



Conservation Advisory Board Meeting Agenda

Thursday, April 14, 2022



Notice of Meeting

Conservation Advisory Board

Thursday, April 14, 2022

4:00 p.m.

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** – Bowman
- 2. Declaration of Conflict of Interest** – Bowman
- 3. Approval of Agenda** – Bowman
- 4. Delegations**
- 5. Member Briefing**
 - 5.1. Shoreline Management Plan – Peck
 - 5.2. 2021 HCA Annual Report – Burnside
- 6. Chair's Report on Board of Directors Actions** – Bowman
 - CA 2203 Westfield Heritage Village Accession and Deaccession Lists
 - CA 2204 2022 Annual Membership Pass Program Renewal Strategy
 - CA 2205 HCA 10 Year Masterplan Strategy Update
 - CA 2207 LDD (Gypsy) Moth Surveys & 2022 Control Program
- 7. Approval of Minutes of Previous Meeting**
 - 7.1. Minutes – Conservation Advisory Board (February 10, 2022) – Bowman
- 8. Business Arising from the Minutes**
- 9. Staff Reports/Memorandums**
 - 9.1. HCA Trail Map Standards Report – Hall

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|--|---------------------|
| 9.2. Saltfleet Master Plan Progress Update | – Armstrong / Smith |
| 9.3. Fifty Point Pond Fishery & Wetland Project Final Design | – Oaks |
| 9.4. Ecological Monitoring Program Plans 2022 | – McDonell / Oaks |
| 9.5. Stewardship Program Plan 2022 | – Gamble / Stock |
| 9.6. Conservation Area Experiences – Verbal Update | – Costie |

10. New Business

11. Next Meeting – Thursday, June 9, 2022 at 4:00 p.m.

12. Adjournment

HAMILTON CONSERVATION AUTHORITY

Conservation Advisory Board

MINUTES

February 10, 2022

Minutes of the Conservation Advisory Board meeting held on Thursday, February 10, 2022 at the HCA Main Administration Office – Woodend Auditorium, commencing at 4:00 p.m.

PRESENT:

**Dan Bowman - in the Chair
Lydia Cartlidge
Cynthia Janzen
Wayne Terryberry**

**Joanne Di Maio
Duke O’Sullivan**

REGRETS:

Lloyd Ferguson – Ex-officio

STAFF PRESENT:

Rondalyn Brown, Lisa Burnside, Grace Correia, Gord Costie, Lindsay Davidson, Matt Hall, Bruce Harschnitz, Peter Lloyd, Lesley McDonell, Neil McDougall, Scott Peck, Mike Stone, and Jaime Tellier

OTHERS:

N/A

1. Chairman’s Remarks

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. There were none.

**CA 2201 MOVED BY: Joanne Di Maio
 SECONDED BY: Duke O'Sullivan**

THAT the agenda be approved.

CARRIED

4. Delegations

There were none.

5. Election of the Vice Chair

The Chair advised the election for Vice-Chair of the Conservation Advisory Board for 2022 would begin. The Chair declared the office of Vice-Chair vacant and called for nominations.

Nominated: Wayne Terryberry

By – Mover: Joanne Di Maio

The Chair called for nominations twice more. Having no further nominations, the Chair asked Wayne Terryberry if he would serve. Wayne indicated he would. The Chair declared Wayne Terryberry as Vice Chair of the Conservation Advisory Board for 2022 by acclamation.

**CA 2202 MOVED BY: Joanne Di Maio
 SECONDED BY: Duke O'Sullivan**

**THAT Wayne Terryberry be confirmed as Vice Chair of the
Conservation Advisory Board for 2022.**

CARRIED

6. Member Briefing

There was none.

7. Chairman's Report on Board of Directors Actions

CA 2126 Fifty Point Conservation Area & Marina Master Plan
CA 2127 Spencer Gorge Conservation Area Reservation System

The Chair advised that both recommendations were approved by the Board, as recommended by CAB.

8. Approval of Minutes of Previous Meeting

8.1. Minutes – Conservation Advisory Board (December 9, 2021)

**CA 2203 MOVED BY: Cynthia Janzen
 SECONDED BY: Lydia Cartlidge**

THAT the minutes of the December 9, 2021 Conservation Areas Advisory Board meeting be approved.

CARRIED

9. Business Arising from the Minutes

There was none.

10. Staff Reports/Memorandums

10.1. Westfield Heritage Village Accession and Deaccession Lists

Peter Lloyd presented a summary of the report, outlining how the artifact collection at Westfield is managed. Peter highlighted an Ideal Lever spinning wheel, a very rare and significant acquisition for the collection, as well as other items recommended for accession. He also displayed items recommended for deaccession and described the criteria used to select items for deaccession, often due to poor condition or lack of interpretive value.

Disposition processes were discussed. Items on the deaccession list are made available for sale on the CHIN. They are then offered for public sale with the proceeds going to support the collection. Items can also be gifted. Disposal is the final option once all other alternatives are explored.

**CA 2204 MOVED BY: Joanne Di Maio
 SECONDED BY: Lydia Cartlidge**

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

THAT the Westfield 2021 Artifact Accessions and Deaccessions List as noted in the February 10, 2022

Accessions/Deaccessions report be accepted as the artifacts to be added to, or removed from, the Westfield Heritage Village Conservation Area and the Hamilton Conservation Authority collection.

CARRIED

10.2. 2022 Annual Membership Pass Program Renewal Strategy

Lindsay Davidson presented a summary of the report reviewing the history of the membership pass program. She reviewed the great increase in sales since the pandemic began with 2021, ending with a record of over 12,000 passes sold.

The primary target audience for our memberships continues to be young families, active seniors and outdoor enthusiasts, including birders, hikers, runners, boaters and campers.

The report outlined a 6-point strategy of additional member engagement tools to retain and attract new pass holders. The strategy includes a postal code analysis to better understand pass holder demographics, improving platforms for online pass sales and tracking pass holders for renewal, as well as ensuring staff have the appropriate training and tools to market and sell the pass.

The provision of passes at local libraries has also been very well received. Staff look forward to feedback from the library system after their experience having the passes available later this year.

**CA 2205 MOVED BY: Wayne Terryberry
 SECONDED BY: Cynthia Janzen**

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

THAT the 2022 Annual Membership Program Renewal Strategy Report be received for information regarding our Annual Membership Pass Program; further;

THAT staff be directed to implement the six-point strategy outlined in the 2022 Annual Membership Program Renewal Strategy Report dated February 10, 2022,

CARRIED

10.3. HCA 10 Year Masterplan Strategy Update

Matt Hall presented a summary of the report, including a background on the master and management plans as long-term planning mechanisms for HCA lands and areas. He provided an overview of the plans completed to date and advised that the plans for the Saltfleet Conservation Area and surrounding lands are underway for 2022.

Staff brought forward a recommended adjustment to the 2019 Board approved schedule. Staff recommended moving the East Mountain conservation areas to be the next review to provide complete plans for the new Hamilton Mountain business unit. Additionally, this also addresses recent staffing changes with the phased retirement of the Design Projects Manager to develop and mentor junior staff prior to undertaking the complex final study areas of Christie Lake and Dundas Valley.

**CA 2206 MOVED BY: Duke O'Sullivan
 SECONDED BY: Wayne Terryberry**

**THAT the Conservation Advisory Board recommend to the
Board of Directors:**

**THAT the amended Master Plans Implementation Priority List
of the HCA Ten Year Master Plan Update Strategy be
approved.**

CARRIED

10.4. Conservation Areas Attendance and General Update

Bruce Harschnitz presented on the 2021 visitor attendance and started with a summary of 2020 which saw record visitation numbers, despite the shorted seasons at the CA's in general and Spencer Gorge and Wild Waterworks, in particular, due to pandemic closures. There were notable increases at Dundas Valley, Fifty Point and Valens Lake Conservation Areas following reopening.

In 2021, with pandemic restrictions still in place, HCA Conservation Areas continued to be popular destinations for visitors. Estimated visitation increased to over 1.2 million people. Wild Waterworks remained closed during this season. Visitation numbers previously included in the Dundas Valley Conservation Area estimates were separated out and allocated to the new Hamilton Mountain Conservation Areas business unit, in 2021. As a result, there was a slight decline in the Dundas Valley CA visitation estimate, but now accurately reflects the visitors to the Hamilton Mountain CAs. In addition, trail and vehicle counts undertaken for master planning purposes revealed previously unknown entrance points to some Conservation Areas, particularly at Fifty Point Conservation Area where visitors were gaining entry via a Kelson Road beach access point. This resulted in a significant increase in visitors for Fifty Point for 2021, when compared with 2020. In addition, the Spencer Gorge pilot reservation system was extended to the Summer and Fall in 2021, resulting in more accurate visitation numbers for the area. Also, new pay and

display and auto gate parking systems were installed at various Conservation Areas, also contributing more information to visitation estimates.

Bruce provided an overview of the pay and display and autogate systems, noting that ten of HCA's conservation areas have auto gate systems and eleven areas have pay and display systems. The four busiest areas, Devil's Punchbowl, Tiffany Falls, Artaban Road and the Hermitage, have twin pay and display machines to improve customer service and functionality. These systems create equity among customers by better ensuring that all patrons are paying entrance fees. Bruce showed a 108% pay station revenue increase between 2018 and 2021.

Bruce clarified the attendance numbers are estimates as we do not have the ability to count every visitor that comes to the conservation areas, adding that every year the methods are refined and the estimations improved. It was noted that attendance is based on parking sales and an estimate of 3 people per vehicle, membership pass sales, vehicle and trail counters at certain areas, and ticketed entrances at Wild Waterworks.

**CA 2207 MOVED BY: Joanne Di Maio
 SECONDED BY: Wayne Terryberry**

**THAT the verbal update entitled Conservation Areas
Attendance and General Update be received.**

CARRIED

10.5. LDD ((Gypsy) Moth Surveys & 2022 Control Program Report

Lesley McDonell provided a presentation on the background of the invasive moth and the extensive survey work staff have undertaken on HCA's properties. Staff advised the moth has now become endemic and will have to be managed continuously.

Lesley noted that Royal Botanical Gardens and the City of Hamilton have decided to spray select areas this spring, however, HCA staff are recommending against spraying as it is not ecologically or economically effective. HCA sprayed in 2018 and 2019 and despite these efforts, LDD moth numbers have risen again.

Staff recommended a targeted approach that focuses on scraping egg masses and using burlap banding to protect high value oak trees in our forests for 2022 which has worked well in recent years. Staff are also looking to rely on the moths' natural enemies, including a bacterium, virus and parasitic wasps that feed on the caterpillars, to reduce the population.

**CA 2208 MOVED BY: Cynthia Janzen
 SECONDED BY: Lydia Cartlidge**

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

THAT this report be received for information regarding our LDD moth surveys and results; and further;

THAT the HCA not undertake a spray program to control LDD Moths in 2022, and;

THAT the HCA undertake a targeted approach (banding, egg mass scraping) that focuses on high value oak trees in our forests for 2022.

CARRIED

11. New Business

There was none.

12. Next Meeting

The next meeting of the CAB is scheduled for Thursday, April 14, 2022 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: HCA Trail Mapping Committee

PREPARED BY: Matt Hall, Director Capital Projects & Strategic Services

MEETING DATE: April 14, 2022

RE: HCA Trail Map Standards

STAFF RECOMMENDATION

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

THAT the new HCA Trail Map Standard & Wayfinding system be adopted and implemented within the Eramosa Karst Conservation Area as a pilot program; and further

THAT the HCA Trails Mapping Committee continue to develop and implement associated systems across other HCA properties on a priority basis; and further

THAT the HCA Trails Mapping Committee reports back to CAB on an annual basis with trail map and wayfinding system program progress updates.

BACKGROUND

In late 2020, HCA staff identified a key initiative for our conservation areas to review and update all trail maps for HCA owned and managed properties across the watershed. Currently there are a wide variety of trail maps in use at our areas, and additionally, staff noted in some areas maps on-site do not match updates shown on the HCA website, and in a few instances staff identified where no official map exists at all.

As a result, to address these inconsistencies and gaps, an internal Trails Mapping Committee was formed with staff representing multiple departments including: Marketing, Watershed Management Services, Conservation Area Services, and Capital Projects & Strategic Services. The Committee's goal was to develop a template of HCA Trail Map Standards that could be applied consistently to all HCA trail maps moving forward.

STAFF COMMENT

In early 2021, the committee began the task of reviewing our various existing internal maps, researching external map examples, as well as reviewing applicable standards, best practices and regulations that may apply. During this material review phase, certain common map characteristics and attributes were selected by the Committee, which were deemed to be an ideal way to navigate one's self around an area.

Some of the key elements created for the mapping standard consist of:

- Simplified map colour scheme
- Highlight key geographic areas and Points of Interest
- Clear distinction between trail lines and other map features
- Addition of total trail lengths and approximate hiking times
- Addition of trail post ID markers
- Development of a standard HCA Trail Difficulty Rating System

The Committee discussed a pilot area to develop a new map using these key elements, it was agreed that the Eramosa Karst Conservation Area (EKCA) would be an ideal site to start with. A draft map of the EKCA was developed and posted on the HCA's "Bang the Table" public commenting site, as well as various HCA social media platforms, in order to obtain public feedback. The commenting period lasted for two weeks from February 22, 2022 to March 11, 2022. Well over 100 responses were received during this time, capturing some invaluable feedback along the way.

Once the public commenting period ended, HCA staff reviewed the comments received and made final edits to the draft map. The result is a three-page downloadable pamphlet that allows users to either print the document themselves to carry with them, or to keep it saved to a mobile device.

Many public comments reiterated the importance of having clear trail wayfinding signage on-site, in addition to the trail map itself. They must work hand in hand with one another in order to be successful. As such, next steps for the Committee will include a full review of the existing signage at the EKCA., in order to redevelop it alongside of the new trail map.

While the implementation of the new map and wayfinding system is being undertaken at the EKCA, all other HCA properties with official public trails on them will be reviewed, evaluated and scored on a priority basis for their respective trail map & wayfinding system upgrades. This process is expected to last for a period of several years, until all necessary HCA trail map and on-site wayfinding systems have been adequately upgraded.

STRATEGIC PLAN LINKAGE

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

- **Strategic Priority Area – Conservation Area Experience**
 - Initiatives – Develop visitor and parking management strategies to support conservation areas for sustainable recreation, education and tourism
 - Work with partners such as the City of Hamilton, the Cootes to Escarpment Ecopark System, and the Hamilton Burlington Trails Council, to enhance trail networks for recreational uses
 - Identify and support a more diverse and accessible range of programs for our conservation area users

- **Strategic Priority Area – Education and Environmental Awareness**
 - Initiatives – Develop enhanced and consistent interpretive signage and information for conservation areas
 - Create engaging communication materials for HCA website and social media to enhance environmental awareness and the programs and services conservation authorities deliver
 - Support community participation through user group engagement and volunteer group coordination
 - Identify and create input and engagement opportunities for conservation area visitors on site
 - Promote the connection between environmental health and human wellness

AGENCY COMMENTS

Members of the Hamilton Burlington Trails Council and the Cootes to Escarpment Ecopark System were circulated with the public survey for any input they wished to provide.

LEGAL/FINANCIAL IMPLICATIONS

Cost of new signage on-site will be covered within annual Capital Project and Operational budgets, as required. Potential for additional grants or donation opportunities may exist and will be explored as well.

CONCLUSIONS

Ensuring up to date and consistent trail mapping is an important initiative to our visitors navigating themselves through HCA areas. It not only helps inform users how to make their way around an area, but also helps them engage with the areas themselves and explore them with more confidence. Developing and maintaining a consistent standard for this purpose will help users visiting multiple areas become familiar and comfortable with a new location faster, in addition to helping improve HCA branding across the areas.

ERAMOSA KARST TRAILS



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.

Karst Features

Please stay out of the caves, they can be dangerous. You can observe these natural features from the outside.

Pottruff Homestead

In the 1800s, Eramosa Karst was owned by several farming families and many features have since been named after them. The old Pottruff homestead included a house and a barn, and is gone other than some old foundations. This area is now protected, so these ruins will remain as the only man made structures in the conservation area.

The Amphitheatre

This large semi-circular depression is affectionately called the "Amphitheatre." This landmark has been influenced by both people and the forces of nature. The ridge of rock you see is the top of the Eramosa Escarpment. Like the Niagara Escarpment, this erosional escarpment extends east to west across the Hamilton Mountain. It varies up to 30 m tall but much of it is buried under soil. The semi-circular shape of the amphitheater is a result of quarrying, this area was a convenient place for early settlers to extract blocks of the dolostone rock to use for building barn foundations and homes.

Pottruff Spring

Pottruff Spring is an example of a resurgent spring, which means the water is re-emerging after flowing underground through caves or smaller conduits from stream sinks situated farther upstream. Pottruff Spring is fed by Stewart Creek and Phoenix Creek. The flow of water from this spring varies greatly depending on recent rainfall.

Pottruff Cave

Pottruff Cave is an example of a karst window. It was created by the collapse of its bedrock roof into the underlying cave passage. During rainfall, a stream emerges from a conduit on the southwest side of the cave and disappears down a vertical fissure on the northwest side. The water comes from the confluence of Stewart and Phoenix Creeks. Once it sinks through the fissure in the floor, it flows through underground passages until emerging at Pottruff Spring.

Pottruff Half-Blind Valley

A stream valley that ends abruptly at a stream sink is called a "blind valley." In some cases, water can overwhelm that stream sink during excessive rainfall, forcing the stream to overflow the blind valley and carry on overland. This is what geologists refer to as a "half-blind valley."

Pottruff Creek

Unless it has been raining, this rocky creek bed is likely dry. However, there is more here than meets the eye. You can see several small caves or sinks, all along the creek bed if you look closely. These are called overflow sinks. Upstream from this area, the water in Stewart & Phoenix Creeks flows down a set of sinks, or caves, at the end of each creek bed. The water continues its journey in underground conduits. When there is a lot of water, the conduits fill up, and the water of the two creeks is forced to flow over land where they join (called a confluence) and become Pottruff Creek. Pottruff Creek then flows down this shallow valley until it reaches another sink. If that sink is overwhelmed, the water is forced to flow down the valley floor again. This process continues until the water eventually reaches Pottruff Cave.

Nexus Cave & Window

This cave is the largest at Eramosa Karst and the tenth longest cave in Ontario. It has 344 m of surveyed passage that extends to a water-filled cave called a sump. Although not passable, the underground stream continues another 320 m to the north where it resurges at an inaccessible spring outside of the park. The main entrance is a large fissure or grike that overlies a wider cave passage. Farther downstream, there is a second entrance called the Window where a roof collapse created a small vertical opening. When flowing, the underground stream can be seen below.



KARST
FEATURES
TRAIL

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 1.5 km loop.



MEADOWS
TRAIL

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.



BOBOLINK
TRAIL

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

ERAMOSA KARST TRAIL MAP



LEGEND

- Washrooms
- Information
- Trail Head
- Picnic Area
- Trail ID Post
- Site Feature
- Building
- Parking
- Field
- Forest
- Watercourse

0 125 m 250 m



TRAILS

		Trail Length	Hike Times	Rating	Surface Type
Karst Features Trail		2.6 km	40 minutes	Moderate	Gravel
Meadows Trail		1.7 km	30 minutes	Easy	Mown Grass
Bobolink Trail		1.3 km	25 minutes	Easy	Mown Grass
Connector Trail		See map	Varies	Varies	Varies
East Mountain Trail Loop		See City of Hamilton for more information		Easy	Asphalt

14

Main Entrance & Parking Area

86 Upper Mount Albion Road, Stoney Creek, ON

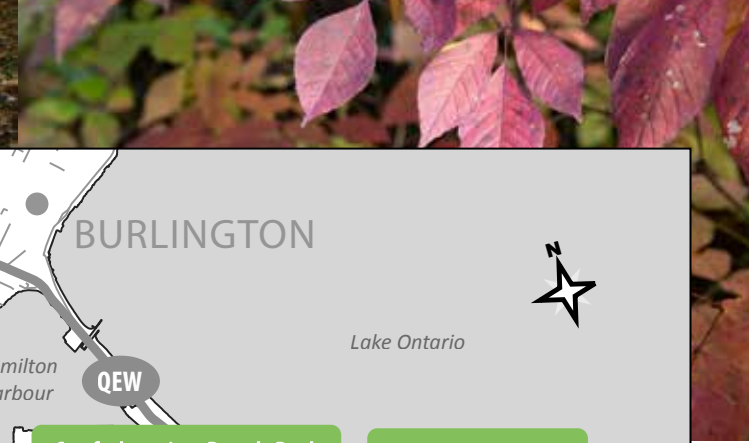


PERMITTED TRAIL USE



Pets must be on a leash at all times. Pet waste must be picked up and thrown away in the garbage.





On all of the trails, obstacles to be aware of include bridges, rocks, roots and areas of flooding after heavy rain events.

When preparing to explore a trail, visitors should consider gear including water, nourishment, proper clothing and footwear, and maps or GPS equipment.

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

Generally flat trails less than 5km in length with firm, stable surfaces and slopes from 0% to 5%. Some obstacles may be present. Little to no trail experience or preparation are required.



Moderate

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.



Hours & Admission

Open 7 days a week, from sunrise to sunset, unless otherwise posted.
Fees: Parking is \$7.50 per day; free with HCA Membership Pass.

Parking

15 86 Upper Mount Albion Road
Stoney Creek, ON

Connect with us!

conservationhamilton.ca
mountain@conservationhamilton.ca

#ExploreHCA



Memorandum

TO: Conservation Advisory Board

FROM: Lisa Burnside, Chief Administrative Officer (CAO)

RECOMMENDED BY: Matthew Hall, Director; Capital Projects & Strategic Services

PREPARED BY: Madolyn Armstrong, Landscape Designer and
Kathy Smith, Landscape Architect; Capital Projects & Strategic Services

MEETING DATE: April 14, 2022

RE: Update Re: Saltfleet Conservation Area Master Plan and Management Plans

BACKGROUND

HCA's 10 Year Master Plan Update Strategy was recently updated by staff, then subsequently approved by CAB and the Board of Directors. This Strategy sets out a ten-year schedule for HCA properties to receive updated Master Plans and Management Plans. As per this Strategy, the properties scheduled for review and updates in 2022 are: Saltfleet Conservation Area, Devil's Punchbowl Conservation Area, Vinemount and Winona Conservation Areas, and the Dofasco 2000 Trail. This memorandum, the appended study area map and sample table of contents, are provided for project background and general understanding to update CAB on the process and upcoming planned stages to complete the Saltfleet Conservation Area master plan and management plans.

STAFF COMMENT

Master Plan and Management Plan Study Areas

Saltfleet Conservation Area (Saltfleet) is comprised of six properties on top of the Niagara Escarpment in Stoney Creek. HCA acquired the lands following a 2011 Environmental Assessment of the area, with the vision of creating multiple wetlands to address flooding and erosion below the Niagara Escarpment in urban Stoney Creek, as well as providing

both new and restored natural areas in the watershed and opportunities for passive recreation. Wetland construction at Saltfleet is now underway on the land parcel situated between First and Second Road East. This property will be the main focus of the Master Plan, since it will contain the conservation area's anticipated long-term main entrance, parking area, day-use facilities, and recreational trails. This will be HCA's first Master Plan for the Saltfleet Conservation Area.

Devil's Punchbowl Conservation Area (DPCA) was acquired by HCA in 1969 for its significant location on the escarpment. The property contains two waterfalls, and offers visitor parking and trail access to lookout areas with spectacular views of Stoney Creek, Hamilton Harbour, the Punchbowl and the gorge. From the parking lot, visitors can also access the Dofasco 2000 Trail connecting to Saltfleet Conservation Area. This day-use area has become very popular, and high visitation is straining the parking capacity and site facilities. This Management Plan will update and replace the Devil's Punchbowl Master Plan of 1980. The plan will consolidate all studies of DPCA since 1980, supply current mapping and site analysis, and further guide HCA's visitor management, natural area conservation, and operation of the conservation area.

Vinemount and Winona Conservation Areas were established in the 1970's, from HCA's strategic land acquisition to secure these sensitive escarpment lands threatened by urban sprawl. Vinemount Conservation Area is located at the eastern boundary of HCA's watershed with Winona Conservation Area 3km to the west. Both properties run along the face of the Niagara Escarpment, with a few areas of tableland above and below. They are connected by the Bruce Trail, which also links them to Devil's Punchbowl property below the escarpment. One new Management Plan is proposed to update and replace the 1979 Master Development Plans prepared by HCA staff for both areas. The Vinemount and Winona Conservation Areas are located in very close proximity to each other, and are similar in their environmental features, functions, and management needs. A new Management Plan will consolidate all available information on file, add new information on current site conditions, and help guide HCA's land management decisions for these escarpment lands.

The Dofasco 2000 Trail is an 11.5-kilometre multi-use recreational trail located on top of the Niagara Escarpment in Stoney Creek. The trail was built over twenty years ago with the support of the Hamilton Conservation Foundation, Dofasco Inc., the Millennium Bureau of Canada and the City of Hamilton (City), and is operated under a management agreement between HCA and the City. The trail runs from Ridge Road at the Devil's Punchbowl, through Saltfleet, and across to Eleventh Road. Two main access points and parking lots for the trail are at Devil's Punchbowl Conservation Area and Saltfleet Conservation Area. In 2000 the HCA Board of Directors approved the Powerline Road Trail Master Development Plan. This Management Plan will update and replace that plan and will provide guidance for HCA's management and operation of the off-road trail portion.

This set of plans is intended to provide direction and guidance for the next ten years of operation for Saltfleet Conservation Area, Devil's Punchbowl Conservation Area,

Vinemount and Winona Conservation Areas and the Dofasco 2000 Trail. These plans will provide HCA with detailed property evaluations for land and resource management, visitor management, and include a public consultation process. A staff team with the necessary experience and expertise is assembled for this project, to deliver these comprehensive plans on schedule.

It is not often that HCA opens a brand-new conservation area. The Saltfleet Master Plan will be a key guiding document for Saltfleet Conservation Area and build upon the extensive information already compiled to facilitate the Saltfleet Wetland project.

The new management plans for Devil's Punchbowl, Vinemount, Winona and the Dofasco 2000 Trail will provide HCA with updated resource management information and recommend best management practices for these lands. Significant items to be explored include a review of the natural resources, evaluation of the current recreational uses, and recommendations for capital infrastructure.

Upcoming Public Consultation

Public consultation for the Master and Management Plans is anticipated as follows:

- Two online visitor surveys will be posted on HCA's Bang the Table portal from the Victoria Day long weekend in May until mid-August to gather information for the Saltfleet Master Plan and Devil's Punchbowl Management Plan. After the surveys close, the Bang the Table site will stay active until the end of the year to provide public information and receive comments.
- The master plan process will be promoted on HCA's social media, and flyers with QR codes linking to the visitor surveys will be posted in the study area at key public locations to help drive public engagement.
- Staff will operate a public information booth at Saltfleet Conservation Area for a weekend in July or August.
- Staff will operate a public information booth at Devil's Punchbowl Conservation Area for a weekend in July or August.
- Staff will install automated trail and vehicle counters on the properties to collect visitor attendance data. Survey polls on the preliminary data results will be posted on the public engagement site for comment.

During the public consultation period, HCA will also be working with the appropriate agencies and stakeholders to receive information and comments.

Next CAB Review and Update

Work in progress on the plans will be brought to CAB for review and comment, which is anticipated this year in 2022, with Board of Directors review and approval in first quarter 2023.

STRATEGIC PLAN LINKAGE

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

- **Strategic Priority Area – Organizational Excellence**
 - Initiatives – Identify opportunities to engage the community, adjacent landowners and Indigenous Peoples.
- **Strategic Priority Area – Natural Heritage Conservation**
 - Initiatives – Identify restoration projects in master plans.
 - Initiatives – Identify details of the approved Invasive Species Strategy and natural heritage plans in HCA master plans.
- **Strategic Priority Area – Conservation Area Experience**
 - Initiatives – Update and develop master and management plans, and implement priorities to further enhance conservation area for current and future generations.
- **Strategic Priority Area – Education and Environmental Awareness**
 - Initiatives – Identify and create input and engagement opportunities for conservation area visitors on site.

AGENCY COMMENTS

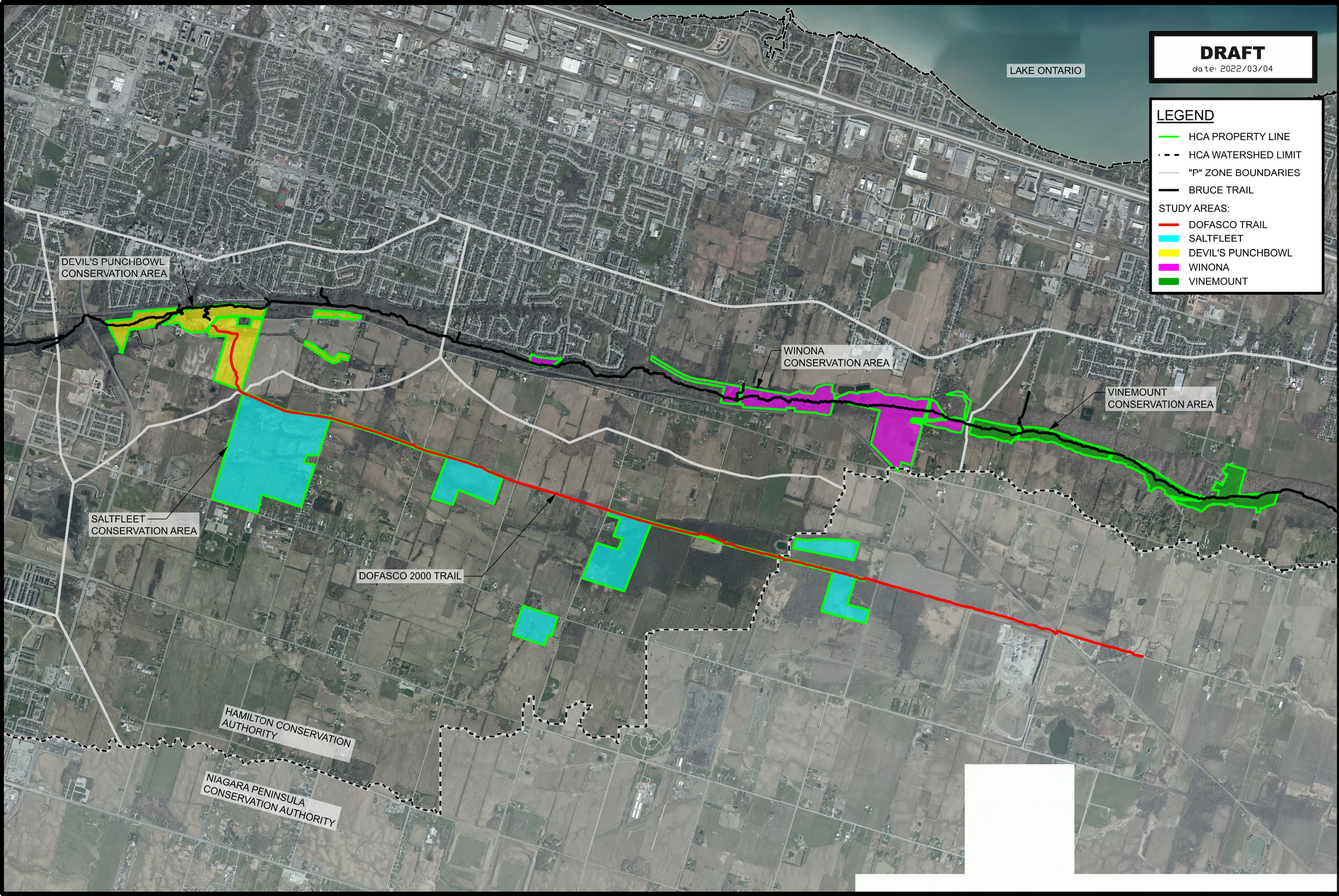
The properties under review contain lands in the watershed of the Niagara Peninsula Conservation Authority, lands in the City of Hamilton, and lands under the jurisdiction of the Niagara Escarpment Commission. These agencies will be consulted and circulated for comment during the draft plan review process.

LEGAL/FINANCIAL IMPLICATIONS

HCA in-house staffing expertise and resources will be utilized in order to develop these plans. Third party consultation would only be sought should public concerns on specific components of these plans warrant further public consultation and facilitation beyond the expertise of HCA staff. Adequate funding for the preparation of these plans has been arranged through pre-approved annual HCA capital project and operational accounts.

CONCLUSIONS

The completion of the Saltfleet master plan and management plans support the goals as outlined in HCA's 2019-2023 Strategic Plan as well as the 10 Year Master Plan Update Strategy. Work in progress on the plans is anticipated to be brought to CAB for review and comment later in 2022 with Board of Directors review and approval in first quarter 2023.



SITE CONTEXT MAP
SALTFLEET MASTER PLAN

DATE: 2022/03/04

2022 Saltfleet Conservation Area Master Plan - Proposed Table of Contents

1.0	APPROVAL STATEMENT
2.0	PREFACE
3.0	EXECUTIVE SUMMARY
3.1	Introduction
3.2	Goals
3.3	Objectives
3.4	Site Concept
3.5	Policy and By-Law Framework
3.6	Master Plan Zones
3.7	Development Priorities
4.0	BACKGROUND
4.1	Study Area
4.2	Property History
4.3	Planning and Development Controls
4.4	Buildings
4.5	Physical Features
4.6	Cultural Heritage
4.7	Heritage Designation and Historic Buildings
4.8	Natural Areas
5.0	NATURAL AREAS INVENTORY
5.1	Physiography and Topography
5.2	Soil Composition
5.3	Hydrology and Surface Drainage
5.4	Biophysical Inventory Methodology
5.5	Ecological Land Classification
5.6	Flora/ Botanical Inventory
5.7	Fauna Inventory
5.8	Migratory and Breeding Bird Surveys
5.9	Ecological Land Classification Results
5.10	Flora/Botanical Inventory Results
5.11	Fauna Inventory Results
5.12	Aquatic Inventory
5.13	Significant Ecological Features

2022 Saltfleet Conservation Area Master Plan - Proposed Table of Contents

5.14	Biophysical Inventory – Analysis.....
5.15	Managed Forest
5.16	Natural Areas Recommendations.....
6.0	OVERALL SITE CONCEPT
6.1	Natural Areas Development.....
6.2	Conservation Area Development.....
6.3	Day Use Activity Areas
6.4	Marketing.....
7.0	CONSERVATION AREA MANAGEMENT.....
7.1	Land and Water Management
7.2	Vegetation Management.....
7.3	Fish and Wildlife Management
7.4	Cultural Heritage Management.....
7.5	Conservation Area Operations
7.6	Education
7.7	Research.....
7.8	Recreation.....
7.9	Partnerships
8.0	FINANCIAL
8.1	Attendance and Revenue Forecasts
8.2	Capital Projects
8.3	Funding Sources
8.4	Business Model.....
9.0	PROGRAMMING
9.1	Special Events and Programming.....
9.2	Education and Interpretive Programs.....
10.0	SUMMARY.....

11.0 APPENDIX CONTENTS.....

1. Mapping
2. Capital Development Priorities
3. Heritage Conservation Guiding Principles
4. Operating Revenue and Expenses
5. Visitor Data, Attendance, Visitor Surveys, Trail Counts
6. Managed Forest Plan Recommendations
7. Natural Inventory - Species Lists

APPENDIX 1. MAPS

1. Ecological Land Classification
2. Conservation Area Zones
3. Trail Master Plan
4. Constructed Wetlands
5. Site Concept Map
6. Building Map (Proposed built development for the new conservation area)

FIGURES

1. Study Area (from 10yr Master Plan strategy)
2. Watersheds
3. Tourism Region
4. Zoning Map
5. Soil Composition
6. Archaeological Sites
7. Constructed Wetland Features
8. Creek Fishery - Species Catch Percentages
9. Trail and Vehicle Counters

TABLES

1. Nature Reserve
2. Natural Zone
3. Access Zone
4. Cultural Heritage Zone
5. Development Zone
6. Resource Management Zone
7. Summary of Ecological Field Studies
8. Vegetation Communities
9. Migratory Bird Survey
10. Fish Species - Creek
11. Federal & Provincial Species at Risk

**2022 Devil's Punchbowl Conservation Area Management Plan
Proposed Table of Contents**

1.0	APPROVAL STATEMENT
2.0	INTRODUCTION
2.1	Area Summary.....
2.2	Goals
2.3	Objectives.....
2.4	Policy and By-Law Framework
2.5	Management Plan Zones
3.0	BACKGROUND
3.1	Study Area
3.2	Property History
3.3	Planning and Development Controls.....
3.4	Physical Features
3.5	Cultural Heritage
3.6	Natural Areas
4.0	NATURAL AREA INVENTORY
4.1	Natural Features
4.2	Biophysical Inventory Methodology.....
4.3	Ecological Land Classification.....
4.4	Terrestrial Inventory.....
4.5	Aquatic Inventory.....
4.6	Significant Ecological Features
4.7	Natural Areas Recommendations
5.0	CONSERVATION AREA MANAGEMENT.... ..
5.1	Land and Water Management
5.2	Vegetation Management
5.3	Fish and Wildlife Management.....
5.4	Cultural Heritage Management.....
5.5	Conservation Area Operations
5.6	Education and Environmental Awareness
5.7	Public Infrastructure - Utilities, Trails and Transportation
5.8	Day Use Recreation
6.0	MANAGEMENT PRACTICES
6.1	Natural Heritage Conservation
6.2	Conservation Area Experience
6.3	Business Model
7.0	SUMMARY
7.1	Implementation Priorities

2022 Devil's Punchbowl Conservation Area Management Plan Proposed Table of Contents

8.0 APPENDIX CONTENTS.....

1. Mapping
2. Capital Development Priorities
3. Trail and Vehicle Counter Data
4. Visitor Surveys
5. Managed Forest Plan Recommendations 2018-2027

Mapping

Management Plan Zones
Ecological Land Classification

Figures

Study Area (based on 10yr Master Plan Strategy)

Tables

Nature Reserve (Wetland) Zone
Natural Zone
Access Zone
Resource Management Zone
Summary of Ecological Field Studies
Vegetation Communities
Federal and Provincial Species at Risk
Fish Species (if applicable)

Memorandum

TO: 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

MEETING DATE: April 14, 2022

RE: Fifty Point Conservation Area Wetland and Fisheries
Enhancement Project Update

BACKGROUND

In 2018, it was identified that the pond at Fifty Point Conservation Area was connected to Fifty Creek. This necessitated that the Rainbow Trout stocking that had traditionally occurred 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 and update the board on those findings.

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. Attachment A contains a summary of the fisheries and bathymetry data collected. 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 diversion creates the opportunity for the creation of a wetland adjacent to the Fifty Point pond and further creates the opportunity to create additional fish habitat as part of the wetland and within the pond.

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.

At the April 2021 Conservation Advisory Board meeting staff provided an update on the project to highlight the preliminary design work that had been submitted by the consultant.

STAFF COMMENT

Since the April 2021 update, HCA staff have received new designs for the project from Water's Edge that respond to previous feedback and results of the soil analysis that was completed. Figure 1 shows the current design.

The design still includes the creation of a connecting channel from WC11 to Fifty Point pond through two wetland cells along the pond shoreline. The cells will be divided by the existing trail (location adjusted) to provide opportunities for users to view the wetland features. The wetlands will be constructed with variable depths to provide a biologically diverse habitat feature. This will provide additional spawning and rearing habitat for the fish in the pond, as well as additional habitat for other species of wildlife that are present at Fifty Point CA.

The proposed design does not contain any proposed shoreline modifications outside of the proposed wetland cells, as it was identified during the soil analysis the soils were not appropriate for the proposed use in the pond. The soils are too fine in nature and would migrate away from the shoreline area where they would be placed. As an alternative, the design now contains two landscape features (berms) made from the extracted wetland materials (soils). These features are proposed to be sculpted into the landscape with a maximum height of 2m and will help to screen the boat storage area from the trail and naturalized wetland and pond. Additionally, the berms will provide increased habitat variability to the property which can be enhanced through restoration plantings.

Public Outreach

As part of public outreach and consultation on the Fifty Point Master Plan during 2021, HCA staff made information available regarding the wetland and fisheries enhancement project available through the “Bang the Table” platform. No comments specific to the project were received through this process.

Project Implementation

Staff have submitted comments on the current design package and are awaiting further review and response from the consulting engineer. This will be followed by the final design and detailed construction drawings, and project cost estimates. Subject to confirming funds, the project is proposed for construction in late 2022 or early 2023.

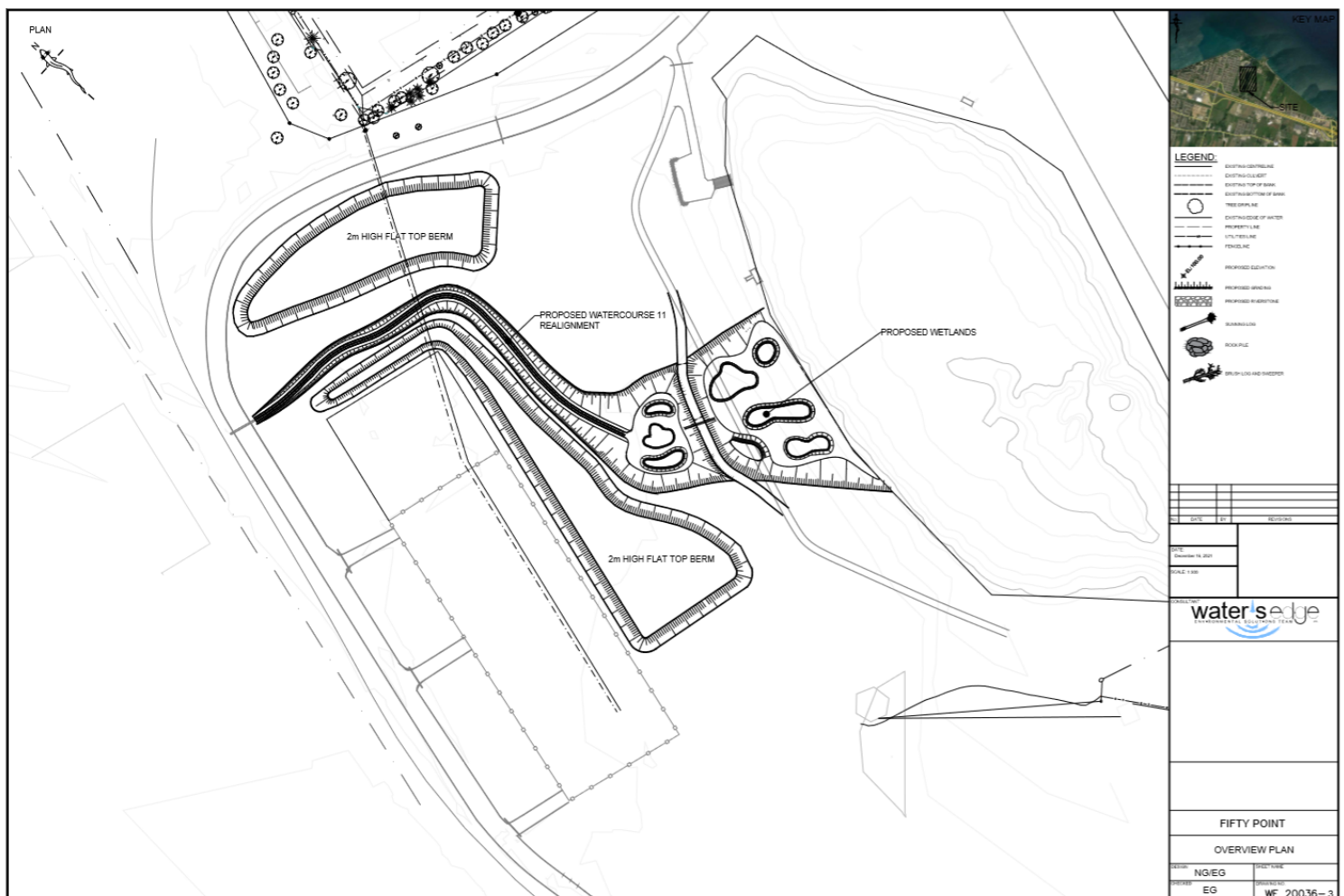


Figure 1: Draft Design from Water's Edge

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

Staff have identified that the project will need to be reviewed by the City to determine if a site alteration permit will be required.

DFO review will also need to be completed and staff will be reaching out to DFO this Spring based on the current design plan. Staff expect DFO will support this project given its objective of improving fish habitat.

LEGAL/FINANCIAL IMPLICATIONS

Not applicable

CONCLUSIONS

HCA staff will continue to update the Conservation Advisory Board as this project progresses and final design drawings are prepared. Moving in the direction of being a self-sustaining fishery can provide conservation area guests with a desirable fishing opportunity while providing an overall net environmental gain through the creation of wetland and fish habitat.

Memorandum

TO: 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
Lesley McDonell, Terrestrial Ecologist
Mike Stone, MCIP, RPP, Manager, Watershed Planning,
Stewardship & Ecological Services

MEETING DATE: April 14, 2022

RE: Ecology Program Plan 2022

BACKGROUND

The Hamilton Conservation Authority (HCA) has a long-standing ecology program, which is focused on the inventorying, monitoring, protection and restoration of natural areas in the watershed.

HCA's Aquatic Resource Monitoring Program (ARMP) has been in place since the mid-90's, and in its current form since 2012. The program has evolved since its inception as protocols have been developed to better monitor the watershed and its health, and to add new components to the program. The Terrestrial Resource Monitoring Program (TRMP) began in 2012. The monitoring methodology employed by HCA through this program is very closely based on that which was created by Environment Canada in its Ecological Monitoring and Assessment Network (EMAN).

The monitoring programs main goals are to improve our knowledge/understanding of the health and composition of fish and wildlife as well as their habitat across our watershed. This will improve our ability to quantify changes and help facilitate conservation and restoration of HCA owned lands and assist with the Stewardship Program. Data collected through the monitoring program is helpful in HCA staff's review of development applications occurring in or adjacent to natural habitat. This data is also used to inform other HCA programs such as Conservation Area Master Plans and

Watershed Report Cards, as well as restoration projects carried out by the HCA. Ecology staff also assist the City of Hamilton and Hamilton Harbour Remedial Action Plan by sharing in some of the monitoring efforts for those projects as well.

HCA's invasive species program began in earnest in 2016 with the creation of an Invasive Species Strategy for the watershed. The program has been building slowly since then with some mapping and removal of invasive species from 2016 until 2021. In 2021 two contract staff were hired to work exclusively on invasive species. This has allowed the program to grow and many invasive species have been removed and volunteers educated in the last year.

STAFF COMMENTS

HCA staff undertake a broad range of activities under the ecology program. The following highlights some of the key work activities planned for the 2022 season:

Aquatic Resource Monitoring Program (ARMP)

- Benthic Invertebrate sampling following Ontario Benthos Biomonitoring Network (OBBN) at 13 Annual sites and 12 Year One sites across the watershed (see map)
- Backpack Electrofishing following Ontario Stream Assessment Protocol (OSAP) at 13 Annual sites and 12 Year One sites across the watershed (see map)
- Boat Electrofishing Christie Lake (COVID has prevented this over the last two years and work for 2022 still needs to be confirmed since we contract the Toronto Region Conservation Authority for this work)
- Seine net near shore fish at 7 sites at Christie Lake CA to assess the nearshore fish community in the lake
- Assess and identify if any data gaps in Watershed Report Card can be filled
- Install Temperature Loggers in Spencer Creek watershed
- Chinook Salmon Spawning Surveys in Lower Spencer Creek
- Beaver Monitoring (Currently, Lower Spencer Creek CA, Pimlico Drive, between Warren Park and Sanctuary Park, and Crooks Hollow CA, Ancaster Creek) and Fifty Point Conservation Area
- Goose Management Program

Terrestrial Resource Monitoring Program (TRMP)

- Marsh Monitoring at Windermere Basin – Frog calls
- Frog area searches at Windermere Basin
- Tree health, tree regeneration and ground flora diversity monitoring at 10 plots throughout the watershed (see map)
- Breeding bird surveys at all 10 monitoring plots

- Tree regeneration/deer browse monitoring at high deer density Conservation Areas (Dundas Valley and Iroquois Heights)
- Spongy Moth defoliation monitoring (Borer's, Westfield and Dundas Valley)
- Forest pest monitoring (Hemlock Wooley Adelgid and Beech Leaf Disease)

Conservation Area Mater Planning – East Mountain

- Identify/assess watercourse crossings on Escarpment properties along Bruce Trail
- Identify/assess watercourse crossings on Dofasco Trail
- If trail crossing assessment identify any spots of interest Benthic and Fish sampling may occur to fill data gaps
- Spring waterfowl surveys on the East Mountain in the flooded fields
- Ecological Land Classification at Devils Punch Bowl, Vinemont and Wynona Conservation Areas as well as the Dofasco Trail
- Breeding bird surveys at Devils Punch Bowl, Vinemont and Wynona Conservation areas as well as the Dofasco Trail
- Summer and fall vegetation surveys at Devils Punch Bowl, Vinemont and Wynona Conservation areas as well as the Dofasco Trail
- Snake hibernacula surveys at the Devils Punch Bowl Conservation Area

Restoration Projects

- Lower Spencer Creek fish monitoring at pre-project sites
- Lower Spencer Creek Thalweg assessment at Lower Spencer Creek CA
- Lower Spencer Creek floodplain connection rehabilitation project
- Marsh Monitoring Christie Lake – Frog calls
- Christie Lake former Pond 7 Photo Monitoring
- Consulting with Conservation Areas Services Staff on tree planting projects watershed wide
- Fifty Point WC11 and Wetland Project

Invasive Species

- At least 10 volunteer events to be held focusing on seasonally relevant invasive species, i.e. Garlic mustard pulling in the spring and invasive shrub removal in the fall
- Review of all treated and manual pull locations from 2021
- Chemical and manual removal of Giant Hogweed, Garlic Mustard, Dog Strangling Vine, Tree of Heaven, Phragmites, Japanese Knotweed, Oriental Bittersweet, Common and Glossy Buckthorn, Multiflora Rose, Burning Bush, European Privet, non-native Honeysuckles, throughout the watershed
- Continued mapping of invasive species in hotspot areas across the watershed
- Continue to provide invasive species content to our social media team

- Develop a Jumping Worm sign for the Dundas Valley Conservation Area
- Additional volunteer events with Stewardship on private property
- Goldfish management in McCormick Pond

STRATEGIC PLAN LINKAGE

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
 - Continue and expand the aquatic and terrestrial monitoring programs
 - Work with our partners on stewardship initiatives for the Hamilton Watershed Stewardship Program and the Cootes to Escarpment EcoPark System

AGENCY COMMENTS

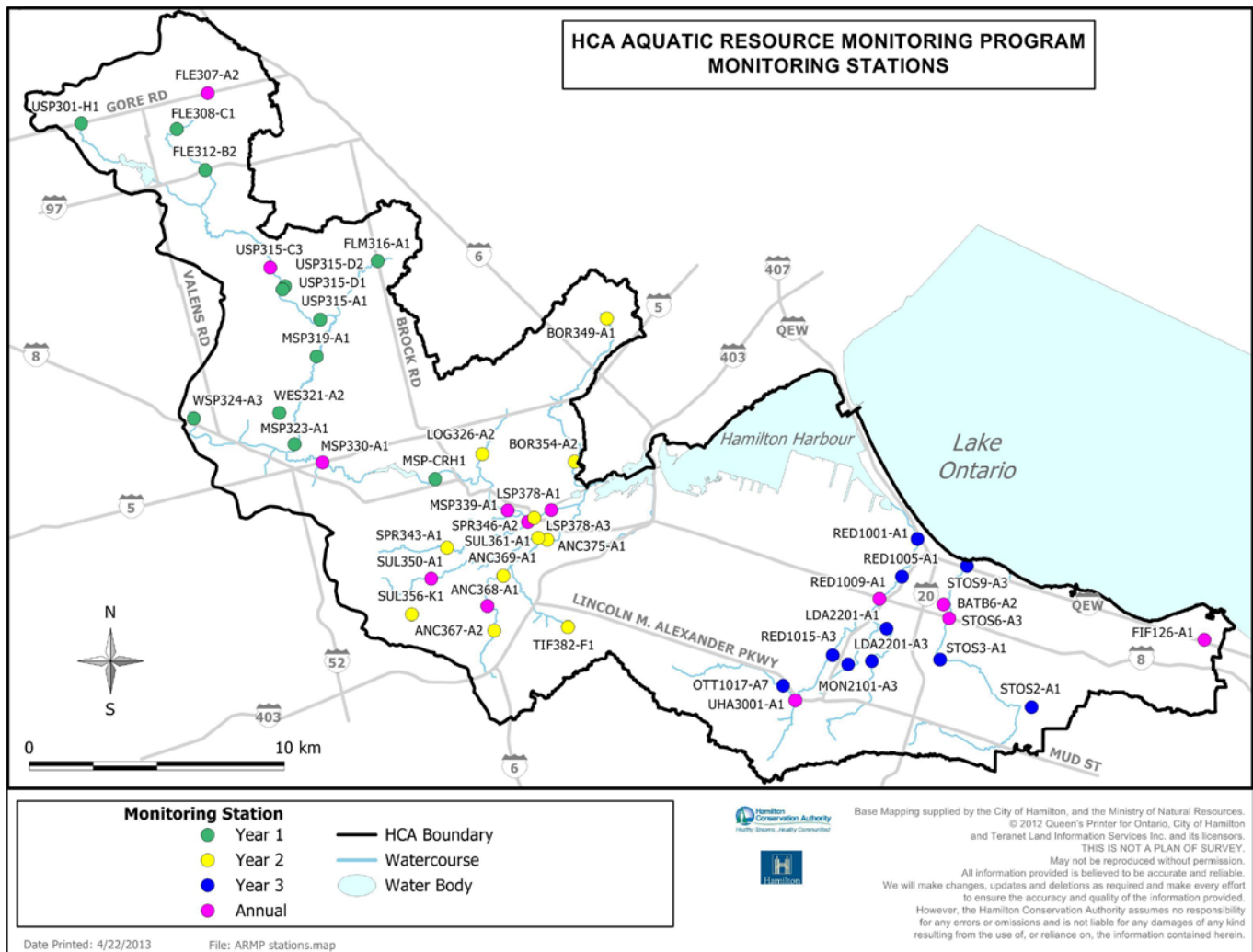
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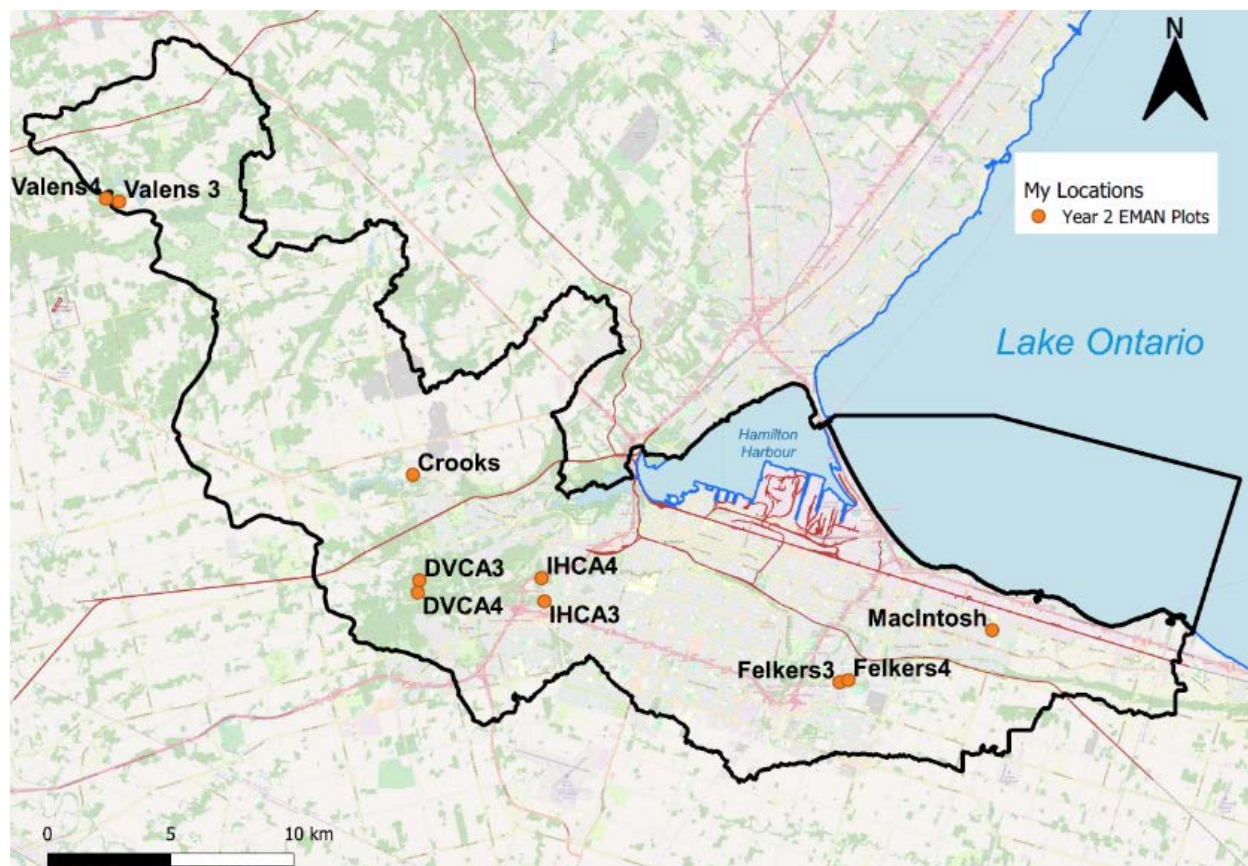
LEGAL/FINANCIAL IMPLICATIONS

N/A

CONCLUSIONS

HCA ecology staff will continue to develop and implement ecology programs and planned work activities in 2022 and beyond. Under the ARMP staff are focusing on analyzing some results from the long-term data set on a subwatershed level. The data collected over the last eight years within the TRMP will be similarly analysed and reports provided by year end. Invasive species will continue to be removed throughout the watershed, focusing on priority areas, priority species and follow up with the work completed in 2021. HCA ecology staff will continue to coordinate with our partners to promote improved information and understanding of the watershed, and to support habitat protection and enhancement to ensure a healthy watershed for everyone.





Memorandum

TO: Conservation Advisory Board

FROM: Lisa Burnside, Chief Administrative Officer (CAO)

RECOMMENDED BY: T. Scott Peck, MCIP, RPP, Deputy Chief Administrative Officer/Director, Watershed Planning Services

PREPARED BY: Jeff Stock, Watershed Stewardship Technician
Cherish Gamble, Watershed Stewardship Technician
Mike Stone, MCIP, RPP, Manager, Watershed Planning, Stewardship & Ecological Services

DATE: April 14, 2022

RE: Stewardship Program Update 2022

BACKGROUND

Since 1994 the Hamilton Conservation Authority's (HCA) Hamilton Watershed Stewardship Program (HWSP) has been providing private landowners with technical and financial assistance to undertake conservation projects on their properties to protect, enhance and restore natural areas and wildlife habitats, and to improve water quality within the HCA watershed. The types of projects vary, but commonly include the implementation of agricultural best management practices in rural areas, stormwater low impact development (LID) projects, reforestation, invasive species removal, the restriction of livestock from waterways, and increasing biodiversity through native plantings.

The HWSP further promotes best management practices for protecting and improving water quality and natural areas through outreach and educational programming. The HWSP seeks to maintain and improve the health of local natural ecosystems through create programming which promotes education and empowerment of private landowners.

STAFF COMMENTS

HWSP staff undertake a broad range of activities through the Stewardship program. The following highlights some of the key work activities planned for the 2022:

Water Quality and Habitat and Improvement Program (WQHIP)

The HWSP continues to deliver its annual grant program to support rural landowner stewardship and restoration projects. WQHIP now includes urban stormwater LID practices after successful uptake of the Stormwater Stewardship grant pilot project. The deadline for project application submissions under the WQHIP grant program for 2022 was April 1st. Fourteen project applications have been received, which will be reviewed by the Hamilton Harbour Watershed Stewardship Project (HHWSP) Project Technical Advisory Committee (PTAC). PTAC acts as a review and approval committee for applications submitted to WQHIP grant program. Project's proposed for 2022 include the following:

- Three projects in Ancaster Creek Subwatershed – one Riparian Planting and two Invasive Species Removals, one in a wetland and one adjacent to a pond;
- Three projects in Middle Spencer Creek Subwatershed – one Terrestrial Habitat Feature (Barn Swallow nest structure) and two Invasive Species Removals, both in Riparian areas;
- Two projects in Spring Creek Subwatershed – one Riparian Planting and one joint Invasive Species Removal and Planting adjacent to ponds on the property;
- Four projects in Sulphur Creek Subwatershed – two Meadow Prairie Plantings, one Meadow Prairie Seeding, and one Riparian Planting; and
- One project in Upper Spencer Creek Subwatershed - invasive species removal and planting on a 100-acre parcel just north of Valens Lake.

Well Decommissioning Program

The HWSP delivers funding for well decommissioning to protect groundwater quality on behalf of the City of Hamilton. Property owners within the HCA watershed who reside within the City of Hamilton are eligible to apply to receive a \$1,000 reimbursement per decommissioned well, with a limit of two wells per property. Promotion of this program for 2022 is already underway.

Watershed Steward Award Program

Landowners in the Hamilton Conservation Authority (including private landowners, schools and businesses) who demonstrate good land stewardship practices and or exemplify a commitment to maintain and restore natural features and watershed

function, are recognized with the Watershed Stewardship Award. Watershed Stewards understand the important role they have to play in protecting the natural features on their lands or within the watershed, have been managing their lands/contributing efforts in a way that protects the health of the watershed, and are willing to enter into a voluntary handshake agreement to continue to protect and preserve the natural features and watercourses on their property and promote good land stewardship practices.

Watershed Stewards Appreciation Day offers both learning and social opportunities for our award winners. The event has traditionally taken place annually in August in conjunction with Conservation Halton (CH) as part of the Hamilton Harbour Watershed Stewardship Project (HHWSP), and after a two-year hiatus program staff are looking forward to an event in 2022.

Education and Outreach

A core duty of the HWSP is community and landowner outreach within the watershed, with targeted activities/outreach occurring on an as needed basis in high priority areas such as high development pressure areas, the rural/urban fringe, ravine lots and new developments. In 2022 the HWSP is undertaking a concerted effort to reach landowners in the Ancaster and Spring Creek subwatersheds. Landowners in these two subwatersheds have been active in seeking out information and support on how to maintain and restore sections of creek on their properties and public spaces. Targeted mailouts are underway to connect with new and existing landowners to extend the restoration achievements in recent years and to further engage with these communities.

HWSP staff undertake outreach via one-on-one on-site consultations with property owners, attendance at public events and by hosting volunteer events and educational opportunities such as workshops.

HWSP staff are working on website and social media updates in 2022 to increase promotion of the technical and financial assistance services available through the program.

Prior to COVID-19, staff had piloted an outreach program called “Stewardship Stations” at high traffic areas within the HCA Conservation Areas. This initiative aimed to educate the public and develop outreach opportunities for watershed residents. As restrictions ease it is anticipated that these stations will return in 2022.

Another educational opportunity that will be returning this year will be the Spencer Creek Salmon Stroll. This annual event was first held in October 2016 with local experts discussing the Chinook salmon run and restoration projects within Lower Spencer Creek.

HWSP staff are working on the development of a stewardship action-based workshop series template that can be tailored to target specific areas within the watershed, with

the first workshop to be targeted to property owners in the east end of the watershed in 2022.

Sharing Experiences Workshop

Sharing Experiences is a free one-day workshop which gives community-based environmental groups the opportunity to learn from one other. The workshop includes presentations, an opportunity to network and share ideas. It is organized by HWSP staff representing HCA, as well as other local conservation authorities and environmental organizations. The spring 2022 event was put on hiatus but the group will be reconvening this summer to ensure different topics are selected from year to year.

Great Lakes Protection Initiative (GLPI) Funding Program

Through the Great Lakes Protection Initiative, the Government of Canada takes action to address the most significant environmental challenges affecting Great Lakes water quality and ecosystem health by delivering on Canada's commitments under the Canada-United States Great Lakes Water Quality Agreement. HCA and CH's joint GLPI grant came to an end on March 31st, 2021. This grant has funded HCA and CH's Hamilton Harbour Watershed Stewardship Project (HHWSP) for many years, and supports education and outreach initiatives, and the implementation of WQHIP projects in the Hamilton Harbour watersheds. Both organizations have once again jointly applied for three additional years of funding under the federal grant.

Ecocise Volunteer Event Program

The HWSP has branded its volunteer events, most notably invasive species removals, under the Ecocise Program. The program promotes getting ones' 'Ecocise' – to "get out in nature, get some exercise and do some good while you're at it!". Ecocise volunteer events are ongoing, with two volunteer events to date in 2022. The first was a collection of live materials including willow and dogwood species from CA lands to be used in a future restoration project in Sulphur Creek. The second was an invasive species removal targeting Multiflora Rose and Common Buckthorn as part of site preparation for the same restoration project. The landowners currently have a WQHIP application under review.

Many of the submitted WQHIP applications rely upon the HCA volunteer program to help realize the planting plans and to successfully plant the hundreds of native trees, shrubs and herbaceous plants planted through the WQHIP program every year.

Working with the Invasive Species Technicians, every Thursday will be geared towards working with landowners in need of assistance in management and eradication of invasive species on their properties. These days will run from site visits and observations, to small scale removals, all the way to large scale volunteer events under the "Ecocise" banner.

Program Partnerships and Collaborations

The HWSP continues to work closely with Conservation Halton on implementation of projects and activities conducted through the HHWSP and funded through the GLPI funding program. HCA and CH also work in cooperation with the volunteer Project Technical Advisory Committee (PTAC) which evaluates submitted projects for funding consideration.

HWSP staff represent HWSP/HCA interests on the Bee City Hamilton Committee, Biodiversity Action Plan Committee, and the C2E Stewardship Subcommittee.

The HWSP works closely with local environmental organizations and institutions to enhance wildlife habitat and water quality within the watershed, and some highlights for 2022 include:

- This is the first year that stewardship staff has collaborated with the Niagara College Ecosystem Restoration Graduate Program. As part of the program's year-long course, several students were partnered with a landowner who owns a significant tract of land in the Upper Spencer Subwatershed. Under guidance from staff, students are developing a restoration strategy for the property. It is a learning experience that will provide the landowner with restoration options and an in-depth report that the landowner and stewardship program will be able to utilize for future restoration goals.
- In the spring, HWSP staff coordinated a partnership with a University of Windsor teaching student and Aldershot High School. Students at Aldershot High School produced and donated bat boxes, tree swallow nesting boxes and turtle nest protectors for the HCA to utilize in their conservation areas.
- HWSP staff are currently working with a project submission to install Miyawaki forest plots - potential partners on the project include McMaster University and CanPlant.
- HWSP staff are working with Trout Unlimited Canada out of their Guelph office to identify and work towards restoration efforts in the Spencer Creek watershed. This not for profit agency partnered with the HWSP in 2019 to deliver in-stream restoration projects that led to improvements in fish passage and are planning to continue this effort in 2022.

STRATEGIC PLAN LINKAGE

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

- **Water Management**
 - Invest in programs to address the impacts of nutrient and sediment loading on watershed streams, creeks, rivers and receiving water bodies.
 - Work with the City of Hamilton, and our partners on the Hamilton Harbour Remedial Action Plan to address nutrient and sediment loading within the Hamilton Harbour Watershed.
 - Continue the HCA's Watershed Stewardship Program and work with landowners to increase environmental awareness and restoration projects.
- **Natural Heritage Conservation**
 - Work with our partners on stewardship initiatives for the Hamilton Watershed Stewardship Program and the Cootes to Escarpment EcoPark System
 - Work with our partners to maintain and enhance the natural heritage inventory
 - Implement the approved Invasive Species Strategy and natural heritage plans as detailed in HCA master plans
- **Education and Environmental Awareness**
 - Enhance stewardship programs for both urban and rural areas.
 - Identify and support outreach opportunities within all of our program areas.
 - Promote the connection between environmental health and human wellness.
 - Participate in collaborative programs and research projects with our academic institutions

AGENCY COMMENTS

N/A

LEGAL/FINANCIAL IMPLICATIONS

N/A

CONCLUSIONS

The HWSP looks forward to continuing to serve the public through its outreach, education and restoration project programs and activities in 2022. This work helps to promote the protection and enhancement of water quality and habitat throughout the watershed, and to further HCA's vision for a healthy watershed for everyone.