The Ontario Headwaters Institute
Working to preserve the foundation of Ontario's watersheds

Detailed Proposal to the Friends of the Greenbelt Foundation:
Headwater Hikes in the Greenbelt

1. Executive Summary

The Ontario Headwaters Institute, a registered charity focused on research, education, and best practices, seeks to develop a series of ten headwater hikes, in collaboration with local partners, to enhance public understanding of the important role that headwaters perform in the health of the Greenbelt's biodiversity, downstream watersheds, and socio-economic fabric.

The hikes will be designed in partnership with regional partners, and will represent a cross-section of different types of headwater areas across the Greenbelt. Once the hikes and their supporting materials are developed, individuals will be able to experience headwater areas on their own, such as from seeing the information on the Friends of the Greenbelt website or through on-going activities delivered by the OHI or our project partners.

Headwater Hikes will help increase overall appreciation of headwater areas, the Greenbelt, and the need to safeguard and strengthen the implementation of the Greenbelt initiative.

This proposal to the Friends of the Greenbelt Foundation was approved by a motion of the Board of the Ontario Headwaters Institute on April 10, 2014.

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Andrew McCammon (Executive Director), Date

2. High-level Context and Project Description & Methodology

The OHI defines headwaters as:
- Ephemeral and intermittent streams;
- Upstream wetlands, including vernal pools;
- Spring-fed ponds, impoundments, and reservoirs;
- Surface water run-off drainage features;
- Groundwater recharge areas and aquifers;
- Areas of groundwater discharge and upwelling; and,
- First and second order streams.

A first order stream is one with no tributaries, as per the drawing to the right, while a second-order stream starts where two first-order streams converge.
Consistent with current science on biodiversity and natural capital, the OHI also considers headwater catchments - the area drained by small streams - an integral component of watershed health.
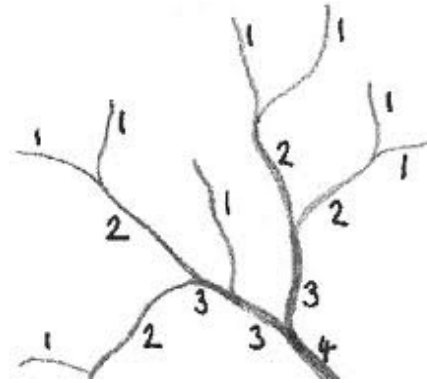
Together, headwaters and their catchment areas:
- Comprise the majority of the surface area of most watersheds;
- Constitute the majority of stream length in most watersheds;
- Contribute the majority of the flow to most watercourses;
- Provide significant portions of a stream's nutrients, organic material, and sediment;
- Help regulate the flow of water into and can mitigate flooding in a watercourse; and,
- Furnish key habitat for the breeding, feeding, and sheltering of upstream species, thereby nurturing the majority, and in many ways the base, of a watershed's biodiversity.

While it is often cited that the Oak Ridges Moraine, a significant portion of the Greenbelt, provides sources of water to 65 watercourses, people in general do not understand the overall importance of headwaters across the Greenbelt, nor the wide variety of headwater features. A small stream will be somewhat different, for example, if it is on mostly loam or clay, or in areas dominated by thinly-soiled Canadian Shield, Karst dolomite, well-forested moraine, or an area of intensive agriculture.

By getting people out on headwater hikes, and by sharing information such as that above, Headwater Hikes will help increase public appreciation of headwaters, the Greenbelt, and the need to safeguard and strengthen the implementation of the Greenbelt initiative.

Purpose, Goals, Objectives, and Opportunity

- To indentify and develop ten headwater hikes, and supporting materials, to enhance public understanding of the important role that headwaters perform in the health of the Greenbelt's biodiversity, downstream watersheds, and socio-economic fabric;
- To provide a set of ten headwater hikes so that people may have more Greenbelt hike options for their recreational and therapeutic vale, and/or to access the educational material on headwaters to increase their understanding of both headwaters and the Greenbelt; and,
- To help local organizations stage Greenbelt / Headwater hikes in their area in order to increase local public awareness about the Greenbelt, attract new members and supporters, and to potentially increase local participation in the pending review of the Greenbelt initiative.

Main Activities

1. The OHI will develop high-level text, based on our existing expertise and further research, on the importance of headwaters in general and for the Greenbelt in particular, to describe the role that headwaters perform in the health of the Greenbelt's biodiversity, downstream watersheds, and socio-economic fabric. Longer text will be available for use on websites and shorter versions of the high-level text will be used, along with hike-specific material, to describe each of the ten headwater hikes to be developed;

2. The OHI will contact numerous organizations, including NGOs, conservation authorities, and municipalities, to help identify locations for ten Headwater Hikes in the Greenbelt. We anticipate an initial pool of about 15 potential project partners, as some proposed hikes may not proceed to full development. Organizations that have already expressed an interest in this project include Alton Grange Association, Coalition on the Niagara Escarpment, Friends of the Rouge Watershed, Grand River Environmental Network, Oakvillegreen Conservation Association, Save the Oak Ridges Moraine, and Credit Valley Conservation. Other candidate partners will be pursued in various sectors, such as with municipalities, as well as through the OHI's membership in groups such as the Ontario Greenbelt Alliance;

3. While individual hikes may demonstrate only one type of headwater area, the OHI will seek to develop a suite of walks in a variety of headwater types, as described in the previous section;

4. All hike text and supporting material will be posted on the OHI website, will include appropriate recognition of the Friends of the Greenbelt Foundation and project partners; and will be available for use by the Friends of the Greenbelt Foundation;

5. In addition to helping to identify local hikes, project partners will be asked to provide any hike-specific material that they think might be useful and to proofread text on their local hike. We consider this to be an average pro-bono contribution of five days per organization, for each hike, at pro bono rate of $200.00 per day, or $10,000.00 pro bono in total from partners;

6. Project partners will be provided with digital copies of the high-level text on headwaters, as well as of their local hike, for use as they deem helpful, including posting the material to their website, with a link to the OHI and/or FGF if desired. Not-for-profit partners may stage walks as they see fit, including upon request from individual school classes, but shall refrain from performing proactive outreach to schools for broader headwater educational purposes for a period of five years without the permission of the OHI; and,

7. Once this project is compete, the OHI intends to develop an educational program of headwater Hikes for schools, which may be delivered in further cooperation with the partners in this project.

Expected Results

• Ten headwater hikes, with supporting material, posted on both the OHI and FGF websites;
• Increased common understanding amongst the partners about the role of headwaters in the health of the Greenbelt;
• Ten turn-key Greenbelt hikes to help project partners involve their supporters, & members; and,
• Ten hikes for the partners to help the public better understand the Greenbelt and potentially support efforts to safeguard and strengthen the Greenbelt initiative.

3. Rationale and Fit with the Foundation's Goals

The proposed headwater hikes will:

- Advance knowledge and understanding of the Greenbelt through the provision of educational material on the value of headwater areas in the Greenbelt;
- Provide material and experiences for local organizations to generate increased knowledge of the Greenbelt;
- Provide a common focus for project partners on the importance of the headwater areas of the Greenbelt, potentially enhancing the prospects of their participation in and comments during the Review;
- Create a series of turn-key Greenbelt hikes that project partners can use as they see fit to offer to their members, supporters, and the general public;
- Provide a common experience that may result in the project partners, their members, and supporters becoming more knowledgeable about and involved in the Review of the Greenbelt, lending a greater voice for safeguarding and strengthening the Greenbelt;
- Generate publicity on the importance of headwaters and the availability of headwater hikes in the Greenbelt, potentially during its Review; and,
- Serve as the backbone of a further project to allow the OHI to offer headwater hikes to schools.

4. Communications Plan

Internal Communications

As mentioned in item 2 on page 2, the OHI thinks that a pool of about 15 local partners will be required to allow us to assess 15 possible hikes in order to identify a group of ten hikes that vary in their location and type of headwater. As a result, an initial round of communications shall take place early in the project to inform potential partners, in addition to those already recruited, about the opportunity to participate in developing local headwater hikes.

Outreach will directed in August – September to: non-profit organizations with whom the OHI has regular contact; organizations in groups to which the OHI belongs, such as the Credit River Alliance, Planning for Sustainability - A PPS Collaborative, and the Ontario Greenbelt Alliance, and; municipalities, especially regional municipalities that have regional forests and existing trails, and conservation authorities.

With respect to the last group, the OHI already has received a firm expression of interest from Credit Valley Conservation, as per Section 8, and initial enthusiasm from Kawartha Conservation.

Project partners will also receive digital material on local hikes so they can post them to their own websites, and will be invited to participate in media outreach as described below.

Naturally, all of the organizations mentioned in the second paragraph in this section that do not become partners will be notified once all of the hike information has been posted on the OHI website.

Media Communications

Targeted efforts to generate information in the media include:

- Phase I: Two weeks of effort in February, 2015, leading up to the 10th anniversary of the Greenbelt on February 28, to share information with local and provincial media about the availability of the information on the importance of headwaters to the Greenbelt and the ten hikes. The media release will mention the availability of the OHI and our partners to accompany journalists on a walk, and note our availability for a winter or a spring walk. The release will acknowledge the participation of the partners and the support of the Foundation, and the OHI will welcome input and support from both regarding the distribution, content, and timing of media outreach. Releases to local media may be tailoured to highlight a local walk and the involvement of a local organization; and,

- Phase II: Near the start of spring hiking, a second round of media releases will be issued. These will replicate the elements of media outreach described above, but will highlight the advent of the spring hiking season and stress the availability of the project partners to provide journalists with guided hikes.

Media releases will stress the educational value of the material on the website to help people understand the Greenbelt and the important roles played by headwaters in its natural capital and socio-economic fabric, the opportunity the hikes represent in getting people out on the ground, and the benefit of both to informing opinions that can be expressed during the review of the Greenbelt initiative.

5.   Evaluation Plan

Expected Results	
What do you want to accomplish?	
Develop ten headwater hikes in the Greenbelt	
Identify impact on Greenbelt and Foundation's goals:	
Increased public appreciation of the Greenbelt;	
Increased understanding of the role headwaters play in the greenbelt;	
Increased hikes in the Greenbelt and its headwater areas; and,	
Increased public support to safeguard and strengthen the Greenbelt initiative.	

	Activities	Performance Indicators
	What individual actions and steps did you complete to be successful?	*How did you measure your success? Include quantitative and qualitative measures.*
1	Identify and develop high-level text on headwaters and on ten hikes in varied locations and of varied headwater type	All target material posted to OHI and FGF websites
2	Find and engage with ten partners, one for each hike	Publish material on ten hikes with ten partners, and have their local hike on their website
3	Host webinar with all partners to discuss common and different headwater hike perspectives; how partners may use material; initial thoughts on media outreach	Host first webinar. Incorporate perspectives into partner website information, plan for media outreach
4	Media coverage: February	Number of articles covering Hikes near Feb 28, 2015
5	Host second webinar to discuss second round of media outreach and ways partners might use Hikes to increase public involvement in Hikes and the Greenbelt review	Host second webinar. Use information to explore perspectives for second media release and increased public outreach on Hikes and Greenbelt review
6	Media coverage: April	Number of articles covering Hikes near April, 2015
7	Use of headwater hikes by partners to enhance knowledge of the Greenbelt and its headwaters	Number of hikes / info sent to supporters by the partners as a result of the project
8	Increased public use of Hikes	Qualitative and quantitative feedback from partners on people hiking and expressing interest in the Greenbelt, separate from an organizational initiative in item 7
9	Use of project info in organizational comments in the Greenbelt review	Qualitative and quantitative feedback from partners on content in submissions reflecting content gained in Hikes project
10	Use of project info by other individuals or groups in their area in comments on the Greenbelt review	Qualitative and quantitative feedback from partners on content in submissions from others reflecting content gained in Hikes project

6. Budget

Technical issues prevented the OHI from using the PDF Budget Template. We attach a phased budget below, however, that includes budget allocations against a phased timeline of the project, as well as an estimate of pro bono contributions from partners, based on a figure of $$200.00 per day for the valued time or project partners.

Period	Task	OHI $s	OHI & Partner Pro Bono	Grant Request
Feb 2014	Prepare Headwater Hike Concept and submit application (1 week)	$1,070.00		
March/April	Develop full proposal (1 week)		$ 1,000.00	
Sept / Oct	Contact potential partners to identify candidate hikes; Begin work on high-level text on the importance of headwaters (3 weeks)			$3,210.00
Oct / Nov	Conduct hikes of best-bet candidate areas; Begin local text, seeking maps and photos. Hold webinar on common perspectives (3 wks) Travel and expenses		$2,000.00	$3,210.00 $500.00
December	Complete high-level and local text; send to partners for review in January (3 wks)		$2,000.00	$3,210.00
January 2015	Obtain partner comments / incorporate comments into final text; Post to OHI website; Provide digital material for other websites (3 weeks) Fees for professional layout and HST			$3,210.00 2,260.00
Jan / Feb	Partners to post walks to their websites		$ 2,000.00	
February	Hold second webinar. Contact regional and larger media on Hike info leading up to Feb 28, the 10th Anniversary of the Greenbelt (2 Wks) Travel and expenses		$ 2,000.00	$2,140.00 500.00
April, 2015	In conjunction with the arrival of the spring hike season, conduct a second round of media contacts, emphasizing offer of a guided Hike (2 wks) Travel		$ 2,000.00	$2,140.00 $500.00
May, 2915	Final report with Evaluation (1 week) Professional financial statement			$1,070.00 $600.00
Totals		$1,070.00	$ 11,000.00	**$22,550.00**

Breakouts of these figures for key line-items in the Budget Template for which funding from the Foundation would be allocated are:

Personnel Costs, including employer contributions	$18,190.00
Travel	$ 1,500.00
Consultants	$ 2,860.00
Total	**$22,550.00**

7. Organizational & Financial Information

<u>A Brief History</u>

The Ontario Headwaters Institute, established as a provincial corporation in December 2003 and which received federal charitable status in September 2004, seeks to preserve and protect Ontario's headwaters through three main areas of activity: research, education, and best practices

Efforts in the early years, led by founder Bob Duncanson, focused on encouraging the inclusion of headwaters in the shift to more fulsome watershed management in Ontario that was being discussed as a result of the Walkerton tragedy, the subsequent inquiry, and the Clean Water Act (2006).

These efforts were successful in elevating the profile of headwaters, and resulted in the appointment of key members of the OHI Board to some of the newly-created Source Protection Committees. Unfortunately, these new responsibilities took up much of the free time of the Board, and like many organizations the OHI generate fewer of its own initiatives from 2007 through the end of 2008.

In late 2008, the Board sought new direction, recruited new members, and began a return to a more active role in Ontario. In 2009 and 2010, the OHI designed and delivered two Symposia on watershed management, as a service to the broader community of watershed stakeholders; conducted a series of eight regional workshops on Preserving Ontario's headwaters, with sessions across the landscape from Elora to Peterborough, and; facilitated two regional meetings on the review of the provincial Policy Statement, on behalf of Planning for Sustainability: A PPS Collaborative.

In 2011, the Board reviewed its effort to deliver six projects in two years, and adopted a strategic plan to develop intellectual properties to better position itself for consistent funding in the future. These core properties are OH Mapping, to facilitate better visibility for and understanding of Ontario's headwaters; the development of a set of indicators of headwater health, for potential inclusion in watershed report cards; and the transition of its past efforts to stage an annual symposium with regional, sectoral, and digital initiatives, such as Pools and Riffles, the OHI's webinar program.

After a requirement for significant time to development these three portfolios, and with a small annual and greatly appreciated donation from one main sponsor, all three properties will be advanced significantly in 2014. For example, one new watershed will be added to OH Mapping; the OHI purchased webinar software in early 2014, and; two major concept papers on the indicators used in watershed report cards will be issued shortly.

In addition to these internal strategic efforts, the OHI has over the last five years established itself as a leader in the watershed management community, participating on the steering committee of the PPS Collaborative, advocating the application of integrated watershed management and cumulative monitoring on fronts as diverse as Ontario's biodiversity strategy, the Low Water Response Plan, and the Great Lakes Protection Act, and; establishing a high profile in the revitalization of the Credit River Alliance and in deliberations in the Ontario Greenbelt Alliance.

Our application for a grant to design and deliver a series of headwater hikes in the Greenbelt serves two of our strongly held, inter-twined positions: working in partnership with affiliated organizations across the landscape and seeking to deliver educational material to the public.

Members of the Board

Andrew McCammon: President (2013) and Executive Director (since 2008)

> Andrew has worked in public facilitation, environmental project management, and communications since1990, working as a consultant, in government agencies, and the not-for-profit sector. These experiences have provided Andrew with extensive, practical knowledge in watershed management, natural heritage protection, pollution prevention, municipal environmental management, and clean air and climate change.

> A past chair of the Environmental Forum and the Friends of the Don East, Andrew founded the Taylor Massey Project in 2003. Working with about 20 partner organizations, the TMP staged 67 events in its first 6 years, with 3,870 participants planting 3,550 trees and shrubs and picking up more than 1,300 bags of litter. Andrew was selected a local eco hero by Green Living Magazine in the fall of 2008. He has also been the author or editor of hundreds of environmental publications and reports and has coordinated or facilitated a similar number of events.

Nancy Penny: Past President (President, 2008 – 2013)

> Nancy retired in mid-2013 following more than ten years in a managerial position for a property development company and extensive involvement in community environmental issues for over 20 years. She stepped down as the President of the OHI at that time but remains on the Board and will take an active role in OHI regional efforts being launched in 2014. Her previous involvement with the community and the Toronto and Region Conservation Authority resulted in the first stage of the regeneration of the Terraview Willowfield wetland complex, including the creation of a sediment plunge pool, two large habitat ponds, an experimental storm water treatment pond, trails, and extensive community plantings.

Janet Klees: Secretary (since 2008)

> Janet grew up hiking on Vancouver Island, where she obtained a deep awareness of the importance and fragility of nature, and developed a dedication to community and environmental stewardship. For the past 15 years she has been a coordinator with the family-governed Deohaeko Support Network, a group of families who designed and built a 105 unit housing co-operative, which seven of their sons and daughters with disabilities now call home. She is the author of two books directly rooted in the Deohaeko experience, *We Come Bearing Gifts* and *Our Presence has Roots*, now sold around the world to present the unique options of this family group. As a result of these experiences, Janet now presents, consults, and teaches across Canada, as well as in Holland, Ireland, Australia, New Zealand, and other countries around the world, and brings a unique inclusionary perspective to the OHI.

George Clegg, Treasurer (since 2013)

> George brings more than 40 years of experience in sales, marketing, and building relationships in the business community, which includes more than 20 years of running his own business ventures in IT, to the OHI. As treasurer, George will help the OHI implement its new strategic plan while building new relationships with the corporate sector. In addition, George's IT expertise will help implement new digital initiatives.

Financial information

The Policy and Procedures Manual approved by the Board does not require audits at our current level of funding. Annual financial statements, however, are required to be prepared by a professional.

Revenue for the last four years for which reports have been prepared declare revenue as: 2009: $23,305; 2010: $33,568; 2011: $3,429; 2012: $4,981. Receipts for 2013, required in the second quarter of 2014, exceed $6,000.00, but no statement has yet been produced.

An annual donation of $4,000.00 to help the OHI implement the three deliverables in the strategic plan is expected in 2014. Part of this small but multi-year commitment to the OHI from 2013 was used to craft this grant application, and several other applications will be developed for 2015 based on the 2014 donation.

These modest funds are used to pay annual digital costs, defray attendance at conferences such as the annual Latournelle Conservation Symposium, printed material for conferences, and staff costs.

Project Partners

As mentioned above, the OHI has expressions of interest in this project from seven organizations: Alton Grange Association, Coalition on the Niagara Escarpment, Friends of the Rouge Watershed, Grand River Environmental Network, Oakvillegreen Conservation Association, Save the Oak Ridges Moraine, and Credit Valley Conservation. The first six are community organizations while the last is a government agency. All are proven, responsible stakeholders involved in land use, natural heritage, and watershed management issues, and we think all will be well-known to the Foundation.

Also as mentioned above, interest in the project does not signify that each organization listed above will be associated with a hike. Although that likelihood is very high, hikes will be selected after the project is funded on the basis of having a set of hikes on different areas of the Greenbelt and that provide hikes on a variety of headwater types.

8. Background Materials & Additional Information

This project has received e-mail expressions of interest from the executives and/or boards of the six environmental organizations listed on page 2, and the following letters of support, one from Credit Valley Conservation and one from the Grand River

Please feel free to visit the OHI website, and in particular our summary of past efforts at http://www.ohwi.ca/news.html, to see our track record delivering previous projects.

CVC
CREDIT VALLEY
CONSERVATION

April 2, 2014

Attn: Friends of the Greenbelt Foundation
Re: Letter of Support for Ontario Headwaters Institute, "Headwater Hikes in the Greenbelt" Project

I am writing on behalf of Credit Valley Conservation (CVC) in support of the Ontario Headwaters Institute's Headwater Hikes in the Greenbelt project. CVC would be pleased to host at least one of the Headwater hikes in our Conservation Areas, particularly Terra Cotta Conservation Area in Halton Hills.

The OHI's work will highlight the role of the headwaters in protecting the health of the Greenbelt's biodiversity, downstream watersheds, and socioeconomic fabric. Once the hikes are developed, individuals will be able to use the materials developed for Terra Cotta and the other headwater hikes to experience it on their own which can help increase use of the Conservation Area by hikers. We may also use some of the materials developed for CVC's education programs including the Conservation Youth Corps, a program for high school-aged volunteers. The Hikes will increase overall appreciation of our Conservation Areas, the Greenbelt, as well as the need to safeguard and strengthen it.

Credit Valley Conservation (CVC) is a community-based environmental organization dedicated to conserving, restoring, and managing natural resources in the Credit River Watershed. CVC is recognized as a scientific authority and leader in protecting the natural heritage of the Credit River and surrounding region. CVC will work with the leadership of Ontario Headwaters Institute to add value to this project and leverage one another's activities. CVC is supportive of OHI's goals and we are very happy to be involved in this project and look forward to participating in its future development. I sincerely hope that the Friends of the Greenbelt Foundation will consider funding this worthwhile initiative. If you have any questions, please do not hesitate to contact me.

Sincerely,

Andrew Kett
Manager, Education
Tel: 905-670-1615 ext 433
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Fax: 905-670-2210
Email: akett@creditvalleyca.ca

Grand River Environmental Network
www.gren.ca

The proactive voice for the environment in the Grand River watershed

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10 April 2014

To Friends of the Greenbelt Foundation

The Grand River Environmental Network (GREN) offers its enthusiastic support to the Ontario Headwaters Institute's application for funding its Headwater Hikes in the Greenbelt project. GREN would be delighted to work with the Ontario Headwaters Institute in helping to implement this project.

Background on GREN

Organized in 2008, the Grand River Environmental Network is a network of about 40 environmental groups and environmentally concerned individuals in the Grand River watershed. The groups and individuals represented in GREN have been working on a wide variety of local environmental issues for many years, and GREN was formed to help coordinate these efforts. Following is GREN's statement of principles:

Mission Statement: GREN is the proactive voice for the environment in the Grand River watershed. Members of GREN are activists, watchdogs, guardians, stewards and concerned citizens; support each other by sharing information and expertise; foster environmental awareness and literacy; and promote respect for our natural world and our place in it.

Our Belief: We are near the carrying capacity of the essentials for life—water, air, energy, greenspace, aggregate, agricultural land and wetlands—in our communities.

Our Commitment: GREN will draw from the well of creative people in our communities to find innovative ways to live better with less; work cooperatively to promote initiatives that restore, maintain and enhance the livability of our community; do so for all lifeforms, for current and future generations.

This proposed project fits perfectly within our mission statements goals of fostering environmental awareness and literacy and promoting respect for our natural world and our place in it.

For these reasons, GREN wholeheartedly supports the Ontario Headwaters Institute's proposal. We would be honoured to participate in this project.

Sincerely,

John Jackson

Chair, Grand River Environmental Network

519-744-7503

jjackson@web.ca

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