



2022 ACTION PLAN



Introduction

Friends of the Grand River (FOGR) is focused on the preservation and conservation of the historic upper Grand River watershed. We pride ourselves on being the stewards of a fragile ecosystem working to ensure that it continues to thrive through changing climate and urban growth. The historical river designation that was provided to the Grand River in 1994 is a treasure to us, and we greatly value maintaining this.

We work with local government, businesses and fellow non-profit organizations always making sure that the health of the river remains top of mind for all stakeholders. We have been instrumental in trail/access establishment, implementing special fishing regulations, river enhancement projects, community education and so much more!

The work done by FOGR is critically important and our impact has been significant. Amazingly each project is managed, planned and implemented by groups of volunteers that are unwaveringly dedicated to our mission. Unfortunately, it's not always enough! It continues to be increasingly challenging to maintain what we have today when the variable elements, such as climate change and urban growth impacting the ecosystem, continue to change rapidly.

In recent years the ecosystem has undoubtedly seen changes, both positive and negative. We have witnessed an increase in many species' populations such as eagles, osprey, beavers, walleye, cormorants, etc. while also seeing a decrease in other populations such as second year brown trout, northern pike and insect hatches, etc. There is also widespread indication of poorer over winter survival rates within the trout population. At the same time, the river is seeing an increase in sporting usage on the upper stretch of the river such as angling, canoeing and tubing.

With all of the above in mind, FOGR sees 2022 as a critical year to establish water quality benchmarks and identify short, medium and long-term goals to start working towards for the organization and other stakeholder groups.



Our 2022 goals

1

Improve survivorship, stocking techniques and monitoring of hatchery trout

- Analyzing historical stocking variables and coordinating ideal conditions with GRCA
- Compiling temperature, dissolved oxygen and conductivity data from continuous monitoring sites and comparing to historical stocking dates
- Confirm timing of 23,000 fish stocking with MNRF for the Grand River and 14,000 fish for the Conestogo River
- Provide live wells, stocking buckets and volunteer workforce (if allowable under COVID protocols).
- Finalize the number of drop points and stocking numbers in partnership with MNRF
- Consider multiple stocking techniques to ensure maximum distribution.
- Promote the stocking of the rivers in social media and local news outlets
- Summarize current year and historical stocking data for consideration in review of Tailwater Plan.

2

Monitor survivorship, distribution success and behaviours of stocked trout

- Using a longer term, multi year lens, spend 2022 working with MNRF in determining a fin clipping or fish tagging strategy for 2023 season
- Once 2023 strategy is determined, work to educate anglers about the role they must play in monitoring
- Revise annual angler survey to capture more granular data and view points regarding stocking program success

3

Improve potential reproduction and rearing streams for wild fish and improve temperatures and water quality in the main river stem

- Strong focus on Carrol Creek as a key tributary to the main stem
- Mobilize volunteers to cut and stake dogwood and willows for bank stabilization in key stretches
- Identify quantities for tree planting and mobilize volunteers to plant (mature trees 3-4' to increase survival rate in flood plain)
- Consider advertising and reporting the stream rehabilitation work on social media and Centre Wellington News.
- Summarize current and previous years' stream rehabilitation learnings to assist in review of Tailwater Plan.



4

Understanding the current thermal characteristics of the Upper Grand at stations and changes in temperature characteristics over time down the system

- Repeat 2021 locations for temperature loggers (2021: 10 sites were replicated from a historical study in the early 2000s)
- Use the capacity we have to expand to 20 sites in 2022
- Add new loggers to Carrol Creek in order to monitor the impact of the rehab work planned for 2022
- If technologically possible - using temp loggers/flow data to inform anglers if there are particularly warm days where people should not be fishing. Use data on social media to inform river users.
- Summarize current year and historical temperature data for consideration in review of Tailwater Plan.

6

Data collection inform where the problems are so that you can advocate support

- Grab water samples on the higher/middle/lower sections at high flow and low flow events to analyze for nitrates/hardness.
- Analyze pollutants (cost dependent)
- Confirm sampling locations and replicates of samples with input from MNRF biologists
- Purchase sample bottles and ethanol for this initiative
- Organize volunteers for grab samples and freezer storage space before samples are sent to lab.
- Summarize current and historical water quality data for consideration in review of Tailwater Plan.

5

Determine current conditions of the benthic (*anything associated with or occurring on the bottom of a body of water*) population and compare to historical information collected

- 5 sampling locations will be chosen along the upper Grand to provide an initial assessment regarding benthic populations using kicknet sampling, and by following the Canadian Aquatic Biomonitoring Network (CABIN) protocols.
- Sampling locations would be 1) below Shand Dam 2) downstream of stormwater pipes 3) below Carrol Creek where the tree-planting efforts will be focused 4) one area with high riparian spring after snowmelt to assess what locations would be feasible to sample.
- Benthic sampling will occur in tandem with water quality monitoring, ideally with replications happening at low flow and high flow events. Target University Co-op student support for this work.
- Summarize current and historical Benthic data for consideration in review of Tailwater Plan.



Our Core Work

Fish Stocking

Since 1995 FOGR, in partnership with the Ministry of Natural Resources (MNR) and the Grand River Conservation Authority (GRCA) have been stocking brown trout in the upper Grand River from the Shand Dam in Belwood conservation area all along the 27km stretch down river to West Montrose. Each year the program introduces another 20,000+ fish to this stretch of river resulting in a world class fishery for which people travel from around the world to enjoy. The stocking takes place annually in early May and with the help of many volunteers we are able to get all fish into their new home in only 2 days. The result of the thriving fishery has been an estimated \$1.5M in business annually to the local economy from fishing enthusiasts alone.

FOGR also supports the efforts of its chapter Conestogo River Enhancement Workgroup (CREW) in fish stocking of an estimated 15,000 new brown trout per year since 2005

River Access

Each year FOGR opens, clears and maintains 9 access points along both the Grand River and Conestogo river. This work includes the installation of stair cases, brush trimming and most importantly the maintenance of garbage kiosks. These trails are accessed by hikers, canoe enthusiasts, photographers and most commonly fish enthusiast. Providing safe access to this precious resource is of critical importance to us. We also gather an estimated 200 garbage bags annually from our Kiosk points, keeping the rivers clear of manmade hazards.

Tree Planting

Since 1992 FOGR has planted over 50,000 trees along the shore lines of both the Grand River and Conestogo Rivers. Our tree planting program not only cleans the air of carbon dioxide, provides habitat to wildlife but it also helps provide shade to the rivers, ensuring healthy water temperatures throughout the warm Ontario summers.

Garbage Cleanup

Multiple times a year volunteers gather to walk the banks of the Grand and Conestogo Rivers picking up any unnatural items that appear. From plastics to cardboard our volunteers make sure that the rivers edges are covered only in their natural beauty.

Stream Rehabilitation

FOGR has participated in many stream restoration projects over the years. Often led by the GRCA, FOGR supports the initiatives that provide better flows, deeper pools, controlled erosion and increased shade to the Grand River.

Other historical initiatives:

- Kids day BBQ
- Grand Opportunities – A day of education and fundraising
- Spey Clave – A day of education and fundraising

The RESULTS of our efforts:

- Our planted trees are becoming forests
- The use of the river has climbed dramatically over the years
- Our garbage kiosks are always filled with garbage and the river is NOT
- The osprey population has been reintroduced and is thriving
- World class brown trout fishery with special regulations
- The local economy generates in excess of \$1.5M annually from visitors using the river (2005 economic study)
- Increased real estate market with desirable river properties
- Community engagement (Volunteers, Donors and Members)
- More environmentally conscious communities
- MUCH MORE!

We thank you for your
ongoing support of
our programme

