Appendix A - Community Environmental Fund 2023 Project Summaries and Funding Allocation Recommendations

Descriptions for Projects Recommended for 2023 CEF Funding

Dog Strangling Vine (DSV) Response. This intent of this project is to control known small populations of dog-strangling vine on GRCA properties in particular at Shade's Mills Conservation Area. Dog-strangling vine (DSV) is a non-native, invasive plant that is having significant impacts in many areas of southern Ontario and is starting to present itself on GRCA properties, particularly in the northern half of the watershed. Non-native invasive plants are a significant threat to biodiversity in southern Ontario. While control measures are often pursued only when these plants are already well established on a site or within a region, this project aims to limit the establishment of dog-strangling vine on a site where populations are still small and the level of resources required for control still relatively modest.

Total project cost \$11,640; CEF Request \$8,800; Recommended funding \$5,000

Restoring Riparian Biodiversity Along Laurel Creek. The purpose of the project is to manage the highly invasive, non-native, Rhamnus cathartica, commonly known as buckthorn, along Laurel Creek at the University of Waterloo. Laurel Creek's riparian zone and existing forested areas are dense with buckthorn. This fast-growing and aggressive shrub reduces biodiversity by shading out understory plants, impacts soil chemistry, and the seeds can be spread far distances. Laurel Creek is an important ecosystem feature both to the University of Waterloo, as well as the City of Waterloo at large.

Total project cost \$14,329; CEF Request \$9,529; Recommended funding \$5,000

Pollinator Roadsides - Plantings for Bees, Butterflies and Beautification. Pollinator Roadsides is a community-driven project, led by Waterloo Region Nature and working with Municipality and Regional representation. Roadsides are important and significant regional areas for creating habitat for pollinators and other wildlife. Roadsides constitute potential important pollinator corridors through the cities and across the province of Ontario. This project aims to promote the planting of roadsides to beautify and restore habitats for pollinators and wildlife. A long-term goal is to encourage changes in Municipal and Provincial management practices to reduce mowing and promote the ongoing creation and maintenance of roadsides for pollinator pathways.

Total project cost \$6,909; CEF Request \$5,554; Recommended funding \$2,500

Grebel Student Pollinator Garden. The Pollinator Garden is a student initiative that is part of Conrad Grebel University College's commitment to reducing their carbon footprint by 35% by 2035. The Pollinator Garden is a student initiative that has the support of the college's administration who sees this project as an example of fostering student leadership and engagement on climate change and naturalization. The project is being carried out in consultation with Dr. Lyle Friesen who has worked for over twenty years as a Songbird Biologist with the federal government and has experience in designing pollinator gardens. The Student Council Environment Committee has been foundational in the planning of the project and has sold original Christmas and Greeting cards to raise funds. The garden will improve naturalization and sustainability on campus in addition to educating and inspiring students and the public about the challenges facing pollinators. The garden will also create an inviting outdoor space which will encourage students and staff to spend more time in nature and promote their mental and physical wellbeing.

Total project cost \$8,790; CEF Request \$3,313; Recommended funding \$2,500

Continuing Restoration by Residents of a Piece of Land on the Luther Village on the Park Campus. This project will continue the restoration of a large piece of fallow land at the back of the Luther Village on the Park property. This land was previously part of the Sunshine Factory in Waterloo, which manufactured munitions during the war. Along with native trees and bushes planted last year, further restoration with native shrubs and a pathway will stabilize the soil, provide shade, increase carbon storage, and provide educational opportunities for those using the land, particularly the residents of the Luther Village on the Park.

Total project cost \$17,590; CEF Request \$16,940; Recommended funding \$6,000

S.E.W. Pollinator Pathway 2023 Challenge – Mill Courtland. This is one of several Pollinator Pathway Challenge projects. This project is located in the Mill Courtland Neighbourhood in Kitchener. Under the leadership of, and in collaboration with, Sankofa Ecological Wellness (S.E.W.) participants plant food forests on their properties, naturalize landscapes, create habitat and attract native pollinators by planting low-maintenance, drought-tolerant native species. The site builds are designed to build community and to support ongoing engagement with the land that sustains the people who live there. The goal of the projects is to change the relationships that citizens across the region have with their ecosystem. These are all critical elements of resilience in the face of the climate crisis. The projects incorporate local artists, drummers and land acknowledgements to further the local community connection to Place and Space.

Total project cost \$6,090; CEF Request \$400; Recommended funding \$400

Paradise Lake Water Quality Monitoring, Implementation and Education. The Paradise Lake Association has been actively encouraging environmental stewardship since it was first formed more than sixty years ago. The main reason for this project is to address concerns about the potential of blue-green algae (cyanobacteria) blooms and other threats to the health of Paradise Lake, which is located in the Laurel Creek Headwaters Environmentally Sensitive Landscape (ESL). It is also within the Paradise Lake Environmentally Sensitive Policy Area #8 (ESPA#8). In the past two years, the Paradise Lake Association has carried out a water quality monitoring program with support from the Community Environmental Fund (CEF). The project will encourage members to participate in citizen science, while also using expert services. The data and information obtained from long term monitoring will give a better understanding of the environmental health of Paradise Lake. The project will also allow continuing educating of residents in order to promote stewardship in an effort to improve lake health.

Total project cost \$20,034; CEF Request \$20,034; Recommended funding \$8,750

Let's Tree Wilmot in Baden. This project will see the creation of a small forest of native trees and shrubs in a riparian area located at the northwest corner of the intersection of Gingerich Road and Foundry Street near Baden. Baden Creek flows through the site, which is owned by the Township of Wilmot. In addition, a line of trees will be planted in the boulevard on the west side of Foundry Street to enhance the streetscape. This project will contribute to the goal of increasing native tree canopy in the township, and increase tree cover of a riparian zone with attendant ecological benefits. The project will also enhance the appearance of Foundry Street for people entering or leaving the town of Baden. Volunteers will be used to complete the work with some advice and expert labour being provided by a Certified Arborist.

Total project cost \$12,278; CEF Request \$9,278; Recommended funding \$6,000

Petersburg Community Garden. This project is for the purposes of establishing a 10 acre allotment garden on land rented from a local farmer who is setting up an ecological permaculture system with edible forests, berries, and other trees. The project seeks to address the issue of access to land which has been a considerable barrier for many new Canadians and will be accessible by public transportation and car pooling. The gardens will be used by local new Canadian groups who want to grow food for their families and their communities in a sustainable manner. Young City Growers will be selling food to fund additional youth led projects.

Pollinator Pathway 2023 Challenge - École élémentaire L'Harmonie. This is one of several Pollinator Pathway Challenge projects and is located at École élémentaire L'Harmonie in Waterloo. Under the leadership of, and in collaboration with, Sankofa Ecological Wellness (S.E.W.) participants plant food forests on their properties, naturalize landscapes, create habitat and attract native pollinators by planting low-maintenance, drought-tolerant native species. The site builds are designed to build community and to support ongoing engagement with the land that sustains the people who live there. The goal of the projects is to change the relationships that citizens across the region have with their ecosystem. These are all critical elements of resilience in the face of the climate crisis. The projects incorporate local artists, drummers and land acknowledgements to further the local community connection to Place and Space.

Total project cost \$3,000; CEF Request \$245; Recommended funding \$245

Growing Together Community Garden – Kingsdale. This project involves the establishment of a new community garden in the Kingsdale neighbourhood in Kitchener. The funds will be used to install a fence/living fence at the Growing Together Community Garden. The group behind the project is made up of members of both the local African Caribbean Community and members of the Kingsdale neighbourhood, The need for this new garden is the result of the closure of the Salvation Army Community Garden and the Kingsway Community Garden. The garden is located on a bus route and adjacent to the Region of Waterloo housing on Wilson Ave. The fencing is intended to protect the garden produce from wildlife that inhabits the nearby naturalized space After installation of the fence, the group will coordinate efforts to grow plants along the fenceline that will act as both a source of naturalized beauty and communal use herbs and foods.

Total project cost \$25,890; CEF Request \$17,870; Recommended funding \$8,650

SLO-Speed: Shoreland Outpost on the Speed River. Shorelines are crucial regions for aquatic habitat, providing space for breeding, feeding, and shelter. This project aims to assist with habitat development, reduce erosion, limit damage from flooding, and improve water quality on the Speed River. The project will establish a unique "outpost" on the Speed River that will have a long-term environmental impact and serve as a demonstration site for shoreland conservation, landscape naturalization, and wilderness restoration. Paddlers and other visitors to the site will be invited to slow down, reflect on the importance of shoreland conservation, and learn about how they might become

stewards of the land and water in Waterloo Region and beyond. Non-paddlers will be allowed to access the site via the property's River Road entrance with permission from the property owner who will arrange visits through Waterloo Region Nature, rare Charitable Preserve, REEP, University of Waterloo, and Guelph University. All visitors will be asked to respect and give space to the multiple species attracted to this site, which already includes shorebirds (coots, goldeneye, sandhill cranes, trumpeter swans), raptors (osprey, red-tailed hawks, great horned owl), and pollinators (a variety of native bee species, deerflies, hummingbirds, wasps, monarch butterflies).

Total project cost \$28,510; CEF Request \$13,710; Recommended funding \$4,500

Bring Back the Maples - Woolwich Roadside Tree Restoration. One of the goals of the Bring Back the Maples project is to increase the canopy cover in the Region and in Woolwich where there is very little public land available by means of a roadside tree planting program. Mature roadside trees will form a township wide network of vegetation connecting forest areas that will function as wildlife habitat and corridors for birds, insects, reptiles, and mammals. The treed roadsides will also function as a highly visible "park" that will be enjoyed by residents daily, boosting the aesthetic and cultural impact for the township as well as supporting the Maple Syrup Festival brand. This project is designed to be imitated in other jurisdictions, many of whom have similar lack of tree cover, and already inquiries have come form adjoining jurisdictions about recreating this approach. Additional benefits of the project include: carbon capture through CO2 upptake; stormwater diversion through increased absorption into the soil; reduction of airborne pollution as the trees absorb ozone, carbon monoxide, nitrogen dioxide and sulfur dioxide and intercept micron level particulate matter such as smoke, dust and ash, as well as lowering temperatures.

Total project cost \$105,560; CEF Request \$20,000; Recommended funding \$5,000

Wilmot Township Tree Canopy Study / Policy. This project is to develop a comprehensive Tree Canopy Policy for Wilmot Township. The benefit of the project will be community engagement and education on the existing tree canopy and the development of a plan to 'grow' the public and private canopy. This is a continuation of the intial phase that began last year. Phasing was introduced in consultation with Regional staff on funding availability in 2022 and 2023. It is expected that the Tree Canopy Policy will incorporate standard review phases to monitor the success of the policy in achieving community goals and making adjustments as needed to address any deficiencies.

Total project cost \$50,310; CEF Request \$15,000; Recommended funding \$8,500

S.E.W. Pollinator Pathway 2023 Challenge - Janet Metcalfe Public School. This is one of several Pollinator Pathway Challenge projects and is located at Janet Metcalfe P.S. in Kitchener. Under the leadership of, and in collaboration with, Sankofa Ecological Wellness (S.E.W.) participants plant food forests on their properties, naturalize landscapes, create habitat and attract native pollinators by planting low-maintenance, drought-tolerant native species. The site builds are designed to build community and to support ongoing engagement with the land that sustains the people who live there. The goal of the projects is to change the relationships that citizens across the region have with their ecosystem. These are all critical elements of resilience in the face of the climate crisis. The projects incorporate local artists, drummers and land acknowledgements to further the local community connection to Place and Space.

Total project cost \$3,000; CEF Request \$200; Recommended funding \$200

Naturalization of Landscape. This project envisages the naturalization of the surrounding landscapes belonging to the corporation. The installation of a new pollinator garden will create habitats for pollinators by installing low maintenance, drought tolerant native species throughout our property for a sustainable year-round pollinator garden habitat. It will attract butterflies, bees, and include colours that are visually appealing to the condominium residents and community neighbours.

Total project cost \$6,000; CEF Request \$3,000; Recommended funding \$2,500

Video storytelling on the TransformWR Climate Action Strategy. This project will build on the spirit of change of the TransformWR Climate Action Strategy passed by local councils in 2020. TA series of four short videos will be produced, one for each of the four actions presented in the strategy (V1: Transform the ways we move, V2: Transform the ways we build & operate our spaces, V3: Transform the ways we produce, consume and waste, V4: Transform the ways we relate). While TransformWR is an excellent, inspirational document, it reaches a limited readership of people in Waterloo Region, and was passed during a pandemic, when many people were preoccupied with other concerns. The videos will 'bring to life' the document's visions and recommended ways to act and have the potential to reach and engage diverse audiences. Coupled with other tools, such as the strategy itself, these videos could make a big difference towards encouraging deeper engagement towards a more sustainable Waterloo Region.

Total project cost \$24,000; CEF Request \$15,000; Recommended funding \$10,000

DEAR: Developing Environmental Advocates and Researchers. The transition to a lifestyle that is sustainable will be a long process of learning and adapting. It will proceed more effectively if the young people who will live in that more sustainable world energize the transition, and participate in making the decisions. This project will help young researchers understand the need for sustainable goals and actions. In previous years funds have been used at science fairs to assist students in learning about a range of topics critical to a sustainable future. The strategy has proved successful as for young researchers who come from many schools across in Waterloo Region (and a few in Guelph). The students are sent back with an expectation and materials that they can use to demonstrate leadership in their schools and families through reporting to the classes, leading similar activities. This year the project will bring their focus to water in the community, suggest opportunities for future research, inspire an environmental ethic and exercise their leadership in their schools.

Total project cost \$2,500; CEF Request \$1,250; Recommended funding \$1,250

Trinity Village Community Garden Permeable Pathway Project. The vision of Trinity Village states that Trinity Village will be a dynamic community leader, fostering a compassionate and engaging holistic lifestyle in an eco-friendly environment, through best practices, partnerships, research and innovation. The Community Garden Permeable Pathway Project is an opportunity to explore the concept of Low Impact Development and discover the benefits of permeable pavement, for both the Trinity Village Community and the greater Kitchener/Waterloo Community. Permeable paving will help eliminate pooling of water on the current path in all seasons and create a safe slip-free natural stone walkway that also reduces the heat sink of our urban landscape. The walkway through the orchard and the raised beds will provide an opportunity for educational, interactive, interpretive signage, inviting residents, staff and guests to consider the benefits of permeable paving in the wise stewardship of our land.

Total project cost \$64,484; CEF Request \$15,000; Recommended funding \$10,000

Characterising submerged aquatic vegetation in Stormwater Ponds in Kitchener Waterloo. This project builds on work undertaken in previous years with funding provided by the CEF. While the economic benefits associated with a well-functioning stormwater pond treatment system are not often quantified there is a clear economic impact in the associated treatment required for untreated water entering the stormwater systems as a result of un-managed or poorly managed SWM ponds. This past winter research confirmed that some plants were growing in two SWMPs in KW but these were very preliminary studies and clear identification was not possible. An underwater remote operated vehicle (ROV) with a camera has been built that can be used to more

accurately document the presence of submerged aquatic plants in SWMPs in KW and confirm their presence during the winter. The results of the proposed study will have direct application in the guidance of stormwater pond plantings for optimising stormwater pond functionality. Further, determining which species overwinter and thrive will be beneficial in ensuring that desirable species are used in initial plantings of stormwater ponds to avoid costly maintenance or replanting programs.

Total project cost \$5,500; CEF Request \$5,000; Recommended funding \$5,000