

Conservation Advisory Board Meeting Agenda

June 8, 2023



A Healthy Watershed for Everyone

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A Healthy Watershed for Everyone

Notice of Meeting Conservation Advisory Board

Thursday, June 8, 2023

4:00 p.m.

at the HCA Main Office 838 Mineral Springs Road, Ancaster

This meeting will be held in person for Conservation Advisory Board members and designated, limited staff only.

The public may view the meeting live on HCA's You Tube Channel: https://www.youtube.com/user/HamiltonConservation

1.	Welcome – Chair			
2.	Declaration of Conflict of Interest – Chair			
3.	Approval of	– Chair		
4.	Delegations			
5.	Member Briefing			
6.	Chair's Report on Board of Directors Actions – Chair			
	CA 2311	Watershed-based Resource & Conservation Area Management Strategies Development		
	CA 2312	Project Technical Advisory Committee – Responsibili Member Approval for Insurance Requirements	ties &	
7.	Approval of Minutes of Previous Meeting			
	7.1. Minutes	- Conservation Advisory Board (April 13, 2023)	– Chair	Page 1
8.	Business Arising from the Minutes			
-				

9. Staff Information/Presentation for Facilitated Input

9.1. Trail Map & Wayfinding Signage System	 Matt Hall / Madolyn Armstrong 	Page 9
10. Staff Reports/Memorandums		
Reports for Recommendation		
10.1. Proposal to Terminate HCA Water Quality Monitoring Related to Darling Ingredients Effluent Discharge to		
Christie Lake	 Jonathan Bastien 	Page 25
10.2. Fifty Point Watercourse and Pond Restoration		-
Project Update / Final Design	– Colin Oaks	Page 29
11.New Business		

11.1. Recognition of Outgoing CAB Members

12. Next Meeting – Thursday, August 10, 2023 at 4:00 p.m.

13. Adjournment

HAMILTON CONSERVATION AUTHORITY

Conservation Advisory Board

MINUTES

April 13, 2023

Minutes of the Conservation Advisory Board meeting held on Thursday, April 13, 2023 at the HCA Main Administration Office – Woodend Auditorium and livestreamed to YouTube, commencing at 4:00 p.m.

PRESENT:	Dan Bowman – in the Ch Helena Cousins Natalie Faught – Webex Haley McRae Cortney Oliver Wayne Terryberry – Web Santina Moccio – (Ex-off	Tyler Cunningham – Webex Cynthia Janzen Sherry O'Connor Duke O'Sullivan – Webex ex
REGRETS:	Joanne Di Maio	
STAFF PRESENT:	Madolyn Armstrong, Lisa Burnside, Grace Correia, Gord Costie, Matt Hall, Bruce Harschnitz, Lesley McDonell, Colin Oaks, Scott Peck, Jeff Stock, Mike Stone, and Jaime Tellier	
OTHERS:	None	

1. Welcome

The Chair called the meeting to order and welcomed everyone present.

2. Declaration of Conflict of Interest

The Chair asked members to declare any conflicts under the HCA Administrative Bylaw. There were none.

3. Approval of Agenda

The Chair requested any additions or deletions to the agenda. There were none.

2

CA 2308 MOVED BY: Sherry O'Connor SECONDED BY: Haley McRae

THAT the agenda be approved.

CARRIED

4. Delegations

There were none.

5. Member Briefing

5.1.2022 Annual Report

Lisa Burnside presented an overview of the 2022 Annual Report, highlighting key activities under each strategic area. The report marks the fourth year of progress for HCA's current strategic plan and demonstrates HCA's important work toward our vision of a healthy watershed for our communities and the shared natural environment.

5.2. Watershed Report Card

Scott Peck presented the Watershed Report Card (WRC) and answered member questions. The WRC is an initiative of Conservation Ontario, undertaken every five years. The report cards were released on World Water Day and Conservation Ontario has a storyboard of all participating Conservation Authorities. Locally, the report card is being distributed electronically via HCA's website and social media. The report card guides staff on where to undertake work, and illustrates the benefits of restoration work when projects like the Saltfleet CA wetlands are undertaken.

It was noted that some grades for surface water quality have decreased compared with the previous report card, however, this is attributed to a change in the amount of data available and parameters tested, and not a change in actual water quality. There was discussion regarding the sharing of watershed monitoring data with the City of Hamilton. The water quality monitoring data is shared with the City of Hamilton through partnerships with the City. The other ecological monitoring data is shared through the watershed report card. It was noted the intention is to continue to enhance our aquatic and terrestrial monitoring programs in the coming years.

CA 2309 MOVED BY: Duke O'Sullivan

SECONDED BY: Cynthia Janzen

THAT the Watershed Report Card be received.

CARRIED

6. Chair's Report on Board of Directors Actions

The Chair reported that all of the following were approved by the Board of Directors.

CA 2304	Westfield 2022 Accessions List
CA 2305	Advance Purchase Day Use Passes – 2023 Pilot Program
CA 2306	Invasive Species Program Plan 2023

7. Approval of Minutes of Previous Meeting

7.1. Minutes – Conservation Advisory Board (February 9, 2023)

CA 2310 **MOVED BY: Cortney Oliver SECONDED BY: Helena Cousins**

THAT the minutes of the February 9, 2023 Conservation Advisory Board meeting be approved.

CARRIED

8. Business Arising from the Minutes

There was none.

9. Staff Information/Presentation for Facilitated Input

9.1. Invasive Species Strategy Update

Mike Stone introduced 2016 invasive species strategy and current plan for its review and update. Lesley McDonell presented on invasive species, the importance of managing for them, as well as the significant amount of work that HCA has undertaken in this regard as part of the existing strategy. The presentation also included details of current issues in the management of invasive species and the work plan for the program. Questions for facilitated input were posed to CAB members to review scope, challenges, and opportunities.

3

<u>Scope</u>

With regard to priorities and objectives, scope is adequate and consistent with what other organizations are doing. Targeting invasive species that are the greatest risk could be added. The list of species could be too broad and lose focus. Consider focusing on top 10. The strategy could link to impacts of climate change on invasive species. Current partnerships and future opportunities to partner with the City of Hamilton on invasive species were discussed. Ongoing efforts to manage invasive species on private lands through HCA's Stewardship program were noted.

HCA's role in educating the public on invasive species was raised. Education on invasive species is multi-jurisdictional and undertaken by a number of organizations. It is one of the targeted activities in the current strategy, and is typically achieved through collaboration and stewardship.

Regular social media content related to invasive species management was suggested. There are planned events such as invasive species awareness week and invasive species action week that have lent themselves to social media. Staff are also are working to develop a calendar or list of content that Marketing & Communications staff can draw on for regular postings.

Challenges

The lack of predictability in how climate change will affect invasive species was noted. Staff may need to pivot as new threats are identified.

The broad nature of the strategy and possible need for more detailed plans were discussed. The strategy is meant to be broad to provide flexibility to adapt. Currently, implementation of the strategy is addressed through detailed annual work planning.

Prioritization with limited resources was also identified as a possible challenge. The use of SMART goals with measurements for success were recommended.

Challenges in educating varied user groups, including those new to outdoor spaces were noted. This also applies to the increase in use of outdoor spaces overall. The challenge was acknowledged and will be an area of effort for Ecology staff, in collaboration with Conservation Area staff.

Staff resources and continuity were raised. There are currently two Invasive Species Technicians on 2-year contracts. Three summer students are also hired each summer. Longer term contracts have been helpful in retaining staff that have the necessary skills for the program. The more permanency that can be brought to the positions will help address these challenges. An evaluation of the staff resources required to achieve these goals was noted.

Key issues

It was noted that momentum for the Invasive Species Program can be affected by changes to legislation from the provincial government. Managing conservation authority lands, including natural heritage, is included in the mandatory programs regulation from the Province. Plans for how we will manage our lands, including for natural heritage and invasive species, will be included in a Watershed-based resource management strategy, a new regulatory requirement resulting from the changes to the Conservation Authorities Act.

Prioritization, staff resourcing and opportunities for collaboration with other staff, organizations, and volunteers were discussed. Management of invasive species is inter-related with monitoring and restoration as part of the prioritization. Staff work closely with Conservation Area staff to undertake this work. Through the watershed-based resource management strategy, there are opportunities to highlight our restoration and monitoring work and to look to fund the program at a greater scale in time. Staff do utilize volunteers to assist with management of invasive species and plan to continue these efforts.

Top Priorities/Deliverables

A robust communications plan was offered as a key priority. We should be intentional about our communications and tailored to different audiences.

It was noted that priorities and deliverables will be set by staff.

10. Staff Reports/Memorandums

10.1. <u>Watershed-based Resource & Conservation Area Management Strategies</u> <u>Development</u>

Scott Peck presented a summary of the report and answered the members' questions.

CA 2311 MOVED BY: Cynthia Janzen SECONDED BY: Haley McRae

THAT the Conservation Advisory Board recommends to the Board of Directors:

THAT the Board of Directors endorse the approach for the completion of the strategies and plans required in Ontario Regulation 686/21 as detailed in the report titled "Ontario Regulation 686/21 – Required Strategies and Plans", dated April 13, 2023.

CARRIED

10.2. <u>Project Technical Advisory Committee – Responsibilities & Member approval</u> for Insurance Requirements

6

Jeff Stock presented a summary of the report recommending appointment of members to the Hamilton and Halton Watershed Stewardship Programs' Project Technical Advisory Committee (PTAC) for a three-year term and annual endorsement of the responsibilities of the Committee for insurance purposes.

CA 2312 MOVED BY: Sherry O'Connor SECONDED BY: Haley McRae

THAT the Conservation Advisory Board recommends to the Board of Directors:

THAT to meet annual insurance coverage requirements, the responsibilities of the Project Technical Advisory Committee for the Hamilton and Halton Watershed Stewardship Programs be approved as identified in this report; and further

THAT the members on the Project Technical Advisory Committee be appointed for a three-year term, from April 1st, 2023 to March 31, 2026.

CARRIED

10.3. East Hamilton Mountain Master & Management Plans

Madolyn Armstrong presented a summary of the memorandum highlighting East Hamilton Mountain properties scheduled for master and management plans in 2023 and answered the members' questions. The effectiveness of the ten-year master plan strategy that is in place to ensure all master plans are updated on a regular basis was noted.

CA 2313 MOVED BY: Duke O'Sullivan SECONDED BY: Tyler Cunningham

THAT the memorandum entitled East Mountain Conservation Areas Master Plan and Management Plan Updates be received.

CARRIED

10.4. 2022 Conservation Area Annual Attendance

Bruce Harschnitz presented the 2022 Conservation Area attendance figures and answered the members' questions. Methods for determining attendance were outlined. Increases in visitation were noted and attributed to continued interest

following the pandemic-related re-opening and improvements to tracking attendance. There continue to be improvements in tracking attendance through autogates, fee station transactions, and trail counters.

CA 2314 MOVED BY: Cortney Oliver SECONDED BY: Haley McRae

THAT the presentation entitled 2022 Conservation Area Annual Attendance be received.

CARRIED

Natalie Faught left the meeting.

11. New Business

11.1. Resignation of Helena Cousins

The Chair advised that Helena Cousins has accepted an employment opportunity in British Columbia and therefore has to resign from the Conservation Advisory Board. The Chair thanked her for her time on CAB and wished her all the best in her new position.

11.2. User Experience at the Westfield Heritage Village Maple Syrup Festival

Duke O'Sullivan recently attended the Maple Syrup Festival at Westfield Heritage Village and commented on the efficiency and benefits of the reservation system for the event.

12. Next Meeting

The next meeting of the CAB is scheduled for Thursday, June 8, 2023 at 4:00 p.m.

13. Adjournment

On motion, the meeting was adjourned.

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HCA Wayfinding Signage System Development

CAB Meeting – June 8, 2023



A Healthy Watershed for Everyone

Project Overview

- Trail Mapping Committee is working to improve wayfinding at all HCA Conservation Areas
- Eramosa Karst as a pilot site
 - New map and brochure created for Eramosa
 Karst in 2022
 - Signage to be implemented first at EKCA in 2023, then at other CAs
- Public feedback on proposed signage on Bang the Table from May 2nd – 15th, 2023
- Facilitated input session with CAB on June 8th 2023



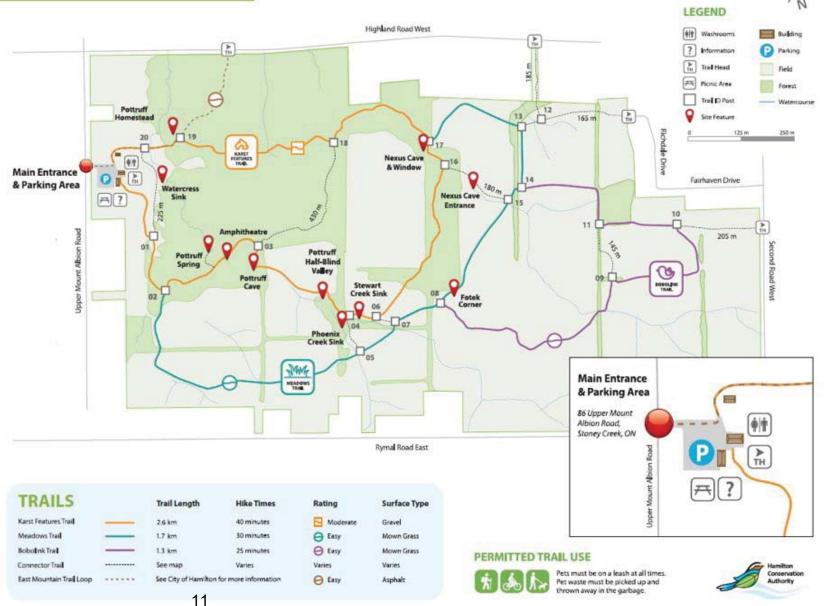
Eramosa Karst 2022 Map

ERAMOSA KARST TRAIL MAP

Posted on Bang the Table for public feedback in April 2022

Key Features

- Main trails colour coded and symbols used
- Trail intersection ID numbers
- Trail lengths, hike times and difficulty given in legend



HCA Signage Family Concept



MAIN TRAILHEAD

MAP BOARD

TRAIL ID POST

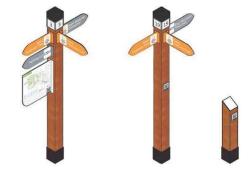
WITH MAP

FEATURE SIGN

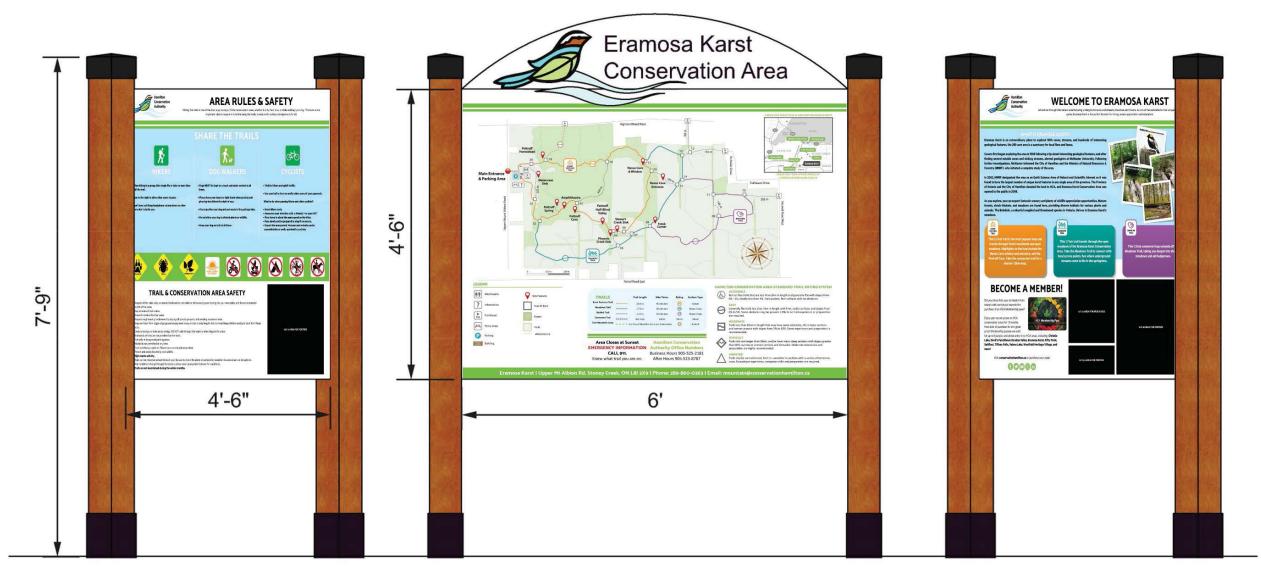








Trailhead Sign Concept



Feedback from Public Consultation

What people like about the concept

- Large size, easy to read
- Clear, informative map
- Bright, inviting, eye-catching

Comments to consider

- o The use of brochures
- Make sure it's accessible text sizes, colour contrast





Wayfinding Post Concept



Feedback from Public Consultation

What people like about the concept

- Easy to interpret with or without a map
- The use of intersection ID numbers
- Providing a map on select posts within the trail system

Comments to consider

- Provide direction back to parking lot often
- Ensure accessibility height, colours, text size, brail
- o Providing distances to amenities and lengths of trail segments





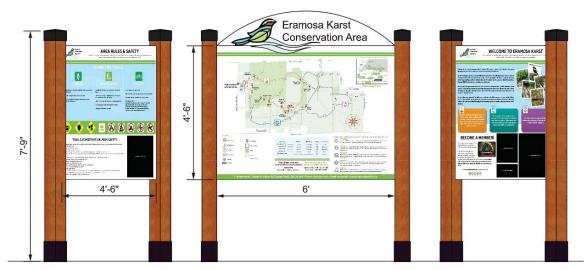
Planned Next Steps

- Revise sign panels with comments received
- Create construction drawings detailing how the signs will be built
- Signage to be installed at Eramosa Karst by the end of 2023
- Signage will be installed by HCA construction crew
- Trail Mapping Committee is working on a priority list of conservation areas to receive new maps and signage
- Continue roll out of new signage over the next few years



Questions for CAB Members

- What are the strengths/benefits of the trailhead sign and wayfinding post concepts shown?
- 2. What do you think could be improved about the concepts?
- 3. Do you foresee any challenges with implementing this system in all HCA conservation areas?
- 4. How can we best communicate the introduction of this new wayfinding system to visitors?





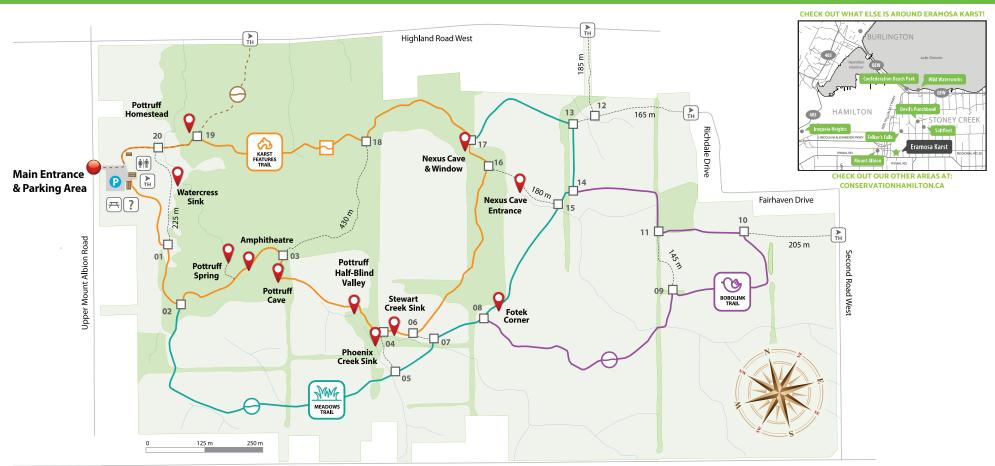
Thank You

Maddy Armstrong BLA Landscape Designer marmstro@conservationhamilton.ca



Matt Hall C.E.T. Director; Capital Projects and Strategic Services matthall@conservationhamilton.ca

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LEGEND

Building



Rymal Road East

TRAILS	Trail Length	Hike Times	Rating	Surface Type
Karst Features Trail	 2.6 km	40 minutes		Gravel
Meadows Trail	 1.7 km	30 minutes	Θ	Mown Grass
Boblink Trail	 1.3 km	25 minutes	Θ	Mown Grass
Connector Trail	 See map	Varies	Varies	Varies
East Mountain Loop	 See City of Hamilton f	or more information	θ	Asphalt

Area Closes at Sunset EMERGENCY INFORMATION CALL 911.

Know what trail you are on.

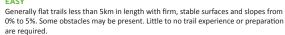
Hamilton Conservation Authority Office Numbers Business Hours 905-525-2181 After Hours 905-523-8787

HAMILTON CONSERVATION AREA STANDARD TRAIL RATING SYSTEM

ACCESSIBLE

Barrier free trails that are less than 2km in length and generally flat with slopes from 0% - 5%, mostly less than 3%. Hard packed, firm surfaces with no obstacles.

EASY



MODERATE



(ይ

Trails less than 10km in length that may have some obstacles, short steep sections and uneven ground with slopes from 5% to 10%. Some experience and preparation is recommended.

DIFFICULT



Trails that are longer than 10km, and/or have many steep sections with slopes greater than 10%, narrow or uneven sections and obstacles. Moderate experience and preparation are highly recommended.

UNRATED



Trails may be unmaintained, faint or unmarked in sections with a variety of terrain to cross. Exceptional experience, navigation skills and preparation are required.

AREA RULES & SAFETY

Hitting the trails is one of the best ways to enjoy HCA's conservation areas, whether it is by foot, bike, or while walking your dog. There are some important rules to keep in mind while using the trails, to ensure the safety and enjoyment for all.



TRAIL & CONSERVATION AREA SAFETY

- Respect all the rules, stay on marked trails and do not climb or otherwise bypass fencing, for your own safety and the environmental health of the areas.
- Stay on marked trail routes.
- Share the trails with other users.
- Respect neighbouring landowners by staying off private property and avoiding excessive noise.
- Keep well back from edges of gorge and escarpment areas, at least a body length. Adults should keep children and pets back from these areas.
- Creek crossings on trails are by bridge. DO NOT walk through the water or allow dogs in the water.
- · Motorized vehicles are not permitted on the trails.
- Park only in designated parking areas.
- Alcohol is not permitted at any time.
- Pack out what you pack in. Please leave our natural areas clean.
- Protect and avoid disturbing local wildlife.
- High coyote activity.
- Trails can be closed at certain times of year. Be sure to check the alerts on website for possible closures or service disruptions.
- Trail conditions change through the season, please wear appropriate footwear for conditions. 22
- Trails are not maintained during the winter months.

15X 17 AREA FOR POSTERS



WELCOME TO ERAMOSA KARST

Adventure through this natural area featuring underground caves and streams, meadows and forests. As one of the watershed's most unique natural gems, Eramosa Karst is the perfect location for hiking, nature appreciation and education.

WHAT IS ERAMOSA KARST?

Eramosa Karst is an extraordinary place to explore! With caves, streams, and hundreds of interesting geological features, the 285-acre area is a sanctuary for local flora and fauna.

Cavers first began exploring the area in 1998 following a tip about interesting geological features, and after finding several notable caves and sinking streams, alerted geologists at McMaster University. Following further investigations, McMaster informed the City of Hamilton and the Ministry of Natural Resources & Forestry (MNRF), who initiated a complete study of the area.

In 2003, MNRF designated the area as an Earth Science Area of Natural and Scientific Interest as it was found to have the largest number of unique karst features in any single area of the province. The Province of Ontario and the City of Hamilton donated the land to HCA, and Eramosa Karst Conservation Area was opened to the public in 2008.

As you explore, you can expect fantastic scenery and plenty of wildlife appreciation opportunities. Mature forests, shrub thickets, and meadows are found here, providing diverse habitats for various plants and animals. The Bobolink, a colourful songbird and threatened species in Ontario, thrives in Eramosa Karst's meadows.



This 2.3 km trail is the most popular loop and travels through forest woodlands and open meadows. Highlights on the loop include the Nexus Cave window and entrance, and the Pottruff Cave. Take the connection trail for a shorter 1.5km loop.



This 1.7 km trail travels through the open meadows of the Eramosa Karst Conservation Area. Take the Meadows Trail to connect with local access points. See where underground streams come to life in the springtime.



This 1.3 km connector loop extends off the Meadows Trail, taking you deeper into the open meadows and old hedgerows.

BECOME A MEMBER!

Did you know that your admission from today's visit can be put towards the purchase of an HCA Membership pass?

Enjoy year-round access to HCA conservation areas for 12 months from date of purchase for one great price! Membership passes are valid

for up to 6 people, and allows entry in to HCA areas, including: **Christie** Lake, Devil's Punchbowl, Dundas Valley, Eramosa Karst, Fifty Point, Saltfleet, Tiffany Falls, Valens Lake, Westfield Heritage Village, and more!

Visit conservationhamilton.ca to purchase your pass!





12 X 12 AREA FOR BROCHURES

18 X 18 AREA FOR POSTERS

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10.1

A Healthy Watershed for Everyone

Report

TO:	Conservation Advisory Board
FROM:	Lisa Burnside, Chief Administrative Officer (CAO)
RECOMMENDED BY:	T. Scott Peck, MCIP, RPP, Deputy Chief Administrative Officer / Director, Watershed Management Services
PREPARED BY:	Jonathan Bastien, Water Resources Engineer
MEETIING DATE:	June 8, 2023
RE:	Proposal to Terminate HCA's Water Quality Monitoring Related to Darling Ingredients's Effluent Discharge to Christie Lake

STAFF RECOMMENDATION

THAT the Conservation Advisory Board recommends to the Board of Directors:

THAT HCA's water quality monitoring related to Darling Ingredients operational effluent discharge to Christie Lake be terminated.

BACKGROUND

The Darling Ingredients Plant (formerly Rothsay Dundas Plant) is a meat rendering facility that renders raw meat material from meat processing plants, farms, grocery stores, and restaurants and converts this into products including animal feeds, cosmetics, detergents and other products. As part of the rendering process and operation of the facility, wastewater is produced and treated on-site. The Environmental Compliance Approval (ECA) for Darling Ingredients issued by the Ministry of Environment, Conservation and Parks allows for discharge of the treated wastewater. The discharge is released into a pond located on Darling Ingredients property before being released into a wetland that flows into a watercourse on HCA lands (former Pond 4) and Christie Lake Conservation Area. The approved discharge period is November 1 to March 31. The discharge period is as detailed in the ECA and any variations to the specific dates must be approved by the HCA as per conditions specified in the ECA.

Requests for Early Discharge

Requests for early and extended discharges were made by Darling Ingredients and approved by the HCA Board of Directors in 2011 and 2013. Further, in 2019 Darling Ingredients requested and the HCA Board approved a permanent change in the earliest allowable discharge date from November 1 to October 1. The recommendations by staff to approve the extension requests were informed by a water quality monitoring program that was undertaken downstream of the plants discharge point, at the expense of Darling Ingredients. This monitoring program has been in place since 2013.

The results of the water quality monitoring program have indicated that Total Phosphorous (TP) and Dissolved Organic Carbon (DOC) concentrations are elevated during the discharge season. However, based on the collected data, they are either not influenced by Darling Ingredients effluent or concentrations are low enough that there are no adverse ecological effects in the receiving waterbodies downstream.

STAFF COMMENT

The original objective of HCA's water quality monitoring was to review whether effluent discharge from Darling Ingredients in October (rather than November) had a negative impact on water quality downstream.

The findings of the revised AMP for each year between 2019 and 2023 continue to confirm previous findings that effluent discharge from Darling Ingredients does not have a negative impact on water quality downstream.

Most key water quality parameters have been decreasing in average annual concentration overall. Given the trend of decreasing concentrations, and the previous conclusion that concentrations are within natural fluctuations and not negatively impacted by Darling Ingredients effluent, there are no concerns regarding most key water quality parameters.

Although Nitrate has shown an increase in average annual concentration overall, concentrations are well below relevant water quality standards.

STRATEGIC PLAN LINKAGE

The initiative refers directly to the HCA Strategic Plan 2019 - 2023:

- Strategic Priority Area Organizational Excellence
 - Initiatives Communicate both internally and externally about what HCA does and why

- Strategic Priority Area Water Management
 - Invest in programs to address the impacts of nutrient and sediment loading on watershed streams, creeks, rivers and receiving water bodies
 - Invest in our monitoring programs and networks to support our ability to track the impacts of climate change and changes in our environment, and inform our adaptation strategies

AGENCY COMMENTS

Not applicable.

LEGAL/FINANCIAL IMPLICATIONS

Not applicable.

CONCLUSIONS

The findings of the revised AMP for each year between 2019 and 2023 continue to confirm previous findings that effluent discharge from Darling Ingredients does not have a negative impact on water quality downstream. As such, it is HCA staff's recommendation that HCA's water quality monitoring program related to Darling Ingredients's effluent discharge to Christie Lake be terminated.

HCA staff have had a positive relationship with Darling Ingredients and with their predecessor, Rothsay, generally and as part of this monitoring program. It is staff's intention to stay in contact with Darling Ingredients to maintain this relationship and to work to identify potential future partnerships with Darling Ingredients, in lieu of this HCA water quality monitoring.

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10.2

A Healthy Watershed for Everyone

Report	
то:	Conservation Advisory Board
FROM:	Lisa Burnside, Chief Administrative Officer (CAO)
RECOMMENDED BY:	T. Scott Peck, MCIP, RPP, Deputy CAO/Director, Watershed Management Services
PREPARED BY:	Colin Oaks, Aquatic Ecologist Mike Stone, MCIP, RPP, Manager, Watershed Planning, Stewardship & Ecological Services
MEETIING DATE:	June 8, 2023
RE:	Fifty Point Conservation Area Wetland and Fisheries Enhancement Project Update

STAFF RECOMMENDATION

THAT the Conservation Advisory Board recommends to the Board of Directors

THAT the Fifty Point Conservation Area Wetland and Fisheries Enhancement Project Update be received and further;

THAT upon completion of the Stage 2 archaeological work, staff finalize design plans and move forward to tender the project for construction which is anticipated in late Fall 2023/Winter 2024.

BACKGROUND

In 2018, it was identified that the pond at Fifty Point Conservation Area was connected to Fifty Creek, and that the Rainbow Trout stocking that had traditionally occurred in the pond would no longer be permitted by the Ministry of Natural Resources and Forestry (MNRF). While Fifty Point provides a variety of angling opportunities to conservation area users including in the marina inlet and Lake Ontario, the loss of a stocked fishery in the pond was a concern as fishing is popular at Fifty Point and there was interest in continuing to provide fishing opportunities at the pond. HCA staff were given direction to undertake a project feasibility study for the work required to transition the Fifty Point pond to a self-sustaining fishery.

At the September 2020 Conservation Advisory Board meeting staff provided a project update to report on the fisheries and background data collection completed in 2019 to characterize existing conditions present in the pond. Through this work it was found that the pond supports a number of warm and cool water fish species, across different age classes. While some spawning and reproduction is occurring naturally, it was also determined that the absence of littoral (near shore) habitat and riparian buffers are a significant limiting factor to the productivity and sustainability of the pond fishery.

In 2018 HCA also completed a Class Environmental Assessment (EA) study to examine potential solutions for flooding issues being experienced at the north end of the Conservation Area and adjacent lands associated with Stoney Creek Watercourse 11 (WC11) which traverses the park. The EA found that by diverting the upstream flow to the Fifty Point pond, some flooding relief could be achieved. The proposed diversion created an opportunity for the establishment of a wetland adjacent to the Fifty Point pond to provide a new natural area and support additional fish habitat.

To provide for an integrated design solution to address both the pond fishery and the WC 11 EA study's recommendations, a competitive bid process for design work was completed in 2020. The consulting firm Water's Edge was the successful bidder and was retained in 2020 to undertake detailed design for both the proposed wetland and pond fish habitat improvements.

The wetland enhancement project has been incorporated into the recently approved Fifty Point Conservation Area master plan, which the Board of Directors endorsed in 2022.

STAFF COMMENT

Current Status

Since 2020, HCA staff have worked with Water's Edge on a number of design revisions to address EA recommendations and staff comments and feedback. Important considerations in the review of the design have included providing habitat diversity, minimizing fill volumes (berms) and grading work, and ensuring the watercourse diversion and wetland are appropriately integrated with existing park infrastructure and features (roads, trails, existing trees/vegetation, etc.). HCA has received the final draft design submission, which provides for the connection of WC 11 to the pond through two wetland cells adjacent to the pond shoreline. The design is shown in Figure 1.

Through the design process HCA staff identified the need for the project to complete an archaeological assessment. HCA retained Detritus Consulting to complete a Stage 1 assessment. Following the results of the Stage 1 assessment, a Stage 2 assessment is being completed for a targeted smaller area adjacent to the pond. Monitoring

agreements for the Stage 2 work have been established with Six Nations of the Grand River and the Haudenosaunee Development Institute.

Project Implementation

Upon completion of the Stage 2 archaeological work, HCA staff will review the design plans to ensure no further changes are required and with funding now in place, staff are recommending to move forward to tender the project for construction in late Fall 2023/Winter 2024.

Staff are also undertaking to obtain site alteration clearances from the City of Hamilton. Staff are also consulting with the Department of Fisheries and Oceans (DFO) on the final design. Staff expect DFO will support this project given its objective of improving fish habitat.

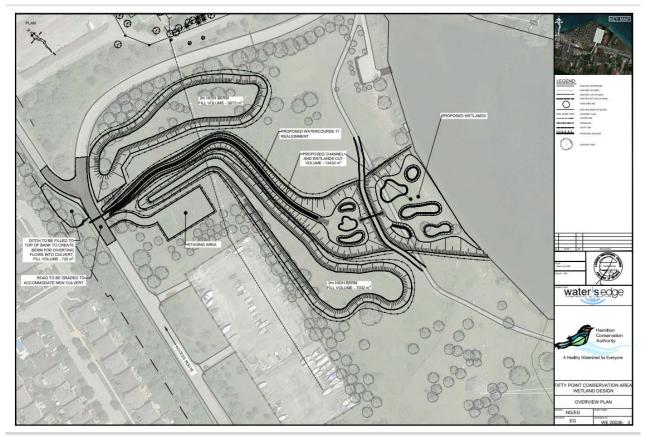


Figure 1: Final Draft Design from Water's Edge

STRATEGIC PLAN LINKAGE

The initiative refers directly to the HCA Strategic Plan 2019 - 2023:

• Strategic Priority Area – Water Management

- Initiatives Maintain and enhance our flood control infrastructure to address flooding and work to augment low flow conditions
- Strategic Priority Area Natural Heritage Conservation
 - Initiatives Maintain and enhance the natural heritage features of HCA lands and manage these lands on an environmentally sustainable basis
- Strategic Priority Area Conservation Area Experience
 - Initiatives Identify and act upon revenue generation/cost reduction and investment in visitor services opportunities in our conservation areas

AGENCY COMMENTS

Not applicable

LEGAL/FINANCIAL IMPLICATIONS

Funding for the construction has been allocated through the 2022 operating surplus. At the June 1, 2023 Board of Directors meeting, \$900,000 was approved for the establishment of the Fifty Point Wetland reserve to fund the project.

CONCLUSIONS

The design for the Fifty Point Conservation Area WC 11 diversion and wetland and fisheries enhancement has been completed. HCA staff intend to tender the project for construction in late 2023/early 2024. The project is expected to help reduce minor flooding associated with WC 11, and promote the establishment of a self-sustaining fishery in the pond that will provide conservation area guests with additional fishing opportunities. The wetland features to be established will provide additional natural area and habitat diversity within the conservation area.