Section III - Items for the Information of the Board

RES.#A256/21 - THE MEADOWAY PROJECT ANNUAL UPDATE

Moved by: Paul Ainslie
Seconded by: Jennifer Drake

THAT the update for The Meadoway project be received;

AND FURTHER THAT updates be brought back to the Board of Directors on an annual basis as implementation of the project proceeds.

CARRIED

BACKGROUND

Led by TRCA, in partnership with Toronto and Region Conservation Authority, City of Toronto, and the Weston Family Foundation, The Meadoway will transform 16 kilometres of hydro corridor in Scarborough into one of the largest urban linear greenspaces in Canada.

On April 11, 2018, Mayor John Tory along with the Directors of the Weston Family Foundation, and representatives from TRCA and Toronto and Region Conservation Foundation jointly announced the launch of The Meadoway at a ceremony in Scarborough. As part of this announcement, the Weston Family Foundation pledged up to \$25 million in support of the project, with a firm commitment of \$10 million available immediately to support Phase 1 of the project. The City of Toronto committed \$6.3 million to realize the shared vision for The Meadoway by supporting the multi-use trail infrastructure, and to support the City's ongoing operations and maintenance activities in the hydro corridor.

At Authority Meeting #7/18, held on September 28, 2018, an update on The Meadoway and recommendation to advance implementation of key priorities was approved per Resolution #A143/18, in part, as follows:

WHEREAS The W. Garfield Weston Foundation has made a \$10 million of the \$25 million pledge available immediately to TRCA to implement Phase 1 of the project; ...

THEREFORE LET IT BE RESOLVED THAT with appropriate Board Authority approvals including purchasing approvals, authorized TRCA and LCF officials be directed to take all necessary actions regarding retaining consulting services, the hiring of contract staff including project managers, and the signing and execution of any service agreements within the limit of the confirmed approved funding agreement for Phase 1; ...

THAT updates be brought back to the Authority on an annual basis as implementation of the project proceeds.

A budget spanning from 2018-2020 was prepared to support the following key objectives in Phase 1:

 Education and Community Learning - Undertaking of engagement and education programs that facilitate opportunities for the community to help implement The Meadoway and utilize this new connection between downtown Toronto and Rouge National Urban Park;

- Public Relations and Communications Undertaking of communications and public relations programs that will effectively position The Meadoway as a world class opportunity for greenspace revitalization;
- Meadow Revitalization Completion of an additional 40 ha of meadow habitat and the continued monitoring and maintenance of 80 ha of habitat in the Meadoway; and
- Active Transportation and Connections Completion of the necessary technical analysis, planning, permitting, and design to provide for a connected 16 km active transportation network across The Meadoway along with beginning implementation for incomplete sections of the trail.

With funding from the original \$10M Weston Family Foundation still remaining at the end of 2020, Phase 1 was expanded to 2021. A carry forward of \$3.8M into 2021 to support the implementation of the Highland Creek trail connection was approved.

In addition to the carry forward of the funding for the Highland Creek trail connection, the Weston Family Foundation approved in principle \$1.348M in bridge funding for 2021 to allow for meadow restoration and to continue general project management while TRCA continues to seek leverage funding. Education, engagement and communications efforts were scaled back during this transition while additional leverage funding was explored.

RATIONALE

This Report serves as an update for The Meadoway Project and is organized by each of the four major objective areas outlined above.

Active Transportation and Connections

One of the key deliverables of Phase 1 was the planning and design of the multi-use trail which will run the full 16 km of The Meadoway. The conceptual alignments for the multi-use trail were evaluated through a Municipal Engineers Class Environmental Assessment (Schedule C), which received approval by the Ministry of Environment, Conservation and Parks (MECP) in January of 2020. In support of the project's active transportation and connection's objective, implementation of one of the exiting trail gaps at Highland Creek (Section 5) was prioritized for implementation. The Highland Creek trail gap spans 1.8 km between Ellesmere Road and Orton Park Road to the west and Neilson Road to the east. It includes a bridge crossing over the Highland Creek and a boardwalk over a wetland on the east side of the river. It also will connect with the Upper Highland Pan Am Path which is currently under construction and when complete will allow users to travel south to the Lake Ontario waterfront with connecting links to Great Lakes Waterfront Trail and Rouge National Urban Park.

In order to advance the work in an expeditated manner implementation of the Section 5 trail has advanced in two phases. Phase 1 is on TRCA lands and starts at Ellesmere Road and Orton Park Road and extends east across Highland Creek. Since award of Contract #10033680 on February 3, 2021, work has been underway on Phase 1 and is expected to be completed in Spring of 2022. Anticipated completion for Phase 2 works is expected in late summer/early fall of 2022, with CSL Group Ltd the successful bidder for Contract #10036549 awarded on October 22, 2021.

A summary of deliverables completed in 2021 to advance active transportation include: **Section 5 - Phase 1**

- City of Toronto Tree Permits approved and received;
- Approvals to proceed with construction received by Hydro One Network Inc. (HONI) and Infrastructure Ontario (IO);

- Full execution of agreements with contractor;
- Site preparation (e.g., tree tagging and clearing, site mobilization, signage, etc.);
- Notifications to Councillor and flyer drops circulated to nearby residents;
- Shop drawings for major structures prepared by contractor and approved by engineering;
- Terraseeding of Cell 1 in Tommy Thompson Park complete, in support of the required restoration and compensation works for trail construction through Highland Creek ravine;
- Fabrication of pedestrian bridge and boardwalk with delivery tentatively scheduled for January 2021;
- Construction of west bridge abutment, with east abutment to be constructed in January 2022;
- Temporary bridge over the Highland Creek installed to provide access for construction of east bridge abutment and boardwalk feature;
- Installation of proposed interim erosion protection on east side of Highland Creek;
- Installation of remaining erosion and sediment control, perimeter fencing and tree protection on east side of Highland Creek;
- Excavation and installation of granular base for trail including proposed switchback from Military Trail to HONI access;
- Installation of entrance at Military trail, resting node, armourstone retaining wall, switchback, and paving of base course from Military Trail to HONI entrance.
- Completion of approximately 900 m of multi-use trail; and,

Section 5 - Phase 2

- Workplan for slope stabilization investigation prepared;
- Updated detailed design approach for eastern slope prepared;
- HONI approval provided for additional geotechnical investigation;
- Request for Tender for construction services released and contractor selected and onboarded;
- Successful Phase 2 contract awarded to CSL Group for construction works in the tablelands and slope; and
- Full design of the alternate slope segment initiated.

Section 3

- 90% detailed design package developed;
- Stage 2 Archaeology Assessment proposal submitted to HONI for review and approval October 1, 2021; and,
- Three rounds of technical comments provided by HONI on 90% submission package addressed and resubmitted – February 24, April 27, and September 9, 2021.

Section 6

- Utility and topographic surveys completed;
- Tree surveys completed;
- 60% detailed design package for complete:
- Ministry of Transportation approval given for Phase 1 trail alignment at Morningside Avenue;
- Submission of 60% detailed design package to HONI for technical review June 17, 2021;
- Stage 2 Archaeology Assessment proposal submitted to HONI for review and approval October 1, 2021; and,

 Two rounds of technical comments provided by HONI on 60% submission package addressed and resubmitted – June 17 and October 26, 2021.

Section 7 (undertaken with financial support from Parks Canada)

- Design works underway for trail improvements along Zoo Road, as well as an enhanced trail connection between the hydro corridor and Meadowvale via Old Kirkhams Road;
- 100% detailed design packages completed for all three sites;
- Stage 2 Archaeology Assessment proposal submitted to HONI for review and approval August 10, 2021;
- Utility and topographic surveys completed;
- Tree surveys completed;
- Conceptual designs prepared, reviewed, and approved by Parks Canada and City of Toronto; and,
- Site 1 connection between the hydro corridor and Meadowvale submitted for HONI technical review – August 8, 2021.

The Meadoway Entry Park - Collaboration with Garden Club of Toronto

In April of 2019, TRCA was approached by members of The Garden Club of Toronto (the Club) regarding an opportunity to develop a naturalized garden park within The Meadoway. Meetings were held throughout 2019 to provide an overview of The Meadoway project to the Club, which included a detailed review of opportunities as constraints within hydro corridors. In January of 2020, TRCA staff presented The Meadoway at the Clubs Annual General Meeting and the proposal to move forward with the design of a naturalized garden park was approved unanimously.

Since that time, TRCA has worked closely with the Club in the planning and design of The Meadoway Entry Park proposed west of Pharmacy Avenue. Key activities in 2021 included:

- Four Advisory Group meetings held in 2021, comprised of TRCA, City of Toronto, and Hydro One staff, during which technical feedback and overall direction was provided to guide the preliminary conceptual design;
- Over ten dedicated meetings with Garden Club members and consultant teams, providing formal review, design and technical assistance, and overall coordination support;
- Formal review and feedback provided by TRCA on conceptual and 30% designs;
- Meeting held with Garden Club on potential long-term TRCA led community engagement, education, and stewardship models;
- Assisted in the running of the first virtual public consultation on the park; and
- Participated on two calls with the Deputy Mayors Office.

Education and Community Learning

Funding was secured from the Habitat Stewardship Program for Species at Risk (Environment and Climate Change Canada) to support a variety of education and community learning activities in The Meadoway. The total grant was \$75,000; \$18,000 of which went to The Meadoway's Restoration team, and \$57,000 was utilized by the Education team. The grant addressed threats to the Monarch butterfly through adaptive management of invasive species in The Meadoway and community outreach using workshops to create awareness.

In 2021, 2024 community members were engaged through programs and events in The

Meadoway. This included eleven in-person school field trips and three virtual field trips. In collaboration with Scarborough Museum and Toronto Ravine Days, six community events were hosted at Thompson Memorial Park.

Communications

Social Media and Digital Content

The Meadoway has three active social media channels including Facebook, Twitter and Instagram. In 2021, social media presence was pulled back to reflect implementation priorities. A commitment to undertake one post per platform per week was made to continue Meadoway messaging. Social media content generally include educational information on native species found in The Meadoway, project updates and milestones, sharing resources and sharing messaging of environmental significant days (e.g., Earth hour, Pollinator week, etc.). The Meadoway social media channels also engage in tagging other like-minded organizations to boost the reach of The Meadoway brand.

Meadoway in the News

The Meadoway has been featured in several digital publications in 2021. The following are some key articles and announcements:

- A Toronto.com article titled "Where do we go from here? #RealScarborough's future is in your hands." This article encouraged social media users to use the hashtag #RealScaarborough and share what Scarborough is to them in order to change the narrative of the city and shine positive light on it. In their article, The Meadowy was mentioned as a 'beauty' of the city.
- A blogTO article titled "This is how Toronto's massive 16 km linear park will look when it's finished." It provided an update on the project status and progression including the commencement of construction at Highland Creek and restoration advancements.
- A NOW Magazine article titled "Pandemic Walk: Scarborough hydro Corridor." It was written from a trail user perspective walking the Scarborough Centre Butterfly Trail.
- A NOW Magazine article titled "Top 20 walks in Toronto". The Meadoway was mentioned as one of the top 20 walks in Toronto.
- A City of Toronto announcement declaring their first Active TO weekend planned and mentioned The Meadoway as a potential route for users.
- A City of Toronto announcement stating their financial investment into the Toronto Ravine Strategy where The Meadoway would be a key partnership advancing in the Planning and Activation of 2021.
- A Toronto Star article about the lack of an adequate cycling network in Scarborough. The article highlights The Meadoway as "one bright spot" for cycle infrastructure.
- A Park People article about The Meadoway, in support of Park People's 10-year anniversary, to be published in December 2021.

Presentations

The Meadoway team often receives requests from stakeholders to present on work being undertaken. To date, the following presentations were made in 2021:

- Evergreen City Builders Program, January 2021
- Ontario Invasive Plant Council Conference The Meadoway, Invasive Species Management January 2021
- Columbia Business School Highland Network, February 2021
- Forest Ontario Conference Forest and Grassland Restoration, February 2021
- Ryerson University Planning and Design Graduate Course, March 2021

- Forest Ontario Webinar-Invasive Species in Meadow Restoration, March 2021
- University of Ottawa Community based environmental stewardship projects, June 2021
- Ryerson University Ecological Design Lab, June 2021
- York Region York South Greenway Knowledge Transfer, July 2021
- Parks People 10 Year Anniversary Meadoway Showcase, September 2021
- North American Pollinator Protection Campaign (NAPPC) Pollinator Electric Power Award accepted at their annual conference and subsequent invite to present in their Power-in-Pollinators Initiative group meeting, October 2021
- Ryerson University Undergraduate Planning Course on The City's Physical Urban Form, November 2021

Newsletter

For 2021 six newsletters were released via a subscriber list. Newsletter content varies from month-to-month but generally incorporates project updates including restoration and construction updates, other project milestones, TRCA/The Meadoway educational resources, wildlife information, and a fun fact at the end to keep subscribers engaged.

All past newsletters are available on the project website, where users can sign-up and subscribe.

Website

The project website had some added features since January 2021 including: Facebook Live E-Learning Videos. In 2020, 17 Facebook Live E-Learning videos were virtually held for the At Home with Nature Campaign for general audiences interested in all things Meadoway. In 2021, several of these videos were added to The Meadoway website with closed captions, to reach a larger audience.

In 2020, an Environics analysis was conducted for The Meadoway project study area. Through this analysis it was determined that the most visible minorities along The Meadoway footprint were Filipino and Chinese communities. In order to have project information more accessible to local communities the 'Project History' and 'Visualization Toolkit' webpages were translated to Tagalog and Simplified Chinese in March 2021.

Visualization Toolkit

The Visualization Toolkit continues to be the most popular resource and webpage on The Meadoway's website with the highest number of pageviews. The renderings have not only been pushed on The Meadoway's digital platforms and reports but have been features in public articles.

The Toolkit also continues to be recognized for its vision and design elements. In April 2021, The Meadoway received the "Design Award" in the "Merit" category by AIA Canada Society which is the Canadian Chapter of the American Institute of Architects. In September 2021, The Meadoway received the Toronto Urban Design Award under the category of "Visions and Master Plans" for redefining our understanding of public and recreational open space by transforming 16 kilometres of underutilized hydro corridor and creating new amenities and trails, in spaces once considered off limits.

The award details can be found on the following websites:

- 2021 Design Award: https://aiacanadasociety.org/design-awards/
- 2021 Visions and Master Plans Award: https://www.toronto.ca/city-government/awards-tributes/awards/toronto-urban-design-awards/

High Line Network

In April of 2020, The Meadoway was accepted into the prestigious High Line Network. It has been very beneficial to be a part of a Network with like-minded projects and individuals sharing information. Bi-weekly calls are scheduled with the Network which feature guest speakers on a variety of topics. TRCA presented their meadow restoration program to the Network as part of the June 10th, 2021 meeting. The team was also part of a practitioner's cohort in July 2021 focused on environmental restoration.

Meadow Restoration Handbook

The Meadoway is considered a 'blueprint for revitalization' of utility corridors. TRCA receives many requests for information on meadow restoration techniques for a variety implementers and academics. Staff have established themselves as experts in this field, with the knowledge gained on The Meadoway. In order to share this knowledge more broadly, the restoration team compiled a comprehensive Meadow Restoration Handbook which was written as a 'how to guide' from lessons learned in The Meadoway. The first draft has been professionally edited and is currently being laid out graphically. By the end of 2021 it will be available electronically and printing options will be explored.

Meadow Revitalization

Amazing progress continued with meadow restoration and adaptive management across the corridor in 2021. Due to license agreement, review and approval delays which have recently been addressed through work by all relevant agencies, restoration was postponed for Section 5 of The Meadoway and the team focused attention on adaptive management and monitoring. From invasive species management to buffer mowing, and site preparation and maintenance, The Meadoway continues to transform into productive meadow habitat with the support and dedication of field staff with limited volunteer support in this period due to COVID-19 restrictions. TRCA monitoring teams were also very busy in the corridor this year completing multiple bird and butterfly transects and flora plots.

Restoration work was acknowledged by the North American Pollinator Protection Campaign (NAPPC) at their annual international conference (October 2021) focused on collaborative conservation. NAPPC's mission is to promote the health of pollinators in Canada, the U.S., and Mexico. In 2021, TRCA was awarded the Pollinator Electric Power Award. This initiative recognizes electric power projects who are leading the field in pollinator-friendly initiatives.

The following is a summary of 2021work undertaken by section:

Section 1 – 18 ha (12.5 ha of established meadow)

- Collection and disposal of debris and garbage from the meadow areas
- Maintenance mow and infill seeding
- Multiple buffer mows and trimming around meadow/fence line
- Continuous invasive species management
- Native species overseeding/enhancement

Section 2 – 29 ha (20.6 ha of established meadow)

- Collection and disposal of debris and garbage from the meadow areas
- Seeding of nurse crop including species and density trials
- Multiple buffer mows and trimming around meadow/fence line

- Continuous invasive species management
- Native species overseeding/enhancement
- Milkweed seeding as deterrent for Dog Strangling Vine encroachment study
- Terrestrial monitoring bird and butterfly transects
- Maintenance mows to reduce non-native species
- University of Toronto research on bees
- University of Toronto research on hydrologic response to restore native meadows
- City of Toronto shrub node plantings

Section 4 – 41 ha (25.3 ha of established meadow)

- Collection and disposal of debris and garbage from the meadow areas
- Spring/fall maintenance mow on specific areas and infill seeding
- Biomass removal study (different mowing/soil disturbance techniques to reduce thatch buildup)
- Adaptive management for invasive species
- Native species overseeding/enhancement
- Terrestrial monitoring of flora plots, bird and butterfly transects
- University of Toronto research on bees: discussion and planning
- University of Toronto research on hydrologic response to restore native meadows
- City of Toronto shrub node invasive species management

Section 7 – 19 ha (9.1 ha of established meadow)

- Collection and disposal of debris and garbage from the meadow areas
- Adaptive management for invasive species
- Maintenance mows and infill seeding
- Native species overseeding in past invasive species locations
- Terrestrial monitoring planning of flora plots, bird and butterfly transects
- University of Toronto research on bees
- University of Toronto research on hydrologic response to restore native meadows

Monitoring and Research

The 2021 monitoring report was completed for the fifth year. Meadow birds were monitored throughout the spring, summer, and fall season. There were 12 monitoring stations in total through the 16km stretch of The Meadoway. Counts were conducted between 05:00 and 10:00 hours and at approximately the same time of day on subsequent visits from year to year. Counts were only conducted in good weather conditions (no rain, light winds). All birds seen or heard within a 100 m radius circle and during a 10-minute time period were recorded. Early maintenance mowing in The Meadoway (i.e., before the return of migrant songbirds) has resulted in excellent nesting habitat for Savannah Sparrows, a ground-nesting bird that makes the most of such shorter turf opportunities early in the season. All bird monitoring data was included in the year-end report to compare previous year bird results.

TRCA's terrestrial monitoring team completed 29, 20m x 20m monitoring plots, 42, 1mx1m monitoring plots throughout the spring, summer, and fall monitoring times. All terrestrial monitoring data was included in the 2021 year-end report to compare previous year bird results. 21 Butterfly transects were completed throughout spring, summer and fall 2021. All terrestrial monitoring data was included in the 2021 year-end report to compare previous year bird results.

The areas of focus on 2021 are below for our current research.

Academic research continues in the corridor. In 2021 TRCA worked closely with two projects undertaken through the University of Toronto.

- Dr. Jennifer Drake and Ke Qin The Meadoway Performance Assessment Project: A Systematic Review of Evaluation Methods for Ecosystem Services Provided by Urban Greenspace
- Dr. Scott McIvor and Sisley Irwin Effects of plant mix, restoration year, and management regime of urban meadows on plant-pollinator network size, structure, and diversity.

FINANCIAL DETAILS

Based on deliverable refinements, a revised budget of \$38.175M for 2018 – 2025 has been estimated for the overall project. \$10M was secured from the Weston Family Foundation for Phase 1, with an additional \$15M pledged which was contingent on TRCA raising matching funding making the gap in funding currently \$13.175M.

\$3.8M for the Highland Creek Trail connection was allocated as part of the original \$10M grant from the Weston Family Foundation. In addition to this, \$1.348M in bridge funding for 2021 to continue to advance meadow restoration and overall project management/coordination. This brings the total approved grant from the Weston Family Foundation for The Meadoway project to 11.348M.

TRCA and the City of Toronto have been successful in securing additional leverage funds for the project. To date \$2.744M has been leveraged from the following sources:

- \$800K City of Toronto confirmed reallocation from the Menno-Reesor Restoration Project to contribute to The Meadoway Highland Creek Trail implementation in 2021;
- \$50K City of Toronto Ravine Invasive Species Funds in support of adaptive management of the meadow;
- \$50K City of Toronto Shrub Node maintenance funding;
- \$175K City of Toronto through the Investing in Canada Infrastructure Program (ICIP) confirmed Wayfinding for existing completed trail in 2021;
- \$150K TRCA through Rouge National Urban Park confirmed for trail upgrades and contribution to meadow restoration in the area abutting the Park for 2021/2022;
- \$40K TRCA through Grassland Stewardship Initiative grant to support meadow restoration:
- \$1.348M TRCA through the Conservation Ontario Nature Smart Climate Solutions Fund Initiative (Federal) to support meadow restoration in 2022 – 2024;
- \$22K TRCA through the 2021 Canada Summer Jobs supporting meadow restoration field staff:
- \$24K TRCA through the Project Learning Tree in support of meadow restoration;
- \$75K TRCA through the Habitat Stewardship Program (Federal) supporting meadow restoration, stewardship and education; and
- 10K Toronto and Region Conservation Foundation through the Alan and Patricia Koval Foundation.

In addition to the above confirmed funding, the City of Toronto has recognized The Meadoway as a priority for the Natural Infrastructure Fund (Federal) and TRCA awaits the intake for the Active Transportation Fund (Federal). Both these funds could help support the advancement of the multi-use trail connection in two other areas of the corridor where gaps remain.

TRCA is currently working with the Weston Family Foundation to set a budget for 2022 that takes into account any remaining funds from their \$11.348M allocation and all funds leveraged. Staff will work with the Weston Family Foundation to ensure that existing approved funds will continue to be leveraged through grant securement.

Funds for The Meadoway project are being tracked in account series: 260-01.

DETAILS OF WORK TO BE DONE

The following summary outlines the remaining work to be undertaken in 2022, organized by key objective areas.

Active Transportation and Connections

- Complete construction of Section 5 Phase 1 and Phase 2, thereby finishing all of Section 5 works;
- Receive full HONI approval for Sections 3, 6, and 7 trail designs and complete detailed design packages once approved, putting them in a shovel ready state;
- Continue to collaborate with the Garden Club of Toronto for the planning and design of the Entry Park;
- Complete detailed design packages for Section 7 trail enhancements on behalf of Rouge National Urban Park (Parks Canada);
- Begin implementation of multi-use trail for Section 3 and 6 (Phase 1) (pending securement of Natural Infrastructure Fund allocations); and
- Continue to seek additional funding for implementation of the trail through programs like the Federal Active Transportation Fund.

Education and Community Learning

Continue to seek grant opportunities to undertake Meadoway specific program delivery.

Communications

- Revisit 2019 Communications Plan and scope deliverables based on available funds;
- Continue to speak at conferences, webinars, guided walks, etc. furthering information sharing on The Meadoway;
- Complete graphic layout of the Meadow Restoration Handbook and explore publication opportunities;
- Reinvigorate discussions with academic institutes to hold a Meadoway research forum (explored with University of Toronto Scarborough Campus prior to COVID-19); and
- Update the website to include a section highlighting awards achieved to date.

Meadow Revitalization

- Begin site prep in spring 2022 for Section 5;
- If licence agreement for Section 3 is complete by April/May 2022, begin site prep;
- Continue adaptive management including invasive species efforts in Sections 1, 2, 4 and 7;
- Monitoring to continue across the 16 km; and
- Research best management practices for meadow restoration in areas of:
 - Water management
 - Climate change
 - Biodiversity
 - o Herbicide alternatives/invasives management.

Region of Durham Interest in The Meadoway

The Region of Durham has expressed an interest in advancing planning in 2022 for an expansion of The Meadoway eastwards from Toronto and the Rouge National Urban Park into Durham. from 2022 onwards. TRCA and Region of Durham staff held some preliminary meetings on this opportunity in 2021, and will report back in the future on the status of the Region's effort and TRCA's potential role.

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