal river will have lots of vegetation in the riparian zone which can filter the water entering the stream. With support from volunteers, we remove garbage and plant native trees and shrubs in riparian areas to help protect the stream from pollution.

#### **Barrier** Mitigation

Human-made and naturally occurring obstructions can impact infrastructure and fish passage. These barriers can block access to preferred habitats for spawning, foraging, and over-wintering. We carefully remove in-stream barriers to improve the quality of habitats and protect human infrastructure.

# Why We Do It

In 2022, Ontario Streams targeted restoring the habitat of the following species:



**Redside Dace** *Clinostomus elongatus* 

Atlantic Salmon

Salmo salar



**Brook Trout** Salvelinus frontinalis



Jefferson Salamander

Ambystoma jeffersonianum

Listed as *Endangered* under the Federal *Species at Risk Act*, more than 80% of Canada's Redside Dace population is found in the Lake Ontario Watershed. Ontario Streams is one of many organizations working to rehabilitate the population of Atlantic Salmon that called Lake Ontario home which has been extirpated since the late 1800's. The only native Trout in the tributaries of Lake Ontario, Brook Trout are sensitive to water quality changes. Urban development and climate change pose significant threats to its survival. As of 2022, Ontario Streams has been working to support endangered Jefferson salamanders and the wetlands they rely on. These wetlands can feed headwater rivers and act as a filter to keep aquatic habitats clean.

### 2022 In Review

Our projects occurred in streams in Lake Simcoe and Lake Ontario watersheds in 2022.

Ontario Streams works on the traditional territories of many First Nations including the Anishinaabe, the Haudenosaunee, the Huron-Wendat, the Mississauga's of the Credit, and the Chippewa. We acknowledge that Indigenous Peoples were the first stewards of the land, and committed are to we reconciliation and recognizing vital role Indigenous the have Peoples played and play continue to in environmental stewardship.

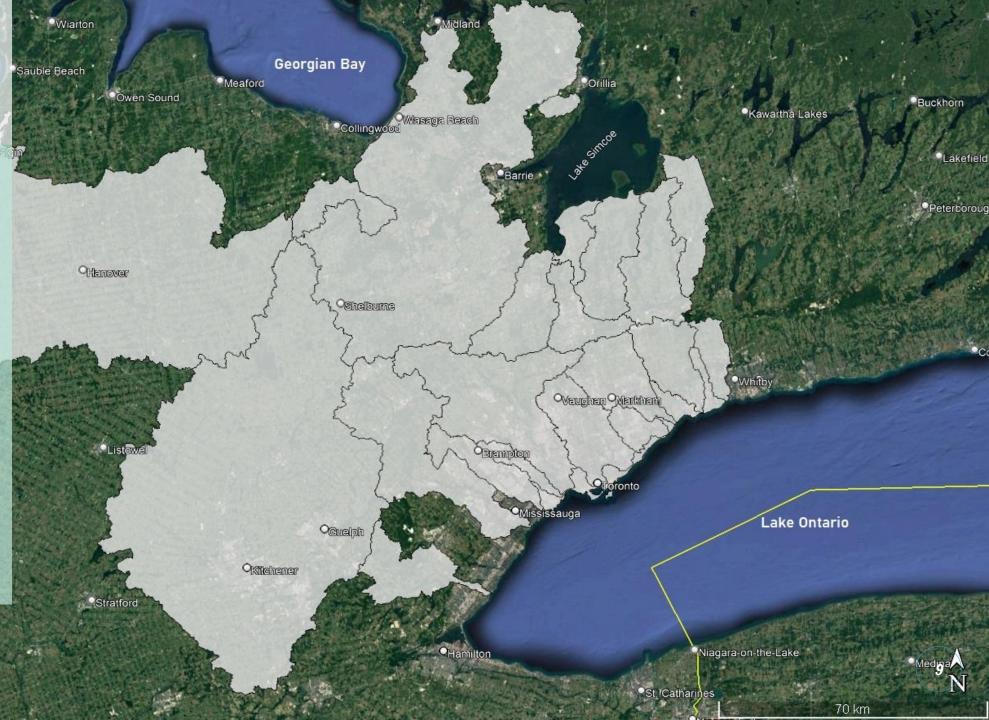
The following pages provide an overview of priority targets and achievements.

Grand Bend

Google Earth

mage Landsat / Copernicus

mage NOAA



## Taking a look back at 2022



#### Marsh Monitoring

In 2022, we led amphibian surveys in York Region using the Marsh Monitoring Protocol. This standardized monitoring method uses frog calls to track the presence of amphibian species in wetlands across Ontario. During these surveys we heard calls from seven species. In addition, we conducted vegetation surveys to evaluate the quality of habitat.

#### Revisiting Historical Redside Dace Habitat

In collaboration with Fisheries and Oceans Canada, Ontario reached Streams out to landowners in the Bronte, Irvine, and Spencer Creek watersheds to evaluate whether historical populations of Redside Dace were still present. During this monitoring we were unable to find any Redside Dace meaning that these rural habitats may no longer be healthy enough to support these sensitive minnows.



#### 2022 Annual General Meeting

November 21, 2022 – Back in person after two years, Ontario Streams hosted our AGM at YMCA Cedar Glen. Our staff shared project successes from 2022 and we were joined by guest speaker Amber Sabourin (biologist at WSP) who spoke about how species at risk are being assessed and protected in Ontario.

#### Thank you to our 2022 volunteer Board of Directors

President Bob Giza

Vice President David Gambin

Treasurer Grant Baverstock

> Secretary Sally Innanen

Directors Pete Davis Eligio de Marco Michael F. Giza Ron Gray Asif Pradhan Tino Romano Heather Wilton

Legacy Member Horst Truttenbach

#### 66 in-stream habitat enhancement structures built (+23 compared to 2021)

Using woody materials, these structures restore streams to their natural form and combat erosion while providing habitat for invertebrates, fish, and other wildlife.



# 270 contractor-sized garbage bags filled with litter (+83.5 bags compared to 2021) from 58 hectares of stream and riparian area

Litter leads to degraded habitats, impacts the health of animals, and can leach harmful chemicals into the water. Ontario Streams staff and volunteers work tirelessly to remove litter from streams and riparian areas.



### 7,467 Atlantic Salmon fry released (-3,985 compared to 2021)

We are working collaboratively to bring the locally extinct Atlantic Salmon back to Lake Ontario through incubation tubes and classroom hatcheries. 31% survival rate (+5% compared to 2021) from incubation tubes and 5 classrooms engaged. Note: we received about half as many eggs as in 2021 which accounts for less fry being released but we attained higher survival of the fry we raised.





#### 11 detrimental in-stream woody material blockages removed (-12 compared to 2021)

Woody material blockages have the potential to block fish passage and cause excessive erosion and sedimentation which can lead to habitat loss and infrastructure damage.





#### 7,579 native trees and shrubs planted (+1,219 compared to 2020) over 2.7 hectares of land

Planting native trees stabilizes soils on streambanks, filters runoff from urban areas, cools streams by providing shade, and provides habitat for wildlife.





### 72 outreach and stewardship programs delivered (+23 compared to 2021)

Engaging volunteers in rehabilitation efforts in their neighbourhoods educates community members on the importance of our environment and fosters a sense of stewardship over their local streams.

# 1,358 volunteers (+801 compared to 2021) engaged in projects totaling 1,284 hours of volunteer support!

Volunteers are vital to supporting our stewardship projects. We believe that community involvement is a critical component to conservation. Thank you for joining us at our stewardship events!







### Evaluated 191 ha of wetlands in Lake Ontario and Lake Simcoe watersheds

Our GIS Specialist works with municipalities to lead projects on wetland mapping and plant surveys. We contributed to the evaluation of 16 wetlands on municipal properties in York Region. We surveyed 248 ha and identified 372 plant species, 70 of which were significant species.



# Enhanced 5 breeding ponds for Jefferson Salamanders and evaluated success of ecopassages in Peel Region

In early 2022, we were awarded a grant through Ontario's Ministry of Environment, Conservation, and Park's Species at Risk Stewardship Program to monitor endangered Jefferson Salamanders, construct a new ecopassage, and restore breeding ponds through shrub plantings and other habitat enhancements.





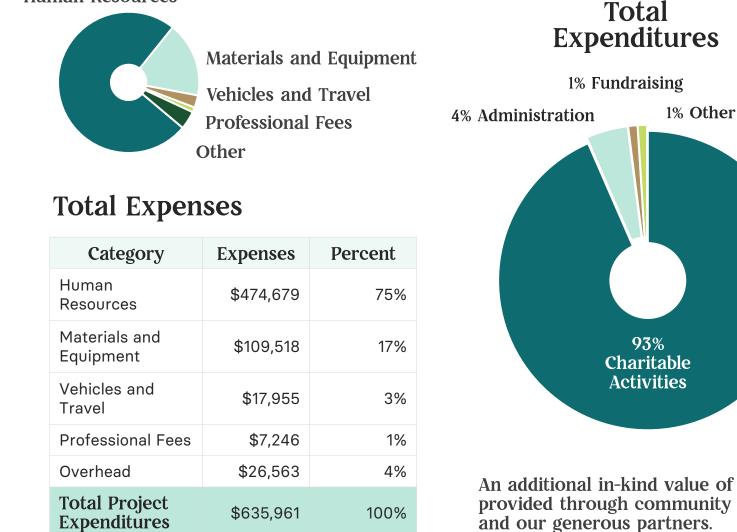


# **2022 Financial Highlights**

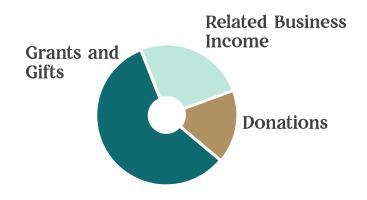
The following is a brief overview of our 2022 financial details. For more detailed information, visit www.ontariostreams.on.ca/Legal-Financial

In-stream structure in Rouge River

# **Ontario Streams 2022 Financial Highlights**



Human Resources



#### **Total Revenue**

Category	Revenue	Percent
Grants and Gifts	\$378,484	58%
Related Business Income	\$165,903	25%
Donations	\$109,317	17%
Total Project Value	\$653,704	100%

An additional in-kind value of \$59.174 was provided through community volunteers and our generous partners.

### Thank you to everyone who supported our projects in 2022

	Corporations	
AbbVie Aviva BMW Group Canada Cascades Canada ULC	CD Sonter Diproinduca EPAM Lifeworks Lotek	SAP PurNat Tangerine WSP Corporation
	Organizations	
Aurora Public Library Blue Door Credit Valley Conservation King Library	Markham Public Library Newmarket Public Library Oak Ridges Moraine Land Trust Ontario Federation of Anglers and Hunters Ontario Land Trust Association	Richmond Hill Public Library Toronto and Region Conservation Authority Volunteer Canada York Region Police
	Join us to conserve and restor Ontario's streams and wetland	re ds

Click here to donate!

# Thank you to everyone who supported our projects in 2022

#### **Community Groups**

Caledon East Wetland Environment Team Galloway Family Islington Sportsman's Club Jackman Family Lost Rivers Toronto Peel Environmental Youth Association Richmond Hill 6<sup>th</sup> Scouts

School Groups

Stewart Family Unionville 5<sup>th</sup> Scouts YMCA Cedar Glen

#### Allan Drive Middle School Belfountain Public School Caledon East Public School Fleming College – Ecosystem Mgmt Holy Trinity School

James Bolton Public School John Knox School Macville Public School Miliken Mills Secondary School Richland Academy Rick Hansen Public School Robert F Hall Catholic Secondary School Sandalwood Heights Secondary School St. Andrews College University of Toronto

#### Join us to conserve and restore Ontario's streams and wetlands

Click here to donate!

### Thank you to our generous financial supporters!

	\$25,000 - \$50,000	
Cabela's Canada City of Brampton City of Richmond Hill	Department of Fisheries and Oceans ECHO Foundation Ministry of Environment, Conservation & Parks	Regional Municipality of York TC Energy
	\$10,000 - \$24,999	
Aviva City of Markham EcoCanada	King Township The McLean Foundation Service Canada	TD Friends of the Environment Foundation Tree Canada
	\$1,000 - \$9,999	Q
BMW Group Canada Cascades Canada ULC	Invasive Species Centre Jim Coyle	Town of Caledon SAP
	\$500 - \$999	Constant of the second s
Diproinduca Christopher Nusaputra	Ontario Teachers Pension Plan St Andrews College	Warren Young

### Thank you to our generous financial supporters!

< \$500

AbbVie CD Sonter EPAM Holy Trinity School Lifeworks Anonymous (5) Mike Boeckler Katie Castelo Fiona Cunningham Pete Davis Doug Forder Nathan Fox Michael Giza Alina Gonzalez Mark Heaton Scott Hildebrandt (monthly) Sally Innanen (monthly) Kat Lucas Laurie Lucas Patti McLeish Gloria Marsh Asha Mistry Ferenc Molnar Ka Man Ng Victoria Pickett (monthly) Ann Seymour JJ Smith (monthly) Ashley Visneski Heather Wilton

Every Ontario Streams program you are involved in supports the conservation and rehabilitation of streams and wetlands through Ontario Stream's projects.

Thank you for your support!

### Sontario Streams Thank You!

We hope to continue to enhance the health of our watershed with your support for another year of success in 2023!

We are so grateful for your financial, volunteer, and in-kind support. Without you, our projects would not be possible. Thank you for your vital contributions to the enhancement of our local streams and wetlands.

Together, we built in-stream habitat enhancement structures to restore fish habitat, removed litter and plastics from streams, planted thousands of native trees and shrubs to stabilize soil while providing habitat for wildlife, and motivated hundreds of members of our community to donate their time to get it all done!