

# Ontario Streams 2021 Annual Report

A highlight of the achievements made possible by our supporters



#### Contents

| Letter from the Board of  | _  |
|---------------------------|----|
| Directors                 | 3  |
| Meet the Team             | 4  |
| What We Do                | 6  |
| Why We Do It              | 7  |
| 2021 in Review            | 8  |
| 2021 Financial Highlights | 17 |
| Supporter Recognition     | 19 |



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 2021

- Installed **45** in-stream habitat enhancement structures to improve **586.5** m of riverbanks
- Removed **186.5** contractor-sized garbage bags filled with litter from **35** ha of riparian habitats
- Removed 26 detrimental in-stream woody material blockages
- Planted 6,360 native trees and shrubs over 2.55 ha of land
- Released **11,452** Atlantic Salmon fry
- Mapped **5,016** ha of wetlands
- Engaged **557** volunteers in projects contributing **1,284** hours of in-kind support
- Delivered **49** outreach programs where we reached **1,029** community members, professionals, and students

#### Thank you for your support!

2

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

Looking back on 2021, I am moved by both the progress we have made in 2022 as a recognized charity and the steps we have taken to grow as an organization while navigating the challenges of the ongoing pandemic. We remain focused on continuing to grow the depth and reach of our conservation and rehabilitation endeavors through our education and community involvement initiatives. Ontario Streams has engaged over 2,400 community members in stream and wetland conservation in 2022, as we continue to increase our outreach capacity and continually grow our presence in the environmental conservation community.

As a former Project Biologist with Ontario Streams, I know firsthand the demands, but also the successes of working within the non-profit and charitable space. Ontario Streams makes a lasting impact on their staff by providing an unmatched learning experience, evident from the growing group of alumni Summer Habitat Technicians who continue on to meaningful careers in the environmental field. Ontario Streams has a small but dedicated team made of people passionate about their work and the positive impact they have on streams and wetlands. They turn a constrained budget into meaningful results which are physical and measurable; the results of this hard work can be seen from the riverbanks in watersheds across Ontario. Although no longer working for Ontario Streams, I am proud to have transitioned to a board member to continue to be a part of this important work.

I am thankful for the opportunity to continue to be involved with this organization and am excited about the future of Ontario Streams as we continue to evolve and remain committed to this important work. On behalf of the employees, Board of Directors and volunteers of Ontario Streams I would like to thank you for your ongoing support.





Heather Wilton Member, Board of Directors

Heatherwilton

### 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, fund raising, reporting, and implementation of Ontario Streams' field projects and provides guidance and training to junior staff members. Madeline Tregenza 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, fund raising, reporting, data collection and interpretation, and stream and wetland restoration.

#### Kat Lucas

OUTREACH AND COMMUNICATIONS COORDINATOR



Kat has a B.Sc. and a Master of Environmental Science. Kat is an experienced science communicator, and her responsibilities include coordinating and delivering in-person and virtual programs, creating educational content for social media, fund raising, 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



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 and restoring Atlantic salmon to several Lake Ontario watersheds.

**Eric Buiter** 

DATA MANAGEMENT

**TECHNICIAN** 

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 continued on in the fall as a Data Management Technician.

#### Habitat Technicians SUMMER CONTRACT



Each summer Ontario Streams hires 6-8 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 2021 Projects were conducted in areas where they were heavily impacted by factors such as:









#### **Erosion Control**

Stream bank erosion in the GTA is generally caused by the increased runoff of water from impervious surfaces such as paved roads and parking lots. This fast-moving water carves out riverbanks and widens channels. As the channels widen, the water temperature increases due to increased surface area absorbing the sun's heat. 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 are especially sensitive to sediment loading, such as the Redside Dace, a species-at-risk which require clear water to catch their food in the air. While working in streams, we use sediment fences to reduce our impact on the ecosystem and trap sediment that occurs as we restore the ecosystem.

#### **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. We frequently lead community stewardship events to improve ecosystems. With volunteers, we remove garbage and plant native trees and shrubs in riparian areas to help protect the stream from pollution.

#### **Barrier Mitigation**

Man-made and naturally occurring obstructions can impede the movement of wildlife through rivers. These barriers can block access to preferred habitats for spawning, foraging, and over-wintering. This can impact genetic diversity as populations are prevented from intermixing. We carefully remove instream barriers to improve the quality of habitats and allow for genetic diversity to build resiliency.

6

### Why We Do It

In 2021, Ontario Streams targeted restoring the habitat of species with significant natural heritage value including:



#### **Redside Dace**

#### Clinostomus elongatus

This iconic fish is the only minnow in Canada who jumps out of the water to catch their prey, such as mosquitos. Over 80% of their population in Ontario is found in the Greater Toronto Area and they are threatened by decreased water quality in this urban environment.



#### **Atlantic Salmon**

#### Salmo salar

Ontario Streams is one of many organizations working to restore the population of Atlantic Salmon in Lake Ontario. This population has been considered locally extinct (extirpated) for over 100 years due to overfishing by settlers and habitat destruction during industrialization.



#### **Brook Trout** Salvelinus fontinalis

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.

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### 2021 In Review

Our projects occurred in streams in Lake Simcoe and Lake Ontario watersheds in 2021

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 we are committed to reconciliation and recognizing the vital role Indigenous Peoples have played and continue to play in environmental stewardship.

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

8

Ontario Streams 2021 Annual Report

### Taking a look back at 2021



#### Starting Something New: Jefferson Salamanders

At the end of 2021, Ontario Streams began exploring opportunities to include new local species at risk target for habitat restoration projects. We applied for funding to monitor Jefferson Salamanders, construct a new ecopassage, and restore breeding ponds through shrub plantings and other habitat enhancements. In early 2022, we were awarded a grant through the Ontario's Species at Risk Stewardship Program and details of our success with this program will come in our 2022 Annual Report.



#### Corporate Stewardship Program

One of our priorities when hiring our new Outreach Coordinator was to build new programs that could generate revenue. Our Corporate Stewardship Program has been a big success. In 2021, we hosted eight paid programs with four corporate teams in the Greater Toronto Area. This program blends stewardship and team building for a fun day outdoors supporting our local environments. If you'd like more information about our corporate program click <u>here</u>!



#### 2021 Annual General Meeting

November 20, 2021 - For a second time, Ontario Streams held our AGM in a virtual format. Ontario Streams staff shared project successes from 2021 joined by guest speaker Steve Varga (Ontario Streams volunteer) who spoke about the importance of wetlands in the Greater Toronto Area. Check out the video <u>here</u> if you missed the last AGM!

#### Thank you to our 2021 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 Horst Truttenbach

#### 45 in-stream habitat enhancement structures built (+1 compared to 2020)

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





### 186.5 contractor-sized garbage bags filled with litter (+53.5 bags compared to 2020) from 35 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 to remove litter from streams and riparian areas.





#### 11,452 Atlantic Salmon fry released (-802 compared to 2020)

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 2020) from incubation tubes and 5 classrooms engaged.





12

#### 23 detrimental in-stream woody material blockages removed (+3 compared to 2020)

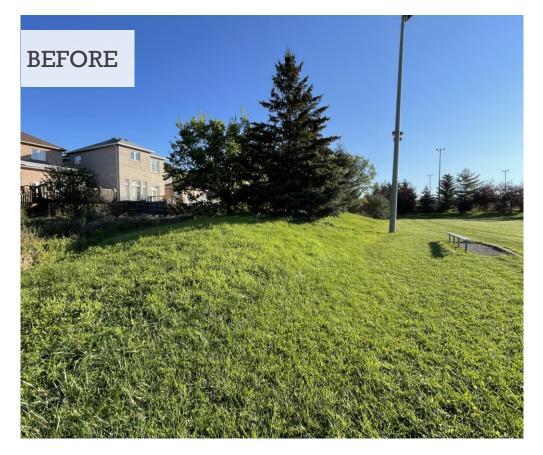
Woody material blockages have the potential to block fish passage and cause excessive erosion and sedimentation which can lead to habitat loss and property damage.





#### 6,360 native trees and shrubs planted (+2,106 compared to 2020) over 2.55 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.





#### 49 outreach and stewardship programs delivered (+22 compared to 2020)

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.

#### 557 volunteers (+267 compared to 2020) 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!







#### Mapped 5,016 ha of wetlands in Lake Ontario and Lake Simcoe watersheds

Our GIS Specialist works with municipalities to lead projects on wetland mapping, vascular plant surveys. We contributed to the evaluation of 8 ha of provincially significant wetlands. We surveyed 209 ha and identified 440 plant species, 88 of which were significant species.



### **2021 Financial Highlights**

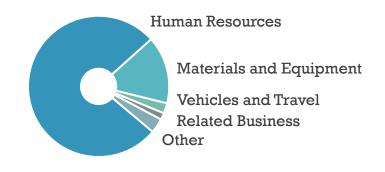
The following is a brief overview of our 2021 financial details.

For more detailed information, visit www.ontariostreams.on.ca/Legal-Financial

Ontario Streams 2021 Annual Report

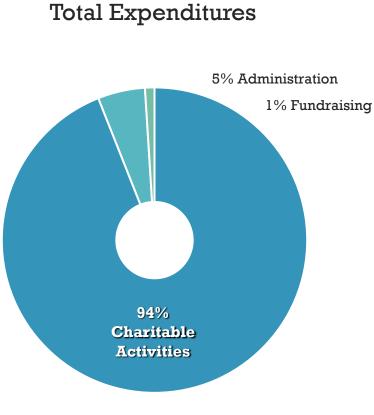
In-stream structure in Rouge River

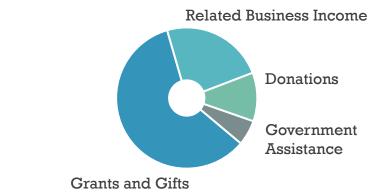
### **Ontario Streams 2021 Financial Highlight**



#### Expense Breakdown

| Category                      | Expenses  | Percent |
|-------------------------------|-----------|---------|
| Human Resources               | \$393,446 | 77%     |
| Materials and<br>Equipment    | \$78,943  | 16%     |
| Vehicles and Travel           | \$11,969  | 2%      |
| Professional Fees             | \$7,850   | 2%      |
| Overhead                      | \$17,047  | 3%      |
| Total Project<br>Expenditures | \$509,255 | 100%    |





#### Total Revenue

| Category                   | Revenue   | Percent |
|----------------------------|-----------|---------|
| Grants and Gifts           | \$381,347 | 59%     |
| Related Business<br>Income | \$151,939 | 24%     |
| Donations                  | \$71,637  | 11%     |
| Government<br>Assistance   | \$37,044  | 6%      |
| Total Project<br>Value     | \$641,967 | 100%    |

### Thank you to our 2021 project supporters!

#### **Community Groups**

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

#### Corporations

BMW Group Canada Cascades Canada ULC SAP PurNat Turner and Townsend Volunteer Canada Wasserman WSP Corporation



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

Click here to donate!

#### Organizations

Credit Valley Conservation CultureLink Toronto and Region Conservation Authority Central Lake Ontario Conservation Authority Markham Public Library Newmarket Public Library Ontario Federation of Anglers and Hunters Ontario Land Trust Association Richmond Hill Public Library St. Francis Center

#### School Groups

Caledon East Public School Humberview Secondary School James Bolton Public School Macville Public School Redstone Public School Robert F Hall Catholic Secondary School Sandalwood Heights Secondary School St. Andrews College University of Toronto Fleming College – Ecosystem Management

19

### Thank you to our generous financial supporters!

|  | \$25,000 - \$50,000   |  |
|--|---|--|
| Cabela's Canada<br>City of Brampton<br>City of Richmond Hill | ECHO Foundation<br>Ministry of Environment, Conservation and Parks<br>Ontario Trillium Foundation | Regional Municipality of York<br>Service Canada<br>TC Energy |
|  | \$10,000 - \$24,999   |  |
| TD Friends of the Environment Foundation<br>King Township    | The McLean Foundation   | SC Johnson   |
|  | \$1,000 - \$9,999   |  |
| BMW Group Canada   | Department of Fisheries and Oceans  | RJ Burnside  |
| Cascades Canada ULC<br>City of Markham                       | EcoCanada<br>Ontario Wildlife Foundation  | Town of Caledon<br>Volunteer Canada                          |
|  | \$500 - \$1,000   |  |
| McKesson Brampton  | St Andrews College  | Warren Young   |
| SAP  | Turner and Townsend   | Wasserman  |

### Thank you to our generous financial supporters!

#### < \$500

Anonymous (2) Michael Athanassiou Mary Buiter Jakob Butrimas Katie Castelo Daria Comas Doug Forder Michael Giza Alina Gonzalez Mark Heaton Emma Helfand-Green Scott Hildebrandt (monthly) Sally Innanen (monthly) Kostantino Kostopoulos Catherine Laird Lianna Lopez Kat Lucas Laurie Lucas Gloria Marsh Victoria Pickett (monthly) Sam Scheerle Benjamin Schmidt Ashley Smith JJ Smith (monthly) Corey Stinson Carol Thomas Peeranut Visetsuth Ashley Visneski

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!



## Thank You!

We hope to continue to enhance the health of our watershed with your support for another year of success in 2022!

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!