PRINCE EDWARD ISLAND WILDLIFE CONSERVATION FUND

Spring 2023 Summary Report

Report Prepared By:

COMMUNITY FOUNDATION OF PRINCE EDWARD ISLAND

LA FONDATION COMMUNAUTAIRE DE L'ÎLE-DU-PRINCE-ÉDOUARD

Community Foundation of PEI
53 Water Street
Charlottetown, PE C1A 1A3
Phone 902-892-3440 | info@cfpei.ca

AVC Wildlife Service
Project Title: Raptor Toxin Study

Brief Summary:
This study evaluated the exposure of a broad base of toxins in PEI raptor species. Results will enhance clinical care of raptors in rehabilitation and may provide future research and learning opportunities.

Project Results:
Our goal was to submit 30 samples for toxin analysis and to assess live avian patients for signs of exposure to toxicity. The Avian Influenza outbreak limited our collection of samples to post-mortem samples and we submitted 21 samples from 8 raptor species (osprey, bald eagle, barred owl, snowy owl, Cooper's hawk, Sharp shinned hawk, red-tailed hawk, northern saw-whet). A total of 438 toxins were tested. Approximately 80% of birds had exposure to dichlorodiphenyldichloroethylene, approximately 5% had exposure to pentobarbital, and approximately 43% had exposure to anticoagulants rodenticides. Approximately 25% of birds had exposure to multiple toxins and 2 birds had co-contamination with lead. Approximately half of the cases had suffered traumatic events and/or were found death or were euthanized. All cases were found in Prince Edward. Results from this study provide a preliminary assessment of exposure of raptor studies on PEI. While we were not able to assess the clinical signs associated with each toxin (as we could not care for live birds during the research period), this information will direct future study which will include assessment of additional samples as well as clinical assessment of live birds in rehabilitation (once the avian clinic re-opens)

Bedeque Bay Environmental Management Association (BBEMA)
Project Title: Enriching Atlantic Salmon Habitats within the Dunk River

Brief Summary:
This project targeted the enhancement of aquatic and riparian habitats along the Dunk River. Prioritizing key areas that are critically important for migration and spawning of Atlantic Salmon.

Project Results:
1. Riparian zone enhancement:
    - BBEMA crew planted 2564 native trees/shrubs adjacent to Dunk River where the riparian zones were heavily damaged by Hurricane Fiona – a primary tree planting target areas was along the Southwest branch to Wrights Mill Road as this area is a well know Atlantic Salmon spawning habitat. Due to the extensive impact from Hurricane Fiona many of the tree planting sites had to be cleared of residual debris/deadfall/downed trees before replanting could be completed. These enhanced riparian buffers adjacent to the watercourses/wetlands will improve water quality by filtering sediment, nutrients, pesticide, and other pollutants from surface runoff.
2. Stream restoration to rehabilitate 7km of stream habitat through physical improvements:
    - BBEMA crew completed cleared approximately 9 km of watercourse blockages over the May to August 2023 summer season. This years stream clearing targeted the Dunk River – concentrating on opening up fish passage through the lower branches: the following sections of stream were cleared: below Scales Pond 3km – Breadalbane 2 km - Greenan Road 1 km - Southwest Branch to Wrights Mill Rd 3km. Additionally, 12 brush mats were installed within the South-West Branch of the Dunk River targeting areas where a heavy loss of riparian vegetation had resulting in an unnatural widening of the watercourse resulting in a weakening of the existing bank.
    - Due to the extensive downfall of large trees (Hurricane Fiona) some trees that had fallen across the streams were deemed too dangerous to be removed with the equipment on hand. In cases such as this, the BBEMA crew would remove all tree limbs in a process called delimbing to promote better water flow and access to the stream. The locations with sizable debris and/or blockages that could not be safely removed were marked on a GPS to track progress and note/map areas needing future work or restoration.
3. Improve available habitat for Atlantic Salmon:
    - BBEMA staff continued efforts to enhance Atlantic Salmon spawning habitats within the Dunk River to optimise the potential for Atlantic salmon reproduction and survival.2023 field season work concentrated on the following known historic sections: Main branch below Walls Road - this instream enhancement work included gravel bed raking and popping of rocks to create crevices/spaces between rocks, inspection and maintenance of artificial redds and chevrons (placed in 2022 field season).
    - Main branch below Scales Pond – this instream enhancement work included clearing of numerous large in stream blockages because of Hurricane Fiona.
    - Greening Road tributaries – this instream enhancement work included gravel bed raking and clearing of several large in stream deadfalls.
    - Southwest Branch – this instream enhancement work included stream clearing and bank stabilization through tree planting and placement of brushmats to mitigate sediment.
    - Breadalbane tributaries – stream clearing/heavy blockage removal (Hurricane Fiona impact).

4. Conduct Atlantic Salmon presence/absence and density surveys using electrofishing techniques to develop base data for population assessments.:

- Below Breadalbane Forks – 1 site – presence/absence
- Above Breadalbane Forks – 1 site – density
- Below Scales Pond (along Dunk River Trail) – 1 site - presence/absence
- Completed in October - due to availability of electro fisher and extensive rainy weather during the month of September BBEMA staff were not able to complete electrofishing monitoring on all targeted sites (5).

5. Conduct headwater assessment surveys (Dunk River) to help build a running database to help determine ongoing changes in the availability in fresh water for aquatic life as a result of land use and climate change impacts:

BBEMA staff conducted on site walking surveys of the following areas: targeting Atlantic Salmon habitats.

- Shamrock/Kinkora region (3.5km of tributaries)
- Newton Road to Scales Pond (3km of tributaries)
- Northwest Branch -- Freetown Road to Walls Road (4km of tributaries)

6. Deployment of HOBO H2O Temp dataloggers at 21 surface sites throughout the Bedeque Watershed.

- Dunk River, 16 HOBO H2O Temp loggers - Wilmot River 3 HOBO H2O Temp loggers, Bradshaw River 2 HOBO H2O Temp loggers
- Additionally, DO loggers were launched in the upper estuary of the Dunk River and on the main branch of the Bradshaw River – with a corresponding air pressure launched at the BBEMA office.
- All loggers were deployed in early June – with retrieval in late November (data from all field loggers has been downloaded to BBEMA database).

7. Aquatic freshwater bi-weekly habitat health monitoring through non-point source water quality analysis of 25 stream surface sampling sites:

- May 12 throughout the end of October BBEMA conducted bi-weekly water quality monitoring at 20 sites throughout the Bedeque Bay Watershed area. Stream site locations were split amongst the 3 main river systems, with 13 sites on the Dunk River, 5 on the Wilmot River, and 2 on the Bradshaw River. All sites were established among three distinct landscape types: agricultural land, pasture fields, and forested areas. The chemical parameters included: pH, conductivity, dissolved oxygen, nitrates, and water temperature. Physical parameters included: water flow, stream width (wet/dry bank) and average stream depth. Over the winter, all 2023 field season data will be uploaded to Atlantic DataStream online database to facilitate sharing with other watershed/environmental groups across Atlantic Canada. Unfortunately, due to accessibility issues, 5 monitoring stream sites could not be tested for water quality this season – new access routes to these sites will have to be cut for the 2024 field season. Additionally, BBEMA staff completed monthly Macro-invertebrate monitoring/assessments of all stream monitoring sites June through August.

8. Conduct post Hurricane Fiona impact assessments using AUV drone technology:

- BBEMA Environmental Projects Coordinator conducted airborne surveys using DJI Mavic 2 Enterprise Dual thermo drone to monitor the impact/change of the riparian zones in the following sub-watershed locations.
- Dunk River – surveys were completed on the main branch in Breadalbane, Greening Road, above/below Scales Pond and the Southwest Branch. Along the upper tributaries along Doodle Road and Dixon Road.

- Wilmot River – surveys were completed on the main branch/tributaries along the Cairns Road and below Arsenault's Pond.
- Bradshaw – main branch from Seven Mile Bay to Bedeque Rink Road and across to the County Line Road.
- Along with the drone surveys staff completed some on the ground stream walking assessments – mostly targeting Atlantic Salmon habitat within the Dunk River.

Belfast Area Watershed Group
Project Title: Who's who in our Backyard

Brief Summary:
We educated & engaged community on wildlife value. We did wildlife monitoring between Eldon & Wood Islands, monarch tagging, community events & outreach, restoration at Ken's Trail (Wood Islands), installation of a small pondside boardwalk/dock.

- Project Results:
  Monarch Watch Program - 20 volunteers (parents, kids, board members) and staff were able to tag 23 monarch butterflies as part of the Monarch Watch Program.Drop in days were held:August 16, Aug 30, Sept 6, Sept 9 and 10th. The pollinator garden at the Gilli's Lodge & our BAWG office at Roseberry Pond both became official Monarch Watch waystations.
- **Wildlife Monitoring and Infographics**
  4 trail cameras were purchased & installed throughout the watershed (Roseberry Pond, Flat River, Belle River, Wood Islands). Several social media posts were made about the animals captured (raccoons, coyotes, foxes, grouse, hare, and several species of bird). 8 amphibian survey boards were built and set out across the watershed (Portree Creek, Roseberry Twins, Roseberry Pond, Flat River, Belle River, MacLeod Rd., Wood Islands Pond, Littoral Ln.). Both spotted salamanders and red backed salamanders were found under the boards at 2 sites. Both were posted on social media for community members to see. Infographics were created and shared on social media to teach the public about the types of amphibians that can be found on PEI.
- **Annual Roseberry Pond Fishing Adventure**
  The fishing day was successful with just over 60 people in attendance. Our largest attendance to date, activities included a BBQ, draw, games and fishing!
- **Wood Islands - Ken's Trail and Pond-side Boardwalk, Critter Dipping adventure**
  Permit approval changed from floating dock to pond-side broadwalk/dock. A critter dipping event was held at the wood islands pond where 10 children and parents learned about pond invertebrates. Take-away ID sheets were created and handed out to children at the event. The trail was repaired in approximately 5 days and is now open to the public. 24 shrubs were planted.
  All goals were achieved.

Cascumpec Bay Watershed Association Inc.
Project Title: Silt Trap Maintenance Elmsdale

Brief Summary:
CBWA Inc. completed the removal of over 7500 ft3 of silt from the Huntley River. The goal was to excavate the silt from the silt trap. The benefits includes enhanced fish habitat, a reduction of silt, an enhanced habitat for wildlife in the area.

Project Results:
CBWA completed the removal of approximately 7500 cubic feet of silt from an existing silt trap on the Huntley River. The project was completed as planned and on schedule.

Central Queens Branch of the PEI Wildlife Federation
Project Title: Woody Debris Management on the West and Clyde River

Brief Summary:
CQWF addressed damages from Hurricane Fiona by targeting problematic woody debris and utilizing large wood as productive habitat features in the West and Clyde Rivers. A short educational video regarding this topic was also produced.

Project Results:
- Maintain stream habitat free of blockages on the West and Clyde Rivers
    - 30,747m of stream habitat was maintained free of problematic woody material (including both West and Clyde River)
- Utilize woody material as productive habitat features
    - 76 brush mats and 149 cover structures were installed
- Create educational resources/opportunities for groups to better their knowledge of managing woody debris in their watersheds
    - 1 youtube video was created and posted for future reference and educational purposes
- Assess and resolve damage to established watershed plantation areas
    - +173 plantations checked and resolved as required
    - strip cuts were made in damaged areas and new plantations were created in heavily damaged areas at 9 sites
- Re-establish missing key species in heavily damaged areas (red oak, yellow birch, sugar maple)
    - +250 trees were planted in newly made strip cuts in heavily damaged areas along with ~750 additional trees planted in other areas

Cornwall and Area Watershed Group Inc.
Project Title: Watershed Rehabilitation and Salmonid Education Initiative

Brief Summary:
We improved fish and wildlife habitat through watershed management techniques to ensure that wildlife and generations can enjoy the North River and Hyde Creek. Education to students plants the seed for creating a more sustainable future.

Project Results:
Water School was taught to grade 5 students from Elliot River Elementary and was a hit! The students learned about water conservation in your home and what a watershed is. It taught students the importance of buffer zones as they reduce runoff that can harm fish. This education may enhance buffer zones in our watershed, which creates habitat for many wildlife and protects fish. We had great feedback from teachers and residents about how meaningful the students found it. This will be an annual event.

Tree planting with East Wiltshire grade 8 students taught them how to properly plant a tree and connect with nature. It also created shelter and diversity for wildlife near the Hyde Creek headwaters.

We documented priority worksites post-Fiona and completed rehabilitation and enhancement of the sites. Sedimentation and erosion were mitigated in our rivers which enhanced fish habitat. We improved spawning habitat for Atlantic salmon and Brook trout. Improved and maintained popular fishing areas for anglers to enjoy the outdoors. Barriers for fish were removed to ensure they could migrate.

Ducks Unlimited Canada
Project Title: PEI Hunting Workshop

Brief Summary:
For over two decades, the PEI Hunting Workshop has proven to be an effective way to recruit and teach new hunters the fundamentals of the sport, focusing on wildlife conservation, safety, and ethics.

Project Results:
-The organizing committee held 3 virtual planning meetings as well as a follow-up meeting. Goal met.
-90 people registered for the event (although 85 showed up). Goal exceeded.
-30 Volunteers represented multiple groups including the Fish & Wildlife Division, Conservation Enforcement Division, Delta Waterfowl, Ducks Unlimited Canada, Charlottetown Trap & Skeet Club, PEI Trapper's Federation, PEI Ground Search & Rescue, and Holland College. Goal exceeded.
-Roughly 70 students participated in the sporting clay shoot. Goal met.
-90 people successfully completed the online hunter education course. Goal exceeded.

Ducks Unlimited Canada
Project Title: Wetland Education Through Experiential Learning

Brief Summary:
Over 450 high school and elementary students took part in DUC's hands on wetland education program this year. CRHS students conducted several action projects, including mentoring visiting Gr. 4 classes on the importance of wetlands.

Project Results:
In our original application, our project goals and objectives were outlined based on the elementary level education program (Wetland Field Trip) and high school level (Wetland Centre of Excellence).

Our project goals for the WFT program were all met or exceeded. Nineteen Grade 4 classes (350 students) participated in the WFT program, surpassing our goal of 16 classes. These classes were provided with a high-quality wetland field trip program that was safe, accessible, and engaging for students in addition to wetland education educational resources. Feedback that we received on the quality of the program and materials echoed these findings, and indicated it's curriculum connection, applicability to their classes, and quality of the program. The partnership with the Charlottetown contributed to the success of the field trips, with high school students sharing their expertise and experience stewarding the site, while providing students with training. Two high school students expressed their interest in developing their public speaking skills, and several expressed interest in continuing in the conservation field upon graduation. Elementary level teachers were provided with an online feedback form to complete after their field trips. We had an 89% return rate with 17/19 teachers completing the feedback form, surpassing our goal of 80% return rate. We received overwhelmingly positive feedback on the program with 16/17 (94%) teachers providing a 5/5 rating on the overall educational value of the trip (the other one gave it a 4/5), surpassing our goal of a 90% satisfaction rating. See attached file for all teacher feedback and comments.

Another goal of this program was to incorporate Traditional Ecological Knowledge and Mi'kmaw language intro field trip delivery and print materials. Led by the Outreach Specialist of Indigenous Engagement, we developed a flora and fauna guide that was used during the nature walk component of the field trip. The guide includes culturally important species such as wisqoq, wild rice, eel, bear, eagle and more. It also included the translation and pronunciation of these species. The production of this guide was made in consultation with an elder and community. This goal was met in the development of this guide, however much more can and should be done to ensure traditional ecological knowledge and indigenous perspectives are an integral part of all environmental education programs and we will continue to support this.

This project was shared on our DUC- Atlantic social media pages (Facebook, Instagram, and X), that have a combined following of over 12,000 followers. PEI WCF was recognized on social media posts, as well as in DUC's annual report, media releases and other communications (see communications strategy).

For the Wetland Centre of Excellence component of the project, all goals were met or exceeded. See attached report from WCE lead teachers which outlines projects completed this year.

For virtual networking sessions, WCE students participated in 2 annual webinars (Fall 2022 and Spring 2023). WCE teachers also participated in a virtual session with WCE teachers across Canada to collaborate on action projects and best practices.

WCE students conducted four action projects supporting wetland and wildlife conservation, surpassing our goal of two. These included trails clean ups/ maintenance (Hurricane Fiona debris and garbage), removal of invasive species (Bittersweet nightshade and Glossy Buckthorn), construction of benches and picnic tables for site enhancement, and planting of native species, including wisqoq (black ash). This is in addition to participation in virtual and in person presentations from DUC, local Elders, and other organizations to support the development and implementation of action projects.

The mentorship aspect of the WCE project was integral to the success of the project. We trained 115 high school students on mentorship activities and best practices, surpassing our goal of 50 students. We aimed to provide this to two classes, but garnered interest from four classes, resulting the more than doubling of our results.

Ellen's Creek Watershed Group Inc.
Project Title: Urban Watershed Restoration

Brief Summary:
Our project, spanning the Ellen's Creek watershed in Charlottetown, successfully removed litter from streams and riparian areas. Strategic documentation of debris collected informed long-term solutions, ultimately improving urban wildlife habitat.

Project Results:
Enhancing wildlife habitat: We enhanced wildlife habitat by removing litter from streams and riparian areas in the Ellen's Creek watershed. Through weekly clean-up efforts in targeted areas, we established litter-free wildlife habitats.

Community engagement: We held a day-long volunteer event (dedicated solely to this project) with 15 volunteers.

Public awareness: We used social media and face-to-face interactions to share information about this project and about the PEI Wildlife Conservation Fund.

Documenting and categorizing litter: Keeping track of every piece of litter that we collected allowed us to come up with simple yet effective solutions to reduce the spread of litter on a long-term scale so that wildlife habitats remain litter-free even when we don't have the capacity to carry out weekly cleanups.

PRINCE EDWARD ISLAND WILDLIFE CONSERVATION FUND

Hillsborough River Association Inc.
Project Title: Hillsborough River Biodiversity Enhancement & Fish Passage Improvement & Commencement of the Amelioration of Critical Areas of Post-Tropical Storm Fiona Damage

Brief Summary:
In 2023, HRA: improved fish passage and spawning/rearing habitat by assessing/addressing Fiona blockages and beaver activity; surveyed salmonid populations and redds; planted and/or provided 799 trees and shrubs; sanitized 30+ bird nest boxes; etc.

Project Results:

- **Assess and ameliorate critical areas of post-tropical storm Fiona damage and winter storm events (i.e. access trails to watershed improvement areas, electro seining sites, and salmon spawning areas) and in at least two major tributaries of the Hillsborough River:** Staff walked Clark's Creek, Callaghan's Brook, the Head of Hillsborough Main Branch, and Tannery Creek to assess blowdown removal needs. Where necessary, blockages caused by fallen trees and assorted woody debris were removed to improve or restore finfish access. A total of 170 in-stream blowdowns were removed, and 18 intentional habitat brush piles were created throughout the stream-clearing process.
- **Assess and address beaver activity which blocks finfish access on at least two major tributaries of the Hillsborough River:** Staff walked Clark's Creek, Callaghan's Brook, the Head of Hillsborough Main Branch, and Tannery Creek to assess dam removal and trapping needs. Where necessary, beavers were trapped and dams were breached to improve finfish access. For example, one beaver was recently removed from the Head of Hillsborough system, four large beavers (i.e., breeders) were removed from the upper end of Clark's (i.e., Jay's) Pond (Clark's Creek), and two small dams were removed from Callaghan's Brook.
- **Repair, replace, or disinfect 30 Tree Swallow nest boxes and 2 American Kestrel nest boxes:** 28 Tree Swallow nest boxes were inspected and cleaned between Jay's Pond (Clark's Creek) [1], Fort Augustus (Avery Property) [1], and Pigot's Trail in Mount Stewart (26). Ten Tree Swallow boxes were also inspected and cleaned in Orwell Cove in collaboration with PREP. Lastly, two American Kestrel nesting boxes were inspected and cleaned in Marshfield (no Kestrels nested in them this year). No new next box installations or repairs were required.
- **Enhance native plant biodiversity and riparian zone structure along two major Hillsborough River tributaries:** HRA acquired a total of 799 native trees and shrubs from the J. Frank Gaudet Tree Nursery in 2023. Some were planted within HRA's stated jurisdictions (e.g., Clark's Creek), others were provided to private landowners for planting (e.g., Mermaid), and others still were provided to PREP for planting in their stated jurisdictions (e.g., the Seal River). Also, 100+ conventional brush piles were created during terrestrial trail clearing.
- **Improve finfish spawning and rearing habitat in Hillsborough River tributaries:** Two brush mats covering a total of 10 metres were installed in the Head of Hillsborough Main Branch directly below Warren's Pond. Work on trail and stream access from Fiona damage prevented the balance of the proposed brush mat installation (i.e., 50 metres). Otherwise, five floating log cover structures, two conventional submerged plank cover structures, and a flow deflector log were installed here. Also raked 40 square metres of cobble directly below the Warren's Pond fishway. Lastly, trimmed back collapsed alders where necessary throughout Hillsborough River tributaries.

- **Install 5 Wildlife Conservation Fund signs:** Three WCF signs printed and provided by the HRA were installed in the Pisquid River Watershed by PREP. Five more WCF signs will be installed in the HRA's stated jurisdictions in the new year.
- **Host two educational community events focused on wildlife habitat stewardship and identification**: In 2023, HRA, PREP, and FF&W collaboratively hosted three educational field trips for Mount Stewart Consolidated School, Donagh Regional School, and École François-Buote. These trips featured smelt dip netting, electrofishing, and riparian zone tours, covering fish habitat, fish identification and ecology, enhancement techniques, riparian zone enhancement techniques, and forest ecology. As well, an interpretive walk and hike was held at Pigot's Trail, a forest ecology tour was held at the Lady's Slipper Trail, and photo essays on HRA and PREP's stream enhancement and watershed management work were presented to several groups.
- **Conduct fish and point source erosion surveys:** Both electrofishing and redd surveys were conducted in Clark's Creek (Main / Callaghan's Branch) and the Head of Hillsborough (Main Branch & Fanning Brook Branch). Point source erosion surveys were also conducted. Despite a tremendous effort to open stream enhancement trails and remove instream obstructions, redd surveys could not be fully completed due to remaining fallen and/or broken trees caused by post-tropical storm Fiona; i.e., 12.5 - 25% of the primary streams were not accessible for redd counts due to Fiona-related obstructions. For results and details, see the supplemental Dropbox link provided below.
- **Conduct smelt surveys:** Surveys were undertaken in the Hillsborough River and its tributaries to determine smelt numbers and the upper limits of smelt spawning locations. A report is currently in the works.
- **Install temperature loggers and collect water samples for nitrate analysis on the Head of Hillsborough and Clark's Creek:** Monitoring of stream temperature and nitrate levels was undertaken in Clark's Creek (and Callaghan's Brook), the Head of Hillsborough Main Branch (and the Fanning Brook Run), and the Glenfinnan River. Also, point source stream temperature recordings were noted during electrofishing surveys. For results and details, see the supplemental Dropbox link provided below.
- **Document our wildlife improvement actions via our website and social media platforms, in our *Hillsborough Tidings* newsletter, and at least one press release to various Island media outlets:** Three press releases were published in *The Buzz* between May 1st and June 11th. A *CBC Radio* interview with Laura Chapin was aired on May 1st. Event posters were displayed at 15+ locations. Eighteen social media posts acknowledging watershed work and promoting watershed events were issued and/or shared via HRA's Facebook, Twitter, and Instagram accounts. (The WCF was acknowledged in relevant social media posts.) The WCF's contributions to our work were also highlighted at HRA's AGM. The WCF's contributions to the HRA were acknowledged in the March 2023 and issue of the *Hillsborough Tidings* and will be included in the March 2024 issue - the *Tidings* being provided to the Confederation Library and UPEI's Robertson Library for posterity. The WCF was also acknowledged at relevant public meetings and events. Lastly, HRA also provided background material for the Foundation for Conservation of Atlantic Salmon's Annual Report.

Hunter-Clyde Watershed Group
Project Title: Post-Fiona Wildlife Habitat Restoration in the Hunter River Watershed

Brief Summary:
Hunter-Clyde Watershed Group worked towards kick-starting ecological rehabilitation of the Hunter River watershed after the devastating impacts of Post-Tropical Storm Fiona through tree planting, nest boxes, and garbage removal.

Project Results:
In total 1357 native trees/shrubs were planted in riparian, shoreline, forest, field, and hedgerow habitats in the Hunter River watershed. 200 + hardwood trees were guarded either using stakes and hardware cloth or plastic tree guards to protect them against grazing. A total of 932 trees/shrubs were planted in riparian areas. Some of these areas were previously unforested field or lawn, and other areas were beaver meadows or forests. 116 trees/shrubs were planted along the shoreline. Some were replacing trees and shrubs lost in Post-Tropical Storm Fiona, and others were planted to stabilize banks with native species. 15 trees were specifically planted in forested habitat, however, many of the trees in riparian areas were in forested habitats. 102 trees/shrubs were planted in fields or lawns that were previously unforested (at least for many years). 192 trees/shrubs were planted either to increase an existing hedgerow, or to create a hedgerow.

Five cover logs were installed using woody debris and were placed in areas that are potential brook trout spawning habitat. Two were installed on the Clyde Stream, one on the main branch on a stretch above Campbell's Pond, and two were installed near pools on Moffat's Brook.

Refuse was removed from one kilometer of stream, 5.4km of shoreline and some roadsides as work was carried out. Garbage was also emptied from garbage cans at Campbell's Pond on a regular basis so that there were garbage cans available to reduce the amount of roadside or stream garbage. Four fishing line collection tubes were installed. Three were installed at popular fishing spots at Campbell's Pond and one was installed near the sewage facility in Hunter River which is next to another popular fishing spot. ~65m of fishing line were collected from these tubes over the course of the summer. Although the staff carried out many shoreline clean ups without community help, there was one community beach clean up where there was a total of 8 people removing garbage from the North Rustico Harbour shoreline one evening. Over the course of the summer, 915kg of garbage were removed from beaches, shorelines, and roadsides. The weight slips were not able to be kept as IWMC was unable to provide us with them because we were not the organization it was billed to due to the nature of the garbage.

10 tree swallow nest boxes were installed with 6 being installed at a property in New Glasgow and 4 being installed at Farmhouse Inn. One kestrel box was replaced at our office in Greenvale. One owl box was installed at Farmhouse Inn along with one duck box.

Fish passage was improved along 11.77km of freshwater stream by the removal of natural blockages. A lot of these blockages were the result of Post-Tropical Storm Fiona. This exceeded our goal of 10km.

On June 9th our watershed group along with Wheatley River Improvement Group hosted Environmental Fun Day where ~60 students from grades five and six and their teachers joined us at Rackham's Pond to

learn about preserving habitat for wildlife, bats, fish identification, birds of prey, and bug hotels. An oak tree was given to each student.

On October 14th, we hosted a native tree ID walk and had a total of 11 people. We created laminated flashcard sets ahead of time as a helpful guide for our attendees to borrow and printed copies for them to take home. Jack Quigley volunteered to lead the walk and taught the attendees to distinguish between the native maples, spruces, balsam fir, hemlock, ground hemlock, aspens, pines, and birches. At the end of the walk, they were instructed on how they could press the leaves they had gathered at home. Throughout the summer, we set up information booths at more than 5 events to talk about our projects, funders, as well as general wildlife and watershed-related information. We had booths at events such as North Rustico Canada Day, River Clyde Pageant, Cavendish Beach Hut with Parks Canada, Riverbank Heritage Day, and Rivers Day Festival.

Lastly, we teamed up with the Central Queens Branch of the PEI Wildlife Federation (CQWF) to have an educational tree planting session with the students and staff with Wild Child. We gathered at Strathgartney Provincial Park where we talked about watersheds and discussed why trees are invaluable to water quality, and then we helped CQWF plant around 50 native trees and shrubs.

Island Nature Trust
Project Title: Surveying PEI's Coastline for Bank Swallow

Brief Summary:
Fifteen volunteers and nine partner watersheds were trained to survey over 500km of PEI's coastline for Bank Swallow breeding habitat. One hundred and sixty-three active colonies were observed during these surveys.

Project Results:
Goal 1: Recruit, train and support new volunteer Guardians to survey for Bank Swallow colonies and to be ambassadors for their conservation.
There were 33 active volunteers in the Coastal Guardian Program this year. The Coastal Guardian Program aims to facilitate volunteer stewardship of PEI's coastal ecosystems, emphasizing Piping Plover and Bank Swallow, two species at risk. A virtual training session was held for Coastal Guardians on March 16th. The training covered Bank Swallow and Piping Plover biology and threats, survey methods for species monitoring, and a public outreach piece directing Guardians on how to best serve as conservation ambassadors while interacting with the public. There were 19 Guardians in attendance. In collaboration with the Atlantic Canada Bank Swallow Working Group, survey methodologies have been developed over the past two years. A call for Bank Swallow volunteers was deployed on Island Nature Trust's social media in early June, yielding 28 responses. Once an interest in volunteering was expressed, volunteers were given materials to support them in their survey efforts. These resources included a copy of the Coastal Guardian Field Guide, the Bank Swallow Monitoring Protocol, survey forms, a Swallow ID Guide, and the tools and instructions needed to sign up for survey routes. Fifteen volunteers conducted surveys this year and spent 45.74 hours surveying for Bank Swallow. An additional 30 people were unable to volunteer in 2023 but expressed interest in becoming a Coastal Guardian in the future. These individuals have been added to an email list for training in 2024.

Island Nature Trust also partnered with nine watershed groups who completed Bank Swallow surveys within their respective watersheds. Two training sessions were held for partner watershed groups. Watersheds from Prince County met for training at the Tignish Watershed office on May 29th. Coordinators and seasonal staff from Tignish & Area Watershed Management Group, Roseville-Miminegash Watersheds Inc., Cascumpec Bay Watershed Association, and Richmond Bay Watershed Association were in attendance. Watersheds from Queens and Kings County met for training at the Carriage House in Charlottetown on May 30th. Representatives from Morell River Management Co-operative, South Shore Watershed Association, Kensington North Watersheds Association, and Winter River-Tracadie Bay Watershed Association were in attendance. Following the presentation, an email was sent with the data sheets, slideshow, and protocol, and they were encouraged to reach out if they had any questions or concerns. The watershed groups completed 83 Bank Swallow Surveys, identifying 61 of the 163 colonies recorded this season.

Goal 2: to increase knowledge with respect to arrival dates, nest initiation dates and departure dates for PEIs Bank Swallow population.
Six Bank Swallow colonies were surveyed weekly from May 1st until August 31st. There were two colonies in Darnley and single colonies in Wood Islands, Launching, Rock Barra, and Red Point. Bank Swallows were first observed in PEI on May 4th; however, the first sighting at one of the six

colonies was on May 24th at Wood Islands. The other colonies had Bank Swallow return during the first week of June. Bank Swallows quickly initiated nest building, with the first bird observed excavating burrows on May 24th. Bank Swallows were last observed with nesting material on June 13th.

Chick hatching occurred in early July, as evidenced by the appearance of fecal sacs, which are commonly used to confirm chick hatching. The first fecal sac was observed on July 2nd. Nestlings move to the burrow entrance at 15-17 days of age and finally fledge at 18-22 days of age. Nestlings were observed at burrow edges from July 16th until August 24th.

Nestlings and adults were both last observed in Wood Islands on August 24th. At the time, only two adults and two nestlings remained at the colony. There was a notable difference in departure dates between Wood Island and the other colonies. Bank Swallows were last observed at Darnley on August 16th and at Red Point, Old Ferry Spit, and Rock Barra on August 8th.

While a single year of data is insufficient to make broad generalizations about Bank Swallow breeding phenology, it is an essential step in tracking trends over time.

Goal 3: to add to the knowledge of distribution of Bank Swallow across PEI.
In collaboration with the Atlantic Canada Bank Swallow Working Group, a new survey methodology was adopted in 2023. The entire coastline of PEI was broken up into several hundred routes, ranging from 0.5km to 10km in length. Each route was mapped and given a distinct name. A signup sheet was created with a list of routes. Volunteers were encouraged to sign up for one or more routes.

INT staff, partners and volunteers surveyed 523 kilometres of coastline using the methodology set out by the Working Group. Through the surveys, 163 Bank Swallow colonies were identified, and valuable information was gathered about habitat attributes and landscape variables. On routes without Bank Swallow, areas of “suitable habitat” (defined as a bank over 0.5m tall with an approximate slope of 70 degrees) were also identified to help guide future survey efforts and inform the designation of critical habitat.

Goal 4: to reach PEI beach users with a message of Bank Swallow conservation.
During the virtual training session, volunteers were coached on how to best engage with landowners and beachgoers about Bank Swallow. Throughout the season, members of the public were engaged opportunistically. Staff and volunteers reported generally positive interactions with the public.
For routes that were not publicly accessible, surveyors were required to ask landowners for permission to use their land for coastal access. This provided an excellent opportunity to engage with members of the public, some of whom lived near active Bank Swallow colonies. All of the twenty-two landowners approached granted access to the coast through their property. Most surveyors did not record any details on the interaction beyond permission being granted. However, for the five interactions for which greater detail was recorded, interactions were positive and landowner attitudes towards Bank Swallow and Bank Swallow conservation efforts were positive.

Informational door hangers created by Island Nature Trust were opportunistically distributed to property owners along the coast.

Goal 5: to add to the regional, national and continental data for this species.
All data collected through this project is being prepared for sharing with the Canadian Wildlife Service, the Atlantic Canada Conservation Data Centre, provincial Forest, Fish and Wildlife and the Atlantic Canada Bank Swallow Working Group. Island Nature Trust is an active member of the Atlantic Canada Bank Swallow Working Group, and this work will contribute to larger regional and national recovery goals for this species.

Island Nature Trust
Project Title: Empowering Volunteers to Promote Wildlife & Habitat Conservation

Brief Summary:
INT recruited and provided training/resources to new volunteers and provided workshops to educate current volunteers in the Conservation Guardian program. Well trained Guardians are essential to keep Natural Areas healthy to sustain our wildlife.

Project Results:

- Goal 1. Engage new volunteers in the Conservation Guardian program through the delivery of three public introductory workshops (one held in each county). We conducted three public introductory workshops in Charlottetown, Alberton, and Montague, with a combined attendance of five people. Since the attendance was significantly below our anticipated result of five attendees per session INT staff engaged in three other events based in Charlottetown to increase our reach. INT staff participated with a table at in the Holland College Volunteer Fair, a display at a workshop held for private stewards, and gave an overview of the program at a public interpretive walk with the PEI Invasive Species Council. The supplementary events helped us reach 28 other individuals.
- Goal 2. Empower and educate current volunteers through the delivery of at least two workshops relating to wildlife and plant identification (in person and/or online). We conducted two in person workshops for Conservation Guardians including a Krumholtz ecosystem walk in partnership with Macphail Woods Ecological Forestry Project and an invasive species walk in partnership with the PEI Invasive Species Council. Six individuals participated in the invasive species walk and 16 individuals participated in the Krumholtz walk. Our anticipated result was 10 participants per workshop, therefore, on average this turnout meets our goal of 20 individuals.
- Goal 3. Support volunteers by providing in-person field training at local sites (natural areas), either one-on-one or in small groups. We conducted training for a total of 18 new Conservation Guardians. All training sessions except one were conducted in-person at the Natural Area they were assigned to. Training consisted of providing Conservation Guardians with information on how to access their site, what to look for while monitoring their site, and how to report their monitoring to INT staff. This result exceeds our anticipated result of training 10 new volunteers.
- Goal 4. Provide Conservation Guardians with materials and resources to assist with their field visits (for example, animal ID guides, first aid supplies, compasses, notebooks, etc.). We provided materials and resources to each Conservation Guardian at their training sessions. This included tick removal tools, field guides, notebooks, compasses (if applicable), safety whistles, and invasive species quick reference guides. In addition, we distributed information to the six Guardians who attended the invasive species walk and three other Guardians who visited our office. Therefore, we distributed materials to a total of 27 volunteers throughout the course of this project. This result was just short of our anticipated result of distributing materials to 30 volunteers.
- Goal 5. Establish a pilot for the "Natural Nurseries" volunteer project, recruiting and training four volunteers to collect and grow native tree and shrub seeds, which will be planted in INT natural areas once they reach seedling size. We did not proceed with this goal due to the reduced amount of funding available.

Kensington North Watersheds Association

Project Title: Collecting baseline data on KNWSA songbird, amphibian and bat riparian habitat use in a disturbed landscape, with focus on SAR (Canada warbler, eastern wood pewee, olive-sided flycatcher and little brown and northern myotis).

Brief Summary:

Kensington North Watersheds Association deployed 8 acoustic recording units in disturbed riparian areas in the greater Kensington region for 6 months to gather baseline data on the prevalence and range of songbird, amphibian, and bat species.

Project Results:

This project was successful in gaining baseline data on the prevalence and range of songbird, amphibian, and bat species in eight disturbed riparian areas in the greater Kensington region through the use of acoustic recording units. A study area was determined based on species distribution maps provided by Island Nature Trust and guidance provided by Fish and Wildlife. Eight acoustic recording units were programmed with guidance from Fish and Wildlife and maintained monthly.

Morell River Management Cooperative
Project Title: Water Quality Improvement on the Morell River

Brief Summary:
MRMC successfully restored access for native fish to reach nearly 40km of in-stream habitat on Morell River. Removing blockages also improved water quality conditions by keeping water flowing, preventing warm stagnant water with low dissolved oxygen.

Project Results:
1. Restore access to cold water habitat for native fish on the Morell River - A total of 38.1km of the Morell River was made accessible by clearing blockages and windfalls restricting native fish migration (East Branch – 9.2km, West Branch – 16.5km, South Branch – 4.5km, Main Branch – 7.9km).

2. Improve water quality on the Morell River - By removing six beaver dams and 60 logjams, water flow was restored to keep water cooler and flowing. This prevented stagnant water from warming which in the past has resulted in low dissolved oxygen conditions that can be fatal for some fish species.

3. Monitor water quality parameters on the Morell River - a total of six dissolved oxygen loggers and eight temperature loggers were deployed on the Morell River to monitor water quality parameters.

4. Increase the amount of fish cover on the Morell River - When clearing logjam blockages on the Morell River, trees were strategically cut to allow adequate water flow while still providing woody debris fish cover. Logs that were directly in the water causing restricted water flow were cut and turned into cover logs (n=11). Trees that fell across the river but were not directly impeding flow were limbed and left as wildlife crossings (n=13). Clusters of woody debris were left in-stream at each of the logjam sites.

5. Create access to project sites - before in-stream work began our chainsaw operators successfully cleared access trails for safe and efficient access to project sites (n=6).

Nature PEI -- The Natural History Society of Prince Edward Island
Project Title: PEI Species-at-Risk (SAR) Travelling Museum Display

Brief Summary:
Nature PEI created a Travelling Museum on PEI's Species at Risk. Since June 2023, it has visited six locations, engaged Islanders and visitors of all ages, and has resulted in more awareness of SAR and of what protective actions people can take.

Project Results:
The Nature PEI Species-at-Risk Travelling Museum has visited six locations from June 2023 to December 2023

1. Tryon Museum, June 20 - July 13, over 20 people visited
2. Basin Head Fisheries Museum, July 13 - August 11 -- over 200 people visited
3. Bedeque Area Historical Museum, August 11 - September 5 -- over 100 visitors
4. Carr's Wildlife Museum, Stanley Bridge, September 5 - October 30 -- over 150 visitors
5. Acadian Museum, Miscouche, October 30 - November 27 -- over 100 visitors
6. Charlottetown Library Learning Centre, November 27 - present -- estimating over 4,000 visitors
   This is near our target of 5,000-plus visitors. Many visitors provided comments, but only about 10% left pledges in the pledge box. The pledges have been very sincere, ranging from people planning to become more informed, to give to land protection groups, to reduce carbon emissions, go on nature field trips, etc. Pledges include:
   a. "I will participate in shoreline cleanups in the spring"
   b. "We will plant milkweed for the butterflies""I will find out more about these species at risk, and donate to Island Nature Trust."
   c. Children have been taking the stickers (over 500 so far) and have been matching their footprints to those of the plover and black bear on the mat.
   d. We added a PEI bear jaw to the display. We mentioned about collecting black bear stories, but would need a more concerted effort to encourage people to post on our Facebook page and to encourage submission of written stories. The main idea is to have people realize that Black Bears once lived in their community and are no longer present. People of all ages have been rotating the cube display to reveal more photos of species at risk.

Pisquid River Enhancement Project

Project Title: Hurricane Fiona Recovery & In-Stream/Riparian Habitat/Biodiversity Enhancement with a Focus on Fish

Brief Summary:

In 2023, PREP: improved fish passage and spawning/rearing habitat by assessing/addressing beaver activity and Fiona-related blockages; surveyed salmonid populations; planted and/or provided 728 native trees and shrubs; installed nest boxes, etc.

Project Results

- **Where necessary, assess and address terrestrial and in-stream blowdown damage from storm events in the Pisquid, Vernon, Seal, Orwell, and Newtown Rivers as well as Ross Creek - with a focus on the impacts of Hurricane Fiona, of course:** Crew primarily walked the East and West/Main branches of the Pisquid, the Main and Glencoe branches of the Vernon River, and the Seal River. Terrestrial and in-stream obstructions caused by beavers, Hurricane Fiona, and other storm events were assessed and addressed to improve finfish access/passage, and worker access to enhancement and/or monitoring sites - mostly notably, 749 obstructive in-stream blowdowns were removed to assure fish passage, primarily from the Pisquid and Vernon Rivers. Collapsed alders were also trimmed to prevent woody debris congestion.
- **Where necessary, assess and address obstructive beaver activity the Pisquid, Vernon, Seal, Orwell, and Newtown Rivers as well as Ross Creek:** Sixteen beavers preventing fish (e.g., Atlantic salmon) passage were removed from the Ross Creek and Pisquid, Vernon, and Seal River watersheds.
- **Restore salmonid spawning and rearing habitat (e.g., holding pools and cobble substrate) by excavating and stabilizing silt from our High Bridge Road silt trap on the Pisquid River:** We had two Pisquid River sediment traps excavated at the High Bridge Road (540 cubic metres) and the Dunphy Road (270 cubic metres), for a total of 810 cubic metres excavated.
- **Where necessary along the Pisquid, Vernon, Orwell, and Newtown Rivers, enhance native plant biodiversity and riparian zone structure - and compensate for Fiona losses - by planting 400 native trees and shrubs and caring for new and previously planted trees and shrubs:** PREP received 728 native trees and shrubs from the J. Frank Gaudet Tree Nursery this season. Most were planted within the Clark's Creek and Pisquid and Seal River watersheds, with some having been provided to private landowners. 150+ conventional brush piles were created during terrestrial trail clearing in our stated jurisdictions.
- **Improve multi-species fish passage and finfish spawning and rearing habitat where necessary in the Pisquid, Vernon, Seal, Orwell, and Newtown Rivers as well as Ross Creek (e.g., brush mat installation):** Due to time constraints related to the extensive Hurricane Fiona damage throughout our jurisdictions (both in-stream and terrestrial), we were only able to install a pair of flow deflector logs in the Pisquid River East Branch. That said, we did assist the HRA with the installation of brush mats and cover structures in the Head of Hillsborough Main Branch.
- **Host educational events and meetings to inform the public about wildlife habitat stewardship and responsible/ethical conduct according to recreational codes of ethics:** In 2023, PREP, HRA, and the Forests, Fish, & Wildlife Division (FF&W) collaboratively hosted three educational field trips for Mount Stewart Consolidated School, Donagh Regional School, and École François-Buote. These trips included smelt netting, electrofishing, and riparian zone tours covering fish habitat, fish identification and ecology, enhancement techniques, riparian zone enhancement techniques, and forest ecology. A

forest ecology tour was also held at the Lady's Slipper Trail in Dromore, and photo essays on PREP and HRA's conservation efforts were presented to multiple groups.

- **Install temperature loggers and collect water samples for nitrate analysis in the Pisquid, Vernon, and Seal Rivers:** Monitoring of stream temperature and nitrate levels was undertaken in the Pisquid, Vernon, and Seal rivers. Also, point source stream temperature recordings were noted during electrofishing surveys. Regrettably, due to irregularly heavy rainfall, our Seal River temperature logger was lost during a high water event and said data could not be retrieved as such. For results and details, see the supplemental Dropbox link provided below.
- **Conduct fish and point source erosion surveys (e.g., runoff) where necessary throughout our jurisdiction:** Both electrofishing and redd surveys were conducted in the Pisquid, Vernon, and Seal rivers. Point source erosion surveys were also conducted therein. Despite our dedicated crew's massive efforts to open stream access trails and remove in-stream blockages, redd surveys couldn't be fully completed; e.g., redds couldn't be observed in approximately 20% of the Vernon River Main Branch due to Fiona-related obstructions. For results and details, see the supplemental Dropbox link provided below.
- **Document/disseminate our wildlife improvement actions via our Facebook page, in the Hillsborough RiverAssociation (HRA)'s *Hillsborough Tidings* newsletter, and at least one press release to various Island media outlets. (HRA will also help communicate our collaborative work via their Facebook, Twitter, and Instagram accounts.):** Twenty-two (22) Facebook posts acknowledging watershed work and promoting watershed events were issued and/or shared via our Facebook page, with the WCF having been acknowledged in relevant posts. Some of our work was also highlighted via HRA's Facebook, Twitter, and Instagram accounts. The WCF's contributions to our work were also highlighted at HRA's AGM and in the March 2023 issue of the *Hillsborough Tidings,* and will be included in the March 2024 issue - the *Tidings* being provided to the UPEI Robertson Library and Confederation Library archives. We also acknowledged the WCF at relevant public meetings and events, and provided background material for the Foundation for Conservation of Atlantic Salmon's Annual Report.
- **Undertake smelt surveys:** Smelt population and habitat surveys were undertaken in our stated jurisdictions and a report is currently in the works.
- **Install Tree Swallow, Wood Duck, and Barred Owl nest boxes (six total):** We installed one Wood Duck nest box in the Dromore wetlands as well as three Tree Swallows nest boxes on Walter Redmond's Avondale property - both in the vicinity of the Pisquid River. We also inspected and sanitized 30+ other nest boxes in collaboration with the Hillsborough River Association (Wood Duck, Tree Swallow, Barred Owl). Time constraints prevented the installation of further boxes.
- **Install 5 Wildlife Conservation Fund signs:** We installed three WCF signs printed and provided by the HRA in the Pisquid River Watershed. At least two more WCF signs will be installed in our stated jurisdictions in the new year.
- **Install a rudimentary access bridge at a Seal River education / electrofishing site:** Though the site was assessed and a permit was drafted, the bridge was not constructed due to time constraints related to the *extensive* Hurricane Fiona damage throughout our jurisdictions (both in-stream and terrestrial). We aim to complete it in the Summer 2024 season.
- **Repair the Spirit Spring viewing platform in Dromore, which was damaged during Hurricane Fiona:** Blowdowns were cleared from the viewing platform, the spring, and the vicinity of the spring and the platform was repaired.

South Shore Watershed Association
Project Title: DeSable River Watershed Resiliency for Future Changing Climate

Brief Summary:
The project was focused on the enhancement of habitat resilience and connectivity of the DeSable River. The goals were to protect and improve wildlife habitat by increasing the diversity of native plants and exercising stream restoration techniques.

Project Results:

- *Plant several species to support watershed health* - Several types of native species were planted in vulnerable areas across the watershed. SSWA dedicated time to finding locations in which native trees would thrive and be able to adapt to future changing climates and maximize carbon capture/storage throughout their lifetime. We completed site scouting and planning before planting, then species were chosen for those areas and planted accordingly. This season we surpassed our goal of introducing 200 new trees/shrubs to the DeSable Watershed. The target species planted were Red Maple, Winterberry, Willow, Cedar, Common Elder, Eastern Larch, Red-osier dogwood, and Black Spruce. We also played a role in providing 577 trees/shrubs to landowners and advising them on planting in successful areas.

- *Restore and maintain stream stability* - Stream restoration was conducted along an estimated 9km of watercourse. Focus was put on the main branch and larger tributaries as this is where fish need to travel to spawn. Blockages selected were taken out as needed to provide fish passage and crew access. In locations that were identified as lacking fish coverage, the crew installed artificial cover by using wood pallets and brush. The stream presented a good condition in general, and a couple of brush mats were installed as well. The crew removed anthropogenic waste and identified/assessed runoff input along the stream. We conducted a by-weekly water quality monitoring using a YSI in two sites, the data retrieved from this monitoring showed no concerning measurements. In four sites, we employed temperature loggers from June to October, and it was concluded that no significant temperature variation was identified.

- *Conduct several watershed surveys* - SSWA team focused on conducting surveys, such as water quality by-weekly measurements, rapid geomorphologic surveys, and headwaters health assessments throughout the season. The DeSable River is considered a good habitat for migratory Brook Trout (Salvelinus fontinalis), Rainbow Smelts (Osmerus mordax), and small residential fishes. This statement is backed up with data from electrofishing surveys in six areas, and Redd surveys in five locations. From our electrofishing surveys on the DeSable river system, both branches had an occurrence of invasive rainbow trout (Oncorhynchus mykiss), as of currently they seem to pose little threat to the native brook trout. Rainbow trout were found in low numbers at sites nearer the estuary, and they were nonexistent in sites nearer the headwaters. The native Brook trout are still the primary species in this river. As for the redd surveys, we found evidence of brook trout spawning activity throughout the majority of the river both near the estuary and headwaters. Macroinvertebrate surveys concluded the DeSable River is in general good health due to the presence of pollution-intolerant species. None of our sites were missing these key bio-indicators that point to healthy ecosystems. The SSWA crew conducted headwater assessments on the majority of the river to identify cold water discharge

locations and buffer zone coverage. Rapid geomorphic assessments were carried out as well to determine river functionality. The current land use surrounding area is mostly forested areas, with thick and well-established native vegetation. However, at least 30% of the surrounding area is composed of agricultural fields.

- *Increase and strengthen wildlife habitat* - The SSWA team was able to repair and replace any decaying artificial nesting box where possible, as well as put up new nesting habitat in the DeSable area. This included both bird and bat boxes. Due to PST Fiona, we shifted our goals around stream restoration to leave the majority of natural coverage as it is. We believe in minimal intervention in areas where it is possible to see numerous nesting habitats undisturbed. This approach ends up providing more fish cover as groups of logs are left lying across the stream habitat. Trout spawning habitat connectivity was restored on a large portion of the DeSable River system. For artificial fish cover, it was possible to use and place logs in some areas. SSWA's tree/shrub planting efforts mentioned earlier will provide a strengthened wildlife habitat for years to come as plants mature. For example, Ground cover, nesting habitat, and food for wildlife.

Stratford Area Watershed Improvement Group
Project Title: Pollinator habitat enhancement, wildlife surveys, and community outreach

Brief Summary:
Implemented wildlife surveys, bird monitoring, and efforts to increase public education on pollinators in the Stratford Area. Enhanced local ecosystems, strengthened community ties, and sustained pollinator gardens contributing to urban biodiversity.

Project Results:
The purpose of this project is to increase public understanding of pollinators and engagement with the natural environment via educational signage and garden maintenance while simultaneously expanding upon our personal efforts to monitor and collect data on different aspects of the environment, including amphibians and birds.

Our first activity was to kickstart a bird monitoring program within our watershed group via song meter deployments and bird point count surveys to increase our understanding of the local environment. Our goal was to deploy two song meters three times as well as conduct two bird point count surveys in habitats within our watersheds. Our result was that we deployed two song meters a total of three times across different habitat types, including near streams, within wooded areas, and near a public trail. We also conducted two bird point count surveys to complement data collected from the song meters. This data was collected and shared with ACCDC.

Our second activity was to deploy nine amphibian cover boards in forested areas and check them at least three times. We ended up deploying nine cover boards in forested areas, routinely checking them over the summer and into the early fall a total of 10 times. We also anticipated having three community members participate by each checking a cover board on their property – we achieved this goal.
Our third activity was to execute at least one amphibian call survey throughout various habitats within our watersheds, to further expand upon our understanding of amphibians. We completed this task; members of our staff successfully learned how to conduct these surveys and visited a total of four locations. Data collected from this survey, as well as from our cover board checks, was uploaded to FrogWatch.

Our fourth activity was to maintain our existing pollinator gardens by weeding, re-mulching, pruning, and planting shrubs/wildflowers to continue attracting pollinators to these areas. As previously mentioned, while we were unable to re-mulch the gardens, we did weed and prune the gardens several times over the course of the summer, and we also re-seeded and replanted where applicable with approximately 30-35 shrubs and wildflowers.

Our fifth activity was to increase our public outreach in the Earnscliffe area by distributing 30 door hangers at homes/businesses. We visited the Earnscliffe area to deploy door hangers twice and distributed approximately 30-35 door hangers in total. While we are unable to determine for sure if these efforts directly contributed to membership purchases, we had many positive face-to-face interactions with members of the public while distributing the door hangers and received positive feedback on our current monitoring efforts as well as inquires about future project work.
Our sixth activity was to increase public education of the importance of pollinators by creating two

interpretive signs and installing them at each of our pollinator gardens. As previously stated, we opted to create four signs and will be installing them in the spring as soon as the ground softens.

Tignish and Area Watershed Management Group INC
Project Title: Hurricane Fiona Watershed Restoration Project

Brief Summary:
Fish passage was restored to areas of Tignish Watershed from Foley's Pond to Nail Pond from damage done by Hurricane Fiona.

Project Results:

- 18 Km of watershed that was previously restored has been cleared of any trees, limbs and debris blocking fish passage. Trees have been planted in areas where needed.
- Kildare watershed 3km completed with blockage removal
- Foley's Pond 3 km of blockage removal completed
- Tignish River 6 km of blockage removal completed
- Little Tignish River 3 km of blockages removal completed
- Nail Pond 3 km of blockages removal completed
- These areas have been restored to enable fish passage and trees have been planted in areas where needed to provide fish habitat and eventually shade for the stream.

Trout River Environmental Committee
Project Title: Stream restoration, wildlife enhancement, and public engagement in the nine TREC watersheds

Brief Summary:
This project worked to restore watercourse, riparian, and upland habitat to a more natural state, with the aim of promoting native species throughout our nine watersheds in the Stanley Bridge area.

Project Results:

- Activity/Goal: Clear blockages and restore stream habitat
    - Anticipated Result: Restore at least 5km of streams building brush mats.
    - Results:
        - Removed major blockages (refer to supplemental document for photos) from 2.5km of steam and installed 9 new brush mats and topped up 2 existing brush mats in areas with heavy sedimentation (upstream of the Millvale dam on Trout River) enhancing 500m of stream.
        - In stream blockages posed a challenge this year due to Fiona, where blockages were far larger than in past years, some damming streams and severely blocking water flow. We used 1 chainsaw operator and trained/ certified an additional chainsaw operator who handled minor blockages/chainsaw work in her first year of training.
- Activity/Goal: Plant native trees and shrubs.
    - Anticipated Result: Plant 1500 native trees and shrubs, 200 of them with anti-browse cages
    - Results:
        - Planted 2015 native trees and shrubs in 18 locations around the watershed within riparian areas, in hedgerows and areas impacted by Fiona in need of restoration, this includes 350 trees given away at our Annual Tree Drive and at our Riverbank Heritage Day event. 150 trees were caged with anti-browse cages.
- Activity/Goal: Remove Invasive species (flora)
    - Anticipated Result: Clear 10km of streams of Wild Cucumber, Glossy Buckthorn and/or other invasive species
    - Results:
        - TREC tacked 3 main invasive species this year: Wild Cucumber, Glossy Buckthorn, Japanese Knotweed. We traveled all 7.5km of Founds Rivers and removed Wild Cucumber from the stream using 2 teams with help of Kensington North Watershed Group for a day, as well as 3 additional days removing wild cucumber in founds with smaller teams of 2. The Founds River Watershed is our worst case of invasives, we remove Wild Cucumber from the entirety of the stream each field season. We removed invasive species from 3 additional sites, the largest being 1.2km of almost consistent Wild Cucumber from riparian area, stream, and hedgerow in an upper tributary of Granville Creek.
        - We also removed Glossy Buckthorn from the Devil's Punchbowl Trail in riparian areas of Granville Creek with the help of the PEI Invasive Species Council for the second year in a row. We pulled the shrub and girdled larger shrubs when

pulling was not possible, even with an extractigator. This also involves removing and bagging all fruiting branches and removing all fallen berries to manage its spread. (refer to attached image). We removed large patches of Glossy Buckthorn along the Granville Creek estuary beside the TREC office, and identified several new Glossy Buckthorn sites for use by the PEIISC and future work. Removal of this invasive species is extremely important to wildlife because of the harmful impacts it can have on songbird populations.

- We managed Japanese Knotweed in several areas previously identified around the TREC watershed, mainly along Trout River, Hope River and Granville Creek. We assisted Parks Canada in the removal of Garlic Mustard in the Cavendish Beach, PEI National Park on June 8th.
- We also identified a large roadside site of Wild Cucumber along Grahams Road which we will be tacking with a large crew in the 2024 field season, as well as and several other new wild cucumber sites.
- Lastly we educated the public on invasive species and management by sharing information at public outreach events that TREC was an exhibitor or hosted, inviting the PEI Invasive Species Council to events we hosted and helped organize, and shared social media posts, news articles and newsletters to the public.

- Activity/Goal: Build and mount bird and bat boxes
- Anticipated Results: 10 tree swallow boxes and 5 multi-chamber bat boxes built and mounted
- Result:
  - Installed 27 tree swallow nesting boxes (use of 2nd WCF project), 5 bat boxes, and built 15 barn swallow perches (refer to supplemental document for design).
- Activity/Goal: Educate and inform the local population.
- Anticipated Result: Have 40 people come to our Tree Drive event. Have 10 people come to a native Plant Walk. Have 20 people attend volunteer work events.
- Result:
  - 75 people attended our Annual Tree Drive held at the North Granville Community Centre, 340 native trees and shrubs were given away, and planting and information guides were given away with associated species to landowners.
  - The field crew assisted landowners in choosing species suitable to their property type and gave advice on planting, benefits to wildlife etc. We had to postpone and then cancel our Native Plant walk due to continual rain on weekends overlapping with Plant Guide availability issues. We had a tree/shrub planting day at the Trout River Community Park in Millvale, November 15th, with 7 volunteers attending for 1.5 hours.

Trout River Environmental Committee
Project Title: Spring Tree Swallow Nesting Box Installation

Brief Summary:
TREC installed 27 tree swallow nesting boxes on poles in the Stanley Bridge area and captured entertaining and educational footage of the chickadee nesting process, capturing footage from egg to full fledged chickadee in a compressed 3 minute video.

Project Results:

- Activity/Goal: Install nesting boxes.
    - Anticipated Result: 21 new nesting boxes will be installed on poles with predator guards throughout the TREC watershed
    - Result: 27 nesting boxes were installed on poles in the TREC Watershed.
- Activity/Goal: Repair and replace existing nesting boxes as needed.
    - Anticipated Result: All nesting boxes in the field will meet requirements for nesting.
    - Actual Result: All nesting boxes in the field meet requirements for nesting i.e. are on poles, in suitable locations, and are accessible for cleaning and maintenance. Repairs and retrofits were performed on 21 nesting boxes previously built by TREC before being installed in the field and maintenance and cleaning was preformed again after use during Nov. use survey.
    - Repairs and retrofits included ensuring nesting boxes could be easily opened through a side or front wall by removing one screw only, the TREC logo was stencilled onto the wall that could be accessed. Walls and roof were repaired to fit tight, and the wall below the entrance hole was roughened with carved lines to ensure tree swallow fledglings could easily exit the nest when ready.
- Activity/Goal: Add predator guards to new and existing nesting boxes
    - Anticipated Result: Prevention of predators from using the tree swallow nesting boxes, this can be seen through checks throughout the summer as well as when we empty nesting boxes in late winter/early spring of the following year.
    - Result:
        - We did not end up using pole predator guards as they were seen to have the opposite impact, please refer to the section “Changes to Project Outcome” for more details. Most landowners kept us informed of nesting box conditions throughout the field season when necessary, checks were completed on nesting boxes by field crew. Results from our November use survey determined that only 1 nesting box had been used by a squirrel or chipmunk resulting from the nesting box falling down.
        - After consulting with the Wheatley River Improvement Group, we opted to buy two metal hole guards to install on nesting boxes remaining on trees within the Trout River Park for public engagement that have seen previously use by mammals. These nesting boxes were not included in our survey results as no changes were made to them during the field season due to their use for public engagement.
        - Our nesting box survey results conducted November 7th, 2023 were:
            - 11/20 used by wildlife
            - 4/20 used by tree swallows
            - 2/20 used by other birds
            - 2/20 incomplete nests by birds

- 1/20 used by American red squirrel
- 2/10 inconclusive species nests.

- Activity/Goal: Engage Public through media.
  - Anticipated Result: At least 2 social media posts and 2 County line Courier article will mention the installation of new nesting boxes and WCFs contribution.
  - Result: 3 County line Courier articles were published, 3 mentioning the funder and the project and 1 mentioning the project alone. 3 Facebook posts, 3 Instagram posts, and 1 Blog post on our website were shared about the project and funder, 3 newsletters were sent to TREC members mentioning the project and the funder. (see links and articles in attached supplemental document).
- Activity/Goal: Engage public through wireless trail camera.
  - Anticipated Result: Wireless trail camera will be installed properly on a nesting box which has seen successful nesting in the past, footage of nesting will be shared on social media and on our website to educate and engage the community.
  - Result:
    - A small wireless camera was installed in a nesting box outside of our office in order to capture the nesting process of a tree swallow. A chickadee moved in instead, and this still made for entertaining and educational footage.
    - We retrofit an exiting nesting box, building a housing unit on top of the box and placing the camera attachment on top facing into the box (see supplemental document for design). We were happy with the model of camera chosen as it was easy to install and remove with its magnetic attachment, minimizing the disturbance to the chickadees and allowing us to offload and charge the camera when needed. This camera was able to capture colour video and sound as well as night vision. The camera captured footage of the chickadee partially building the nest, as well as capturing footage from eggs to full-fledged chickadees.
    - We were able to compress the footage into a 3-and-a-half-minute video and shared this on social media, on website under “Resources” and in a blog post (refer to supplemental document). We advertised the video in newsletters, news articles and social media as well (refer to supplemental document). We were also able to create a longer ten-minute video which will be played on a screen at the Carr’s Wildlife Centre along with other wildlife footage (longer video available upon request). The camera was inexpensive, allowing us to purchase 2 others at the end of the season to use in nesting boxes that have seen use by tree swallows, in order to capture footage of the tree swallow nesting process in future years. 2 other cameras were purchased at the beginning of the project in order to test which camera would work best inside the nesting box, one was placed outside of the nesting box and captured other unwanted birds such as starlings, unable to enter the nest (see photo in supplemental document), the other camera will require a larger housing unit or could be used in a larger nesting box such as wood duck or kestrel. Cameras allow for use in remote locations using memory cards or use of Wi-Fi where available.

West Point and Area Watersheds Inc.
Project Title: West Point Watershed activities

Brief Summary:
Our project was to clean up any damage caused by Hurricane Fiona.

Project Results:

- We increased diversity in the forests and beaver meadows by planting 200 trees.
- We were able to provide fish passage upstream by removing blockages and stabilizing any eroding banks.
- We installed several brush mats to relieve systems sediment.
- Maintained the Glenwood pond by cutting grass and weed eating
- Educated the public by having a field day for elementary students.

Wheatley River Improvement Group Inc.
Project Title: Wheatley River fish passage improvement and riparian habitat enhancement.

Brief Summary:
Fish passage and connectivity were improved by removing blockages along >4 km of the Wheatley River and by addressing passage issues at 5 high-priority crossings. Wildlife habitat was enhanced in riparian areas by planting over 500 trees and shrubs.

Project Results:
GOAL 1. Determine the priorities for stream crossing improvements: 125 stream crossings were assessed in 2022. For the current project, these crossings were given a score based on both structural integrity and fish passage ability. The scores were used to colour code the crossings in WGIS (on maps) to simplify prioritization. A map showing these colour coded crossings is included in the "Supporting Documents" attachment (see **Figure 1**). The highest priority crossings were then selected for targeted improvements in the following activities.

GOAL 2. Enhance stream connectivity for brook trout: Stream connectivity was improved by removing in-stream blockages along >4 km of the Wheatley River (a map showing these sections is included in the "Supporting Documents" attachment; see **Figure 2**). Fish passage was improved by addressing a variety of passage issues at 5 high-priority crossings. This included removing sediment (with hand tools) from crossings which were too shallow, and removing debris blockages from crossings that were impassable. As mentioned above (see "Changes to Project Outcomes" section) significant steps were taken to address passage issues at one hung culvert in particular. It was decided that a fish ladder was not the best solution for this site and alternative stream channel design plans were recommended. This particular culvert issue was not addressed within the timeframe of the current project.

GOAL 3. Improve wildlife habitat in riparian areas: Wildlife habitat was enhanced in riparian areas by planting over 500 native trees and shrubs. Areas with narrow buffers and those along agricultural fields were targeted. Maps showing the areas planted are included in the "Supporting Documents" attachment (see **Figure 3** and **Figure 4**). We also planted additional dogwood cuttings (~600 individual stakes) along eroded banks and areas with exposed soils.

GOAL 4. Improve public awareness, community engagement and environmental education, particularly in relation to fish passage and riparian buffer zones: A number of educational activities and communications were offered to community members of all ages in the Wheatley River watershed and surrounding areas. WRIG was active on social media, wrote local newspaper articles, collaborated with neighboring watershed groups, met with local property owners, and interacted with visitors to Rackham's Pond. WRIG also collaborated with neighboring watershed groups to conduct shoreline clean ups, to provide information to the public at Cavendish Beach, and to share learned skills amongst the groups. In partnership with the Hunter-Clyde Watershed Group, WRIG also hosted Environmental Fun Day, an outdoor educational event for local grades five and six students that promotes environmental science and conservation. Over 100 students were in attendance.

Sierra Club - Wild Child PEI
Project Title: PEI Wild Child Forest School (2023)

Brief Summary:
Wild Child Forest School worked to develop an ethic of stewardship & responsibility for the natural environment in children by enhancing their connection to nature through repeated exposure to the same natural area over time with trained staff.

Project Results:
Our goals were:

1. Run 30-40 Wild Child Forest school programs from May- December. We ran a total of 36 programs.
2. Have 350-450 children at our programs, with 9,800-12,600 cumulative hours of immersive outdoor-based experiences. We provided a total of 585 children with 14,170 cumulative hours
3. Evaluate the program with input from parents, children & youth, staff and landowner feedback.
    a. When asked “Have you noticed an increase in your child’s desire to play or explore or talk about nature (ex: plants, bird calls, flowers, squirrels, trees, frogs, etc) since they took part in Wild Child Forest School?” 91.2% of caregivers responded yes.
    b. When asked “Has your child shown greater comfort and willingness to go outside in "not nice" weather with you since starting the Wild Child program?” 78.7% of caregivers responded yes.
    c. When asked ”Have you noticed any changes in your child's confidence and self-regulation around managing risk? (for example, increased confidence to balance on a log, or do things for themselves, but also the ability to recognize when a branch is unsafe to continue climbing)” 76.95% of caregivers responded yes
    d. When asked “How often does your child play outside now?”
    48.15% of caregivers responded every day, 38.5% with 4-5 times a week, and 13.35% responded 13.35. 0 responded that there was no change.
4. Collect, compile, and share stories and insights from children and youth as they articulate their thoughts, feelings, and learnings about nature as they participate in the program.
    a. When asked “What are some of the things that your child has shared with you about the program, or some of the things they liked the best about it?” we received the following testimonials.
        i. ”Loved everything. Shared would mostly be the things he learned about nature.”
        ii. “She identifies plants, spends more time looking at bugs, tells me what some things are called.”
        iii. ” My kid loves bringing home tokens and knowledge. Learning how to use plants for different purposes really fires up their mind to possibilities.”
        iv. “She has been having challenges playing with other children at school, but at Wild Child she shares stories of imaginative play that seems happy and inclusive of all. I don't know how you guys do it, but she's had an amazing time.”
        v. “Visit from Helena talking about traditional Mi'kmaq medicines/plants. They also like the non-regimented pace, such as being able to have a snack when they were hungry rather then have someone dictate when they could eat/mush finish up.”

b. When asked “Have you noticed any changes in your child's nature-related fears and/or discomforts? (such as spiders, bees, getting wet, being in the cold, etc)” we received the following testimonials.
    i. “I notice that they both have increased tolerance to "uncomfortable" situations like wet, cold, etc. They have both grown a gentle confidence in who they are when they are interacting with nature.”
    ii. “Definitely! Lots of interest in what's happening outdoors. Enjoys looking for bugs. Always gentle and returns them after catching.”
c. When asked to “Please share what it is about the Wild Child Program that you value.” we received the following testimonials.
    i. “That my child LOVED it. The program offered something to him that us as parent could not.”
    ii. “We value the place and space for the children to be and discover themselves. Their sense of confidence has increased when interacting outdoors. We love the inclusive setting for all and the knowledge put into practice by the instructors.”
    iii. “I value the enthusiastic instructors, the well rounded instruction, the freedom the children are given to explore and try things that interest them, while also making sure the safety boundaries are clearly explained, modeled and expected.”
    iv. ” I love that it’s child led, which allows for some great imagination play and really encourages the youth to work together in their games. I love that they are encouraged to try new things, and trust themselves while playing in nature. The program really helps to build self awareness and self confidence.”
    v. “I value the friendships my kid is making, and the time outside: getting bored, getting messy, getting imaginative. I especially value the counselors that have been chosen. They treat my kids like they matter and are valued and have interesting things to say. That is so important for esteem.”
    vi. “My children learning about risk management and appreciation of our natural environment”
    vii. “Playing in nature, open-ended activities, problem solving, risk taking”
    viii. “My kids loved this program so much, my son cried on the last day because he didn’t want it to be over. My son has autism and ADHD and struggles with school and finding the days long. With Wild Child he was excited every day to play and explore. What an amazing program!”
    ix. “I love getting the kids outside and learning about different things in nature. The camp seemed to provide a wide variety of activities and structure, while allowing kids to be active and enjoy the outdoors each day. It's such a nice break to have them learn about things when they don't even realize they're learning! They would come home and tell me many things about the day (I don't usually get too much information out of them!).”
d. When asked ”Any other stories about how the Wild Child program has impacted your child? Testimonials that we can share with our funders or future kids joining the program?” we received the following testimonials.
    i. “We are so grateful for the Wild Child gang. They are supportive of all children and their individual needs and offer a safe place for children to explore

physically and emotionally. We are particularly thankful for value placed on nature and being a friend of the Earth and all creatures on it. My children have also learned valuable skills and have built resiliency in adverse situations by participating in Wild Child."

ii. "My children have both attended Wild Child Programming since my eldest started as a three-year-old in 2019. We have always found the instruction and the educators to be enthusiastic, caring, emotionally intelligent, inclusive, educational, optimistic and FUN! Both my children tell joyful stories of their experiences and I strongly recommend the program to everyone I know. I can't say enough good things about this program!"

iii. "For myself, I thought I'd be a parent that let kids be kids and take risks, but my anxiety got in the way. Despite my own wild childhood, I couldn't handle watching my own brood do challenging things without my mind yelling

iv. "DANGER!". Knowing you all are there to teach my kids safe climbing and how to assess risks fills in skills that I've been unable to provide. I deeply value that."

v. "My daughter is at the age halfway between childhood and adolescence (she's 9). Many of her friends at school are older and they have turned into tween girls who just want to chat. She wants to play, particularly physically and imaginatively. At Wild Child, she has the opportunity to do that with diverse kids of diverse ages. It has brought her joy"

vi. "The staff are wonderful. My daughter learned so much and has a greater appreciation for nature. Applys her own sunscreen and wants to go bug hunting.we had so many great conversations about what she has learned daily. She had such an amazing experience. Thank you all so much"

vii. "My girls were very nervous and hesitant but I have never seen them so engaged in a camp. That absolutely loved it and I hope they have an opportunity to attend again in the future.""Wild Child has thought (My child) to enjoy nature, learn about the things around her, & encourage physical fitness & social engagement. For a child with ADD it helped (My child) focus on things around her & I found that her attending Wild Child helped her. I would recommend the program to all families. Wish the camp was longer & different times for Summerside area so more kids can attend to experience all the beauty of nature have to offer."

viii. "It is the best program that my son goes to. We look forward to Wild Child, and it's the only daycamp that he's excited to go to. I know the staff are engaged and the day is full of quality activities. I feel good about bringing my son there."

Winter River - Tracadie Bay Watershed Association
Project Title: Hurricane Fiona Cleanup and Habitat Improvement

Brief Summary:
This project successfully helped improve and protect terrestrial and aquatic wildlife habitat in the Winter River-Tracadie Bay area by removing threats and increasing beneficial habitat features with a focus on areas impacted by Hurricane Fiona.

Project Results:
Activity 1: Remove/minimize stream blockages that threaten fish and sediment passage.
Goal: 7 km of habitat with improved fish access. Areas of priority are Winter River Main, and areas heavily impacted by Hurricane Fiona based on assessments done in the Spring.
Outcome: 13.3 km of stream blockages were removed from the Winter River and connected streams

Activity 2: Tree planting in various locations
Goal: 3,000 native trees and/or shrubs planted
Outcome: Over 3,300 native trees and shrubs were planted

Activity 3: Forest enhancement for wildlife including patch cuts, thinning, and creating debris piles.
Goal: 20 structures created for use by wildlife, such as debris piles. Focus on areas heavily impacted by Hurricane Fiona.
Outcome: 20 wildlife brush piles were created

Activity 4: Construction of brush mats and/or enhancements of previously constructed brush mats.
Goal: 10 brush mats created or enhanced.
Outcome: 10 brush mats were created or enhanced

Activity 5: Invasive Species management and removal, increasing native habitat for native wildlife
Goal: 100 kg of invasive species material removed. Focusing on areas within forests and riparian zones.
Outcome: 120 kg of Glossy Buckthorn and Black Knapweed were removed and incinerated at IWMC

Activity 6: Garbage cleanups, shoreline, streamside, roadside etc. Transport waste to IWMC facility.
Goal: Collect and properly dispose of 500 kg of garbage. Various areas including shorelines of Tracadie Bay, roads near streams, stream sides, historical dump sites, etc.
Outcome: 798 kg of garbage was collected and properly disposed of

Activity 7: Increase pollinator habitat by planting native flowers/flowering plants to other project sites.
Goal: 200 native flowers/flowering shrubs planted listed as beneficial for native pollinator species
Outcome: 1,088 flowering native shrubs were planted

Activity 8: Knowledge sharing engagement, education and outreach
Goal: 90 volunteers/participants (including youth), 3000 people reached through social media, email and other methods. Activities and posts surrounding topics of water management/watershed protection.
Outcome: We had 221 volunteers and participants involved in our events and activities and we reached over 4,850 people through social media, our email lists and our newsletter