

2016 RBC Blue Water Project Leadership and Community Action Grants

NATIONAL – CANADA

Canadian Environmental Grantmakers' Network, \$50,000: Solutions to urban freshwater problems require networked approaches that engage multiple groups and sectors working at multiple levels. In 2015, with RBC support, CEGN worked with 20 funder and NGO organizations to develop a shared measurement framework for the freshwater community. Coordinated around a common goal – 'all waters in Canada in good health' – this framework created a transformative platform for catalyzing collective action and assessing real progress against 10 tangible outcomes, with 22 key impact metrics. In 2016-2017, CEGN will build on the platform, relationships and learning by working with key partners to put the framework into action. This will include: catalyzing 2-3 tangible, data-driven projects that support a collective assessment of performance against shared outcomes and metrics; expanding the number of organizations and funders adopting and utilizing the shared measurement framework; and developing communications materials to reach and engage a broader audience.

Canadian Water Research Society, \$50,000: The Canadian Water Research Society, in partnership with the Universities Consortium on Columbia River Governance, Native American Tribes, Canadian First Nations, and other sovereigns and stakeholders will implement the "roadmap" that emerged during the past 12 months. The organization will: work with tribes and First Nations to clarify the role they would like to play in catalyzing and convening an ongoing, inclusive forum to promote and support an integrated, whole basin approach to govern the use of land, water, and associated natural resources in the international Columbia River Basin; consult with other sovereigns and stakeholders through meetings, conference calls, webinars, and other venues; and launch the forum via an appropriate event or activity. The forum will address issues that fall outside the purpose, scope, and authority of the Columbia River Treaty; and supplement other existing transboundary cooperative initiatives.

Foundation for Educational Exchange between Canada and the United States of America, \$50,000: This donation will support two existing Fulbright Canada - RBC programs: the Fulbright Canada-RBC Freshwater Student Awards, and the Fulbright Canada – RBC Eco-Leadership Program.

The Fulbright-RBC Freshwater Student Awards support the research and professional development of outstanding young scholars focused on freshwater issues. Since 2009 the organization has given ten young scholars the opportunity to engage with leaders in their field in their host country, conduct industry-leading research on a variety of topics, and reach their full leadership potential. The Fulbright Canada - RBC Eco-Leadership Program (ELP) provides small grants (\$2000-\$4000) to current grantees and alumni, helping them complete a volunteer-based project that will make a significant positive environmental impact. Through ELP, the organization's active alumni are able to bring together individuals and local community partners who can work together and undertake community-based environmental initiatives.

Green Communities Foundation, \$100,000: The organization's project, Depave Paradise, addresses the proliferation of hard surfaces in modern urban environments through the act of ripping up unused pavement by hand and replacing it with soil and vegetation. Depave Paradise works with local organizations at highly visible sites to stage workbees, during which volunteers "liberate the soil," using hand tools to pry up the pavement. Native plants, bushes and trees are then planted to act as filters and sponges for polluted stormwater runoff. The events attract media and political attention, and raise awareness of the issues surrounding the urban water cycle, while making measurable environmental impacts, reducing runoff and contamination and increasing green space.

Lake Ontario Waterkeeper, \$100,000: The Campaign for Water Literacy is a national effort to ensure Canadian waters are swimmable, drinkable, and fishable for generations to come. The Campaign leverages existing tools (e.g., Swim Guide, Watermark Project) and promotes the work of hundreds of water protection and recreation organizations. It primarily serves youth ages 18-24 and newcomers in urban areas.

Studies show that Canadians value water and nature more than any other country; yet, we rank lowest in the developed world for environmental protection. The Campaign is a response to this disconnect between what Canadians value - clean water - and the health of their waters.

The project incorporates Lake Ontario Waterkeeper's 6-Stage Water Literacy Method into a coordinated outreach, education, and mentoring campaign. By improving their water literacy, youth and recreational water users can better protect their health and their waterbodies. In the process, a nationwide community of people working for swimmable, drinkable, fishable water is created.

National Community Action Grants:

Wildsight, \$10,000: The project will build legitimacy for community based water monitoring (CBM) and citizen science in Canada. Erosion of government capacity, political leadership, legislation and the accelerated loss of hydrological cycle predictability due to climate change have severely challenged our ability to safeguard and manage fresh water in Canada. Recognizing these challenges, communities and stewardship groups have stepped up efforts through CBM with the collaborative goal of filling water quality and quantity, and baseline knowledge gaps to support informed decision-making regarding water protection and allocation in Canada. The project will inform dialogue between academia and citizens by identifying common challenges and steps necessary to enhance and legitimize citizen science. This project will pilot a workshop in partnership with world-renowned water scientist, Dr. Schindler, to field test and identify legitimacy challenges for CBM.

BRITISH COLUMBIA

Invasive Species Council of British Columbia, \$50,000: Aquatic invasive species (AIS) have proven to have devastating impacts on freshwater environments: often changing species distribution, decreasing oxygen content and ultimately lowering water quality and damaging urban water infrastructure. Parrotfeather, Eurasian Milfoil, Elodea as well as zebra and quagga mussels are just some of the top AIS that have been seen to substantially impact watersheds that are integrated with urban areas. Specifically, invasive mussels have proven to cause considerable damage to urban water infrastructure leading to extreme maintenance costs. ISCBC will implement an Adopt-A-Watershed program, empowering communities to become cutting-edge leaders through targeted workshops and webinars that train, educate and facilitate action in BC urban centres - Victoria and Kamloops. Provincial and local governments, community stewardship groups and local people will all benefit from improved/protected urban water quality and maintained water distribution infrastructure.

Nuu-Chah-Nulthaht / WCVI Aquatic Management Society, \$90,000: This organization is spearheading the Port Alberni Clean Water Project. The project goals are improved water quality, protection and remediation of waterways along with education and awareness. The group will monitor the health of streams and ocean environment to protect the Salmon Capital of Canada. The project will assess the storm and sewer network, marine environment and water quality monitoring from industrial and recreational practices. The organization will be using scientifically accepted methods from past research and new stewardship (ie. RDN Water Smart/PSF Salish Sea project) to address specific concerns of Port Alberni (primarily storm/sewer runoff and marine water quality). The group has an established corps of volunteers, industry and government willing to participate and will work with stakeholder organizations such as the City of Port Alberni, Port Alberni Port Authority, First Nations, Catalyst Paper and community volunteers and schools to find solutions to problems identified from the study.

Regional District of Okanagan-Similkameen, \$40,000: The Okanagan is a snow based water system, which recharges aquifers and main stem lakes. Unfortunately for water quality, an estimated 85 % of riparian habitats have been lost in the South Okanagan-Similkameen due to urban development in the valley bottoms. These wetlands are considered imperiled habitats. Owners along foreshores are often not aware of the importance of riparian setbacks, how to look after their properties to preserve land and water quality. This donation will enable the project team to produce seminars and workshops allowing realtors, builders and land owners to understand how development choices impact the viability and health of local riparian habitats, community water systems, and fish populations. The project will encourage development of lakeshore community stewardship.

Local organizations: \$68,000 in Community Action Grants will be shared by these 10 organizations in British Columbia:

- City of Surrey (\$10,000)
- Cowichan Community Land trust Society (\$5,000)
- Cowichan Lake Salmonid Enhancement Society (\$5,000)
- Fraser River Discovery Centre Society (\$10,000)
- Fraser Riverkeeper Society (\$3,000)
- Langley Environmental Partners Society (\$5,000)
- North Shore Neighbourhood House (\$10,000)
- Peninsula Streams Society (\$5,000)
- Powell River Salmon Society (\$5,000)
- Swan Lake Christmas Hill Nature Sanctuary Society (\$10,000)

ALBERTA

Alberta Riparian Habitat Management Society, \$80,000: Cows and Fish (as Alberta Riparian Habitat Management Society is most commonly known) is a voluntary stewardship program focused on improving the appreciation for and management of riparian areas and associated lands. This group will implement on-the-ground residential projects with landowners, both as part of low impact developments (LID) and riparian improvements, to act as showcases in their community. In sharing the LID techniques with other implementers (eg. planners, developers, etc), the organization will increase the skills of other implementers and get them to identify opportunities to incorporate LID in their work. LID and riparian restoration work will help reduce runoff, increase infiltration and trap sediment.

Calgary Horticultural Society, \$30,000: The Calgary Horticultural Society recently completed a two year pilot project partnership with City of Calgary Water Services to engage, educate and empower Calgary gardeners to reduce outdoor water consumption and manage storm water quality and quantity on their properties through water wise (Yard Smart) gardening practices. This donation will enable the organization to train new instructors and volunteers to reach new audiences on the topics of saving money, time, energy and water through beginner gardening and composting workshops. Additional work will include community gardening, educating children; conducting stakeholder discussions, research and planning around new markets and integrating water wise principles into education programming.

Canadian Parks & Wilderness Society (CPAWS) Southern Alberta Chapter, \$35,000: Water Rangers is a highly successful education program delivered by CPAWS SAB since 2007. The hands-on program teaches about water from a global to local watershed perspective and culminates with personal water conservation action initiatives. CPAWS has inspired over 9,000 youth to become watershed steward, and demand continues to grow each year. In 2015 the group expanded its scope to include adult new immigrants and piloted the Water Rangers program for over 150 immigrant women. This donation will be used to continue to build the Water Rangers program for youth and grow the group's new immigrant education program with the Canadian Immigrant Women's Association and other immigrant service groups. The organization will continue its citizen science program partnering with River Watch for secondary students, and with flood mitigation as a central initiative in Calgary, the organization will build this topic into its programs.

Centre for Affordable Water and Sanitation Technology (CAWST), \$50,000: Wavemakers is an Alberta curriculum-linked education program that educates, engages and empowers students and educators to take action on water issues. The program addresses the need for youth to gain the knowledge and skills required to take local action on water issues. This is achieved by providing educators with curriculum-linked, action-oriented environmental education tools and resources that help them incorporate water management topics into their lessons in a way that leads to student behaviour change, increased community engagement and, ultimately, protected water resources. In 2016/17, the group will empower 5000 youth from 30 schools in 15 communities to take action.

City of Calgary Parks, \$88,000: During a major flooding event in 2013, significant stretches of riverbank along the Elbow and Bow Rivers in Calgary were damaged. The high water dramatically eroded banks and stripped away vegetation leaving the river channels vulnerable to even more damage in the face of future flooding. Along the Elbow River Channel, substantial flood debris still covers the banks and adjacent plant communities and a robust beaver population has further degraded the trees and shrubs. The Elbow River channel links some of the oldest and best loved parks in Calgary's network of green spaces. The parks themselves have undergone a variety of repairs and upgrades since the flood. This donation will allow the Calgary Parks Urban Conservation Unit to undertake a series of initiatives to restore and enhance the Elbow River Channel in the high-profile Centre City.

Oldman Watershed Council, \$65,000: The Headwaters Action Plan process was initiated in 2012 by the Oldman Watershed Council. Through scientific testing and social science research, the organization has been successful in forming a key stakeholder group, the Headwaters Action Team (HAT), mapping Linear Features Density and being a leader in educational outreach and government consultation. In 2015/16, the group will increase its educational outreach programs, target conservation and habitat restoration for Native Fish (Westslope Cutthroat Trout - recently given a Critical Habitat Order) and continue to demonstrate leadership and expertise in watershed management.

Trout Unlimited Canada, \$50,000: The Piper Creek Restoration Project is a unique partnership between Trout Unlimited Canada (TUC), ReThink Red Deer, Alberta Riparian Habitat Management Society (Cows and Fish), the City of Red Deer, and local volunteers including TUC's Central Alberta Chapter. The project aims to remove a stream crossing over Piper Creek, restoring connectivity and improving water quality, fish habitat, and riparian health. The stream crossing is comprised of concrete debris, corrugated metal, and soil. The crossing may hinder fish passage during periods of low flow, cause the downstream channel to become incised, contribute to degradation of riparian habitat, and contribute to decreased water quality. Restoring this section of Piper Creek, and improving stream health and fish habitat will benefit local and downstream fish communities, and the citizens of Red Deer. The crossing is located on City property, and was historically used by a tenant to access the south side of the property.

Yellowstone to Yukon (YTY) Conservation Initiative, \$48,000: A critical challenge in tackling urban water issues is raising sufficient awareness amongst downstream users of the source of and concerns around their fresh water, and mobilizing them to play a role in their headwaters' protection. YTY has been successfully developing that understanding amongst Albertans, and forming the relationships needed with both the public, and with key influencers and decision-makers, to translate interest into action. This donation will aid the organization to achieve protection of the Bighorn Wildland and its mountain headwaters. The Bighorn supplies ~90% of Edmonton's drinking water, and provides world-class recreational and wildlife-viewing opportunities for Edmontonians, other local residents and thousands of visitors.

Local organizations: \$14,500 in Community Action Grants will be shared by these 2 organizations in Alberta:

- Canadian Parks and Wilderness Society Northern Alberta (\$10,000)
- Weaselhead/Glenmore Park Preservation Society (\$4,500)

SASKATCHEWAN

Meewasin Valley Authority, \$50,000: Meewasin Valley Authority will employ a two-pronged strategy to provide both short term and longer term stewardship for the South Saskatchewan River Valley. Conservation fieldwork will be performed by staff and volunteer participants to enhance the biodiversity of immediate uplands, drainage swales and channels, riparian slopes and shorelines and a contractor will mitigate the presence of invasive species through conservation grazing. The second component will continue work to create an informed and engaged urban population committed to maintaining good water quality in the South Saskatchewan River Valley through the use of citizen science concerned with water quality of the South Saskatchewan River and related drainage channels. 800 participants will be engaged in scientific data collection while learning about water quality, the natural system related to the river and the role of the city in the basin.

University of Saskatchewan, \$85,000: First Nation Canadian communities face water supply problems that are not typically seen in other Canadian towns and cities, such as lack of trained water operators, absence or inadequate distribution infrastructure, and numerous boil water advisories. In addition to their inherent adverse social and health repercussions, these challenges also negatively impact the economic development opportunities in many of these communities. Given the diversity of these problems, unique solutions must be found that are specific to individual First Nation Canadian communities and Indigenous culture. This project will support a comprehensive study of the water-related challenges currently faced by the eleven First Nations communities that are members of the File Hills Qu'Appelle Tribal Council in Saskatchewan. In addition to determining the water-related technical issues, this project will also examine the environmental, social, cultural, economic and historical factors influencing water stewardship in the member First Nation communities.

Local organizations: \$30,000 in Community Action Grants will be shared by these 3 organizations in Saskatchewan:

- International Institute for Sustainable Development (\$10,000)
- Moose Jaw River Watershed Stewards Inc. (\$10,000)
- The Upper Assiniboine River Conservation District (\$10,000)

MANITOBA

Ducks Unlimited Canada, \$100,000: In 2013, the Global Nature Fund proclaimed Lake Winnipeg "Threatened Lake of the Year" due to toxic algae formation as a result of increasing nutrient levels attributed to wetland drainage within the Lake Winnipeg Watershed. This iconic lake is important to all Manitobans, but especially the residents of Winnipeg, some of which own properties adjacent to the Lake and enjoy the recreational opportunities Lake Winnipeg has to offer.

Ducks Unlimited Canada has conducted studies that reinforce the value of wetlands in providing a solution to nutrient loading and the degradation of Lake Winnipeg. Putting these findings into action, DUC will conserve 295 acres of wetland habitat in the Prairie Pothole Region that will store 119,190 m³ of runoff and prevent 466 kg of phosphorous and 4,656 kg of nitrogen from entering Lake Winnipeg every year, thereby utilizing wetland conservation as an effective method of restoring Lake Winnipeg's health.

Lake Winnipeg Foundation, Inc., \$70,000: The complex challenges facing Lake Winnipeg can seem both daunting and removed to the average urbanite. Paradoxically, it is regular city-dwellers who will determine the future of this vital waterbody – addressing harmful algae blooms requires systemic change driven by a critical mass of informed citizens, and urban centres are where the majority of Manitoba's population lives.

The Internet has the potential to be a water stewardship game changer. Using a diverse suite of communication tools including photography, film and animation, this project will bring compelling education to the online networks on which today's citizens spend their time.

IISD Experimental Lakes Area Inc., \$85,000: Building on the ground breaking freshwater science and two years of high school education programming at IISD-ELA, this project will directly engage Canadian high school students in freshwater science and urban water issues, building tools and opportunities to develop solutions to the challenges cities and municipalities in Canada are facing today. With an overarching theme of urban water issues, the project will: (1) develop curriculum on three areas of ELA research, (2) run a national essay competition for high school students, (3) facilitate a high school level field course on ecological literacy and whole ecosystem science with a specific focus on how it relates to urban water issues and (4) provide an opportunity for essay competition winners to participate in the Canadian Water Network Blue Cities Conference, bringing a youth perspective to this urban water planning event in Canada.

ONTARIO

Environmental Sciences, York Region, \$50,000: York Region will undertake a water reuse research demonstration project using reclaimed water from one of the Region's existing wastewater treatment facilities. The project will focus on the use of reclaimed water for agricultural irrigation (e.g., sod farming, trees) and will evaluate the effects of reclaimed water on plant health, soil properties, and water quality and quantity. The project will last 36 months to accommodate two growing seasons, and the demonstration site will be monitored (i.e., surface and groundwater monitoring). Energy savings and greenhouse gas emission reductions will be tracked and assessed as part of the study. Public outreach opportunities will showcase the benefits of water reuse. Research from this project will inform the development of a broader water reuse program.

Kawartha Region Conservation Authority, \$25,000: This donation will be used to develop and broaden the organization's "BlueScaping" program: a community-focused outreach program that promotes innovative, lot-level stormwater management measures to address urban stormwater issues. The program engages the community in workshops where they learn about stormwater landscaping and what they can do on their properties. The program also works with municipalities and community groups to guide program efforts such as selecting BlueScaping demonstration sites in public, high profile locations, and to help deliver programs that raise urban stormwater awareness among youth. The program will result in an increase in infiltration, cleaner runoff, and a reduction of runoff entering our lakes and rivers.

Ottawa Riverkeeper, \$100,000: The cities of Ottawa and Gatineau frequently spill untreated sewage into the Ottawa River. This pollution adds harmful chemicals to drinking water, creates conditions that are not safe for swimming and elevates fish consumption advisories. The organization will work with the cities to provide real-time public reporting of sewage spills in order to reduce public health risks from contact with polluted water. To move toward long term water quality improvements the group will form a multi-sector Ottawa River Roundtable. This collective of leaders and decision-makers from Quebec and Ontario will set ambitious targets that will form an Ottawa River Action Plan.

Rare Charitable Research Reserve, \$25,000: This project will address the key water problem of sustainability of water quality and quantity in the urban landscape. This project will develop the capacity of the rare Charitable Research Reserve to monitor and manage its three small streams, and educate and advocate for small stream conservation and stewardship. The group's regular monitoring program will be expanded to include regular benthic invertebrate and water chemistry sampling in all three streams, and provide equipment to allow basic chemical and hydrological monitoring within the organization. This work will provide opportunity for research labs at the University of Waterloo and McMaster University to provide in-kind chemical analysis that can be used to assess water quality, and support the conversation around water in the community and schools. This project will enable a full review and update of Rare's water monitoring program after 10 years of implementation.

Mississippi Valley Conservation Authority, \$10,000: Implementation of green infrastructure is lacking in eastern Ontario. With increased development and hardening of natural areas, water balances are altered and the water quality of lakes and rivers are negatively affected. The Water Management and Wetland Restoration Training Course will teach participants to identify potential wetland restoration sites, and explores wetland complexes and several watersheds in Eastern Ontario. Participants engage in group learning, field exercises and presentations. The collaborative nature of the development of the course materials ensures a well balanced approach to the management of wetland restoration within the framework of existing policies and guidelines in practice in the Province of Ontario.

Royal Botanical Gardens, \$75,000: The Cootes to Escarpment EcoPark System (CEES) Targeted Community Based Stewardship project is designed to engage residents of urban and near-urban communities and corporations and their staff in meaningful ecological restoration projects that improve the health of water quality and enhance habitat.

The urban community project will focus on addressing the issue of stormwater runoff through the implementation of Low Impact Development. The near-urban community project will focus on addressing the issue of degraded creeks experiencing erosion, lack of riparian buffers and the existence of barriers through the implementation of stream restoration. The corporate community project will use restoration to improve degraded wildlife habitat and connectivity.

St Lawrence River Institute of Environmental Sciences, \$24,000: For this project, the St. Lawrence River Institute of Environmental Sciences will represent the Upper St. Lawrence River Protection Network on a project called 'The Great St. Lawrence River Clean Up'. This collaborative project will involve the River Institute staff, the Cornwall Lunker Club, the Seaway Valley Divers Club, the City of Cornwall, and community volunteers in a collaborative effort to remove garbage and debris from four impacted sites along the Cornwall shoreline. A full day of in-water and shoreline cleanup activities will be coordinated at each site to remove as much debris as possible.

The Board of Management of the Toronto Zoo, \$85,000: For 14 years, Toronto Zoo's Great Lakes Program (GLP) has offered free, bilingual programming including outreach and multilingual community resources focusing on aquatic conservation to 18,000 students and 3,000 members of the public. This donation will allow the Toronto Zoo to continue GLP core outreach to 750 classes annually and to develop the Blue Schools certification program. The Blue Schools initiative engages students province-wide as they implement water saving strategies at their school. These strategies will result in measureable impacts for our water resources.

The Living City Foundation, \$60,000: During routine fisheries monitoring in the summer of 2015, Toronto and Region Conservation (TRCA) captured five adult Grass Carp along the Toronto Waterfront, which garnered extensive national and international media coverage. As one of the members of the invasive Asian Carp family, Grass Carp have the potential to cause extensive damage to aquatic ecosystems in the Great Lakes basin, particularly to coastal wetlands. TRCA will implement a strategic monitoring program which targets Asian Carps along the Toronto Waterfront. The scope of the monitoring program will be two-fold, targeting areas (a) that are habitats that are suspected to have high potential for sustaining Asian Carps and (b) where Asian Carps have been reported during past monitoring efforts. With this data, TRCA will be better equipped to reduce the threat of ecosystem destruction, particularly in coastal wetlands, through an adaptive management approach to the restoration of coastal habitats.

Trout Unlimited Canada, \$50,000: The Mountsberg Creek Reconnection Project will restore the lower portion of Mountsberg Creek back into its original channel and floodplain in order to improve water quality and management of storm flows. It was diverted into an artificial channel within the City of Hamilton's Courtcliffe Park many years ago as a result of poor land management resulting in loss of storm flow management and deterioration of habitat. This project will benefit the park, the citizens of Hamilton and will contribute to the improved health and quality of this coldwater stream.

Local organizations: \$229,500 in Community Action Grants will be shared by these 35 organizations in Ontario:

- Aquatarium Inc (\$5,000)
- Ausable Bayfield Conservation Authority (\$5,000)
- Bay Area Restoration Council of Hamilton and Halton Inc (\$5,000)
- Brant Waterways Foundation (\$5,000)
- Central Lake Ontario Conservation Authority (\$5,000)
- City of Hamilton – Hamilton Water (\$10,000)
- Canadian Parks and Wilderness Society – Ottawa Valley (\$10,000)
- Ecospark Environmental Organization (\$10,000)
- Essex Region Conservation Foundation (\$5,000)
- Friends of Fort Erie’s Creeks (\$5,000)
- Gamiing Nature Centre (\$5,000)
- Grant River Conservation Foundation (\$7,500)
- Greening Nipissing (\$5,000)
- Heartland Forest Nature Experience (\$10,000)
- Hilliardton Marsh Research & Education Centre (\$2,500)
- Lakehead Region Conservation Authority (\$5,000)
- Lower Thames Valley Conservation Authority (\$5,000)
- Lower Trent Region Conservation Authority (\$5,000)
- Maitland Valley Conservation Authority (\$5,000)
- Niagara Peninsula Conservation Authority (\$5,000)
- Nickel District Conservation Foundation (\$9,500)
- Peterborough Green-up Association (\$5,000)
- Pollination Guelph (\$5,000)
- ReForest London (\$7,500)
- Saugeen Valley Conservation Authority (\$10,000)
- Scugog Lake Stewards Inc. (\$2,500)
- The Bruce Trail Conservancy (\$5,000)
- The Couchiching Conservancy (\$10,000)
- The Halton Region Conservation Foundation (\$5,000)
- The Land Between (\$5,000)
- The North Bay-Mattawa Conservation Authority (\$10,000)
- The Riverwood Conservancy (\$10,000)
- Tin Roof Global Action Inc. (\$10,000)
- Toronto Botanical Garden (\$10,000)
- Town of Niagara-on-the-Lake (\$5,000)

QUEBEC

ENvironnement JEUnesse, \$15,000: Soif de savoir, soif d'agir ! est un projet de préservation et de valorisation de l'eau publique. Il se décline en trois volets complémentaires et indépendants, soit une formation sur les enjeux globaux et montréalais de l'eau où les élèves de 4e et 5e secondaire réfléchissent à leur propre rapport à la ressource, un atelier participatif sur la valorisation de l'eau à Montréal qui permet d'élaborer des solutions et des revendications à soumettre aux élus de la ville et des fiches-projets pour agir concrètement au sein d'un établissement scolaire, du retrait de l'eau embouteillée à la récupération de l'eau de pluie, en passant par l'étude de la consommation de l'eau, ce ne sont pas les occasions de s'impliquer qui manquent! Au fil du processus, les élèves apprennent à reconnaître l'importance de l'eau et ont des idées et des pistes d'action tangibles pour agir et sensibiliser leur entourage.

Fondation de la faune du Québec, \$15,000: Le lac Saint-Charles revêt une importance stratégique en raison de son rôle de réservoir d'eau potable et d'habitat faunique. Or, comme son bassin versant subit une anthropisation croissante, plusieurs de ses affluents sont de mauvaise qualité et contribuent à la dégradation de son eau. C'est notamment le cas de l'effluent du Golf Royal Charbourg, dont l'eau est contaminée par le phosphore, les matières en suspension et les coliformes fécaux. En 2009, la Ville de Québec a aménagé un fossé engazonné pour décontaminer le cours d'eau avant son arrivée au lac, mais la capacité d'absorption et la performance épuratrice de l'ouvrage se sont avérées insuffisantes. Le projet vise donc à restaurer et à bonifier les fonctionnalités du système d'épuration par l'optimisation du fossé engazonné, le réaménagement du parcours de l'effluent et la végétalisation des aménagements. À terme, ces activités vont améliorer la qualité de l'eau et des habitats fauniques.

Groupe d'éducation et d'écovigilance de l'eau, \$30,000: J'adopte un cours d'eau est un programme de science citoyenne réputé et implanté partout au Québec: 40000 participants au cours des 15 premières années ; ça se poursuit et heureusement! L'actualité québécoise démontre toute sa pertinence: déversements d'eaux usées, impacts négatifs de développements près de sources d'eau potable, défauts d'infrastructures municipales, mauvais comportements citoyens, dégradation de rivières urbaines. L'éducation et l'implication citoyenne restent au cœur de la résolution de ces problèmes. Par ce projet, le G3E veut entourer les coordonnateurs et écoles participant à J'adopte, d'un réseau de collaborateurs (villes et experts notamment) afin de mettre au profit de l'ensemble des 30 collectivités ciblées, la réalisation de J'adopte par 2500 jeunes. Après avoir étudié les cours d'eau et compris les répercussions de leurs habitudes quotidiennes sur la ressource et les rôles des cours d'eau urbains sur le bien-être citoyen, les jeunes deviendront des ambassadeurs et des citoyens avertis.

Les Amis des Jardins de Méris, \$30,000: *Upstream - Downstream* (« en amont - en aval ») est une nouvelle initiative axée sur la promotion d'une consommation d'eau intelligente. Elle s'attaque à un important problème, soit le fait que l'eau est une ressource largement abondante pour certains (en amont) et insuffisante pour d'autres (en aval). Cet écart est mis en évidence chaque fois que les sources d'eau de la région sont touchées par une tempête ou des émissions polluantes d'importance. Ce projet contribuera à informer sur la formidable valeur des sources d'eau les 19 000 résidents et les 100 000 touristes qui visitent la région l'été. Son ultime objectif est de contribuer à changer les

habitudes de consommation d'eau. Cela se fera au moyen d'activités éducatives, de communications et d'activité communautaires. Par l'intermédiaire de cinq programmes novateurs (exposition, activités de mesure, activités scientifiques, activités jeunesse et activités de la Journée Eau Bleue), l'organisme vise à changer les habitudes de consommation d'eau dans la région et à aider chaque citoyen à contribuer à la protection de l'environnement.

Organismes locaux : Des subventions Action locale totalisant 49,300 \$ seront réparties parmi les 8 organismes locaux suivants au Québec : Action Saint-François (\$4,500)

- Conseil des bassins versants des Mille-Iles (COMBAMIL) (\$5,000)
- Fondation du Mont-Saint-Bruno (\$4,900)
- Fondation Québécoise pour la protection du patrimoine naturel (\$5,000)
- Fonds d'action Saint-Laurent (\$4,900)
- Great Lakes and St.Lawrence Cities Initiative (\$5,000)
- Negawatts Production (\$10,000)
- Services horticoles, les pousses urbaines (\$10,000)

ATLANTIC CANADA

The Clean Nova Scotia Foundation, \$15,000: The Atlantic Stormwater Initiative (ASI) aims to support climate change adaptation in the Atlantic Provinces by reducing negative impacts of stormwater runoff. Conventional stormwater management prevents flooding by draining runoff as quickly as possible, resulting in increased velocity and volume of surface runoff, alteration of surface and groundwater hydrology, accelerated erosion, and degradation of water quality, habitat and biodiversity. ASI will increase knowledge and access to information and resources amongst stormwater experts and stakeholders. Common language, symbols and signage will be developed to ensure clear communication on best management practices (BMPs) and Low Impact Developments (LIDs). Information on current LIDs will be compiled and mapped, and combined with information on areas at high risk of stormwater damage, flooding, or climate change-related impacts. Several demonstration sites showcasing stormwater management innovation will highlight the impact of LIDs and BMPs. The project will benefit coastal communities, residents, landowners, governments, businesses and other stakeholders.

Atlantic Coastal Action Program Cape Breton, \$35,000: This project will identify historic trends in coastal and estuarine ecosystems and biodiversity in Atlantic Canadian cities and analyse future risks to those ecosystems due to climate change. The project will help to understand common trends and impacts of development and climate change on coastal ecosystems and to recommend restoration approaches for increasing the resiliency of impacted coastal ecosystems and communities. The project will involve an analysis of five major cities in Atlantic Canada, each of which is situated in a distinctive coastal setting, to cover a range of restoration techniques that can be applied to a diversity of impacted coastal ecosystems. An online resource of the information gathered, through literature reviews, case studies, and local knowledge of coastal ecosystems and restoration techniques, will be made developed to share the knowledge gained with a broad audience.

PWMG-GABP Inc., \$35,000: The Petitcodiac River watershed comprises a mosaic of ecologically significant ecosystems within the UNESCO-designated Fundy Biosphere Reserve of southeastern New Brunswick. The veins of the watershed course through 2,071 km² of land spanning multiple municipal jurisdictions, while supporting the most densely populated area of the province (over 160,000 residents). Threats include rapid sprawl, increasing instances of clear cut, outdated raw sewage overflow measures, and insufficient waste water infrastructure. This donation will enable the organization to monitor water quality at 20 stations throughout the watershed, reach an ambitious rain barrel distribution goal (attempt a Guinness World Record), and work with artists to bring awareness about storm water.

Local organizations: \$29,800 in Community Action Grants will be shared by these organizations in Atlantic Canada:

- Atlantic Coastal Action Program – Saint John Inc. (\$9,800)
- Atlantic Salmon Federation (\$5,000)
- Miramichi Salmon Association (\$2,500)
- Newfoundland and Labrador Environment Network Inc. (\$2,500)
- Sackville Rivers Association (\$5,000)
- Town of Stratford (\$5,000)

UNITED STATES (Financial references in USD)

Conservation Lands Foundation, \$35,000: New Mexico's Rio Grande and its tributaries supply water to Albuquerque, Santa Fe, Taos, Native American Pueblos and dozens of small communities—water for more than half of the state's 2 million residents. The Conservation Lands Foundation will partner with military veterans, conservation corps, the Bureau of Land Management, youth groups, and community volunteers to restore up to 83 floodplain acres in the Rio Grande del Norte National Monument. The team will remove invasive tamarisk and re-establish native plants to inhibit run-off, improve water quality and enhance river habitat that is vital to New Mexico's economy, agriculture, wildlife and communities. The project will provide training, mentoring and resource management experience for veterans and conservation corps workers and will educate and inform surrounding communities and youth about river conservation and how the National Conservation Lands are helping to protect water quality in local waterways.

Spark Youth, \$100,000: Spark-Y is building an urban agriculture lab: a community hub connecting diverse Spark-Y programs, growing healthy sustainable food, and empowering youth. In the U.S., agricultural production accounts for the highest consumptive water use—approximately 80% in the US (USDA). The Urban Ag Lab addresses this fresh water issue by utilizing aquaponics: water-conserving agriculture systems ideal for urban agriculture in a cold climate. Aquaponics grows fish indoors and uses their waste and bacteria as a natural fertilizer. Aquaponics impressively uses ~90% less water than traditional agriculture. This donation will allow Spark-Y to take this concept to scale and fully emphasize

water conservation at the Urban Ag Lab while training youth and showcasing its environmental benefits. The project will result in sustainable food, jobs for youth, and a significant water conserving system with global potential.

The New York Botanical Garden, \$100,000: This donation will support the New York Botanical Garden’s “Green Zone” initiative, part of an ongoing effort by NYBG to mitigate damage from storm water runoff, improve habitat for native flora, fauna, and animal species, and improve public awareness and education around urban clean water management. A complex storm water management system will reduce peak storm flows thereby significantly reducing soil and shoreline erosion along the Bronx River- the only fresh water river within NYC limits. This \$8.5 million initiative will also boast a public composting restroom (the first of its kind in New York City) adjacent to a green materials recycling center. Given the overall history of the Bronx River and urban water pollution in New York City, the Green Zone is critical to the future sustainability of the local environment.

Local organizations: \$205,000 in Community Action Grants will be shared by these 39 organizations in the United States:

- Alliance for the Great Lakes (\$10,000)
- Battenkill Conservancy – New York (\$5,000)
- Camp Fire USA Minnesota Council (\$10,000)
- Charles River Conservancy Inc. (\$5,000)
- Citizens Campaign Fund for the Environment (\$2,000)
- Clean Lakes Alliance Inc. (\$2,000)
- Delaware Futures Inc. (\$5,000)
- French Creek Valley Conservancy (\$2,000)
- Friends of Casco Bay (\$5,000)
- Friends of the Chicago River (\$10,000)
- Friends of the Merrimack River Greenway Trail (\$5,000)
- Friends of the Mississippi River (\$10,000)
- Great River Greening (\$9,000)
- Gundalow Company (\$3,000)
- H2O For Life (\$5,000)
- Hudson Highlands Land Trust Inc (\$2,000)
- Inland Northwest Land Trust (\$2,000)
- Kirkland Parks Foundation (\$5,000)
- Living Lands & Waters (\$10,000)
- Maine Island Trail Association (\$3,500)
- Midshore Riverkeeper Conservancy (\$2,000)
- Montana Audubon (\$6,000)
- Montana Trout Unlimited (\$3,000)
- National Audubon Society, Inc. (\$7,500)
- North Carolina Coastal Federation (\$3,5000)

- Otsego Land Trust Inc. (\$2,000)
- Reach Foundation (\$7,500)
- Reeves-Reed Arboretum (\$6,000)
- Rensselaer Land Trust Inc (\$2,000)
- Rocking the Boat Inc. (\$10,000)
- Rocky Mountain College (\$5,000)
- Scenic Hudson Inc. (\$5,000)
- Stonybrook-Millstone Watersheds Association (\$5,000)
- Tampa Baywatch Inc (\$2,000)
- The Fund for Lake George Inc. (\$5,000)
- The River Project Inc. (\$3,000)
- The Tom Jones Foundation (\$10,000)
- Treepeople Inc. (\$5,000)
- Wolf Ridge Environmental Learning Center (\$5,000)

INTERNATIONAL (Financial references in CAD unless otherwise indicated)

AUSTRALIA

Landcare Australia, \$10,000: Landcare Australia, in conjunction with Floating Landcare, engages community and corporate volunteers in a range of water conservation activities including flora or fauna surveys, rubbish removal, weed removal and riparian regeneration. Landcare Australia will work with local organisations to coordinate on-ground activity, encourage engagement with local and corporate volunteers. The ultimate objective of the project is to promote Landcare Australia's vision of All Australian's actively caring for the land and water assets that sustain life.

Peter Cullen Trust, \$35,000: The Peter Cullen Trust Science to Policy Leadership Program trains and supports up and coming water leaders across States and sectors to improve water management in Australia. The program is the most successful eminent program in Australia of its kind. At least one of the sponsored positions will be for the merit-based selection of an Aboriginal/Torres Strait Islander participant.

LUXEMBOURG

Fondation Hellef fir d’Natur, \$50,000: The foundation is planning a restoration project at the "Trëtterbaach", a stream in the North of Luxembourg. The remeandration project will be carried out in collaboration with the community of Wincrange, the administration for water management and LIFE Eislek, a project, co-financed by the EU, on the restoration of wetlands in the NATURA 2000 network. Wetlands provide important ecosystem services related to the purification of water and flood control. Additionally, a nature trail is to be installed at the "Léresmillen" site situated along the Trëtterbaach. The trail will raise awareness of the restoration project as well as other conservation activities of LIFE Eislek. The trail will be approximately 3km in length with five interpretation boards and a preserved historic

watergate which showcases the cultural history of the area. A wooden boardwalk will lead the public through a typical wet meadow to maximize their experience with nature.

UNITED KINGDOM

Wildfowl & Wetlands Trust (WWT), 49,000 GBP: The organization will transform the 1,500 square metre courtyard at the award-winning London Wetland Centre into a vibrant amenity space centred on a sustainable drainage system (SuDS), comprising a network of functional wetland features which collect rainwater runoff from the surrounding visitor centre. This revitalised area will demonstrate the benefits of such systems for people and wildlife to all 190,000 annual visitors to the centre, including 15,000 schoolchildren, plus outside stakeholders such as developers, local authorities and water authorities. The system will include rain gardens with natural vegetation to maximise biodiversity, plus swales, water storage features, and integrated pathways and seating for visitors, making this a much more attractive area for people to spend time in. It will be incorporated into the centre's formal and informal learning programmes, and interpretive panels will explain how such systems work with the aim to inspire people to create SuDS in their own communities.

MALAYSIA

World Wide Fund for Nature, Malaysia (WWF-Malaysia), \$32,000: Klang Valley (KV), the heartland of Malaysia's industry and commerce is home to about 7.2 million people or more than a fifth of Malaysia's total population. In 2014, a prolonged dry spell caused a drastic drop in levels of water from supply dams. Combined with increasing water demand, this led to water rationing in KV that lasted several months. Such water disruption occurrences indicate the worsening water crisis in KV. This project will educate the urban community in KV to not take water for granted and to instill good water management practices. Changing the way public thinks about and manages water, and providing them with the knowledge and skills to take the necessary actions is a critical step in helping to ensure the country's water security.