## Lot 11 & Area Watershed Management Group, Inc. Annual Report: FY 2014/2015



Official Opening of the MacDonald's River Interpretive Trail





#### Acknowledgements

We thank all of our staff, volunteers, WMF, WCF, EDA, Greening Spaces, Service Canada, our neighbouring groups, the PEI Watershed Alliance, the Lot 11 & Area CC, our MLAs, and the provincial departments of: Environment/Labour/Justice (ELJ), Agriculture/Forestry (A&F), Tourism/Culture, Mi'kmag Confederation of PEI, and Transportation/Infrastructure (TIR) for making our year a

success and our future

possible.

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### **Executive Summary**

This annual report presents our year's accomplishments and explicitly demonstrates the consistency between our actions and the strategies mandated by our community-ratified watershed management plan. In the section that presents our past year's accomplishments, we list the specific strategies implemented by each task immediately following the task's subsection heading.

Key projects for the year included:

#### Major Projects

- Official opening of the MacDonald's River Watershed Interpretive Trail by Minister Janice Sherry, Minister George Webster and Minister Robert Henderson. Our interpretive trail at MacDonald's River is very well received by our community. This project shares with our community members and visitors the value of a remarkably pristine old-growth forest, a healthy gravel-bottom stream, and a productive, anoxia-free estuary.
- Culvert replacement in the Foxley River Watershed
- Conducted the Community's Watershed Summer Day Camp Program
- Participated in the Community Aquatic Monitoring Program (CAMP) on the Enmore River.
- Participated in PEI Aquaculture Alliance 2014 Beach Sweep and Shoreline Clean Up
- Enmore River Restoration Project

Beyond major projects, a substantial portion of our year's work was general stream improvement work at ten major streams within our group's managed area. This Included planting 1000 trees/shrubs.

Community engagement, building alliances, providing community information, and exchanging ideas is most important as we seek our community's mandate for watershed protection and improvement. An engaged and informed community is central to consensus-based watershed management.

Over the past few years our group's staff persons and volunteers have developed substantial experience and knowledge in in both community-based watershed management and island-wide watershed management dynamics. They serve in a variety of roles at the provincial level including acting as directors for the PEI Watershed Alliance and the Wildlife Conservation Fund.

### Background

The Lot 11 and Area Watershed Management Group, Inc. was formed in October 2008 and incorporated in 2011. It is a not-for-profit community group and has a seven member, volunteer board of directors: Mark Bishop (Chairperson), Peter Bulger, Susan Milligan (Treasurer), Karen Kelly, Alfred Bridges, Marian Besserer, Thelma Phillips, and Alycia Carr (Secretary). We have a 15<sub>+</sub> member planning committee that, together with the board of directors, constitutes the formal membership of the group.

Our major funding partners include the provincial Watershed Management Fund (WMF), the PEI Wildlife Conservation Fund (WCF), the provincial Employment Development Agency (EDA), the provincial Greening Spaces Program, Service Canada, and the Municipality of Lot 11 and Area.

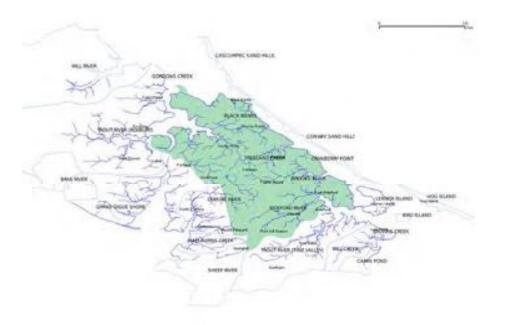
#### **Quick Facts**

Location: Prince Edward Island, Canada Geographic center: 63.99W, 46.64N Municipal areas: Lot 11 & Area, Ellerslie- Bideford, Lady Slipper Nine watersheds

- Ten primary streams
- 18 smaller streams

Area: 15,602 hectares

Our group's area of management includes nine geophysical watersheds: Black Banks, Foxley River, Freeland Creek, Brook's River, Cranberry Point, Josephine Shore, Bideford River, Conway Sand Hills, and Enmore River East. It has ten independent principal streams and ~18 smaller streams. The principal streams are: MacDonald's River, Canadian Creek, Foxley River, Gains Creek, Freeland Creek, Brook's River, Southwest Creek, Grant's Brook, Ellerslie Brook, and the Enmore River. The Conway Sand Hills watershed is entirely natural sand dune wetland.



## Staff

We were fortunate to have eleven motivated employees this year. Our field staff included two experienced watershed field technicians provided through the EDA SPP program. Both have multi-year experience with our group and are trained in safety, chainsaw operation, watershed management, and beaver management. We also had seven youth workers: two through EDA JFY, one through the Service Canada Summer Jobs Program, one through Mi'kmag Confederation of PEI (Lennox Island Band), and three through TIR. Additionally, for three weeks, we had the help of two youth workers provided by ELJ. All of these students made a substantial contribution to our group's work and all had a meaningful summer job experience.

Our Group Coordinator, Karen Rank, has served as our Watershed Coordinator since 2008 and has led our efforts to realize our mission. She has post-secondary training in Integrated Watershed Management (UPEI) and is safety and chain-saw certified. Her abilities in overall watershed management are exemplary on PEI. Additionally, she is an active Community Councillor and Emergency Operations Team Member with the Lot 11 and Area Community Council. She currently sits on the WCF board as a director. Her broad-spectrum community involvement/participation has enabled our group to effectively and appropriately center our mission on community information and engagement.

### Watershed Plan Implementation

The Lot 11 & Area Watershed Management Plan provides the framework for our group's actions. All of our actions this year focused on using the plan's key strategies for realizing our objectives. These strategies will be referred to throughout this report.

### **Key Strategies**

Our planning committee identified 14 primary strategies for realizing our goals. All of our work this year focused on implementing these strategies. (Implementation of strategy 1 is implicit in all of our actions.)

- Maintain a practical-action role for the group
- Provide Public Information Groundwater/Drinking Water Assets
- Provide Public Information Forest, Wetland and Wildlife Assets
- Promote Public Awareness and a Sense of Resource Ownership
- Establish Monitoring Drinking Water
- Continue/Expand Resource Assessment Forest, Wetland, and Wildlife Assets.
- Promote Resource Conservation
- Maintain and Stay Current with Resource Conservation and Habitat Enhancement Methods
- Conduct Resource Enhancement Projects
- Involve Community in Decision Making
- Preserve Unique Cultural and Environmentally Significant Resources
- Form Productive Alliances
- Promote Youth Education and Involvement
- Maintain and Expand Financial Resources

Download this plan from http://www.lot11andarea.org/wsPublications.php

### Accomplishments: 2014/2015

### **Major Projects**

Official Opening of the MacDonald's River Interpretive Trail Implements strategies 1, 3, 4, 7, 9, 10, 11, 12, and 13

The official opening of the MacDonald's River Interpretive Trail was in May of 2014. The trail was opened by Ministers Janice Sherry Dept. of Environment Labour & Justice, Minister George Webster Dept. of Agriculture & Forestry and Minister Robert Henderson Dept. of Tourism. There are many reasons to create nature trails including: community pride, youth education, and recreational enrichment; but the most important advantage is the awareness that they bring to our community members... awareness of significant environmental assets.

The MacDonald's River watershed constitutes one of our island's most healthy and pristine environmental assets. It supports a productive, anoxia-free estuary that, in turn, supports a substantial local shell fishing industry. It features one of the few undisturbed old growth forests on PEI and a gravel bottom stream that is essentially not impacted by human activity. It is centered in a 5000 hectare subsection of Foxley River watershed that is ~95% forest/wetland. The trail is over 5 Km in length and abuts an additional ~3 Km trail at the Foxley River Demonstration Woodlot.



Above are pictures of the Honorable Ministers Sherry, Webster and Henderson opening the trail, community residents young and old using the trail and seasonal work crews maintaining the trail system.

Foxley River Culvert Replacement Implements strategies 1, 4, 7, 9, and 11

Another important stream in our managed area is the Foxley River. Like the MacDonald's River, it supports a healthy, anoxia-free estuary and provides critical riverine and riparian wildlife habitat. It also feeds Milligan's Pond, which provides habitat for pond life including breeding habitat for ducks. The stream is impacted by local land uses and population pressures. Sediment inputs from gravel roads and agricultural fields present difficult management challenges. Our strategy for restoration includes both preventive measures and remedial actions. Preventive measures focus on riparian zone reinforcement through planting and bank stabilization. Removing sediment bed load is accomplished by maintaining three instream sediment traps. This year an undersized corroding hung culvert was replaced along the East Branch of this stream system. Below are pictures of the culvert system before and after.



We are especially grateful to Gillis Limited for their expert excavation and construction work, and to the WCF and WMF for their contributions.

Watershed Summer Day Camp - Educating Our Youth Implements strategies 1, 2, 3, 4, 7, 10, 11, 12 and 13 One most important mandates of our watershed management plan is to promote youth education and involvement. This year we worked towards this goal through a summer recreation/education program. The Watershed Summer Day Camp continues to be a cooperative project with the Lot 11 and Area Community Council. Its purpose is to provide recreation to community kids while making them aware of watershed values. Activities included fieldtrips to the trail, craft making and trail activities at Warburton Memorial Park in Foxley River. Attendance at Watershed Camp was high last year with an average of 16 youth participating on a regular basis.



### Enmore C.A.M.P

Implements strategies 1,3,4,5,6,7,12,13,14

This year we be participating in Fisheries and Oceans Canada's Community Aquatic Monitoring Program (CAMP). In this work we will collect important data that helps monitor the health of the Enmore estuary. The data collected will include aquatic species identification and counting. The effort will provide baseline information necessary for monitoring the health of this important environmental feature and shell fishing resource.



Aquaculture Alliance 2014 Beach Sweep & Shoreline Clean Up Implements strategies 1,3,4,5,6,7,12,13,14

Our group participated in shoreline clean ups in various locations along the shorelines in the Lot 11 Community. We also partnered with Lennox Island who provided 7 student and a supervisor for 3 days to complete this clean up. A total of 18 crew members participated in this important endeavour. A total of 71kg were collected from community shorelines.

Pictured below are crew members collecting garbage and debris from shorelines.



#### **Enmore River Restoration Project**

Implements strategies 1, 4, 7, 9, and 11

Our group established an effective migratory channel at the Enmore River. This work required active management of the entire Enmore River watershed. We also began development of a 2km walking trail within this watershed, we completed 1km. Current fishing hotspots along this river are heavily littered. We hope to place (and service) refuse barrels at these locations in the future.

#### **Tree/shrub planting**

A total of 506 trees and shrubs were planted in riparian zones along the Enmore River East System. Tree planting was done to enhance the diversity of native trees and shrubs, create a canopy at streams edge, enhance habitat for local habitat.

#### Listed are native species planted:

White Birch	Red Maple	Pussy Willow
Black Spruce	Large Tooth Aspen	Yellow Birch
Sumac	White Pine	Red Oak
Green Ash	Spiraia	Red Pine
White Ash	Balsam Fir	Common Elder
Red Leaf Willow	Eastern Larch	Aronia

#### **Alder Succession**

Where appropriate, alders were patch harvested and replanted with appropriate succession trees/shrubs/grasses.

#### **Bank Stabilization**

1km of stream bank was stabilized at meander point bars with brushmats. Additionally, brushmats installed in previous years were maintained as required. Brushmats with accumulated sediment were planted with grasses to stabilize sediment and encourage the formation of resilient, natural river banks.

#### **Migratory Channel Improvements**

One important task in our stream work is protecting migratory access to anadromous and catadromous fish throughout our streams' primary channels. Migratory obstacles were corrected with low-impact, debris-conservative methods. Where obstacles were beaver related and within established beaver-free zones, the abandoned dams were removed in accordance with our approved beaver management plans and watercourse alteration permits.

#### **Access Trail Development**

1 km of access trail was developed along the Enmore River East system to allow crews safe access and allow for recreational fishers to access stream system. Further development to this access trail will take place in 2015 with another kilometre being added onto the existing 1km access trail. A sign with restoration funding partners will be placed at the beginning of this access trail, to inform users of the restoration project and the funders.

#### Sign Placement (Delayed)

The sign slated to be placed at our project site in 2014 was delayed due to not being made aware of funding approval from RFCPP until late September. As we are a not-for-profit organizations funds were not readily available in our budget for that purchase. The sign will be developed and placed at the restoration site in the summer of 2015.



Pictured above are crew members clearing blockages, installing brushmats and developing walking trail.

### **Ongoing Stream/Watershed Improvement/Protection Work**

Implements strategies 1, 7, 9, 11

Location	Brushmats Installed	Blockages Removed	Walking Trails	Brushmats Repaired	Trees Planted
MacDonald's River	4	17	5km maintained	8	294
Foxley River	11	6	4km maintained	2 planted	72
Enmore River	9	31	1km developed	0	506
Freeland Creek	0	12	3km maintained	4 planted	58
Brooks River	0	10	2km maintained	11	36
Bideford River	0	21	0	0	0
Grant's Brook	7	11	1km maintained	11	34
Totals	31 brushmats installed	108 blockages removed	15km maintained 1km developed	6 planted 30 repaired	1000 trees planted

#### **Improvement Summary**

#### **Bank Stabilization**

Several stream banks were stabilized at meander point bars with brushmats. Additionally, brushmats installed in previous years were maintained as required. Brushmats with accumulated sediment were planted with grasses to stabilize sediment and encourage the formation of resilient, natural river banks.

#### **Migratory Channel Improvements and Beaver Management**

One important task in our stream work is protecting migratory access to anadromous and catadromous fish throughout our streams' primary channels. Migratory obstacles were corrected with low-impact, debris-conservative methods. Where obstacles were beaver related and within established beaver-free zones, the beavers and their dams were removed in accordance with our approved beaver management plans and watercourse alteration permits.

#### **Tree/shrub planting**

A total of 1000 trees and shrubs were planted in riparian zones within our managed area. Below is the list of native species we planted:

White Birch Large Tooth Aspen Red Oak White Ash Eastern Larch

Red Maple Yellow Birch Sugar Maple Balsam Fir Aronia Pussy Willow Sumac Spiraia Common Elder Bayberry Black Spruce White Pine Red Pine Red Leaf Willow

#### Alder Succession

Where appropriate, alders were patch harvested and replanted with appropriate succession trees/shrubs/grasses.

#### **Trail Development and Maintenance**

Access and walking trails are maintained and developed and allow easy access for work crews and recreational anglers and hikers throughout the watershed boundaries.

### **Public Information/Communications**

Implements strategies 2, 3, 4, 7, 9, 10, 13, and 14

#### **Newsletters**

A newsletter will be distributed in early 2015. This was a cooperative effort with the Lot 11 and Area Community Council. When published to web, you may download it from http://www.lot11andarea.org/wsPublications.php

#### Web

Our group and the Municipality of Lot 11 and Area have a cooperative website at http://www.lot11andarea.org. This site had 33,766 visitors between May 2014 and March 2015. It is rated by international peer review through the Web Of Trust as excellent for trustworthiness, privacy, and child safety. It is entirely W3C compliant for maximum accessibility and is designed, maintained, and hosted for less than \$80/yr. Facebook

We share a cooperative Facebook page with the Municipality.

#### Newspaper

We had an article published in the *West Prince Graphic* that highlighted our replacement culvert at Foxley River. This was a regional, group-cooperative press release and was a paid-for WCF contact deliverable.

#### Direct exchange with community members

Our relationships with other community organizations (municipal community council, recreation programs, municipal emergency measures, trade associations, the Milligan's Wharf Harbor Authority, etc.) are a productive mechanism for communicating watershed values and promoting awareness to captive audiences. Kitchen table meetings and volunteer participation in assessments, planting projects, and work review are frequent activities for our group.

#### **Public Meetings**

Our Annual General Meeting in 2014 was well attended. As usual, a lively question and answer session followed informative presentations from our Treasurer, Secretary, Coordinator, and Chairperson. At closing, the Hon. Robert Henderson, Minister of Tourism and Culture and District 25 MLA, congratulated our group and promised ongoing support.

### **Ongoing and Follow-up Assessments**

Implements strategy 6

Follow-up assessments were conducted at each of our 10 managed streams. Our migratory corridors are open and our water runs clear during storms. We have problem areas that need tree planting, enhancement maintenance, and new restoration/protection work.

Ongoing Training

Implements strategy 8

A qualified, informed staff is our primary asset. Special training was undertaken by staff in June for the Community Aquatic Monitoring Program. Also in June, staff attended a tree pruning seminar in Coleman hosted by Gary Snider.

### **Expanding Partnerships**

Participating in related community groups Implements strategies 2, 3, and 4

Our staff and membership have roles with several other community groups having common missions. These include municipal community council, recreation programs, municipal emergency measures, trade/industry associations, the Milligan's Wharf Harbor Authority, 4H, etc. These relationships broaden responsible watershed management ideas and actions and result in watershed-integrated decision making.

#### Developing/maintaining partnerships

Applies to all strategies except 5.

Our group is a not-for-profit community organization. Our actions and accomplishments are underpinned by contributions from supporting partners who provide grants and services.

Maintaining these partnerships is central to realizing our goals. All of this work brings outside resources to our community and our province. Watershed groups translate provincial, federal, and private funding resources into community and environmental benefits.

A new partnership was developed with the Mi'kmag Confederation of PEI, Lennox Island Band in putting a student to work for 5 weeks and employed 7 other students for 3 days of beach sweep activities.

**Participation in Regional and Island-wide Watershed Management** Implements strategies 3, 4, 7, 8, 12, 14, and potentially 5

We gained from, and contributed to, the Island's watershed management knowledge base, both in the field and at regional/provincial meetings. We assisted other groups in conducting short-term, labour intensive projects and assisted with bylaw development, funding applications, reports, press-releases, etc.

Our Coordinator, Karen Rank, is a member of the PEI Wildlife Conservation Fund Committee. Her role on this committee is to participate in the fund's oversight as a representative of Island watershed groups. Mark Bishop, Chair sits on the Watershed Alliance Board as chair.

Our group is a member of the Prince Edward Island Watershed Alliance (www.peiwatershedalliance.org). Our Coordinator and our Chairperson actively participated in Alliance projects and conferences in 2014. This organization provides a great opportunity for groups to share and enrich their collective experience in successful watershed management on PEI.

### **Providing Meaningful Employment**

Implements strategies 4, 9, 10, 12, 13, 14

Our group supervised twelve employees in 2014. We provided wages and employer expenses for seven of them. The work they did was of substantial benefit to our watersheds and their contribution is a source of pride and fulfillment. We were supported in providing this employment through the Provincial Watershed Management Fund, the Employment Development Agency, and Service Canada. We also benefited from in-kind labour assistance from provincially paid summer students provided by TIR, and the ELJ. Also the Mi'kmag Confederation of PEI provide 7 students for 3 days. To the remarkable credit of our community and province, watershed groups are substantial employers in Lot 11 and Area and island wide. We employ people to serve the community and protect/improve our shared watershed assets. *There is no higher calling*.

### **Administrative Duties**

Labour supervision, payroll management, records management, insurance maintenance, reporting requirements, task assignment, and safety awareness are all part of the important task of being a responsible employer. The administrative effort associated with contract management is considerable (applications, reports, press releases, multiple accounting schedules, receipt categorization, records management, etc.).

### Future Work: 2015/2016

- Ongoing riparian zone and stream assessments (multiple streams). For continued understanding and appropriate prioritization
- Ongoing bank stabilization on multiple streams reducing erosion, improved habitat
- Sediment management on multiple streams. Improved aquatic habitat
- Migration corridor improvements on multiple streams. Access to anadromous fish
- Riparian zone enrichment on multiple streams. Improved aesthetics, improved riparian buffer
- Continued alder management on various streams. Quality, diversified riparian habitat
- Maintenance of previous improvements on various streams. Continued usefulness of work completed in past

- Beaver management on various streams. Improving migratory corridors for fish
- Participate in the CAMP program on the Enmore River. Improved knowledge of species diversity in estuary's
- Trash removal on multiple streams. Improved aesthetics
- Continue improvement and promotion of the MacDonald's Interpretative Trail. Promote watershed awareness through an accessible interpretive trail. Promote health and vitality to community residents and visitors.
- Watershed Day Camp. 2 days per week July 1st- August 30<sup>th</sup>. Provide education resources, engage community youth in watershed initiatives, continue building community partnerships

### Special Projects for 2015/2016

- Sediment Trap Excavation Enmore River. Removal of bed load sediment from stream system
- Sediment Trap Re-Excavation Foxley River East. Removal of bed load sediment from stream system
- Culvert replacement Eastern Foxley River System. Replace undersized damaged culvert restoring fish passage
- Completion of the Enmore River Restoration Project

# Shortcomings

### **Drinking Water Quality Monitoring**

Clean and plentiful drinking water is a basic human right and a critical component of public safety. Our watershed management plan identifies drinking water quality monitoring as a strategy for realizing plan objectives. Provincial testing services are available but high fees make community-wide monitoring objectives unachievable by our group.

Again we ask our MLAs to urge the provincial laboratory to provide each resident with one free test for bacteria and chemistry each year. Our group offers to conduct sample submission events in our community.