



Conservation Advisory Board Meeting Agenda

August 10, 2023

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Notice of Meeting

Conservation Advisory Board

Thursday, August 10, 2023

4:00 p.m.

at Fifty Point Conservation Area (Ingeldale House)

1479 Baseline Road, Winona

This meeting will be held in person at Fifty Point Conservation Area. There will be no livestream of the meeting given the offsite location. It is open to the public.

- 1. Welcome** – Chair
- 2. Site Tours**
 - 2.1. Fifty Point CA Watercourse and Pond Restoration Project – Scott Peck
 - 2.2. Fifty Point Entrance Improvements – Gord Costie / Matt Hall
- 3. Declaration of Conflict of Interest** – Chair
- 4. Approval of Agenda** – Chair
- 5. Delegations**
- 6. Election of Vice-Chair** – Chair
- 7. Chair's Report on Board of Directors Actions** – Chair
 - CA 2318 Proposal to Terminate HCA Water Quality Monitoring Related to Darling Ingredients Effluent Discharge to Christie Lake
 - CA 2319 Fifty Point Watercourse and Pond Restoration Project Update / Final Design
- 8. Approval of Minutes of Previous Meeting**
 - 8.1. Minutes – Conservation Advisory Board (June 8, 2023) – Chair
- 9. Business Arising from the Minutes**

10. Staff Reports/Memorandums

10.1. Oak Wilt Mapping & Work Plan

– Lesley McDonell

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10.2. HCA Trail Guide Mobile App Project Update

– Jasmine Marinelli

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11. New Business

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

13. Adjournment

HAMILTON CONSERVATION AUTHORITY

Conservation Advisory Board

MINUTES

June 8, 2023

Minutes of the Conservation Advisory Board meeting held on Thursday, June 8, 2023 at 4:00 p.m., at the HCA main office, 838 Mineral Springs Road, in Ancaster, and livestreamed on YouTube.

PRESENT:	Duke O’Sullivan – in the Chair Joanne Di Maio Cynthia Janzen - Webex Sherry O’Connor	Natalie Faught Haley McRae
REGRETS:	Dan Bowman, Tyler Cunningham, Cortney Oliver, Wayne Terryberry	
STAFF PRESENT:	Madolyn Armstrong, Jonathan Bastien, Lisa Burnside, Grace Correia, Scott Fleming, Matt Hall, Bruce Harschnitz, Colin Oaks, Mike Stone, Jaime Tellier, Fionnula Wade, and Nancy Watts	
OTHERS:	Media – 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 By-law. There were none.

3. Approval of Agenda

The Chair requested any additions or deletions to the agenda. A presentation entitled Toward a Net-Zero Future – Hamilton Conservation Authority’s Corporate

Climate Change Strategy was circulated to the members as an addendum to the agenda in advance of the meeting and was noted as item 5.1 on the agenda.

**CA 2315 MOVED BY: Joanne Di Maio
 SECONDED BY: Haley McRae**

THAT the agenda be approved, as amended.

CARRIED

4. Delegations

There were none.

5. Member Briefing

5.1. Toward a Net-Zero Future – Hamilton Conservation Authority’s Corporate Climate Change Strategy

Fionnula Wade presented on HCA’s Corporate Climate Change Strategy and showed an accompanying promotional video for the strategy.

6. Chairman’s Report on Board of Directors Actions

The following recommendations were approved by the Board of Directors at the May 4, 2023 meeting.

CA 2311 Watershed-based Resource & Conservation Area
 Management Strategies Development

CA 2312 Project Technical Advisory Committee – Responsibilities &
 Member Approval for Insurance Requirements

7. Approval of Minutes of Previous Meeting

7.1. Minutes – Conservation Advisory Board (Last Meeting April 13, 2023)

**CA 2316 MOVED BY: Sherry O’Connor
 SECONDED BY: Haley McRae**

THAT the minutes of the April 13, 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. HCA Wayfinding Signage System Development

Madolyn Armstrong presented on the development of the HCA Wayfinding Signage System. Questions for facilitated input were posed to CAB members to review strengths, challenges, and opportunities.

Strengths/Benefits

The members felt the new directional signage will be an improvement for users in navigating throughout. The signs have a professional appearance and are well thought out. The directional signage and distance to the parking lot will also be an improvement for users.

Possible Improvements

The use of QR codes was discussed. They will be added on the main trail head sign and on each post. This is in line with discussions at the Ontario Trails Council.

Providing information in multiple languages was raised. Physical signs on site will be English. However, staff tried to incorporate pictograms as much as possible to assist with user comprehension. With the QR codes, staff can look into multilingual content on electronic maps and the ability for personal devices to provide translation.

Anti-graffiti coatings on signage was discussed. Yes, staff will incorporate coatings, the best type will be investigated when sourcing signage.

The potential to add average hike time with distances on signs was discussed, bearing in mind variability for stops along the hike and differences in walking speed among users. Currently, the average time to complete the main loop is only on the trailhead sign. Visitors may be able to estimate remaining time based on total time and distance. This could be a future consideration.

There was discussion about interpretive signage and how it may be used to convey messaging about biodiversity, invasive species, and other aspects of HCA's focus. This initiative is focused on wayfinding signage. Existing interpretive signage about specific park features, including flora and fauna, will remain on-site. Additional messaging can be addressed through new interpretive signage.

Consideration for pedestrian/cycling access points from adjoining trails and neighbouring communities was raised. Secondary signs will be at select pedestrian/cyclist access points. Trail intersections will also be signed. The size of the signage is helpful for cyclists as they are moving faster than pedestrians.

This initiative will also be beneficial for corporate branding, establishing users are on HCA lands, and setting trail etiquette/norms.

It was noted that the trail head signage will be single-sided so the standard can be replicated at all Conservation Areas.

Challenges

There was discussion regarding any public feedback regarding users requesting additional information, beyond standard AODA difficulty classifications, to help plan their visits according to their specific needs. Comments related to the trail difficulty classification rating system were received during public consultation for the overall trail mapping system last year. There are five difficulty classifications and details for what is considered in each classification is included on the signage.

Prioritization for implementation of the wayfinding signage was discussed. It was suggested for consideration to prioritize the most visited areas and those that currently have the oldest branding still in use.

Communicate

Social media was offered as a primary means of communicating the launch of the new signage to users. In addition, it was thought that it will be intuitive for users as they arrive on-site and observe and use the new signage.

**CA 2317 MOVED BY: Joanne Di Maio
 SECONDED BY: Sherry O'Connor**

**THAT the presentation entitled HCA Wayfinding Signage
System Development be received.**

CARRIED

10. Staff Reports/Memorandums

10.1. Proposal to Terminate HCA Water Quality Monitoring Related to Darling Ingredients Effluent Discharge to Christie Lake

Jonathan Bastien presented a summary of the report and answered the members' questions.

There was discussion regarding maintaining the program as a precaution. It was noted the program was not intended to be a long-term monitoring program and has achieved its intended purpose of satisfying HCA that the discharge of treated effluent is not having an effect on water quality downstream. HCA has collected nine (9) years of data and commissioned a peer reviewed report which confirmed the findings.

It was clarified that the water going into the ponds is treated water that must follow stringent water quality standards through an Environmental Compliance Approval issued by the Ministry of the Environment, Conservation and Parks.

Following discussion, an amendment to the staff recommendation was put forward that HCA request monthly sampling results and continue to receive the annual Environmental Compliance Approval discharge reports from Darling Ingredients for staff to review.

**CA 2318 MOVED BY: Natalie Faught
 SECONDED BY: Haley McRae**

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.

THAT HCA request monthly sampling results and receive annual ECA discharge reports from Darling Ingredients for staff review.

CARRIED

10.2. Fifty Point Watercourse and Pond Restoration Project Update / Final Design

Colin Oaks presented a summary of the report and answered the members' questions.

There was discussion regarding fishing in the pond competing with the self-sustaining fishery objective of the project. Colin noted that this area will be similar to other areas where we promote catch and release as an angling practice. There currently is not much fishing pressure on this pond since the practice of fish stocking has ended. Increasing habitat should facilitate fish populations and staff will monitor to ensure the populations can support recreational fishing. HCA could limit promotion of fishing until the project is complete and stable.

It was suggested that CAB hold its next meeting on-site at Fifty Point if possible, for members to view the project site.

**CA 2319 MOVED BY: Natalie Faught
 SECONDED BY: Joanne Di Maio**

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.

CARRIED

11. New Business

11.1. Recognition of Outgoing CAB Members

Lisa Burnside recognized Joanne Di Maio, Duke O'Sullivan, and Wayne Terryberry as all had reached the maximum of two four-year terms of service on the Conservation Advisory Board (CAB). In addition to this most recent term of CAB, Duke joined the Board of Directors as a City of Hamilton Councillor in 1998 and had continually served on the HCA Board of Directors or its subcommittees since that time, resulting in a remarkable 25 consecutive years of service. Lisa thanked each of the members for their invaluable contributions to great variety of HCA projects and initiatives.

Duke thanked the Board of Directors and staff for the opportunity to sit on CAB, noting the active participation as a highlight of the experience. He commented on the knowledge, expertise, passion and commitment of staff. Joanne also thanked staff for their dedication and expressed appreciation for the opportunity to sit on CAB.

12. Next Meeting

The next meeting of the CAB is scheduled for Thursday, August 10, 2023 at 4:00 p.m.

13. Adjournment

On motion, the meeting was adjourned.

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: Lesley McDonell, Terrestrial Ecologist

MEETING DATE: August 10, 2023

RE: Oak Wilt Mapping & Work Plan

STAFF RECOMMENDATION

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

THAT the Oak Wilt Mapping and Work Plan as detailed in this report be approved, and further;

THAT the Oak Wilt Mapping and Work Plan be incorporated into the HCA's Invasive Species Strategy update.

PURPOSE & BACKGROUND

In June 2023, the presence of oak wilt was confirmed by the Canadian Food Inspection Agency in Niagara Falls, Ontario. This report is intended to provide CAB with an overview of the information and staff recommendation and response with an oak wilt mapping and work plan.

What is Oak Wilt

Oak Wilt is a fungal disease caused by *Bretziella fagacearum*. The fungus develops in the outer sap wood of the trees and causes the host to develop balloonlike outgrowths and gummy plugs in the wood. These then block the movement of water and nutrients within the tree resulting in branch wilting and tree death. Oak wilt can kill an oak tree in as little as 2-6 weeks and most infected trees do not live beyond the growing season.

Trees in the Red Oak group succumb more quickly to the disease and in the Hamilton Conservation Authority (HCA) watershed that includes Red, Black and Pin oaks. Oaks in the White oak group have moderate to high levels of resistance and can live for several years after infection. In the HCA watershed this includes Swamp, White, Bur and Chinquapin oaks.

How is it spread

Oak wilt is spread naturally in two ways: root grafting (below ground) and sap and oak bark beetles (above ground). Oak trees growing close together have roots that intertwine. The disease spreads from tree to tree from these interconnected roots or root grafts. The movement of the disease through root grafts is generally over short distances and between trees of the same oak species.

The second method is via oak bark beetles which are generally responsible for the establishment of new infections in nearby or distant forests. The movement of the fungus (*Bretziella fagacearum*) is via dispersal of spores from a fungal mat. These mats develop when the tree dies and develop on both the trunk and large branches. The fungal mats produce a fruity smell which attracts insects to the dead trees. The spores from the fungal mats then stick to the insect's bodies and this allows the spores to move to wounds on other trees, causing a new infection. Many factors are required for efficient spread including fresh oak tree wounds, new fungal mats and populations of beetles.

Finally, this fungus can also be spread by humans through the movement of logs and firewood that harbour fungal mats.

Where is it found

Oak wilt has recently been found in three areas of Southern Ontario – City of Niagara Falls, Township of Springwater and the Town of Niagara-on-the Lake.

Ecological Importance of Oak Trees

Oaks are a keystone species important in the life stages of many different organisms from deer and squirrels to insects and birds. Their acorns provide food for a variety of wildlife. The massive canopy's slow rain water and help to control erosion on slopes as does the thick layer of leaves that fall from oak trees each year. These fallen leaves also provide habitat and food for insects and other organisms. Oaks are long lived trees and provide these benefits to an ecosystem over hundreds of years.

STAFF COMMENT

The impact that oak wilt could have on the HCA watershed will be a key issue that staff will assess moving forward. Using the Natural Areas Inventory staff will work on creating maps indicating where Red, Black and Pin oak have been identified as dominant or

abundant in the tree canopy and subcanopy. This will be followed by a work plan to survey those areas for the occurrence of dead or dying oak trees, associated communication needs and staff training. The work plan will include training staff on identifying oak wilt symptoms in oak trees, surveying for occurrence of oak wilt and creating maps of forested areas dominated by oak trees.

To help prevent the spread of oak wilt internally on our HCA properties, communication has been provided to HCA Conservation Areas Services and Forestry staff in regard to not pruning oak trees between April - October. In addition, to reduce the risk of disease introduction, HCA will pause its internal firewood program that moves the cut hazard tree wood from our conservation areas to be sold as firewood at Valens Lake Conservation Area.

STRATEGIC PLAN

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

- **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

AGENCY COMMENTS

Not Applicable

LEGAL/FINANCIAL IMPLICATIONS

It is anticipated that the initial oak wilt mapping and work plan will be accommodated in current budget allocations. However, there may be financial implications related to tree removal if Oak Wilt impacts HCA lands. As Oak Wilt has not been found on HCA lands and the noted mapping work to identify oak dominated areas has not been completed, the extent of the potential impact and costs are not known at this time.

CONCLUSIONS

HCA staff are aware to the threat of oak wilt to our forest and will be moving forward with the work plan noted to train staff, map areas with the occurrence of oak trees and start a monitoring program of oak wilt.

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Report

TO: Conservation Advisory Board

FROM: Lisa Burnside, Chief Administrative Officer (CAO)

RECOMMENDED BY: Scott Fleming, Director of Finance & Central Support Services
Sarah Gauden, Marketing & Communications Manager

PREPARED BY: Jasmine Marinelli, Marketing Coordinator

MEETING DATE: August 10, 2023

RE: HCA Trail Guide Mobile App Project Update

STAFF RECOMMENDATION

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

THAT the Trail Guide Mobile App Project Update be received and further;

THAT staff continue to expand the App to other major HCA conservation areas as part of operational work plans.

PURPOSE & BACKGROUND

In 2022, the HCA Board set a goal for staff to expand digital offerings and develop greater online information to engage visitors and supplement in-person visits to conservation areas. This stemmed from the pandemic to leverage and support digital initiatives for our conservation area users.

As a result, HCA's marketing staff researched and worked on a new technology initiative. The project, titled the HCA Trail Guide Mobile App, allows our visitors to learn about the environment around them while they hike our trails.

STAFF COMMENT

HCA Trail Guide Mobile App Background

To accomplish this goal, HCA's Marketing department evaluated various interactive apps with the support of an internal, Virtual Experience Advisory Committee and sought staff and public feedback as part of the process.

The goals of the virtual experience at HCA were as follows:

- To provide a safe, user-friendly software application for Conservation Area visitors;
- To guide and help interpret the Conservation Area using accessible forms of media and language that provide further details about HCA projects, activities and lands;
- To provide themes that can be based on different target markets to attract a variety of users

Through this process, the Talking Forest App met all of the criteria and goals for the committee and HCA staff. In addition, the Talking Forest is already being implemented by other Conservation Authorities and working in collaboration with Conservation Ontario, demonstrating the app's effectiveness and potential to enhance visitor experience across multiple locations.

"The Talking Forest" App Operational Highlights

By simply downloading the app and opening it upon arrival at the trailhead, our visitors can experience our Conservation Areas in a new and exciting way.

- This app is free to download and runs in the background of a smartphone, even while other app functions are in use.
- Visitors can even lock their screens and put their phones in their pockets as they hike so they are not distracted by a screen.
- As they approach a GPS coordinate point, the app will automatically "ping" and play audio explaining the features they are looking at.
- Images and written captions are available for viewing and listening to the audio, making this information more accessible to all user groups.

The Eramosa Karst Conservation Area was utilized as our pilot for the App and is currently being finalized and will be launched this Fall. Additionally, work has begun on the tour for the Spencer Gorge with a target to launch for the upcoming Fall daily reservation service. Through this experience several conservation visitor benefits were identified including:

1. Adds value to entrance fees, providing additional benefits for those hiking in our areas and creating an overall better visitor experience.

2. Provides navigational guidance to hikers and encourages visitors to explore different trails and Conservation Areas.
3. Promotes education and environmental awareness. The Karst app educates visitors and highlights various caves, sumps, and a massive Willow tree. The Spencer Gorge app highlights similar features such as Eastern Hemlock trees, waterfall geology, and the Louisiana water thrush.
4. Provides the future ability to add new themes to offer a variety of tours with various themes centered around seasons, holidays, interest groups and education levels.

STRATEGIC PLAN LINKAGE

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

- **Strategic Priority Area – Conservation Area Experience**
 - Identify and support a more diverse and accessible range of programs for our conservation area users
- **Strategic Priority Area – Education & Environmental Awareness**
 - Identify and create input and engagement opportunities for conservation area visitors on site

AGENCY COMMENTS

Not applicable.

LEGAL/FINANCIAL IMPLICATIONS

The current annual licencing costs for the app are under \$10,000 and have been accommodated as part of the annual marketing budget.

CONCLUSIONS

HCA has been looking to enhance virtual initiatives in our conservation areas since the pandemic. In response, the HCA Trail Guide Mobile App will be launched at Eramosa Karst and Spencer Gorge shortly to enhance virtual initiatives in our conservation areas. Additional tours at each major Conservation Area will be created over the next two to three years.