Central Queens Branch of the PEI Wildlife Federation

WATERSHED NEWS



Summer 2025 Field Recap

To recap our summer 2025 season we want to share some of the major projects we started or completed during this year's field work.

Summer Field Season Recap

Each year, the CQWF team travels many kilometers of stream to restore and maintain the health of our watershed. A key part of this work involves installing large woody debris—natural materials strategically placed in the stream to create essential cover and holding areas for fish, especially in spots where natural shelter is lacking.

We also install *brushmats* in areas prone to excessive sediment runoff. These

structures are placed in over-widened sections or along unstable banks, where they help trap sediment and improve overall stream health. This year alone, we installed **94 cover structures** and **23 brushmats**, making a significant impact on habitat quality.

Another critical part of our annual fieldwork is the removal of stream blockages, such as fallen trees or invasive species, to support fish migration throughout the watershed.

This hands-on work is essential to maintaining healthy, functioning stream systems—and it wouldn't be possible without the continued support of the **Watershed Management Fund**.

Salmon Habitat Upcoming Plans

This year, CQWF introduced a more natural method for building Atlantic Salmon spawning beds—moving away from traditional, invasive techniques that use rebar and other artificial

Cover Structure in Brookvale

materials. Instead, our dedicated crew spent several days hauling in natural rock

from Nova Scotia and carefully constructing seven well-designed spawning beds along a section of the West River.

These beds were placed in areas where the streambed is primarily shale—a type of substrate that offers poor conditions for salmon to spawn. By strategically adding high-quality spawning gravel and creating more natural structures, we're aiming to improve habitat conditions and make the river more attractive to Atlantic Salmon.

This project marks an exciting step forward in our conservation work, as we

continue to restore and enhance critical salmon habitat using sustainable, nature-based solutions.

Support for our Atlantic salmon restoration work this season was graciously supported by **The Foundation for Conservation of Atlantic Salmon**. This organization provides funding to support our spawning habitat activities and other monitoring ventures.



CQWF crew catching fish during electrofishing surveys

Other Restoration and Monitoring Topics

Our riparian habitat enhancement activities involve planting native trees and shrubs. Many of these planting locations were focused on areas damaged by windstorms and blowdown. These patch cuts were planted with suitable species such as red oak, white ash, yellow birch, eastern hemlock, and fruit-bearing shrubs for wildlife. Species are carefully selected and planted in suitable habitat to help produce more resilient forests and increase biodiversity. Plantations also help to enhance the resilience of our riparian zones, making them more suited to withstand storm events and ultimately work towards restoring our native Acadian forest composition. This year we planted a total of 1,482 tree and shrub species. This aspect of our work wouldn't be possible without the

help of the Provincial Frank Gaudet Tree Nursery, which grows and nurtures the trees we use to plant.

There are several monitoring activities that CQWF conducts on an annual basis in order to monitor important environmental indicators. This information is incorporated into our management-based decisions and management plans. This includes water quality monitoring (19 sites biannually), juvenile salmonid density surveys (14 electrofishing index sites). Technical reports can

be found on CQWF's website under the *Management Plans* and *Technical Reports* tab.

This year, we've launched an exciting new initiative focused on improving habitat for Brook Trout in our rivers. As part of this multi-faceted project, we've started working in tributaries that have either never been assessed before or haven't been visited in many years — including **Gass' Brook** and **Black Brook**. Our first step involved conducting a series of surveys, including Habitat Suitability Index (HSI) surveys, pool surveys, and electrofishing. These surveys provide vital insights into the health of these watercourses and help us to estimate Brook Trout populations. With this data in hand, we moved on to targeted stream maintenance efforts to improve conditions within these brooks. We plan to repeat these surveys in the coming years to track how the streams respond to restoration over time. This project marks a significant milestone for PEI. Not only does it



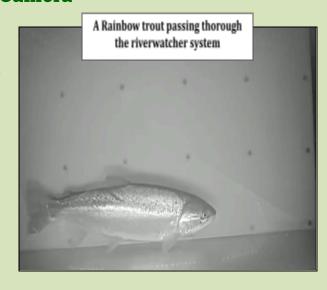
deepen our understanding of Brook Trout habitat needs, but it also helps inform a step-by-step restoration strategy that watershed groups across the province can follow. It's a big step toward answering some long-standing questions about effective watershed restoration.

The second part of our two-pronged approach involves using thermal imaging to gain insights into our rivers that can't be seen with the naked eye. We have been using a thermal camera at the mouths of tributaries to identify cold water inputs into the main branches of the West and Clyde Rivers. These temperature surveys are especially important as we head into our upcoming Redd surveys. By observing where Brook Trout are spawning, we hope to pinpoint cold-water spring seepages nearby. These could become future restoration targets to further enhance spawning habitat in the years ahead.

We would like to thank the **Wildlife Conservation Fund** who supported both of these projects.

West River Fish Fence and Riverwatcher Camera

An exciting new project undertaken on the West River this season was the installation of the Fish Fence and Riverwatcher system. This piece of equipment represents a major advancement in how we understand our rivers on PEI. This system is an open tunnel in which the Riverwatcher system takes a recording once a fish passes through the scanner. This system provides a couple of different pieces of information. This includes: direction of migration, water temperature, approximate length, date and time of observation, and the speed of the wildlife passing through. To date, we have had ~850 detections pass through the camera with all sorts of wildlife, including salmonids, striped bass, and aquatic mammals. We would like to thank our



partners who have helped us get this project off the ground, Prince Edward Island Watershed Alliance, Atlantic Salmon Federation, Department of Fisheries and Ocean, Forest's Fish and Wildlife division of PEI Dept. of Environment, Energy & Climate Action, Morell River Management Cooperative & Mooney's Pond Centre, Canadian Rivers Institute and University of New Brunswick

Other Stream Restoration Work

This season, CQWF installed its first *full tree deflector* on the main branch of the West River—using natural, low-impact materials like duckbill anchors and rope for support. This innovative structure marks a shift toward more environmentally

conscious restoration methods that blend seamlessly with the stream's natural surroundings. The tree deflector was installed to replace a previously removed crib deflector on the opposite bank. By redirecting flow and encouraging natural sediment movement, the new structure is designed to help the stream gradually return to its desired morphology. As this is our first time implementing a deflector of this kind, we're excited to monitor its performance over time and assess its potential for broader use in future restoration efforts.



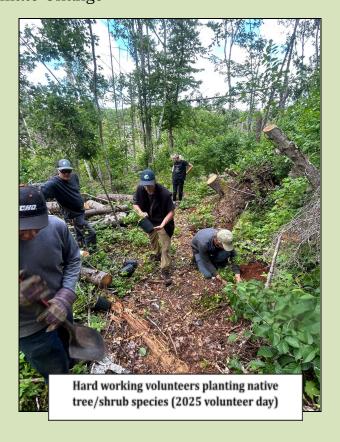
Get Involved!

If you would like to become more involved send us an email at cqwf.pei@gmail.com to subscribe to our email list. CQWF hosted two volunteer days in the 2025 season, including continued planting within the Bonshaw hills provincial park and will be hosting an upcoming event October 4th to provide information on the Riverwatcher and what we have seen through it along with an open house and where a presentation will be held along with a silent auction to help raise funds for local conservation efforts. These events are hosted on Saturday mornings and are intended to give the public a chance to get hands-on experience doing restoration activities. We hope to see some new faces at our Saturday morning volunteer days so stay tuned for those dates once we arrive closer to the summer season. Typically we have a volunteer day event on the first Saturday morning (9 am) of each month beginning in June. We are always looking for any volunteer day suggestions or ideas so please feel free to reach out with any that you may have we'd love to hear from you.

Our Funding Partners

We would like to acknowledge and thank all of our volunteers and funding partners, without whose support we would be unable to continue our restoration efforts:

- The Foundation for Conservation of Atlantic Salmon
- PEI Wildlife Conservation Fund
- PEI Dept. of Transportation and Infrastructure
- PEI Dept. of Environment, Energy and Climate Change
- PEI Dept. of Tourism
- Government of Canada
- CLEAN Foundation
- Atlantic Salmon Federation



Stay Up to Date

Stay tuned to our Facebook page or sign up for our email list to stay up to date on upcoming events in our 2025 field season.

Website: www.centralqueenswildlife.ca

Facebook: www.facebook.com/CentralQueensWildlifeFederation

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