

# Lot 11 & Area Watershed Management Group, Inc. Annual Report: FY 2013/2014



**Youth Planting Day at Warburton Park**

## **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, and Transportation/Infrastructure (TIR) for making our year a success and our future possible.

Prepared by:  
Mark Bishop, Chairperson  
The Lot 11 and Area Watershed Management Group, Inc  
PO Box 115  
Ellerslie, PE C0B 1J0  
[www.lot11andarea.org](http://www.lot11andarea.org)

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## Contents

<b>EXECUTIVE SUMMARY .....</b>	<b>3</b>
<b>STAFF .....</b>	<b>5</b>
<b>WATERSHED PLAN IMPLEMENTATION .....</b>	<b>5</b>
KEY STRATEGIES.....	5
<b>ACCOMPLISHMENTS: 2013/2014.....</b>	<b>6</b>
MAJOR PROJECTS .....	6
<i>MacDonald's River Interpretive Trail.....</i>	6
<i>Foxley River Sediment Control and Capture.....</i>	8
<i>Educating Our Youth.....</i>	8
ONGOING STREAM/WATERSHED IMPROVEMENT/PROTECTION WORK .....	9
<i>Improvement Summary.....</i>	9
<i>Tree/shrub planting.....</i>	9
<i>Bank Stabilization.....</i>	10
<i>Migratory Channel Improvements and Beaver Management.....</i>	10
<i>Alder Succession.....</i>	10
PUBLIC INFORMATION/COMMUNICATIONS.....	10
<i>Newsletters.....</i>	10
<i>Web.....</i>	10
<i>Facebook.....</i>	10
<i>Newspaper.....</i>	10
<i>Direct exchange with community members.....</i>	10
<i>Public Meetings.....</i>	11
ONGOING AND FOLLOW-UP ASSESSMENTS.....	11
ONGOING TRAINING.....	11
EXPANDING PARTNERSHIPS.....	11
<i>Participating in related community groups.....</i>	11
<i>Developing/maintaining partnerships.....</i>	11
<i>Participation in Regional and Island-wide Watershed Management.....</i>	11
PROVIDING MEANINGFUL EMPLOYMENT .....	12
ADMINISTRATIVE DUTIES.....	12
<b>FUTURE WORK: 2013/2014.....</b>	<b>12</b>
<b>SHORTCOMINGS .....</b>	<b>13</b>
DRINKING WATER QUALITY MONITORING .....	13

## 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
  - Completion of the MacDonald's River Watershed Interpretive Trail. 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.
  - Sediment control and removal in the Foxley River Watershed
  - Conducted the Community's Watershed Summer Day Camp Program
- 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 1050 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.

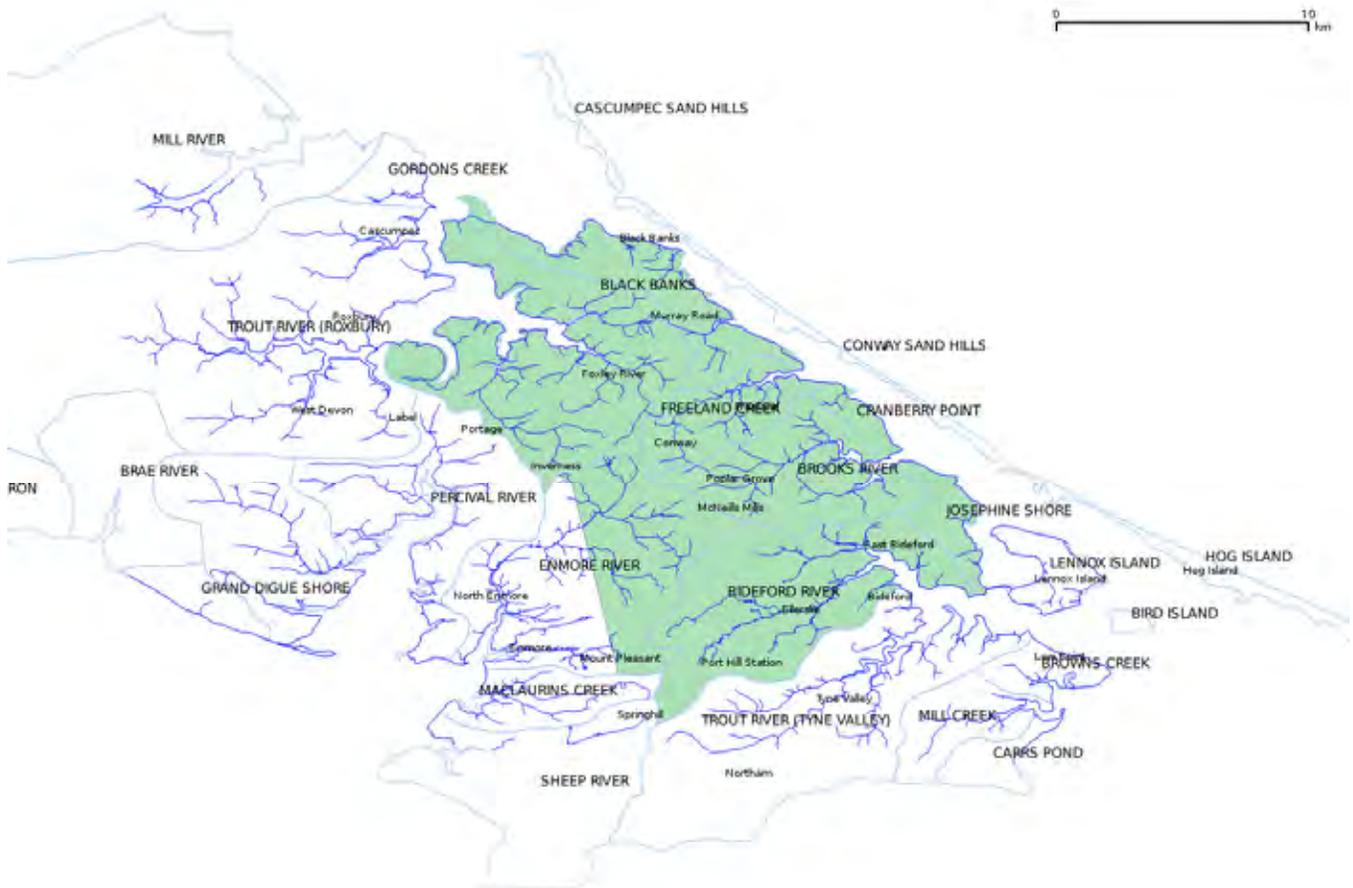
## Background

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, and Alycia Carr (Secretary). We have a 15+ 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 six youth workers: two through EDA JFY, one through the Service Canada Summer Jobs Program, 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 Councilor and Emergency Operations Team Member with the Lot 11 and Area Community Council. 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.)

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

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\* Download this plan from <http://www.lot11andarea.org/wsPublications.php>

## Accomplishments: 2013/2014

### Major Projects

#### MacDonald's River Interpretive Trail

Implements strategies 1, 3, 4, 7, 9, 10, 11, 12, and 13

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.

Why? 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. Here are a few of the interpretive panels that may be found along the way:

<p><b>Hydrologic Cycle</b></p>  <p>It's true, the water we use today has been around for hundreds of millions of years, and the amount available hasn't changed very much. Water moves around the world, changes forms, is taken in by plants and animals, but never really disappears. It "travels" in a large, continuous cycle, we call this the Hydrologic Cycle. Water on earth circulates continuously. It falls as rain, filters into the ground to recharge aquifers, and runs along the surface as creeks, rivers and streams. That same water transpires through plants or evaporates from the surface, re-enters the atmosphere as vapor, then falls again as rain or snow.</p>	<p><b>WETLANDS</b></p>  <p>Wetlands are a valuable and endangered wildlife habitat. Eighty-five percent of birds and mammals use them during their life. People and pets can easily disturb the wildlife that mate, nest, den, rest and feed in wetlands. Like giant sponges, wetlands and riparian areas store water, reduce flooding, absorb pollutants and trap sediments. Wetland soil and plants purify water. The roots of wetland plants hold soil in place preventing erosion.</p>
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<p><b>DRAGONFLY</b></p>  <p>An insect with large multifaceted eyes, two pairs of strong transparent wings, and an elongated body. Dragonflies are similar to damselflies, but the adults can be differentiated by the fact that the wings of most dragonflies are held away from, and perpendicular to, the body when at rest. They are usually found around lakes, ponds, streams and wetlands because their larvae, known as "nymphs", are aquatic.</p>	<p><b>FOREST STRUCTURE</b></p>  <p><b>Canopy:</b> Where the crowns of most of the trees in the forest meet to make a thick layer.  <b>Understory:</b> where smaller trees grow. They provide shelter for many species of animal.  <b>Shrub:</b> Woody vegetation grows close to the ground here.  <b>Herb:</b> Wildflowers, grasses, and ferns offer shelter on the ground.  <b>Forest Floor:</b> Decaying leaves, branches and twigs are here. Recycling of waste occurs.</p>
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#### Sea-run Brook Trout



The MacDonald's River provides habitat for sea-run Brook Trout. The Brook Trout, also called the Speckled Trout, is the primary sport fishing species on PEI. Sea-run Brook Trout leave fresh water and spend time in the estuary, where they feed on shrimp and other crustaceans and grow quickly. This spring-fed stream and its long productive estuary provides ideal conditions for sea-run Brook Trout.

Here are a few of the people that enjoyed the trail:

The kids and the grown-ups:



The volunteers and the workers:



The ministers and the heron:



## **Foxley River Sediment Control and Capture**

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 in-stream sediment traps. One of these traps was re-excavated this year. Below is a picture of the muck removed from this trap and returned to the adjacent field. After removal, the pile was seeded and the riparian zone was replanted.



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

## **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 was a cooperative project with the Lot 11 and Area Community Council. Its purpose was to provide recreation to community kids while making them aware of watershed values. Activities included fieldtrips to the trail, activities at the park, and a huge Planting Day event at Warburton Park where kids participated in planting 50 trees.



## Ongoing Stream/Watershed Improvement/Protection Work

Implements strategies 1, 7, 9, 11

### Improvement Summary

Enhancement	MacDonald's River	Foxley River	Grant's Brook	Freeland Creek	Enmore River	Brook's River	Gain's Creek
Brushmats Installed	33	12	-	-	-	-	2
Blockage Removal	68	103	20	10	12	8	11
Walking Trails Developed	5 km	-	-	-	1 km	-	-
Trees Planted	848	152	-	-	-	-	-
Brushmats maintenance	-	12	-	-	-	1	3
Fish Cover Logs	2	-	-	-	-	-	-

### Tree/shrub planting

A total of 1000 trees and shrubs were planted in riparian zones within our managed area. An additional 50 trees were planted at Warburton Park during the Youth Planting Day event. Here is the list of native species we planted:

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

## **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.

## **Alder Succession**

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

## **Public Information/Communications**

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

### **Newsletters**

A newsletter was distributed in early 2014. This was a cooperative effort with the Lot 11 and Area Community Council. 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 39,500 visitors between May 2013 and March 2014. 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 MacDonald's River trail project 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 2013 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. Staff members attended seminars coordinated by the PEI Watershed Alliance and one group member completed the trapping class provided by A&F.

## 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.

### 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. She also served on the Board of Directors for the Prince Edward Island Watershed Alliance.

Our group is a member of the Prince Edward Island Watershed Alliance ([www.peiwatershedalliance.org](http://www.peiwatershedalliance.org)). Our Coordinator and our Chairperson actively participated in Alliance projects and conferences in 2013. 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 eleven employees in 2013. We provided wages and employer expenses for six 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.

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.).

We give special thanks to our Treasurer, Susan Milligan, for her tireless work and dedication this past year.

### Future Work: 2013/2014

In the coming year we will continue to pursue the goals of our Watershed Management Plan through active implementation of the strategies identified in it.

We have a major culvert replacement planned for a crossing in the Foxley River watershed. The existing culvert is collapsing and threatens the stream, the estuary, and Milligan's Pond. Replacing this culvert will also eliminate a migratory barrier created by the existing culvert. To be compliant with provincial design requirements, the replacement will cost ~\$12,000.

We plan to establish an effective migratory channel at the Enmore River. This work will require active management of the entire Enmore River watershed. We also hope to establish a walking trail within this watershed. Current fishing hotspots along this river are heavily littered. We hope to place (and service) refuse barrels at these locations.

This year we will 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 shellfishing resource.

We also hope to expand the MacDonald's River interpretive trail. The trail will also require ongoing maintenance.

We will continue restoration maintenance, ongoing enhancements, tree planting, etc. at the ten streams in our managed area.

We have a cooperative agreement with the Municipal Community Council to provide education resources to the community recreation program. As usual, we will be active in many other planning and community activities. Public information and community engagement and involvement will also continue to be a principal action item for us. Our future will be determined by the responsible decisions of informed community members.

## 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.*

#### Supporter Logos

