Section III - Items for the Information of the Board

TO: Chair and Members of the Board of Directors

Meeting #1/20, Friday, February 21, 2020

FROM: Moranne McDonnell, Director, Restoration and Infrastructure

Michael Tolensky, Chief Financial and Operating Officer

RE: OPPORTUNITIES AND CONSIDERATIONS FOR TRAIL DEVELOPMENT AND

HABITAT RESTORATION IN INFRASTRUCTURE CORRIDORS

KEY ISSUE

The Board of Directors requested a staff report on opportunities and considerations for trail development and habitat restoration in infrastructure corridors in Toronto and Region Conservation Authority's (TRCA) jurisdiction.

RECOMMENDATION

WHEREAS staff were requested by the Board of Directors to investigate the potential for hydro corridor and other corridor revitalization opportunities in TRCA's jurisdiction with The Meadoway project being a model;

THEREFORE, LET IT BE RESOLVED THAT the staff report on opportunities and considerations for trail development and habitat restoration in infrastructure corridors be received.

BACKGROUND

At Authority Meeting #7/18 held on September 28, 2018 where The Meadoway project was discussed, Resolution #A144/18 included the following:

AND FURTHER THAT staff be authorized to investigate the potential for similar hydro and other corridor revitalization opportunities in TRCA's jurisdiction [...], and report back on these discussions.

This report brings together the work of TRCA's Trail Strategy for the Greater Toronto Region (Trail Strategy) and knowledge gained through the implementation of The Meadoway project to discuss infrastructure corridor revitalization opportunities along with relaying lessons learned to date.

At Board of Directors Meeting #8/19, held on September 27, 2019, Resolution #A157/1, as amended, was approved as follows:

WHEREAS it was resolved by the TRCA Board at Meeting #9/18 on November 30, 2018 that the Draft Trail Strategy for the Greater Toronto Region, dated November 2018, be endorsed in principle for the purposes of engaging with external partners to obtain input prior to finalizing the Strategy and Workbook and for informing staff reviews of projects and plans and preliminary budget submissions (RES.#A183/18);

WHEREAS it was resolved by the TRCA Board at Meeting #9/18 on November 30, 2018 that staff were requested to report back to the Board of Directors in Q3 2019 for final

approval of the Strategy:

THEREFORE, LET IT BE RESOLVED THAT the TRCA Trail Strategy for the Greater Toronto Region be approved;

THAT TRCA staff be directed to meet with partner municipalities to discuss priority projects, service level agreements, and funding agreements in support of the expansion and management of the regional trail network;

THAT TRCA request the Province recognize and build components of the TRCA Trail Strategy for the Greater Toronto Region into the Province's transit and transportation strategies, projects, and provincial land use plans including the Metrolinx Regional Transportation Plan, the Growth Plan for the Greater Golden Horseshoe and official plan update and conformity processes;

AND FURTHER THAT TRCA'S trail partners and the Regional Watershed Alliance be so advised.

The Trail Strategy sets out the direction for TRCA to work towards achieving its vision of "a complete regional trail network in greenspace and along the Lake Ontario shoreline that connects our growing communities to nature, to culture, and to each other, contributing to active living and enhancing our conservation legacy." It outlines TRCA's plan to complete, expand, manage and celebrate the Greater Toronto Region Trail Network and serves as a framework to protect potential trail alignments. The Trail Strategy acts as a guide for the planning, development and management of these trails, and creates the opportunity for partnership with our member municipalities, provincial and federal agencies, and trail focused groups.

The Trail Strategy's Greater Toronto Region Trail Network includes 1,000 kilometres (km) of trails through the Oak Ridges Moraine, the valleys of the Etobicoke, Mimico, Highland, Petticoat and Duffins Creeks, and the major valleys of the Don, Humber and Rouge Rivers; along the Lake Ontario waterfront; and through regional infrastructure corridors, including transit, utility and electric power facility corridors. It also envisions the introduction of blue trails, which are paddling routes on our navigable waterways. The network includes 520 km of trails that are already in place, with 480 km of new trails required to complete the Greater Toronto Region Trail Network. The network is further supported by thousands of kilometres of local trails that provide community connections to the regional network or are recreational destinations in and of themselves. Many of these trails also connect to transit networks and stations to enable enhanced access to greenspaces across the Toronto Region.

The Meadoway is identified in the Trail Strategy as a key component of Greater Toronto Region Trail Network. Led by TRCA, in partnership with City of Toronto and The W. Garfield Weston Foundation, The Meadoway Project will transform 16 km (over 200 hectares) of hydro corridor in Scarborough into one of the largest urban linear greenspaces in Canada. Connecting seven watercourses and more than 15 parks across Scarborough, The Meadoway will provide a green, active transportation link between downtown Toronto and Rouge National Urban Park. A multi-use trail will be complimented by high functioning meadow habitat increasing biodiversity and transforming the relationship between the built structure of an urban area and natural spaces.

RATIONALE

Utility corridors have the potential to be revitalized from barren mowed areas to public spaces. They can connect and promote a healthy natural system, help manage overland flows with naturalized plantings, provide active transportation linkages while reducing carbon emissions and revolutionize how we look at the relationship between the built structure and the natural environment.

Trails within infrastructure corridors are a significant component of the Trail Strategy's Greater Toronto Region Trail Network (see Attachment 1). Approximately 182 km of the 480 km (38%) of trail opportunities identified in the Greater Toronto Region Trail Network are within infrastructure corridors. This represents 13 major trail projects across four (4) regional municipalities (Durham, Peel, Toronto and York) and nine (9) local municipalities (Ajax, Brampton, Caledon, King, Markham, Mississauga, Pickering, Richmond Hill and Vaughan). While TRCA's role in the projects identified in the Trail Strategy will vary depending on the project's location, all trail projects will support the Greater Toronto Regional Trail Network and can provide the opportunity to enhance habitats to increase resiliency.

There is a long history of trail development in utility corridors in Ontario. However, past efforts have generally been small in scale and fragmented. The "Great Trail" by Trans Canada Trail has utilized hydro corridors and old rail lines to make connections for decades. With land use pressures, particularly in urban areas, utility corridors are becoming key elements of new trail plans. For example, the 100 km loop for the Vaughan Super Trail (2017) integrates pipeline and hydro corridors while placing an emphasis on leveraging opportunities to integrate multi-use trails into planned capital upgrades to transportation routes.

The Meadoway project is a TRCA flagship project which can be used as a larger scale blueprint for revitalization of underutilized infrastructure corridors. The project demonstrates that trail development and habitat restoration within a hydro utility corridor is complex but feasible with extensive collaboration.

TRCA's work in The Meadoway started with a pilot project referred to as the Scarborough Centre Butterfly Trail. Prior to 2011 this 3.5 km section of the Gatineau Hydro Corridor was a barren 40 hectare (ha) area with non-native grass mown eight (8) times annually. The establishment of native meadow habitat complimenting the multi-use trail had an overwhelmingly positive community response. It proved the concept and inspired the vision for the larger Meadoway initiative.

Within the 16 km corridor, 10 km of trail have already been implemented by the City of Toronto. In 2019 TRCA undertook a Municipal Engineer Class Environmental Assessment (EA), Schedule C (pending final approval January 26, 2020) to address the six (6) km of trail 'gaps' in the corridor. During the EA planning process TRCA continued to expand meadow habitat in areas where the trail was already established and launched an education and outreach program.

The Meadoway corridor is owned by Infrastructure Ontario (IO) on behalf of the Province of Ontario. IO and Hydro One Networks Inc. (HONI) jointly manage the Provincial Secondary Land Use Program associated with transmission corridors owned by the Ministry of Government and Consumer Services. HONI maintains a statutory easement over these lands and manages them for their primary use, which is the safe transmission of electricity for the province. In order to implement trail or meadow restoration in the corridor, TRCA works with the City of Toronto to prepare an authorization package for HONI detailing the proposed works. Once this plan is

approved a temporary access agreement is provided to the City of Toronto specifying the terms of the land use and management. The new parcels/sections for each temporary access agreement are then added to the City of Toronto's Master Park License annually. The Master Park License is renewed every five (5) years. In this situation, the TRCA acts as a third-party leading the planning and implementation of new trail connections along with the planning, implementation and management of new meadow habitat. The City of Toronto has committed to the long-term maintenance of the multi-use trail, management of the overall space as a linear park/public space and payment of all fees associated with The Master Park License.

Table 1 overviews some key considerations for hydro corridor revitalization as learnt from The Meadoway experience. It should be noted that each utility corridor will have its own set of considerations based on the land ownership, designation and other factors. This information is being presented as an example only.

Table 1: The Meadoway: Key considerations for hydro corridor revitalization.

Area		Project Impact/Risk
Legal Agreements	The layered property ownership and management model that comes into place for hydro corridor revitalization may require a Memorandum of Understanding (MOU) or other agreements with agencies taking a role in the work who are outside of those that are legally bound by the license agreement (IO, HONI and the license holder – who is the City of Toronto in the case of The Meadoway). TRCA has previously had MOUs with the City of Toronto for meadow habitat implementation in The Meadoway and will be working to refine a master agreement as new meadow and trail works are implemented. As the Master Park License is currently limited to five (5) year terms, the parties involved assume a risk that, upon expiry,	CostTimeProject termination
	there could be a change in the terms or desires of the landowner to continue with a similar license.	
Planning and Approvals	Depending on the activities being contemplated and associated impacts and costs, trail development or works in corridors may trigger an EA process. The Meadoway project triggered a Municipal Engineers Class EA, Schedule C because the trail infrastructure costs were anticipated to exceed \$9 million.	CostTime
	Trails and other infrastructure plans cannot be reviewed formally by HONI until they are at approximately 60% design. This can be challenging as substantial effort and financial resources must be invested prior to formal comments which can lead to multiple submissions and delayed approvals in complex areas. It also does not allow for formal comments from HONI to be integrated in EA planning as this process typically results in conceptual designs at around 30%.	

Area	Lesson		ject act/Risk
Planning and Approvals (continued)	All activities in the corridor that involve any disturbance of the land require authorization from HONI. Examples include but are not limited to: meadow restoration through agricultural practices, geotechnical boreholes, Stage 2 archaeology, and use of drones for monitoring. Non-permanent structures such as tents or portable toilets for events also require approval. All authorizations from HONI, regardless of the proposed implementation or activity, are subject to a minimum 16-week review period. Often this can be much lengthier with requests for additional information and resubmissions. In the case of The Meadoway there is also a general timeline of two (2) to four (4) weeks required for the execution of the temporary access agreement from City of Toronto's legal department. Both timelines are key consideration for project schedules. Infrastructure Ontario is now requiring a Stewardship Agreement to be approved as part of any new authorizations on their land as it related to the Safe Harbor Permit requirement under the Endangered Species Act. TRCA is currently working on a submission to meet this new requirement and it will be one of the first applications of its kind. Two conference calls and one in-person meeting with IO and Ministry of the Environment, Conservation and Parks have been undertaken to help all parties work through the process.	• (Cost Time
	Municipalities may require an Electric Magnetic Frequency (EMF) Management Plan to be undertaken to allow new public use in or adjacent to hydro corridors. The City of Toronto adopted this policy in 2008 and it applies to plans for new multi-use trails, garden allotment, recreational, or parkland uses in or abutting a hydro corridor. The EMF Management Plan is reviewed by Toronto Public Health.		
Technical Considerations	Infrastructure within the corridor is regulated by HONI's technical requirements and restrictions. Proximity to hydro towers and materials used for any permanent structures like bridges are a major consideration and can limit opportunities in already constrained areas.	•	Limits solutions May increase cost but also
	Trees or any tall growing natural species are not permitted in hydro corridors because of the potential for growth and interference with hydro towers. This HONI requirement makes the introduction of meadow habitat a perfect fit for revitalization. HONI has a detailed list of acceptable shrub, grasses and wildflower species that can be planted in their corridors.		may spur innovation and creative solutions

Area		Project Impact/Risk
	The license holder is responsible for payment of an annual license fee. In the case of The Meadoway this is 50% of the assessed property value because of its use as "parkland". The City of Toronto (Parks Forestry and Recreation) has assumed these fees for The Meadoway as part of their overall Master Park License with HONI for all applicable lands in the City of Toronto. The City of Toronto's current annual budget is \$500,000 with approximately \$18,500 of this currently allocated to The Meadoway.	• Cost

Relationship to Building the Living City, the TRCA 2013-2022 Strategic Plan

This report supports the following strategies set forth in the TRCA 2013-2022 Strategic Plan:

Strategy 3 – Rethink greenspace to maximize its value

Strategy 4 – Create complete communities that integrate nature and the built environment

Strategy 7 - Build partnerships and new business models

FINANCIAL DETAILS

Based on preliminary high-level costing of the proposed trail connections, the total cost to construct the proposed 480 km of trails required to complete the Greater Toronto Region Trail Network identified in the Trails Strategy is \$315.4 million, using 2019 costing information (this estimate is accurate to +/- 20 to 30 per cent). Trail construction project costs include planning, design and engineering, permits and agreements, construction and contingencies, and excludes crossings, lighting, engineering features, site servicing, trail amenities, and additional habitat restoration or other community benefits.

The Trail Strategy provides an estimate of \$588.09 per linear metre, using 2019 costing information, for trail construction costs, including planning, design and engineering, permits and agreements, construction and contingencies. This excludes crossings, lighting, engineering features, site servicing, trail amenities, and additional habitat restoration or other community benefits. With approximately 182,000 linear metres of utility corridor identified for development as part of the Greater Toronto Region Trail Network in the Trail Strategy it can be assumed that trail construction costs would be in the order of magnitude of over \$107 million.

The Meadoway was able to advance from a pilot to a 16 km initiative with a generous donation of \$10 million from The W. Garfield Weston Foundation for Phase 1 of the project (2018 – 2020). The project framework can be used as an example of financial considerations associated with the revitalization of utility corridors. Table 2 outlines costs based on precedents set in 2018 and 2019 for The Meadoway and implementation estimates from the Trail Strategy.

Table 2: Project costs associated with The Meadoway project.

Item	Cost	Notes
License Agreement	~\$1,020/ha per year	It is difficult to find funds if the cost is not
Fees		absorbed by the municipality.
Class Environmental	~\$650,000	Funds for planning can be difficult to secure
Assessment	for a 1-year process	as many grant programs are looking for
	Municipal Class EA,	implementation-ready capital projects.
	Schedule C	

Multi-use Trail	~\$588.09	There are usually municipal, provincial and
Design and	per linear metre*	federal funding opportunities available if there
Implementation		is a significant municipal cost sharing
		component and the planning and design is
		advanced.
Meadow Habitat	~\$95,000/ha over	Meadow habitat establishment takes a
Implementation	three years	minimum of three years. Some grant
		programs exist but tend to be smaller in
		value.
Meadow	~\$10,000/ha per year	This activity is required every three years at
Maintenance and		minimum. It is difficult to find funding
Adaptive		opportunities for this type of
Management		operational/maintenance activity.
Environmental	~\$20,000/ha per year	Costs decrease to ~\$6,000/year once the
Monitoring		program is established in year one. Some
		opportunities to secure funds from grant
		programs exist.
Education and	~\$500,000/year	This can be scaled to desired level. Some
Outreach Program		opportunities to secure funds from grant
		programs exist.
Public Relations and	~\$500,000/year	This can be scaled to desired level. Some
Communications		opportunities to secure funds from grant
		programs exist.

^{*} Includes trail planning, design and engineering, permits and agreements, construction and contingencies, and excludes crossings, lighting, engineering features, site servicing, trail amenities and additional habitat restoration or other community benefits.

Financial resilience to move trail projects forward will require a range of eligible funding sources as well as leveraging the revenue-generating potential of trails and related facilities. TRCA is using the Trail Strategy to collaborate with municipal, provincial and federal colleagues, non-governmental organizations, trail and community leaders, and the development industry to acquire, protect and enhance the Greater Toronto Regional Trail Network and associated greenspaces. Funding sources will include all traditional funding sources and support, including the levy process, service agreements, mutually beneficial partnerships with municipalities, federal, provincial and municipal funding programs, the development process, and development and management agreements, as well as other partnership projects with trail and community organizations.

DETAILS OF WORK TO BE DONE

- In support of the Trail Strategy, TRCA will continue to meet with municipal partners to discuss existing and future trail projects (including those in utility corridors), coordinate implementation plans, seek opportunities for partnership, secure land and easements, and address trail ownership and management. Initial meetings with local and regional municipalities are expected to be completed in the first quarter of 2020.
- TRCA will continue to request funding support from senior levels of government as part
 of ongoing budget processes and as a means of helping governments achieve their
 transportation related and environmental objectives.
- Meetings with other trail partners and/or landowners such the provincial ministries and agencies and utility companies to discuss opportunities that span multiple municipalities

- will be undertaken after initial meetings with local and regional municipalities are completed. This is expected to begin in the second quarter of 2020.
- TRCA will continue to concentrate efforts on the completion of The Meadoway so that the 16 km corridor can become a fully implemented model for future utility corridor revitalization. The focus for 2020 will be: the design and construction of the Highland Creek connection; detailed design of the remaining two trail gaps; completion of a wayfinding plan and implementation of an associated pilot site; expansion of The Meadoway School program; implementation of a Communications Strategy; and securement of additional funds to leverage The W. Garfield Weston Foundation funds to advance the project.

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Attachments: 1

Attachment 1: Infrastructure Corridor Trail Opportunities in the Greater Toronto Region Trail Network