



## **2019-2020 PEI Watershed Management Fund Report**

**Ellen's Creek, Hazard Creek and Hermitage Creek  
Watershed Management Project**

**ELLEN'S CREEK WATERSHED GROUP INC 2014  
CHARLOTTETOWN, PEI**

Prepared for



**Forests, Fish and Wildlife Division**

May 15, 2020

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## 1.0 EXECUTIVE SUMMARY

The past project year marks a year of expansion in the area under our management and in our ability to examine surface water quality issues.

## 2.0 ORGANIZATION CONTACT INFORMATION

**Main Contact:** Norman Dewar, Watershed Coordinator

**Mailing Address:** 43 Summer Street, Charlottetown, PE, C1A 2P9

**Email:** [normdewar@gmail.com](mailto:normdewar@gmail.com)

**Phone:** 902-569-9115 (H) or 902-393-6461 (C)

## 3.0 GOVERNANCE

According to our bylaws, the ECWG Board of Directors is comprised of a minimum of three and a maximum of seven members.

### Board of Directors 2019-2020

| Name          | Position         | Sector                |
|---------------|------------------|-----------------------|
| Darragh Mogan | Chairperson      | Homeowner             |
| Norman Dewar  | Acting Secretary | Watershed Coordinator |
| Doug Miller   | Treasurer        | Homeowner             |
| Barry Maze    | Webmaster        | Homeowner             |
| David Kidd    | Director         | Angler                |

Since ECWG formed in 2009, we have lost three board members (relocated), and gained two. We recognize the need to recruit more board members from different sectors and have identified this as an ongoing goal in our work plan. We do get a few drop ins.

Our regular meeting schedule is every 6 weeks at the West Royalty Community Centre at 7:00 p.m. Minutes from past meetings are posted on our website once approved. The meetings are open to anyone who wishes to attend. Participation at meetings is between 4-5 people which has been stable since the formation of our group in 2009. A representative from the Wright's Creek Environmental Management Committee attends our regular meetings. In 2019-2020, we held 4 meetings where official minutes were recorded and 2 meetings where due to lack of quorum, no minutes were recorded. More meetings were scheduled but were cancelled due to weather closures of our meeting venue, illness, and other factors beyond our control. In the absence of meetings, we seek input through email. We do not normally meet from June to September or in December. Minutes from our monthly meetings are available to the public at <http://www.ellenscreekwatershed.ca/meetings.htm>.

According to our Bylaws, membership is open to any persons, and/or corporations, who live in the Ellen's Creek Watershed, any person or corporation who owns real property in the watershed, or operates a business in the watershed, or who have lived or operated a business in the area at least 6 months. Membership is currently free of charge. However, we will be reviewing the issue of membership as part of a larger review of our bylaws.

We do not have a physical office. The West Royalty Community Centre is used as an operational base during the summer field season and the City of Charlottetown allows us to use the Committee Room in the Centre for meetings or other business free of charge.

## 4.0 COMMUNICATION AND OUTREACH

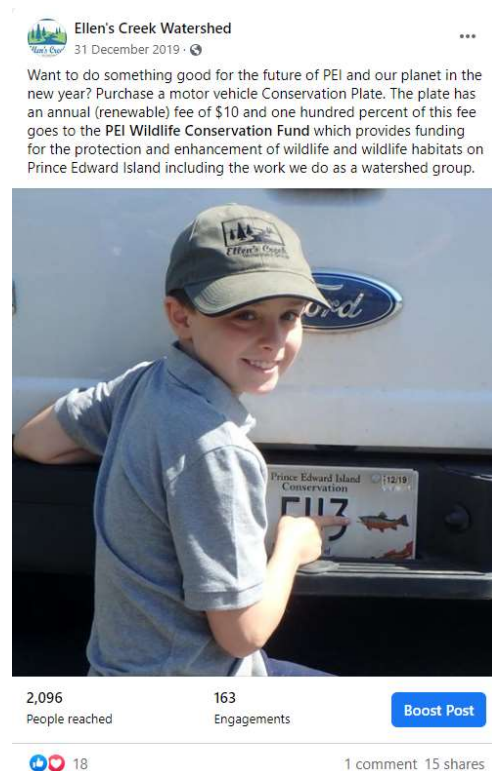
### a.) Communication

We maintain a webpage presence as an information repository. We do not publish a newsletter due to the cost, and questionable effectiveness. We are always looking for new strategies in increase public awareness of ECWG.

#### Facebook

We continue to publish to Facebook and have had several posts that trended well. Facebook is such a crowded forum now we no longer sure of its effectiveness but is a good news feed. We had plans to shift to more to Twitter and Instagram but social media, if you are creating original posts, is time consuming. COVID-19 may open an opportunity to assign social media postings to a staff person.

An example of a post that trended well on Facebook:



## Media

We received excellent media coverage from CBC PEI.

| Date         | Topic(s)  | Link                    |
|--------------|---|-------------------------|
| May 07, 2020 | Creek Cleanup, Plastic in the Environment, Nature PEI Talk                              | <a href="#">CBC PEI</a> |
| June 13, 202 | Return of Brook Trout to Ellen's Creek, Pop up talk at the Confederation Centre Library | <a href="#">CBC PEI</a> |
| Dec 24, 2020 | Watershed Expansion   | <a href="#">CBC PEI</a> |

The best (worst?) coverage came out of a mention of "Stream Jam" during our coordinator's interview with CBC Reporter Laura Chapin on May 07, 2020.

Months later, he still has people asking about it.



## b.) Outreach

We had one of best years ever for community outreach which we are unlikely to repeat in the coming season. We have had to postpone or cancel several planned community events because of COVID-19.

In 2019-20, we partnered in 12 community events:

| Date           | Subject, Event Name, Location  | # Attendees |
|----------------|--|-------------|
| April 22, 2019 | Rain Gardens, PEI Earth Expo, PEI Farm Centre  | 250         |
| May 04, 2019   | Rain Gardens, Green Ideas@YourLibrary, Confederation Centre Library  | 50          |
| May 07, 2019   | Strange Things and Other Discoveries from Our City's Ponds and Streams Presentation, Monthly Meeting of Nature PEI | 60          |
| May 17, 2019   | Watershed Model, Grade 5 City Arbor Day, Victoria Park   | 350         |
| May 31, 2019   | Macro-invertebrate and Fishing Demo with Charlottetown Rural Students, Hermitage Pond                              | 10          |
| June 08, 2019  | Happy Ocean Clean Up Queens Arms Intersection  | 30          |
| June 13, 2019  | Pop Up Talk on Brook Trout in Charlottetown, Confederation Centre Library  | 15          |
| July 19, 2019  | UPEI EAL Watershed Day, WRCC   | 26          |
| Aug 02, 2019   | ECWG-HC <a href="#">Science Day</a> , Dead Man's Pond, Victoria Park   | 75          |
| Aug 07, 2019   | Public Electro-fishing Demonstration, Ellen's Creek  | 12          |
| Aug 13, 2019   | Bumble Bee Walk and Talk, PEI Farm Centre  | 65          |
| Aug 14, 2019   | Bumble Bee Walk, Upton Farms Natural Area  | 12          |
| Total          |  | 955         |

A 13<sup>th</sup> event was scheduled for September but cancelled due to w

Photos from Our Community Events:







**Ellen's Creek Watershed**  
12 June 2019 · 🌐

Our coordinator will be participating in a pop up informational talk on city brook trout at the Confederation Centre Library. See poster for details.

## The Secret Lives of City Brook Trout

Norman Dewar, Coordinator of the Ellen's Creek Watershed Group in Charlottetown, will share his love for a city resident many of us know little about, the Brook Trout. He will talk about the state of Brook Trout in Charlottetown and the challenges they face.



Confederation Centre Public Library  
Thursday, June 13 at 6:30 p.m.



## 5.0 OTHER COMMUNITY INVOLVEMENT

### 1.) Community Award



On February 10<sup>th</sup>, 2020 in the City Council Chambers, we presented the 2020 Brookie Award to Dr John W. Andrew from East Royalty for his efforts to preserve and protect Wright's Creek and Andrew's Pond.

We created the Brookie Award as an award of excellence to an individual, organization or business demonstrating commitment and leadership in promoting urban watershed health. The award is named after the “brookie” in recognition of the correlation between watershed health and the health of its brook trout population.

### 2.) Interorganizational Cooperation

We partnered in the annual Canadian Wildlife Service geese banding survey in PEI with Ducks Unlimited and the Abeqweit Conservation Society.





## 6.0 ACTIVITIES REPORT

Please see our 2019-20 Watershed Management Form B for a complete listing of all our activities.

### a.) Highlighted Activities

#### **The Ecological Health of Charlottetown Ponds Study 2019**

To make science-based decisions on how to protect or restore the ecological health of surface water within the City, there must be going monitoring and testing. In 2019, we again provided ancillary support to this expanded project. It is an excellent example of collaborative partnerships across organizations.

The 2017, 2018, and 2019 findings of the students from the Environmental Applied Science Technology (EAST) Program at Holland College have provided valuable insight into some of the underlying issues that may be threatening these ponds in the future. Results continue to demonstrate the need for multi-year monitoring and study. We are supporting this study again in 2020 in which we will be add testing for phthalates (the chemical breakdown of plastics in the environment) and algae.

A copy of the 2019 report can be found here:

[One Drive Link \(5.4mb file\)](#)

#### **Water Quality Testing**

With support from the City, we increased our water testing program to include other water quality parameters such as faecal coliform, suspended solids, and biological oxygen demand. Following up on results from the Holland College Pond studies, and water testing we completed in the summer of 2018 (funded by the City), we attempted to determine the sources of contaminants entering our freshwater ponds and stream. If we can determine the sources, corrective action can be taken.

In 2019, we sampled and completed 14 Faecal coliform tests, 8 Total Dissolved Solid tests, 1 Complete Water Chemistry Test, 1 Biochemical Oxygen Demand (BOD)test, and 1 Carbonaceous Biochemical Oxygen Demand (CBOD) test through the PEI Analytical Lab were completed over the 2019 field season.

**Impact:** The results from our surveys in 2019 were reviewed with staff from the PEI Department of Environment, Water and Climate Change and the City of Charlottetown.

## b.) Over and Above

### The Bumble Bee Walk and Talk (and bonus walk at the Upton Farms Natural Area)

1. We were extremely fortunate to engage Victoria MacPhail, a pollination biologist, for 2 events. This was an excellent example of the value of joint partnerships between ECWG and the City. Over 60 people attended the event at the Farm Centre on August 13, 2019, and the event had an impact across the Province. Interest in helping bumble bees should be considered when trying to encourage other ecofriendly practices in the City such as domestic pesticide use.



The walk at the Upton Farms Natural Area did not have as many participants. However the smaller turnout combined with an ideal location enabled us to produce [a video](#) on Facebook demonstrating how to catch bumble bees in an aerial net for identification.

The table below illustrated the impact of this event.



#### Bumble Bee Postings from PEI on BumbleBeeWatch.org

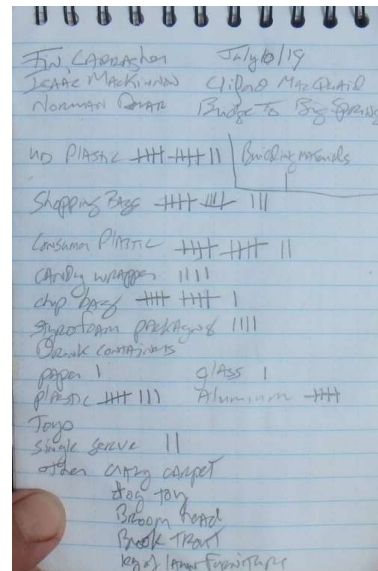
| Year              | Number of Postings   | Species Identified  |
|-------------------|--|---|
| 2016              | 5  | 3   |
| 2017              | 11   | 4   |
| 2018              | 5  | 3   |
| 2019 (Pre event)  | 3  | 2   |
| 2019 (Post event) | 101 (31 individuals from one end of the Province to the other) | 10 (it is suspected there are up to 12 species of bumble bees in PEI) |



## 7.0 PROJECT PHOTOS









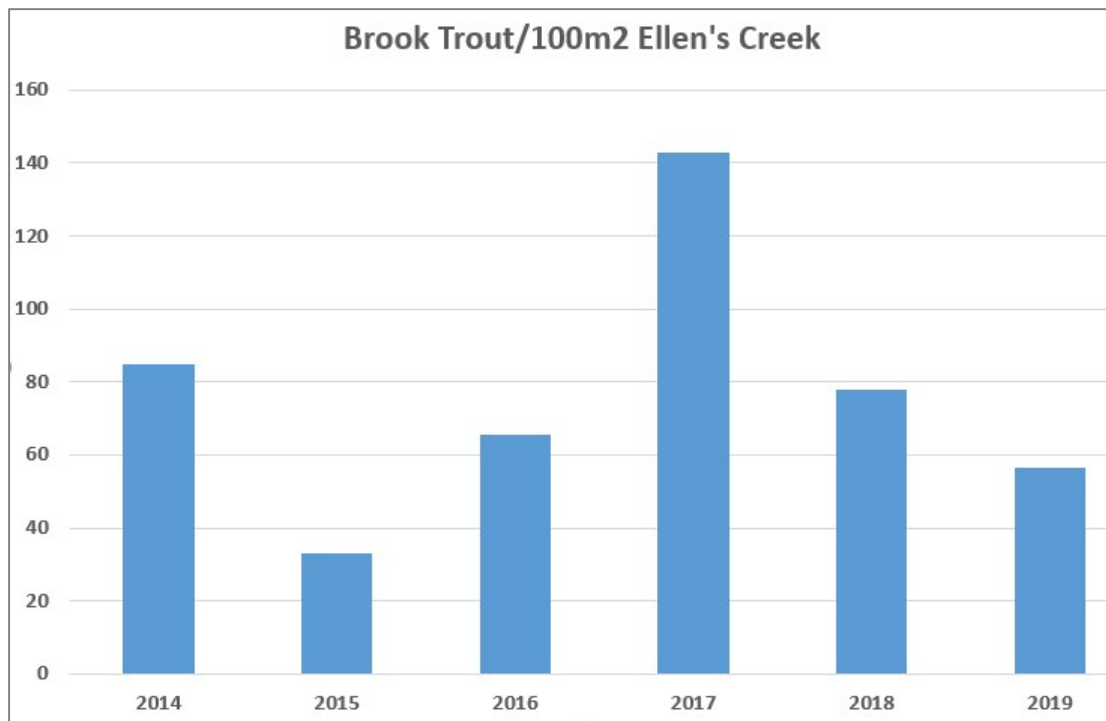


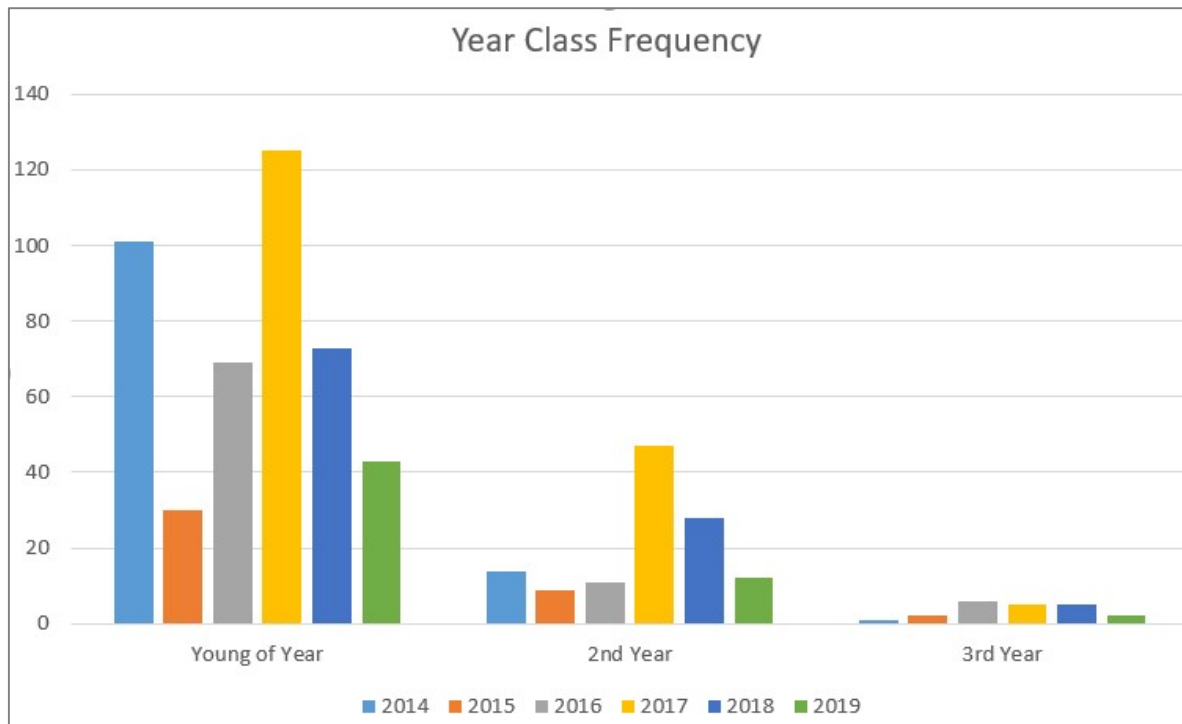




## 8.0 Fish Population Ellen's Creek

We now have 6 years of brook trout electrofishing data from the same location. We saw excellent results from our 2017 electrofishing survey after a sharp decline in the Young of Year Class in 2015. We believe this was due a private crossing failure below the Malpeque Road in December 2014 which impacted spawning success. In 2018, we saw a sharp drop-in population from 2017. However, year class frequency was evenly distributed which is encouraging. Our survey in 2019 showed a decline again in population. However, year class frequency was again evenly distributed. See graphs below.





The graph below compares the average length of Young of Year (YOY) vs the Average April Temperature. Could cold wet springs be influencing growth and population levels of YOY Brook Trout and a hidden impact of climate change?

