



## **2018 Micro-grant Recipients**

### **1) Project Title: Building a Sustainable City**

STEAM PEI, in collaboration with the Architects' Association of PEI, Bricks 4Kids, and the Confederation Centre Public Library, will coordinate a "Building a Sustainable City" event. This hands-on building event will be free to the public, open to participants of all ages, and held on Saturday afternoon during Architecture Week in October 2018 at the Confederation Centre Public Library. At least two architects, one engineer, and one teacher will be present to facilitate discussion, and assist with designing and building a sustainable city with LEGO. Participants will join in group discussion on sustainable cities, design a structure for the City, and then assemble it together. This visionary event will accommodate up to 100 participants and will use LEGO bricks, larger LEGO Diplo bricks (for little hands), motorized technics LEDO, and new renewable energy LEGO components including solar, wind, and hydro to provide power to the City. With the City of Charlottetown's Community Sustainability Micro-grant funding STEAM PEI will have the ability to purchase these renewable energy kits and continue to use them for additional programming such as camps, workshops, and classes – integrating alternative energy building and learning, and advanced robotics education to thousands of Charlottetown students for years to come.

### **2) Project Title: Charlottetown Rural Solar Watering Pump**

Charlottetown Rural has had successful vegetable growth and production in their greenhouse this year. They are now hoping to expand the project to the outdoors, creating several (15) raised garden beds to produce food for our cafeteria, and also provide a green space for students to enjoy. The goal is to ensure that sustainable and innovative practices are used, to teach students the value of the environment, and to enjoy the outdoors. This project will use a solar powered submersible pump to distribute water from a fresh water source close to the school into several storage barrels, which will then be used for watering our outdoor garden. The pump will be controlled by a sensor system that will automatically turn the pump off when barrels are full, thus ensuring there will always be water available in the tank, and very little water wasted. The location of the outdoor garden is ideal for this system as it

is in close proximity to a water course and the garden plot is south facing. There is a shed with an angled roof specifically designed to hold a solar panel to ensure maximal security and functionality.

### **3) Project Title: Edible Gardening for Beginners**

Edible Gardening for Beginners is a series of gardening workshops presented through the growing season from June until October. The workshops are free to the public who can attend any workshops relevant to them. The goal of this project is to empower people to start growing their own food. In 2017 a survey commissioned by the City of Charlottetown concluded that the biggest barrier for people to grow their own food was the lack of knowledge. Edible Gardening for Beginners will teach people how to successfully grow their own food in an urban environment.

Gardening skills are ideally suited to experiential learning so the workshops are designed to be hands on learning in the garden. The food growing techniques taught in this series of nine workshops will be based on organic principles. Stephanie Dewar, a well-known and respected farmer, will develop and deliver all the workshops for Edible Gardening for Beginners. The curriculum and course material that Stephanie develops will be available for other people who want to teach such workshops in the future.

Stephanie was one of the original farmers hired to develop the Farm Centre Legacy Garden in 2014 and has worked on many of the Islands' best organic farms including Heart Beet Organics, Soleil's Farm, Jen & Derek's Organic Farm. She just recently purchased her own farm, which she plans to develop in 2019, so she is available to teach in 2018. She has the skills, knowledge, ability and personality to deliver a high quality and engaging course as well as the reputation to attract people to the workshops.

### **4) Project Title: Import Replacement Strategy for the City of Charlottetown**

Building on the Centre for Local Prosperity's (CLP) recently-released import replacement study, the CLP is rolling out a service to help communities, municipalities, and regions to explore and develop their own import replacement strategies. Import replacement focuses on re-directing spending by local "anchor institutions" (large public and private locally-embedded organizations with large discretionary procurement budgets) and the residents, from non-local to local suppliers.

In partnership with Nancy Willis, Institute for Bioregional Studies, and Phil Ferraro, one of our advisors from the PEI Farm Centre, The Centre for Local Prosperity is proposing to help facilitate the process of implementing an import replacement strategy that will work for the City of Charlottetown. Starting with a public evening town hall presentation, and a day long strategy implementation session inviting representatives from anchor institutions, local businesses, governments and community. CLP intends to build a broad range of partnership support with key Charlottetown stakeholders.

**5) Project Title: Inner City Life Skills Camp**

The Inner City Life Skills Camp is a not for profit organization that provides free summer camp experience for children in grades 3 – 6 who live in the City. The goal of the camp is to provide an opportunity for growth and emotional wellness, physical activity, and encourage positive intrapersonal skills among the children who participate. The hope is that through the lessons and activities this camp has to offer the children will return to their school community better prepared for success.

The camp runs for six weeks in the summer and will operate out of St. Jean's School in Charlottetown. The project is not a new initiative and has been benefiting children in the Charlottetown community for years. The funding received through the City of Charlottetown's Community Sustainability Micro-grant program will go directly toward new experiences and opportunities for the children who attend the camp – such as bowling, BBQ's, and weekly outings.

**6) Project Title: The Distribution of Invasive Plant Species and Management of Oriental Bittersweet**

Oriental bittersweet (*Celastrus orbiculatus* Thunb.) is an invasive woody vine that poses a significant threat to native plant communities. It competes aggressively for light with its quick growth habit and rapidly shades out the native plant community. The climbing *C. orbiculatus* vines girdle trees and shrubs, severely weakening them through constricted nutrient and water flow. A project has recently been developed through a partnership between the PEI Invasive Species Council, Agriculture Canada and Island Nature Trust and received funding through the PEI Wildlife Conservation Fund to survey for oriental bittersweet across PEI and then develop control strategies for this invasive vine. The goal of that project will be to develop a management plan for effective control of oriental bittersweet that can be used by land owners and conservation groups and which limits the negative impact on the environment.

Invasive species often originate from large urban centres. As such, regular intensive surveying is required to rapidly detect and respond to new invasive species before they become an issue. The proposed project will build on the existing oriental bittersweet project and intensively survey within Charlottetown for the presence of this species as well as other priority invasive plant species. Oriental bittersweet and other invasive plant species are often distributed through garden centres and nurseries, therefore; in addition we will survey these locations for the presence of invasive species. Lastly, to encourage the public to plant native species, we will produce a "Plant Me Instead" guide to be distributed to the public.

**7) Project Title: Seeing is Believing**

Rain gardens are a simple and effective landscaping tool that reduces surface water runoff in urban areas through on-site retention and absorption of rainwater. It is often overlooked by property owners as a storm water control option in favor of quick drainage off site.

The Spring Park Home and School Association (SPHSA) will install a demo rain garden just off the main entrance Spring Park Elementary School in Charlottetown. By reducing or eliminating a surface water runoff problem specific to this site, the goal of the project to provide a practical demonstration of how to use storm water runoff to create an attractive landscape feature.

**8) Project Title: Sustainable Development Fair**

The Sustainable Development Fair featured displays and activities provided by multiple organizations devoted to sustainable development – doing things that contribute to the achievement of the United Nations Sustainable Development Goals and the City’s Integrated Community Sustainability Plan (ICSP). The aim was to provide a fun, educational, inclusive, and family friendly event promoting public awareness and commitment to sustainable development.

**9) Project Title: The Power of Produce Club**

The Power of Produce (PoP) Club is a program that will be offered to children age 5-12 at the Charlottetown Farmers Market to empower and engage youth in the local food system and encourage them to make healthier food choices. The program will include activities on healthy eating and environmental education. Children who participate will receive a reusable market shopping bag when they register and each week they will receive one \$2 token to purchase fruit and vegetables at the Farmers Market. The Farmer’s Market will keep a Passport to Health on file and track the child’s attendance and participation in food literacy activities that will be offered at the market each week.

The goal of the PoP Club is to positively impact children, families, farmers, and communities in making healthier food choices while supporting the local food system.

**10) Project Title: Wild Child Forest School Gear Library**

The PEI Wild Child Forest School is a program that takes place in nature, entirely outdoors for the duration of the program: rain or shine. Forest School is a concept that is quickly gaining popularity worldwide because it is focused on connecting kids to nature through hands-on immersive experiences. At Forest School, kids build skills to climb trees, identify local flora and fauna, learn bird calls, explore natural areas, develop physical literacy skills, and if they are old enough learn to use tools like saws, hammers, and drills.

The City of Charlottetown Community Sustainability Micro-grant funding will be use to establish a fully stocked ‘gear library’ so that all children have the rain gear required to enjoy the outdoors regardless of the weather. Supplies such as a GPS unit, compasses will greatly enhance the quality of the program, allowing coordinators to teach orienteering, and hand-on lessons about food webs.