

BOARD OF DIRECTORS MEETING AGENDA

THURSDAY, MARCH 7, 2019

Vision

A healthy watershed for everyone.

Mission

To lead in the conservation of our watershed and connect people to nature.



AGENDA FOR BOARD OF DIRECTORS MEETING

Thursday, March 7, 2019 at 7:00 p.m.

- 1. CALL TO ORDER** ~ Fielding
- 2. DECLARATIONS OF CONFLICT OF INTEREST**
- 3. APPROVAL OF AGENDA**
- 4. DELEGATIONS**
- 5. CONSENT ITEMS FOR APPLICATIONS, MINUTES, AND CORRESPONDENCE**
 - 5.1 Applications – Development, Interference with Wetlands, Alterations to Shorelines and Watercourses
 - 5.2 Approval of Board of Directors Minutes – February 7, 2019
- 6. MEMBER BRIEFING**
- 7. BUSINESS ARISING FROM THE MINUTES**
- 8. OTHER CORRESPONDENCE**
- 9. REPORTS FROM BUDGET & ADMINISTRATION COMMITTEE, CONSERVATION ADVISORY BOARD, AND THE FOUNDATION**
 - 9.1 Conservation Advisory Board – February 14, 2019 ~ Topalovic
(Recommendations and Minutes)

CA1903	2019 Shuttle Bus – Spencer Gorge Conservation Area
CA1904	HCA Conservation Area Vehicle Parking Review
CA1905	HCA 10 Year Masterplan Update Strategy
CA1906	2018 Westfield Heritage Village Artifact Donation Acquisition Report
CA1907	Seed Mixes Suitable for HCA Watershed
Minutes	Approval of February 14, 2019 Minutes
 - 9.2 Foundation Chairman's Report ~ Wauben
- 10. OTHER STAFF REPORTS/MEMORANDUMS**
 - 10.1 Current Watershed Conditions as of February 25, 2019 ~ Peck
 - 10.2 Upcoming HCA and Partner Events ~ Costie
- 11. NEW BUSINESS**
- 12. IN-CAMERA ITEMS FOR MATTERS OF LAW, PERSONNEL AND PROPERTY**
- 13. NEXT MEETING – Thursday, April 4, 2019**
- 14. ADJOURNMENT**



Memorandum

TO: Board of Directors

FROM: Lisa Burnside, Chief Administrative Officer

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

PREPARED BY: Jaime Tellier, Watershed Officer

DATE: February 25, 2019

RE: Summary Enforcement Report – Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation 161/06 Applications for March 7, 2019

HCA Regulation applications approved by staff between the dates of January 25, 2019 and February 25, 2019 are summarized in the following Summary Enforcement Report (SER-2/19).

RECOMMENDATION

THAT the Board of Directors receive this Summary Enforcement Report SER-2/19 as information.

HAMILTON REGION CONSERVATION AUTHORITY

DEVELOPMENT, INTERFERENCE WITH WETLANDS, AND ALTERATIONS TO SHORELINES AND WATERCOURSES APPLICATIONS

February 25, 2019

Development, Interference with Wetlands, and Alterations to Shorelines and Watercourses Applications Report to the Board of Directors of the Hamilton Region Conservation Authority, March 07, 2019

The proposed works are subject to Ontario Regulation 161/06, and in particular Section 2, Subsection (1).

SUMMARY ENFORCEMENT REPORT SER 2/19

File Number	Date Received	Date Permit Issued	Review Days	Applicant Name	Location	Application Description	Recommendation / Conditions
SC/F,C,A/18/49V	15-Jun-18	12-Feb-19	74		645 Grays Rd Lot 23, Concession BF Stoney Creek	Replacement of an existing shoreline retaining wall in a regulated area of the Lake Ontario shoreline.	Approved subject to standard conditions
D/F,C/18/111	11-Dec-18	13-Feb-19	28		107 Grant Blvd Lot 57, Concession 1 Dundas	Construction of a single family residence and associated grading in a regulated area of Ancaster Creek.	Approved subject to standard conditions
H/F,C,A/18/72	15-Aug-18	21-Feb-19	69		17 Discovery Dr, 65 Guise St E, 57 Discovery Dr,659 Catherine St N,111 Guise St E,595 Catherine St N Lot , Concession Hamilton	Construction of a new shoreline retaining wall, fill placement, grading, internal road development and service installation associated with the development of Pier 7 and 8 Draft Plan of Subdivision (25T-2016-05) and Contract No. C13-33-18 in a regulated area of Hamilton Harbour.	Approved subject to standard conditions

HAMILTON REGION CONSERVATION AUTHORITY

MINUTES

Board of Directors Meeting

February 7, 2019

Minutes of the Board of Directors meeting held on Thursday, February 7, 2019, at Woodend Auditorium, 838 Mineral Springs Road, Ancaster, Ontario at 7:00 p.m.

PRESENT: Susan Fielding, in the Chair
Chad Collins
Brad Gautreau
Santina Moccio
Maria Topalovic

Lloyd Ferguson
Tom Jackson
Esther Pauls

Fred Fuchs, Foundation Vice Chair

REGRETS: Dan Bowman, Brad Clark

STAFF PRESENT: Lisa Burnside, Grace Correia, Gord Costie, Bruce Harschnitz, Judy Love, Neil McDougall, James O'Neill, Scott Peck, Sandy Root, Jaime Tellier - HCA Staff

OTHERS: Richard Leitner - Media

1. CALL TO ORDER

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

2. DECLARATIONS OF CONFLICT OF INTEREST

The Chair asked members to declare any conflicts under the Board's Governance Policy. There was none.

3. APPROVAL OF AGENDA

The Chair requested any additions or deletions to the agenda. The Chair indicated that there are two amendments reports for 10.3.1 and 10.4.1.

BD12,2605 MOVED BY: Santina Moccio
SECONDED BY: Esther Pauls

THAT the agenda be approved as amended.

CARRIED

4. DELEGATIONS

There was none.

5. CONSENT ITEMS

The following consent items were adopted:

- 5.1 Applications – Development, Interference with Wetlands, Alterations to Shorelines and Watercourses
- 5.2 Approval of Board of Directors Minutes from December 6, 2018
- 5.3 Letter from Conservation Ontario regarding Comment on Bill 66

6. MEMBER BRIEFING

6.1 Cheque Presentation – Burlington Runners Club

Grace Correia introduced Tim Nelson and Stephan de Wit from the Burlington Runners Club. Tim Nelson indicated that the Sulphur Springs race is one of the best days of running you will experience. The race starts at the Ancaster Community Centre and weaves its way through the beautiful trails of the Dundas Valley. There are many options of racing from a 10 km race to a 100 mile race.

The Burlington Runners Club come together to make sure that the weekend event is memorable for all.

Tim Nelson and Stephan de Wit presented a cheque in the amount of \$9,000 to be used for the Dundas Valley trail maintenance.

Susan Fielding thanked the Burlington Runners Club for their generous donation.

6.2 Outdoor Environmental Education Program – Overview

Grace Correia indicated that the Outdoor Environmental Education program is designed to provide students from elementary to secondary school with hands-on outdoor environmental education experiences that meet overall student learning expectations.

The program, run by education professionals, is based out of Dundas Valley Conservation Area.

Program costs are shared between the participating schools, school boards, and the Hamilton Conservation Foundation. In 2018, the Foundation increased its support of the program from \$55,000 to \$125,000 annually. The Foundation also raises additional funds to provide transportation subsidies to At-Risk schools that may not have the funds to send students to Dundas Valley.

Donations to the Foundation are instrumental in ensuring the Outdoor Environmental Education Program is available to all students across the City of Hamilton and continue to thrive.

6.3 Presentation for the Conservation Areas Innovation Award

Grace Correia indicated that the work of the education staff was recently recognized with a Conservation Areas Innovation Award. HCA's Outdoor Environmental Education program was selected to receive the 2018 award in recognition of the introduction of iPads into the education programming in 2017.

This introduction enhanced the students' experiences while out in the field and activities were successfully implemented for most grades. These activities help the students identify aquatic invertebrates, birds, animal tracks, wildflowers, trees, and even cloud formations.

Recognizing that technology is part of the students' lives, program educators, Beth Stormont, Sandy Root, and James O'Neill, found a way of using the technology to connect the students to nature and enhance their learning experiences.

It's the staff that bring the education program to life and inspire an appreciation for nature and the environment in the students. Sandy Root and James O'Neill were in attendance and accepted the award.

Susan Fielding thanked Sandy and James and indicated that it is very important work that you do.

7. BUSINESS ARISING FROM THE MINUTES

7.1 Date of Annual General Meeting (AGM)

Lisa Burnside presented the memorandum and indicated that at the December 6, 2018 Board of Directors meeting, the board approved the meetings dates for 2019.

The HCA Administrative By-Law states that the Board shall designate one of the meetings each year as the Annual General Meeting where the election of officers takes place.

Staff were directed to contact the City of Hamilton clerk in regards to the timing of citizen appointments to help determine the appropriate date to schedule the AGM. Staff reached out to the staff at the City and they cannot give us an exact date when the citizen appointments will be approved by Council.

BD12,2606 **MOVED BY:** **Lloyd Ferguson**
SECONDED BY: **Esther Pauls**

THAT the Board of Directors approve the following recommendations:

THAT the AGM for the Board of Directors be scheduled for Thursday, April 4, 2019, pending designation of the citizen appointments.

CARRIED

8. OTHER CORRESPONDENCE

There was none.

9. REPORTS

9.1 Foundation Chairman's Report

Fred Fuchs reported on the following:

- We received a total of \$54,367 donations in December and January. They break down as follows:
 - \$23,725 for the Outdoor Environmental Education Program
 - \$14,748 for the Area of Greatest Need Fund
 - \$5,300 for the Tribute Tree Fund

- \$2,506 for plantings as part of the Christie Lake CA stream restoration project
 - \$2,130 for the Dundas Valley Trail System
 - \$1,425 for the Westfield Heritage Village Building Fund
 - \$1,125 for the Dundas Valley CA Fund
 - The remaining \$2,208 came in donations for Land Securement, the Stewardship Program, and Trail Development
- The Foundation will be undergoing a Strategic Planning process this spring to set its course for the next few years and to align with HCA's new strategic plan. In addition, a recent focus on the recruitment of new Board members will provide opportunities for new prospect development and new ideas for fundraising activities.
 - The Foundation has raised over \$500,000 and exceeded our goal for 2018.

10. OTHER STAFF REPORTS/MEMORANDUMS

10.1 Fifty Point Conservation Area – Watercourse No. 11 Environmental Assessment

Scott Peck presented the report and answered member's questions. Watercourse No. 11 is located along the western boundary of the Fifty Point Conservation Area. The watercourse drains from the south end of the conservation area adjacent to Baseline Road and flow northerly along the length of the conservation onto private property at Windermere Road and then drains into Lake Ontario.

Two land owners on Windermere Road are experiencing flood issues and they are quite concerned.

HCA staff meet with the residents and the local City of Hamilton Ward Councillor to explain the issues and consider options. It was agreed to undertake an environmental assessment study report to investigate the causes of the flooding and develop alternatives to resolve the flooding issues.

The Class EA Flood Remediation Project – Watercourse 11, Fifty Point Conservation Area report has been completed. The report identifies five alternatives to the identified issue.

Alternative 2 is the preferred option. This alternative ensures removal of 67% of the total flood water from the Fifty Point Conservation Area while maintaining a positive impact on the environment.

HCA staff have been involved throughout this program and have worked with the consultants and taken part in the Public Information Centres as the project has moved forward.

HCA staff are supportive of the findings and recommendations of the environmental study report and will continue to meet with adjacent landowners to address concerns and work toward implementation of Alternative 2.

BD12,2607 **MOVED BY:** **Santina Moccio**
SECONDED BY: **Maria Topalovic**

THAT the Board of Directors approve the following recommendations:

That the Class EA Flood Remediation Project – Watercourse 11, Fifty Point Conservation Area Report, dated December 17, 2018 be filed for public review and for the Ministry of Environment, Conservation and Parks.

CARRIED

10.2 Ratification of Email Poll for Replacement Mobile Marina Lift at Fifty Point Conservation Area

Neil McDougall presented the report. An email poll was sent out to the Board of Directors on January 15, 2019 for their approval. In accordance with the HCA's governance policies, the Board of Directors ratified unanimously the email poll approving the purchase of the mobile marina lift for Fifty Point Conservation Area.

BD12,2608 **MOVED BY:** **Maria Topalovic**
SECONDED BY: **Brad Gautreau**

THAT the Board of Directors approve the following recommendations:

That the quotation for the replacement of the Fifty Point Mobile Marina Boat Lift be awarded to Kropf Industrial Inc. at a cost of \$319,060.00 plus HST. The HST is recoverable.

CARRIED

10.3 Addendum Report for Request for Proposal – Stoney Creek and Battlefield Creek Flood Plain Mapping Study

Scott Peck presented the report and answered member's questions. A Request for Proposal for the Stoney Creek & Battlefield Creek Flood Plain Mapping Study was developed and a call for proposals issued. Nine proposals were submitted prior to the deadline of February 1, 2019.

Based on the review of the proposals provided, it is recommended that this project work be awarded to Water's Edge Environmental Solutions Team.

BD12,2609

MOVED BY: Chad Collins
SECONDED BY: Santina Moccio

THAT the Board of Directors approve the following recommendations:

THAT the proposal for the Stoney Creek and Battlefield Creek Flood Plain Mapping Study submitted by Water's Edge Environmental Solutions Team be accepted at a cost of \$59,990.00 plus HST.

CARRIED

10.4 Addendum Report for Request for Proposal – Wetland Design – Saltfleet Conservation Area Wetland Restoration Project

Scott Peck presented the report and answered member's questions. A Request for Proposal for the Wetland Design – Saltfleet Conservation Area Wetland Restoration Project was developed and a call for proposals issued. Seven proposals were submitted prior to the deadline of February 1, 2019.

Based on the review of the proposals provided, it is recommended that this project work be awarded to Water's Edge Environmental Solutions Team.

Water's Edge is also the recommended consultant for the Stoney Creek & Battlefield Creek Flood Plain Mapping Study Request. Having the same firm work on both projects will streamline project development and remove any concerns related to duplicate work or communications between two different consulting firms.

Lloyd Ferguson has concerns that the low bidder will complain. Scott indicated the Water's Edge submission is detailed with tasks noted with associated specifics and costs. The lowest quote does not provide this level of review.

Additionally, the HCA RFP process does not require that the lowest proposal will be accepted.

Tom Jackson indicated that this is possibly something at the City they could learn in regards to the tender process.

BD12,2610

MOVED BY: Maria Topalovic

SECONDED BY: Santina Moccio

THAT the Board of Directors approve the following recommendations:

THAT the proposal for the Wetland Design – Saltfleet Conservation Area Wetland Restoration Project submitted by Water’s Edge Environmental Solutions Team be accepted at a cost not to exceed \$129,985.00 plus HST.

CARRIED

10.5 Current Watershed Conditions as of January 25, 2019

Scott Peck indicated that the conditions have changed since this report was written. With the snow melt and freezing rain, the water levels are high but no alarms have gone off. Staff continue to monitor the situation and staff do have a flood watch out.

10.5 Upcoming HCA and Partner Events

Gord Costie provided an update of the upcoming events that are included in the agenda package.

Gord indicated that the deer harvest with the Haudenosaunee Wildlife and Habitat Authority took place on weekdays excluding Fridays between November 12 and December 6, 2018. It was a successful harvest. Staff did a daily inspection and there were no issues. Staff have not received the total count but have indicated that it was a light harvest.

11. NEW BUSINESS

11.1 Budget Presentation

Tom Jackson congratulated staff on the excellent budget presentation provided to City Councillors. Lloyd Ferguson applauded the staff and indicated that our presentation went very smoothly.

Santina Moccio attended the budget presentation and indicated that staff did a great job. Susan Fielding thanked staff for all their hard work.

12. IN-CAMERA ITEMS FOR MATTERS OF LAW, PERSONNEL AND PROPERTY

BD12,2611 **MOVED BY:** **Santina Moccio**
SECONDED BY: **Esther Pauls**

THAT the Board of Directors moves *in camera* for matters of law, personnel and property.

CARRIED

During the *in camera* session, one personnel and one property matter and one legal/property matter were discussed.

12.1 Confidential Report BD/Feb 01-2019

Lisa Burnside presented the report and answered member's questions.

BD12,2612 **MOVED BY:** **Santina Moccio**
SECONDED BY: **Brad Gautreau**

THAT the Board of Directors approve the following recommendations:

THAT Report BD/Feb 01-2019 be approved and remain in camera.

CARRIED

12.2 Confidential Report BD/Feb 02-2019

Scott Peck presented the report and answered member's questions.

BD12,2613 **MOVED BY:** **Santina Moccio**
SECONDED BY: **Maria Topalovic**

THAT the Board of Directors approve the following recommendations:

THAT Report BD/Feb 02-2019 be approved and remain in camera.

CARRIED

12.3 Confidential Verbal Update BD/Feb 03-2019

Lisa Burnside provided a verbal update.

BD12,2614**MOVED BY: Lloyd Ferguson****SECONDED BY: Maria Topalovic**

THAT the Board of Directors moves out of *in camera*.

CARRIED**13. NEXT MEETING**

The next meeting of the Board of Directors will be held on Thursday, March 7 2019 at 7:00 p.m. at Woodend Auditorium, 838 Mineral Springs Road, Ancaster, Ontario.

14. ADJOURNMENT

On motion, the meeting adjourned.

Neil McDougall
Secretary-Treasurer

HAMILTON CONSERVATION AUTHORITY

Conservation Advisory Board

MINUTES

February 14, 2019

Minutes of the Conservation Advisory Board meeting held on Thursday, February 14, 2019 at HCA's Woodend Administration Building commencing at 4:00 p.m.

PRESENT:

Maria Topalovic, Chair
John Barkovic
Brad Gautreau
Cheryl Larocque
Duke O'Sullivan
John Shaw

Frank Cucullo
Donna Kydd
Santina Moccio
Morgan Pirie
Wayne Terryberry

REGRETS:

Kristen Brittain, Lydia Cartlidge, Joanne Di Maio, Susan Fielding, Chris Michels

STAFF PRESENT:

Rondalyn Brown, Lisa Burnside, Grace Correia, Gord Costie, Summer Graham, Matt Hall, Cari Hobbs, Peter Lloyd, Judy Love, Lesley McDonell, Neil McDougall, Scott Peck, Kathy Smith, Jaime Tellier, and Nancy Watts – HCA Staff

OTHERS:

Richard Leitner - Media

1. CHAIR'S REMARKS

Maria Topalovic welcomed everyone and indicated the regrets received for the meeting.

Maria Topalovic made a presentation and remarks as member Morgan Pirie has reached his maximum 12 year term. She wished to recognize Morgan for his tremendous record of citizen involvement and commitment with HCA.

Maria indicated that she was also very grateful for all Morgan's help as Vice Chair. She extended our sincere appreciation and admiration for all of his wisdom and work, and that he will be truly missed.

Morgan thanked his fellow CAB members and staff. He indicated that he enjoyed his time on CAB and it has been very rewarding. Morgan indicated that HCA staff do very important work to make our watershed healthy and he wished HCA all the best.

2. DECLARATION OF CONFLICT OF INTEREST

The Chair asked members to declare any conflicts of interest. There were none.

3. APPROVAL OF THE AGENDA

The Chair requested any additions or deletions to the agenda.

CA1901	MOVED BY:	Duke O'Sullivan
	SECONDED BY:	Frank Cucullo

THAT the agenda be approved.

CARRIED

4. DELEGATIONS

There was none.

5. MEMBER BRIEFING

5.1 Strategic Plan – 2019 to 2023

Scott Peck presented a PowerPoint presentation. The Strategic Plan is a priority document that will guide the HCA over the next 5 years. It has been developed through an extensive consultation process resulting in a new vision, mission and logo.

The Strategic Plan is a streamlined document that provides that higher level of direction relating to the priorities of the HCA. Implementation of the Strategic Plan will be through departmental work plans with an annual report prepared to highlight progress in implementing the priorities and initiatives of the Strategic Plan.

An annual report will be prepared as to what we have accomplished each year.

6. CHAIRMAN'S REPORT OF BOARD OF DIRECTOR'S ACTIONS

Maria reported that the following items were approved at the October HCA Board of Directors meeting.

CA1821 Westfield Heritage Village Conservation Area – Master Plan

7. APPROVAL OF THE MINUTES OF PREVIOUS MEETING

7.1 Minutes – Conservation Advisory Board (October 11, 2018)

CA1902 MOVED BY: Brad Gautreau
SECONDED BY: John Shaw

THAT the minutes of the October 11, 2018 Conservation Areas Advisory Board meeting be approved.

CARRIED

8. BUSINESS ARISING FROM THE MINUTES

There was none.

9. STAFF REPORTS/MEMORANDUMS

9.1 2019 Shuttle Bus – Spencer Gorge Conservation Area

Gord Costie presented the report and answered member's questions. Gord indicated that through the operation of this year's shuttle bus out of Christie Lake, staff have had an opportunity to experience all aspects of the service and how it integrates with Christie Lake's operations.

The experience of the past year has demonstrated that Christie Lake is an ideal conservation area setting as a start and finish point for visitors.

Getting visitors directly to Christie Lake as the shuttle base is a key aspect of the shuttle success. This removes traffic congestion in the area and provides the picnic, washroom and garbage facilities for visitors.

A successful shuttle operation will require ongoing Bylaw Enforcement of “No Parking/Stopping” within the Greenville community to deter all unauthorized parking as well to shut down unauthorized “pop up” parking lots.

A new outreach was also undertaken in 2018 with ParkBus to address visitors from the Toronto area looking for the Hamilton waterfall experience. The organization operates bus services to National and Provincial Parks from major cities across Canada and removes cars from the roads.

Staff are recommending Christie Lake Conservation Area as the Spencer Gorge shuttle hub location and include it as part of regular operations for the park. Staff will continue to undertake marketing and communication efforts to ensure visitors have awareness of the shuttle operations.

Ongoing partnership and collaboration with City of Hamilton and Ward Councillor will be continued for waterfall safety, and in order to discuss and address municipal parking enforcement and traffic safety.

CA1903

MOVED BY: Wayne Terryberry
SECONDED BY: Morgan Pirie

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

THAT the shuttle bus service for the Spencer Gorge Conservation Area be continued in 2019 and become part of ongoing operations at Christie Lake Conservation Area on an annual basis; and

THAT the shuttle bus service operates on Saturdays, Sundays, Public Holiday Mondays and Canada Day between May and October weather pending; and further

THAT the Easter weekend be considered by staff for potential shuttle operations based on weather conditions or other factors as determined.

CARRIED

9.2 HCA Conservation Area Vehicle Parking Review

Scott Peck presented the report and answered member’s questions. HCA staff have been working to address parking and visitation issues by undertaking the following initiatives:

- implementing the shuttle service at the Spencer Gorge

- shuttles have also been utilized for special events (Telling Tales) at Westfield Heritage Village
- having staff on site to meet with visitors to provide trail etiquette
- trail signage and brochures highlighting the need to stay on the trail for visitor safety and conservation of the associated natural areas
- working through HCA website and social media regarding authorized access points
- working with City of Hamilton regarding municipal no parking and no stopping signage
- installation of automated access gates at conservation areas

All of the above initiatives are considered to be part of an overall visitor management strategy for the HCA as noted in the HCA Strategic Plan 2019 – 2023. One aspect that needs to be considered as part of an overall visitor management system is an assessment and analysis of available parking.

Staff are recommending to the Conservation Advisory Board and the Board of Directors that staff undertake a detailed analysis and assessment of parking and associated access to our conservation areas. This detailed report will provide potential recommendations for parking strategies that support HCA areas. This project will be done in house and will be completed by the fall of 2019.

CA1904

MOVED BY: Donna Kydd

SECONDED BY: Duke O’Sullivan

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

THAT HCA staff be directed to undertake the parking inventory as detailed in the report titled “HCA Conservation Area Vehicle Parking Review”, dated February 1, 2019.

CARRIED

9.3 HCA 10 Year Masterplan Update Strategy

Matt Hall presented the report and answered member’s questions. Masterplans provide a long-term vision for our conservation and managed areas as well as direction for guiding the management of the property.

HCA staff began an internal process to review the status of all existing Master and Management Plan files in order to establish a strategy to review and update these plans for all HCA owned lands over the next ten years.

Staff have developed the following approach for completion of the plans as follows:

- Masterplans
 - are prepared for active conservation areas
 - they provide a detailed property evaluation for land and resource management, development decisions and include a public consultation process
- Management Plans
 - are prepared for lands where resource management is a priority and are generally less detailed than Masterplans
 - these plans set goals and objective for property management
 - will include a public consultation process when not being developed within the overall scope of a Masterplan
- Study Areas
 - are prepared for specific geographic areas within our watershed

This strategy highlights a comprehensive plan for HCA staff to work toward over the next ten years. All HCA owned property should have a current, modern, and working plan in order to effectively direct HCA staffing and resources to manage, restore and improve areas in an appropriate way.

CA1905

MOVED BY: Wayne Terryberry
SECONDED BY: Cheryl Larocque

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

THAT the HCA Ten Year Masterplan Update Strategy be approved.

CARRIED

9.4 2018 Westfield Heritage Village Artifact Donation Acquisition Report

Peter Lloyd provided a presentation and answered member's questions. Peter indicated that Westfield Heritage Village has a comprehensive Collections Management Policy.

Westfield maintains an artifact and archival collection consisting of more than 25,000 objects reflecting the social, cultural and material history of the area. This policy affirms the museum's commitment to managing this collection according to current professional standards for preservation, documentation, research and use of the collection.

Objects acquired for the collection will be consistent with the mandate, goals, and priorities of the site. Objects collected will normally represent the types of material goods that would have been locally manufactured, routinely available or the product of local activity in Southern Ontario from the period 1790 – 1925. They must be in a condition suitable for display or research. The decision to accession an artifact into the Westfield Collection will be made by the Collections Committee.

Deaccessioning is the permanent removal of an object from the collection. The deaccession process will be undertaken according to the highest professional standards and ethical practices, and will be fully documented.

Westfield staff are diligent about adhering to the very important collections management policies and museum standards to ensure the Hamilton Conservation Authority is managing the artifact collection in a professional manner. The artifact donation list needs to be approved each year. Adding the artifacts on this list to the Westfield Heritage Village collection will preserve important pieces of local history and enhance the experience for visitors.

CA1906

MOVED BY: John Shaw
SECONDED BY: Donna Kydd

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

THAT the Westfield Heritage Village 2018 Artifact Acquisitions and Deaccession List be accepted as the artifacts added to, or removed from, the Westfield Heritage Village and the Hamilton Conservation Authority collection.

CARRIED

9.5 Stoney/Battlefield Creeks Flood Plain Mapping Study

Scott Peck presented the memorandum and answered member's questions. In 2010, the HCA undertook a Flood Plain Mapping Review of the existing HCA floodplain mapping for the watershed. The results of the review determined that the existing floodplain mapping needed to be updated and recommendations were implemented to update and create new HCA floodplain mapping to meet current standards.

The next area identified for the new floodplain mapping is Battlefield Creek and Stoney Creek.

A Request for Proposal for the Stoney Creek & Battlefield Creek Flood Plain Mapping Study was developed and a call for proposals issued. Nine proposals were submitted prior to the deadline of February 1, 2019.

At the February 7 Board of Directors meeting, the board approved the proposal submitted by Water's Edge Environmental Solutions Team for the cost of \$59,990.00 plus HST.

9.6 HCA Climate Change Strategy Update and HCA Involvement with Bay Area Climate Change Consortium

Scott Peck presented the memorandum and answered member's questions. In March 2012, the Board of Directors approved the HCA Climate Change Strategy. Over the past 7 years, implementation efforts relating to the HCA Climate Change Strategy have included completing vulnerability analysis and modelling with the City of Hamilton, working with partners to provide data available through our monitoring program, providing education information to the public.

As part of our work to implement the HCA Climate Change Strategy, HCA staff have joined the Bay Area Climate Change Council. HCA involvement with the Bay Area Climate Change Council will enable continued engagement with business, government, community and individual stakeholders to improve our understanding of local climate change issues and priorities. Further, the Council's work will help inform HCA programs as it relates to the HCA Climate Change Strategy and community priorities, work plans and implementation and the effectiveness of programs and achieving targets.

9.7 Seed Mixes Suitable for HCA Watershed

Lesley McDonell presented the report and answered member's questions. Lesley indicated that HCA frequently provides recommendations for species to be included in plantings for residential, commercial and industrial developments, stormwater management facilities and other infrastructure projects, buffer zones and naturalization projects.

When making recommendations for species to be planted, staff consider site and surrounding conditions, including soils, vegetation community type(s), significant or sensitive natural features, ecological functions, native status and local occurrence of species present.

Staff have developed a document of the seed mixes that are appropriate for use within our watershed. The document is intended for use by HCA staff, and to also be distributed to external parties and proponents of development as necessary.

The development of a guideline document will promote consistency in species planted as part of projects undertaken when staff review planting plans associated with development/infrastructure and restoration projects carried out by external and private landowners.

CA1907

MOVED BY: Wayne Terryberry

SECONDED BY: Frank Cucullo

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

THAT the See Mix Guidelines for the HCA Watershed be approved.

CARRIED

9.8 Upcoming Events

Gord Costie provided an update of the upcoming events that was provided in the agenda package.

Gord indicated that the deer harvest with the Haudenosaunee Wildlife and Habitat Authority took place on weekdays excluding Fridays between November 12 and December 6, 2018. It was a successful harvest and recognized treaty rights of the Haudenosaunee. Staff did a daily inspection and there were no issues. Staff have not received the total count but have indicated that it was a light harvest.

10. NEW BUSINESS

10.1 Ancaster Well

John Shaw asked for an update on the Ancaster Well following the October CAB meeting where discussion took place regarding the approvals as he is concerned the water is being consumed. Maria Topalovic indicated that there was no staff direction for a follow up report, and asked Scott Peck to review the Board motion that was passed.

Scott indicated that the Board of Directors approved the motion and all requirements were met, and specifically those of the Medical Officer of Health, Public Health Services for the inspection and approval of the change in operation. Scott also noted that users need to obtain an access pass which requires signing a waiver form on an annual basis which informs that the water is not provided for drinking water purposes.

Maria indicated that at the Board of Directors meeting in December 2018, the new board did not raise any issues when the topic of the Ancaster Wells was reviewed as part of year-end presentation.

10.2 Start Time for CAB Meetings

John Shaw indicated he would like to review the new 4 p.m. start time for CAB meetings. Scott Peck noted that the staff will review the new terms of reference for CAB in this regard.

11. **NEXT MEETING**

The next meeting of the CAB is scheduled for Thursday, April 11, 2019 at 4:00 p.m.

12. **ADJOURNMENT**

On motion, the meeting was adjourned.



Report

TO: Conservation Advisory Board Members

FROM: Lisa Burnside, Chief Administrative Officer (CAO)

PREPARED BY: Gord Costie, Director of Conservation Area Services

DATE: February 1, 2019

RE: Shuttle Bus Service - Spencer Gorge Conservation Area

STAFF RECOMMENDATION

THAT HCA staff recommends to the Conservation Advisory Board:

THAT the shuttle bus service for the Spencer Gorge Conservation Area be continued in 2019 and become part of ongoing operations at Christie Lake Conservation Area on an annual basis; and

THAT the shuttle bus service operates on Saturdays, Sundays, Public Holiday Mondays and Canada Day between May and October weather pending; and further

THAT the Easter weekend be considered by staff for potential shuttle operations based on weather conditions or other factors as determined.

BACKGROUND

The waterfall shuttle bus, a collaborative effort initially started by the Hamilton Conservation Authority and community group Think Greensville, was piloted in 2017. The 2017 shuttle program proved to be a significant and effective operational change for visitor access to the Spencer Gorge area removing over 16,000 cars from area roads. It demonstrated that visitors will park offsite and shuttle to the area effectively, thereby decreasing on-street parking, reducing local traffic congestion and improving

safety. With these achievements realized, it was important that the shuttle be based in an optimal location and was moved to Christie Lake Conservation Area in 2018.

The past three seasons have averaged an annual 105,000 visitors to this area with favorable weather conditions that extended into the fall color season.

STAFF COMMENT

Through the operation of this year's shuttle bus out of Christie Lake, staff have had an opportunity to experience all aspects of the service and how it integrates with Christie Lake's operations. The 2018 operating season has provided the opportunity to gain confidence and knowledge to ensure customer service and to manage special events without significant issue. Marketing and communication plans are posted on the HCA website to alert visitors of extreme peak event times.

The experience of the past year has demonstrated that Christie Lake is an ideal conservation area setting as a start and finish point for visitors with the following key attributes:

- multiple recreation experiences such as swimming, fishing, boat rentals, disc golf, bike trails and other hiking trails
- amenities and facilities for picnic areas, washrooms and food concessions
- superior wayfinding with Christie Lake recognition and current signage
- ease and safety of entry with turning lanes both east and west bound on Hwy 5
- efficient entry with dual entry lane and dual gatehouse entry terminals equipped with POS systems
- largest parking areas – designed gravel and overflow areas that can accommodate and have been designed for large scale use.

Shuttle Success Factors

The past season of experience has also brought to the forefront that getting visitors directly to Christie Lake Conservation Area as the shuttle base is a key aspect of the shuttle success. This removes traffic congestion in the area and provides the picnic, washroom and garbage facilities for visitors. In this regard, continued support from the City of Hamilton for municipal road issues is essential, as is appropriate HCA marketing and communication efforts to ensure visitors have the awareness of the shuttle operation and location and do not drive to the closed parking lots.

City of Hamilton Bylaw Enforcement and Additional Supports

A successful shuttle operation will require ongoing Bylaw Enforcement of No Parking/Stopping within the Greensville community to deter all unauthorized parking. Continued Bylaw Enforcement to shut down unauthorized "pop up" parking lots is also

noted as critical to keeping traffic away from the hamlet area and eliminate the undue flow of vehicles those lots create.

HCA staff will continue to work collaboratively with City of Hamilton and the ward councillor to identify new measures to deter parking and improve wayfinding to Christie Lake. This is particularly important during the months of September and October for fall colours when visitation increases. Joint media releases stressing waterfall safety, parking enforcement and shuttle information for Spencer Gorge will be continued.

HCA staff have also brought forward additional suggested municipal measures and supports as follows:

- install very large no parking signs down both sides of Harvest Road - similar to what has been installed along Wilson Street to deter parking by Tiffany Falls for a visual parking deterrent
- consideration be given for special event parking fines on weekends and holiday Mondays when the shuttle is running as the regular no parking/stopping fee may not be enough of a deterrent for visitors
- evaluate if additional no parking/stopping areas need to be identified and signed west of Brock Road and east of Ofield Road
- install way finding signage on municipal roads to direct cars to Christie Lake; the traffic department may have signs on trailers that could be used seasonally for this purpose and this department has experience with where to best place signage
- request that the City traffic department place “road closed signs/local traffic only” on Harvest/Brock and Harvest/Ofield on weekends during peak visitation months of September and October which also note Christie Lake as the location for waterfall parking
- consideration be given to identify any measures to physically block parking along Harvest Road with cones or some other type of barrier during peak visitation months of September and October

Marketing & Communication Efforts

With social media and the internet the main driver of where visitors look for information, HCA has focused its information and awareness of the shuttle online to ensure accurate information would be appear prominently in any search to reduce vehicles driving to the closed parking lots, requiring redirection. These efforts are undertaken not to increase and expand visitation, but to ensure the visitors that are coming have the correct information and directions.

In 2018, HCA Marketing and Communication staff placed Google AdWords promotions so that when people searched for keywords including Dundas Peak, Webster Falls, Tew Falls, Spencer Gorge, Hamilton Waterfalls, Waterfall Shuttle or Waterfall Parking, our HCA website would appear at the top of the search results. Staff also sponsored Facebook and Instagram posts at strategic points of the shuttle operations season,

namely the launch and the beginning of fall color season, promoting the use of the shuttle when visiting Webster or Tew Falls. Additionally, connections were made with our partners at Tourism Hamilton and Heart of Ontario to ensure that they linked to the shuttle information when posting about Webster Falls, Tew Falls or Spencer Gorge. Marketing & Communication will continue to build on the efforts and experience undertaken in 2018, to ensure visitors have the appropriate information for the shuttle on our website and HCA Facebook and Instagram pages and posts. They will also continue to rent the Pattison billboard sign on Highway 5 westbound to help direct cars to Christie Lake.

Parkbus

A new outreach was also undertaken in 2018 with ParkBus to address visitors from the Toronto area who looking for the Hamilton waterfall experience. The organization was founded in 2010, and operate bus services to National and Provincial Parks from major cities across Canada.

A small pilot program was trialed from June 24 to October 7, with 16 trips carrying 430 passengers. For 2019, an enlarged program with ParkBus is being explored for an expanded operating season, from May to the end of October. The ParkBus experience brings visitors directly to Christie Lake, providing the amenities these visitors are seeking for the day long experience (picnic spots, washrooms etc.) and helps reduce the impact of visitors looking for facilities at Spencer Gorge and within the Greenville community. Additionally, ParkBus has the benefit of eliminating additional traffic and cars coming to the area.

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
 - Initiatives – identify and act upon revenue generation/cost reduction and investment in visitor services opportunities in our conservation areas
- **Strategic Priority Area – Organizational Excellence**
 - Initiatives – providing a positive and safe environment for both staff and visitors

AGENCY COMMENTS

Not applicable.

LEGAL/FINANCIAL IMPLICATIONS

From a financial perspective, operating a shuttle system out of Christie Lake compared to utilizing the parking lots at Webster and Tew Falls comes with a cost exceeding \$100,000. However, given that the visitor demand has exceeded the capacity of those parking lots a shuttle operation is needed and the current recommendation remains the most cost effective.

CONCLUSION

Based on the 2018 experience of operations out of Christie Lake, staff are recommending Christie Lake Conservation Area as the Spencer Gorge shuttle hub location and include it as part of regular operations for the park. Christie Lake is an ideal conservation area setting as the start and finish point for visitors. HCA will undertake marketing and communication efforts to ensure visitors have awareness of the shuttle operations and explore and review initiatives such as Parkbus.

Ongoing partnership with City of Hamilton will be continued for waterfall safety, and in order to discuss and address municipal parking enforcement and traffic safety.



Report

TO: Conservation Advisory Board Members

FROM: Lisa Burnside, Chief Administrative Officer (CAO)

RECOMMENDED & PREPARED BY: T. Scott Peck, MCIP, RPP, Deputy CAO/Director, Watershed Planning & Engineering and Gord Costie, Director of Conservation Area Services

DATE: February 1, 2019

RE: HCA Conservation Area Vehicle Parking Review

STAFF RECOMMENDATION

THAT the HCA staff recommends to the Conservation Advisory Board:

THAT HCA staff be directed to undertake the parking inventory as detailed in the report titled “HCA Conservation Area Vehicle Parking Review”, dated February 1, 2019.

BACKGROUND

Visitor numbers at national and provincial parks and at conservation areas have been increasing over the past number of years with resulting issues being raised such as traffic congestion and safety of communities in and around these natural areas, visitor experience, and impacts on natural areas.

It is anticipated that the popularity will continue with the growing population in the greater Toronto and Hamilton Area and demonstrated through social media with visitors posting selfies and photos showcasing the natural beauty of the area and vistas. Iconic vistas and fall colour destinations throughout Ontario experience enormous parking pressures with the limited available parking facilities that quickly fill during peak times.

The issue is no longer how to attract people to these natural lands, it is how to manage the current visitation and the associated vehicle parking.

STAFF COMMENT

The HCA has been working to address parking and visitation issues by undertaking the following initiatives:

- Implementing the shuttle service at the Spencer Gorge Conservation Area and examining each year how to make this more effective.
- Shuttles have also been utilized to bring visitors to the Telling Tales Festival event at Westfield Heritage Conservation Area by the third party organizers.
- Having conservation staff on site to meet with visitors to provide trail etiquette and information regarding other conservation areas to visit.
- Trail signage and brochures highlighting the need to stay on the trail for visitor safety and conservation of the associated natural areas.
- Working through HCA website and social media regarding authorized access points and visitor education.
- Working with the City of Hamilton regarding municipal no parking and no stopping signage and associated municipal by-law enforcement.
- Installation of automated access gates at conservation areas and installing trail counters to provide accurate information regarding the number of visitors accessing areas, when and where they are accessing and the number of visitors using the various trail systems.

All of the above initiatives are considered to be part of an overall visitor management strategy for the Hamilton Conservation Authority as noted in the HCA Strategic Plan 2019 – 2023. One aspect that needs to be considered as part of an overall visitor management system is an assessment and analysis of available parking.

The purpose of this report is to highlight to the Conservation Advisory Board and the Board of Directors that staff recommend undertaking a detailed analysis and assessment of parking and associated access to our conservation areas. This project will be done in house and will be completed by the fall of 2019. The following template details what aspects will be considered through the parking review:

1. Determine number of existing parking lots at each conservation area.
 - i. Include and map locations.

- ii. Calculate and map total number of parking spaces per lot and per conservation area.
2. Identify and map local roadways surrounding conservation areas with associated parking limitations and restrictions such as no parking and no stopping areas.
3. Identify and map alternative existing parking lots on adjacent private lands.
4. Identify and map adjacent bus routes to all conservation areas.
5. Identify and map regional and local trail and cycling networks associated with conservation areas.
6. Identify and map potential parking lots on HCA lands including a review of the following:
 - i. Access and contour information.
 - ii. Site restrictions such as HCA, City of Hamilton and Niagara Escarpment Commission regulatory, land use and plan requirements.
 - iii. Information related to environmentally significant areas, woodlots, wetlands, watercourses, floodplain, ravine slopes and erosion hazards.
7. Identify and map all conservation area access points.
8. Identify and map location of all manual and automated gates.
9. Identify and map trail counter locations and associated data.

The parking review will assess the supply at HCA areas and identify gaps, provide potential recommendations for parking strategies that support HCA areas while conserving the natural features of the area, and builds upon the existing parking system. Additionally, the review will identify peak visitation times at popular conservation areas and alternative sustainable methods of access.

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

AGENCY COMMENTS

Not applicable.

LEGAL/FINANCIAL IMPLICATIONS

Not applicable.

CONCLUSIONS

An HCA conservation area parking review as noted and detailed in this report will inform potential recommendations for parking strategies that support HCA areas. This project will be done in house and will be completed by the fall of 2019.



Report

TO: Conservation Advisory Board Members

FROM: Lisa Burnside, Chief Administrative Officer (CAO)

RECOMMENDED & PREPARED BY: Matthew Hall, Director; Capital Projects & Strategic Services
Kathy Smith, Design Projects Coordinator; Capital Projects & Strategic Services

DATE: January 31, 2019

RE: HCA Ten Year Masterplan Update Strategy

STAFF RECOMMENDATION

THAT the HCA staff recommends to the Conservation Advisory Board:

THAT the Conservation Advisory Board, recommends to the Board of Directors that the HCA Ten Year Masterplan Update Strategy be approved.

BACKGROUND

Over the years, HCA has undertaken and implemented Master and Management Plans, for HCA properties that we own and manage.

Master Plans provide a long-term vision for our conservation and managed areas as well as direction for guiding the management of the property. It helps advise day-to-day operational decisions and identifies actions to successfully manage the conservation area.

While some of these plans are relatively current (i.e.: less than ten years old), many more are older. Additionally, many of the older plans have seen the initial site concepts

realized and as such their needs have transitioned to more of a land and resource management strategy.

As the recent Westfield Heritage Village Conservation Area Masterplan was being finalized, HCA staff began an internal process to review the status of all existing Master and Management Plan files in order to establish a strategy to review and update these plans, for all HCA owned lands over the next ten years.

STAFF COMMENT

Staff have developed the following approach for the completion of the plans as follows:

Master Plans

- Are prepared for active conservation areas. They provide a detailed property evaluation for land and resource management, development decisions and include a public consultation process.

Management Plans

- Are prepared for lands where resource management is a priority and are generally less detailed than Master Plans. These plans set goals and objectives for property management and are supplemental to their associated Masterplan Study Area. Management Plans will include a public consultation process when not being developed within the overall scope of a Masterplan.

Study Areas

- Are prepared for specific geographic areas within our watershed. The attached map (Appendix 1.0) illustrates the locations of the proposed Study Areas and the landholdings associated within each one. The Study Area groupings shown are based on a sub-watershed basis in order to gather relevant scientific data within each area, which will then allow HCA staff to glean much more valuable insight into the appropriate zone classifications for the plans.

The attached table (Appendix 2.0) highlights the priority sequence of the related plan reviews based on HCA staff input from multiple departments. The proposed timelines have been considered with regard to a number of considerations. These include current and future use of the areas, anticipated site pressures, HCA resources available and relevant ecological information for the areas. This will be used to direct where further field review and studies will be required prior to plan initiation.

Lastly, all areas have been reviewed for crossover with other plan review agencies within the HCA watershed such as the Niagara Escarpment Plan (NEP) and Greenbelt Plan. With this in mind, HCA lands that lie within the boundary of the NEP have been specifically identified as these plan reviews will need further approval by the Niagara Escarpment Commission (NEC) in order to formally ratify them.

Beginning with the Westfield Heritage Village Conservation Area Master Plan, we have strategically decided to develop all future HCA Master Plans within the guidelines of the Niagara Escarpment Parks and Open Spaces System (NEPOSS), which is a requirement of the NEC for any public agency NEPOSS park Master Plans. The NEPOSS policy framework ensures that the NEC, MNRF and all associated public agencies are developing plans to an appropriate level of detail and have sufficient public consultation for all proposed land improvements and uses.

STRATEGIC PLAN LINKAGE

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

- **Strategic Priority Area – Conservation Area Experience**
 - Initiatives – Update and develop master and management plans, and implement priorities to further enhance conservation areas for current and future generations.

AGENCY COMMENTS

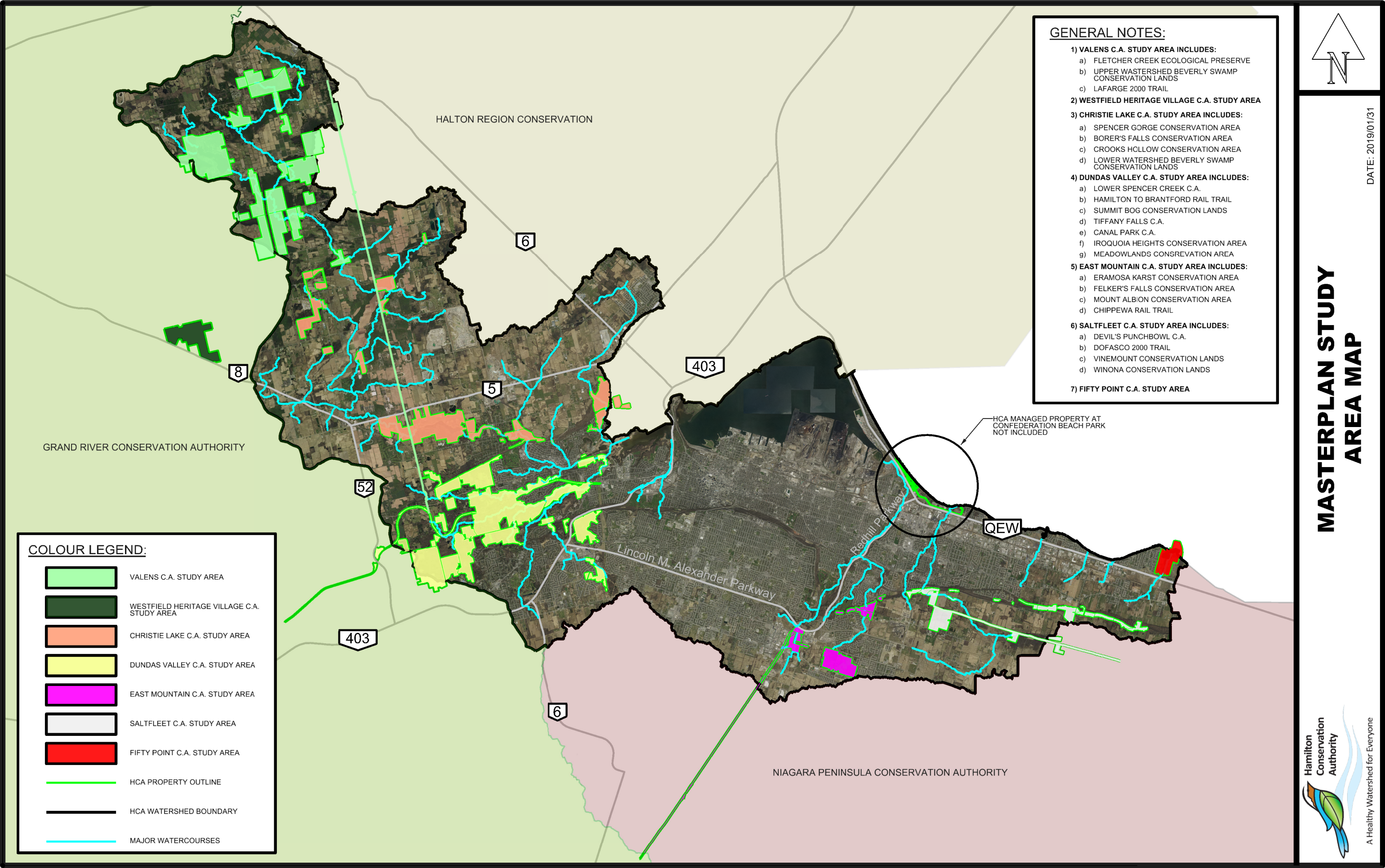
Not applicable.

LEGAL/FINANCIAL IMPLICATIONS

These plan updates are expected to utilize HCA in-house staffing expertise and resources in order to develop and implement as necessary. Third party consultation would be sought for very specific components of the plans if and when necessary. Any expenses associated to Master and Management plan development will be funded through annual HCA Capital Project budget allocations.

CONCLUSIONS

This strategy highlights a comprehensive plan for HCA staff to work toward, over the next ten years. All HCA owned property should have a current, modern, and working plan in order to effectively direct HCA staffing and resources to manage, restore and improve areas in an appropriate way.



GENERAL NOTES:

- 1) **VALENS C.A. STUDY AREA INCLUDES:**
 - a) FLETCHER CREEK ECOLOGICAL PRESERVE
 - b) UPPER WATERSHED BEVERLY SWAMP CONSERVATION LANDS
 - c) LAFARGE 2000 TRAIL
- 2) **WESTFIELD HERITAGE VILLAGE C.A. STUDY AREA**
- 3) **CHRISTIE LAKE C.A. STUDY AREA INCLUDES:**
 - a) SPENCER GORGE CONSERVATION AREA
 - b) BORER'S FALLS CONSERVATION AREA
 - c) CROOKS HOLLOW CONSERVATION AREA
 - d) LOWER WATERSHED BEVERLY SWAMP CONSERVATION LANDS
- 4) **DUNDAS VALLEY C.A. STUDY AREA INCLUDES:**
 - a) LOWER SPENCER CREEK C.A.
 - b) HAMILTON TO BRANTFORD RAIL TRAIL
 - c) SUMMIT BOG CONSERVATION LANDS
 - d) TIFFANY FALLS C.A.
 - e) CANAL PARK C.A.
 - f) IROQUOIA HEIGHTS CONSERVATION AREA
 - g) MEADOWLANDS CONSERVATION AREA
- 5) **EAST MOUNTAIN C.A. STUDY AREA INCLUDES:**
 - a) ERAMOSKA KARST CONSERVATION AREA
 - b) FELKER'S FALLS CONSERVATION AREA
 - c) MOUNT ALBION CONSERVATION AREA
 - d) CHIPPEWA RAIL TRAIL
- 6) **SALTFLEET C.A. STUDY AREA INCLUDES:**
 - a) DEVIL'S PUNCHBOWL C.A.
 - b) DOFASCO 2000 TRAIL
 - c) VINEMOUNT CONSERVATION LANDS
 - d) WINONA CONSERVATION LANDS
- 7) **FIFTY POINT C.A. STUDY AREA**

COLOUR LEGEND:

- VALENS C.A. STUDY AREA
- WESTFIELD HERITAGE VILLAGE C.A. STUDY AREA
- CHRISTIE LAKE C.A. STUDY AREA
- DUNDAS VALLEY C.A. STUDY AREA
- EAST MOUNTAIN C.A. STUDY AREA
- SALTFLEET C.A. STUDY AREA
- FIFTY POINT C.A. STUDY AREA
- HCA PROPERTY OUTLINE
- HCA WATERSHED BOUNDARY
- MAJOR WATERCOURSES

**MASTERPLAN STUDY
AREA MAP**

**Master Plans Implementation Priority List
2019 - 2029**

Study Areas	Scheduled Review	NEPOSS / NEC Designation	Current Plan
<u>Valens C.A. Study Area:</u>	2019		
Valens Conservation Area			2000
Fletcher Creek Ecological Preserve			2004
Upper Watershed Beverly Swamp Conservation Lands			1976
Lafarge 2000 Trail			2000
<u>Fifty Point C.A. Study Area:</u>	2020		
Fifty Point Conservation Area			2000
<u>Saltfleet C.A. Study Area:</u>	2021		
Saltfleet Conservation Area		✓	
Devil's Punchbowl Conservation Area		✓	1976
Dofasco 2000 Trail			2000
Vinemount Conservation Lands		✓	1979
Winona Conservation Lands		✓	1979
<u>Christie Lake C.A. Study Area:</u>	2022		
Spencer Gorge Conservation Area		✓	2013
Christie Lake Conservation Area		✓	2006
Borer's Falls Conservation Area		✓	2002
Crooks Hollow Conservation Area		✓	2014
Lower Watershed Beverly Swamp Conservation Lands			1976

**Master Plans Implementation Priority List
2019 - 2029**

Study Areas	Scheduled Review	NEPOSS / NEC Designation	Current Plan
<u>Dundas Valley C.A. Study Area:</u>	2024		
Dundas Valley Conservation Area		✓	1997
Lower Spencer Creek Conservation Area			2010
Hamilton to Brantford Rail Trail		✓	2009
Summit Bog Conservation Lands		✓	1978
Tiffany Falls Conservation Area		✓	2009
Canal Park Conservation Area			
Iroquoia Heights Conservation Area		✓	1993
Meadowlands Conservation Area			2012
<u>East Mountain C.A. Study Area:</u>	2026		
Eramosa Karst Conservation Area			2015
Felker's Falls Conservation Area		✓	1980
Mount Albion Conservation Area		✓	2000
Chippewa Rail Trail			1998
Completed Studies:			
<u>Westfield Heritage Village C.A. Study Area:</u>	2030		
Westfield Heritage Village Conservation Area			2018



Report

TO: Conservation Advisory Board

FROM: Lisa Burnside, Chief Administrative Officer (CAO)

RECOMMENDED BY: Gord Costie, Director Conservation Area Services

PREPARED BY: Rondalyn Brown and Peter Lloyd, Westfield Staff

DATE: February 14, 2019

RE: 2018 Westfield Heritage Village Artifact Donation Acquisition Report

STAFF RECOMMENDATION

THAT the HCA staff recommends to the Conservation Advisory Board:

THAT the Westfield Heritage Village 2018 Artifact Acquisitions and Deaccession List be accepted as the artifacts added to, or removed from, the Westfield Heritage Village and the Hamilton Conservation Authority collection.

BACKGROUND

Westfield Heritage Village has a comprehensive Collections Management Policy approved by the Board of Directors.

Westfield is a living history museum dedicated to the collection, preservation and presentation of objects associated with the cultural and natural history of this area. Westfield maintains an artifact and archival collection consisting of more than 25,000 objects reflecting the social, cultural and material history of the area. This policy affirms the museum's commitment to managing this collection according to current professional standards for acquisition, preservation, documentation, research and use of the artifact collection.

Objects acquired for the collection will be consistent with the mandate, goals and priorities of the site. Objects collected will normally represent the types of material goods that would have been locally manufactured, routinely available or the product of local activity in Southern Ontario from the period 1790-1925. They must be in a condition suitable for display or research. The decision to accession an artifact into the Westfield Collection will be made by the Collections Committee through consultation with the Collections Officer and the Westfield Manager. A list of accessioned items will be provided to the Hamilton Conservation Authority at year end.

Deaccessioning is the permanent removal of an object from the collection. The deaccession process will be undertaken according to the highest professional standards and ethical practices, and will be fully documented. The decision to deaccession an artifact, as well as the subsequent methods of disposal, will be made by the Collections Committee, through consultation with the Collections Officer and the Westfield Manager. A list of deaccessioned items will be provided to the Hamilton Conservation Authority at year end.

STAFF COMMENT

Westfield staff is diligent about adhering to the very important collections management policies and museum standards to ensure the Hamilton Conservation Authority is managing the artifact collection in a professional manner.

STRATEGIC PLAN LINKAGE

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

- **Strategic Priority Area – Conservation Area Experience**
 - Initiatives – identify and support a more diverse and accessible range of programs for our conservation area users.

AGENCY COMMENTS

Not applicable.

LEGAL/FINANCIAL IMPLICATIONS

In accepting these artifacts the Hamilton Conservation Authority assumes liability and responsibility for the care and protection of the artifacts as per the Collections Management Policy.

CONCLUSIONS

Adding the artifacts on this list to the Westfield Heritage Village collection will preserve important pieces of local history and enhance the experience for visitors.

Westfield Donations List Complete for 2018

- Pewter jug and 5 medicine bottles
- Medicine spoon
- Wood Stove, Guelph stove works
- Collection of local wills
- Jacquard bed spread
- Post card book, Hamilton
- Feather tick
- Adze and 6 rose head nails
- Two pin cushions
- Two maple spiles
- Chenille Bed spread
- Black skirt, wool, 1900
- Rug beater
- TH&B train tickets and baggage cards
- Tooth paste pot
- Soda Cracker Box
- Bound annual of German Newspaper
- Book, botany, 1886
- Wheel Barrow
- Baptismal font Rock Chapple Methodist Church
- Group of Troy Lodge artifacts
- Wentworth County Atlas 1903
- Voting box
- Three framed photographs
- Seven COOF membership ledgers
- Odd Fellows and Free Masons pins and regalia
- Large shipping crate, stenciled
- Two gavels
- Wooden chest
- Carpenter's level
- COOF Rockton framed pledge and membership board
- Doctor's flechette
- Ceramic jardeniere (plant stand)

Westfield Deaccession List: Summer 2018

Number	Item	Condition
X975.240.1	White card. Lace samples	Poor
X975.235.1	Green display card. Lace samples	Poor
987.2137.1	Wood carriage back, wheeled bottom	Poor
987.2650.1	Metal linked hooks	Poor
973.763	Wood shelf. Carved patterns	Poor
9??	Metal pin, small	Poor
987.2135.1	Wooden board, artifact fragment	Poor
X970.723.1	Wood template. Pointed shape	Poor
998.199.135a	Long metal cover. Hooked	Poor
987.1675.1	Wrench	Poor
X970.660.1	Wood mallet	Poor
987.1667.1	Dual looped wrench	Poor
980.217.1	Spade head	Poor
976.397.1	5 spikes, linked	Poor
987.2678.1	Fire place poker	Poor
987.1860.1	Unknown heavy, metal object	Poor
987.2653.1	3-pronged pitch fork head	Poor
976.387.1	Rope pulley	Poor
987.2656.1	Shovel head	Poor
987.2791.1	Metal welding compressor	Poor
987.2382.1	Mallet. Long handle.	Poor
987.1731.1	Metal disk. 30-holed	Poor

X970.948.4	Crude chandelier. Wood	Poor
N.N.	Bell pump organ	Poor
987.2147.1	Pump organ	Poor
987.2152.1	Cracked tin	Poor
X972.416	Tea tin	Poor
X974.855.1a	Chamber pot	Poor
000.37.9	Record player	Poor
996.6.1	Barley flower bin	Poor
X972.418	Spice tin	Poor
X971.100.1	Spice tin	Poor
986.2511.1	Rusty tin	Poor
005.41.18	Wood/ leather clamp	Poor
976.384.1	Metal pulley wheel	Poor
986.871.1	White tin, large,	Poor
984.02.02	Wood lid	Poor
994.2.1	Piano. Black – Broken sound board	Poor
980.223.1	Piano, Mason & Rich. Broken sound	Poor
987.2302.1	Spool	Poor
987.2229.1	Spool	Poor
987.2283.1	Spool	Poor
987.2296.1	Spool	Poor
987.2284.1	Spool	Poor
987.2269.1	Spool	Poor
987.2278.1	Spool	Poor
987.2242.1	Spool	Poor

987.2220.1	Spool	Poor
987.2305.1	Spool	Poor
987.2225.1	Spool	Poor
987.2212.1	Spool	Poor
987.2249.1	Spool	Poor
987.2299.1	Spool	Poor
987.2217.1	Spool	Poor
987.2282.1	Spool	Poor
987.2293.1	Spool	Poor
987.2317.1	Spool	Poor
987.2273.1	Spool	Poor
987.2276.1	Spool	Poor
X974.491.1	Spool	Poor
987.2292.1	Spool	Poor
987.2235.1	Spool	Poor
987.2240.1	Spool	Poor
987.2312.1	Spool	Poor
987.2279.1	Spool	Poor
987.2230.1	Spool	Poor
987.2214.1	Spool	Poor
987.2316.1	Spool	Poor
987.2307.1	Spool	Poor
987.2321.1	Spool	Poor
987.2213.1	Spool	Poor
987.2261.1	Spool	Poor

987.2318.1	Spool	Poor
987.2267.1	Spool	Poor
987.2288.1	Spool	Poor
987.2263.1	Spool	Poor
987.2306.1	Spool	Poor
987.2315.1	Spool	Poor
987.2287.1	Spool	Poor
987.2211.1	Spool	Poor
987.2271.1	Spool	Poor
987.2250.1	Spool	Poor
987.2314.1	Spool	Poor
987.2240.1	Spool	Poor
987.2218.1	Spool	Poor
987.2208.1	Spool	Poor
987.2259.1	Spool	Poor
987.2310.1	Spool	Poor
987.2265.1	Spool	Poor
987.2222.1	Spool	Poor
987.2270.1	Spool	Poor
987.2322.1	Spool	Poor
987.2295.1	Spool	Poor
987.2234.1	Spool	Poor
987.2233.1	Spool	Poor
987.2241.1	Spool	Poor
987.2244.1	Spool	Poor

987.2378.1	Spool	Poor
987.2285.1	Spool	Poor
987.2275.1	Spool	Poor
002.0013.1	Road Grader	Poor
996.167.1	Stirrup	Poor
987.1644.1	Horse bit	Poor
987.1797.1	Pick Ax Head	Poor
983.17.14c	Small Jar	Poor
985.200.1	Hair Band	Poor
986.1772.3	Train Flag	Poor
986.1772.5	Train Flag	Poor
987.2142.1	Bicycle Tool Pouch	Poor
X970.925.1	Tin container	Poor
994.12.21	Brown Chair, Large Right Arm	Poor
994.12.20	Brown Chair, Large Right Arm	Poor
002.17.1b	Bed Frame, front	Poor
002.17.1d	Bed Side Frame	Poor
002.17.1c	Bed Support Frame	Poor
002.17.1a	Bed Back Frame	Poor
987.1005.1	Chair, Flower-Patterns, Wheels	Poor
987.999.1	Chair, Flower-Patterns, Wheels	Poor
996.150.1	Rocking Chair, Red, No Feet	Poor
X971.744.1	Package, Buck Bean Leaves	Poor
977.3.980	Package	Poor
986.1448.1	Package, Romid Pills	Poor

995.555.1a-g	Weigh Scale & Parts	Poor
X971.730.1	Package Liniment	Poor
015.16.151	Package Talcum Powder	Poor
978.449.1	Medicine Bottle	Poor
979.9.1	Medicine Bottle	Poor
978.415.1	Medicine Bottle	Poor
979.5.1	Medicine Bottle	Poor
978.429.1	Medicine Bottle	Poor
986.524.1	Medicine Bottle	Poor
978.491.1	Medicine Bottle	Poor
X971.724.1	Medicine Bottle	Poor
996.182.1	Medicine Bottle	Poor
998.38.1	Medicine Bottle	Poor
996.174.1	Medicine Bottle	Poor
986.585.1	Sloan's Liniment	Poor
996.169.1	Medicine Bottle	Poor
998.43.1	Medicine Bottle	Poor
012.109.1	Chair, Holes	Poor
986.1533.1	Chair Set, Cheap	Poor
986.1533.2	Chair Set, Cheap	Poor
986.1533.3	Chair Set, Cheap	Poor
986.1533.4	Chair Set, Cheap	Poor
986.1533.5	Chair Set, Cheap	Poor
986.1533.6	Chair Set, Cheap	Poor
980.219.1	Table, Extending Arm	Poor

X972.461	Stove	Poor
X972.462	Stove	Poor
X971.0938.1	Stove	Poor
987.2035.1	Stove	Poor
973.636	Screen, Bamboo Frame	Poor
987.3354.1	Office Chair	Poor
X970.948.1	Wood Chandelier frame	Poor
999.39.1	Metal Piece	Poor
X972.393	Artifact fragment	Poor
987.2035.1	Stove	Poor
X972.461.1	Stove	Poor
986.1978.1	Stove	Poor
986.1387.1	Stove	Poor
X972.493.1	Stove	Poor
X972.461.1	Stove	Poor
982.22.3	Hay rake	Poor
982.22.1	Hay reaper	Poor
982.22.2	Hay mower	Poor
980.215.3	Two wheel gig	Poor
987.4061.1	Field roller	Poor
987.4197.1	Tractor, gasoline, M.D.	Poor



Report

TO: Conservation Advisory Board Members

FROM: Lisa Burnside, Chief Administrative Officer (CAO)

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

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

DATE: January 25, 2019

RE: Seed Mixes Suitable for HCA Watershed

STAFF RECOMMENDATION

THAT the HCA staff recommends to the Conservation Advisory Board:

THAT the Conservation Advisory Board recommends to the Board of Directors that the Seed Mix Guidelines for the HCA Watershed be approved.

BACKGROUND

The Hamilton Conservation Authority (HCA) frequently provides recommendations for species to be included in plantings for residential, commercial and industrial developments, stormwater management facilities and other infrastructure projects, buffer zones and naturalization projects.

When making recommendations for species to be planted, HCA staff consider site and surrounding conditions, including soils, vegetation community type(s), significant or sensitive natural features, ecological functions, native status and local occurrence of species present, etc. Careful consideration of such factors as part of a planting project is important towards the conservation of the natural features present, to help control invasive species, and for the maintenance of biodiversity and ecological integrity more

generally. While HCA staff has always taken such factors into consideration when commenting on planting proposals, there currently is no official document to guide staff's recommendations.

STAFF COMMENT

HCA staff have developed the attached summary of the seed mixes that are appropriate for use within our watershed. The document is intended for use by HCA staff, and to also be distributed to external parties and proponents of development as necessary. The primary purpose of this document is to clarify HCA's expectations for appropriate seed mixes (species) for planting in different scenarios, and to promote consistency in staff's planting recommendations when reviewing development, infrastructure and naturalization projects being undertaken by external, private developers and landowners.

With the exception of temporary cover/nurse crops, all species included in the guidelines are native and locally common. This encourages a diverse native community that is resilient. Invasive/exotic species are avoided as they may out-compete native species for resources and can undermine the ecological integrity of restoration sites and adjacent natural areas. Most seed mixes include a high number of species to promote diversity and the establishment of a system that can withstand a variety of soil and moisture conditions.

STRATEGIC PLAN LINKAGE

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

- **Strategic Priority Area – Natural Heritage Conservation**
 - Initiatives: promote sustainable development by working with the City of Hamilton on natural heritage issues and undertake the HCA plan input and review program
 - 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

None.

CONCLUSIONS

HCA currently has no formal guideline document to use when providing recommendations on development proposals that require planting of terrestrial vegetation. The development of a guideline document will promote consistency in species planted as part of projects undertaken when staff review planting plans associated with development/infrastructure and restoration projects carried out by external/private landowners. It will also ensure that recommendations include native, common species that will not undermine the ecological integrity of planting sites or adjacent natural areas.

Attachment A – Seed Mixes Suitable for Our Watershed Document



Seed Mixes Suitable for our Watershed



A Healthy Watershed for Everyone

Hamilton Conservation Authority (HCA) has developed a variety of seed mixes that are appropriate for use within our watershed. These seed mixes are suitable for restoration and naturalization projects, as well as for planting plans for stormwater management facilities. One of the main purposes of this document is to standardize the planting recommendations to development projects.

With the exception of temporary cover/nurse crops, all species are native and locally common. Invasive/exotic species are avoided as they may out-compete native species for resources and can undermine the ecological integrity of restoration sites and adjacent natural areas. Most seed mixes include a high number of species to promote diversity and the establishment of a system that can withstand a variety of soil and moisture conditions. Proponents can select any supplier to purchase their seed mixes but HCA recommends suppliers who obtain their seeds locally. Seed zones 34, 37 and 38 are preferred.

Application Rate: These seed mixes should be applied at a rate of 22 - 25 kg/ha (21-23 lbs/acre) or at a rate of 250g/90 m² (1/2lb/1000 sq. ft) for smaller areas.

Wetland Restoration Mix

Common Name	Latin Name	City of Hamilton Status	% of Mix
Creeping Bent Grass	<i>Agrostis stolonifera</i>	Common	20
Canada Anemone	<i>Anemonastrum canadense</i>	Common	1
Swamp Milkweed	<i>Asclepias incarnata</i> ssp. <i>incarnata</i>	Common	1
Swamp Aster	<i>Symphyotrichum puniceum</i> var. <i>puniceum</i>	Common	1
Canada Blue-joint	<i>Calamagrostis canadensis</i>	Common	1
Bebb's Sedge	<i>Carex bebbii</i>	Common	1
Awl- fruited Sedge	<i>Carex stipata</i>	Common	1
Fox Sedge	<i>Carex vulpinoidea</i>	Common	20
Virginia Wildrye	<i>Elymus virginicus</i> var. <i>virginicus</i>	Common	20
Spotted Joe-Pye-Weed	<i>Eutrochium maculatum</i>	Common	1
Common Boneset	<i>Eupatorium perfoliatum</i>	Common	1
Grass Leaved Goldenrod	<i>Euthamia graminifolia</i>	Common	1
Fowl Mannagrass	<i>Glyceria striata</i>	Common	1
Fowl Bluegrass	<i>Poa palustris</i>	Common	20
Dark Green Bulrush	<i>Scirpus atrovirens</i>	Common	6
Canada Goldenrod	<i>Solidago canadensis</i>	Common	1
Blue Vervain	<i>Verbena hastata</i>	Common	3
			100

Low Maintenance Retention Basin Seed Mix

Common Name	Latin Name	City of Hamilton Status	% of Mix
Rough Bentgrass	<i>Agrostis scabra</i>	Common	25
Fox Sedge	<i>Carex vulpinoidea</i>	Common	25
Virginia Wildrye	<i>Elymus virginicus</i> var. <i>virginicus</i>	Common	25
Fowl Bluegrass	<i>Poa palustris</i>	Common	25
			100

Upland Native Meadow Mix

Common Name	Latin Name	City of Hamilton Status	% of Mix
Common Evening Primrose	<i>Oenothera biennis</i>	Common	25
Canada Anemone	<i>Anemonastrum canadense</i>	Common	1
Common Milkweed	<i>Asclepias syriaca</i>	Common	2
Heart Leaved Aster	<i>Symphotrichum cordifolium</i>	Common	1
New England Aster	<i>Symphotrichum novae-angliae</i>	Common	1
Granular Sedge	<i>Carex granularis</i>	Common	15
Virginia Virgin's-bower	<i>Clematis virginiana</i>	Common	1
Virginia Wildrye	<i>Elymus virginicus</i> var. <i>virginicus</i>	Common	40
Grass-leaved Goldenrod	<i>Euthamia graminifolia</i>	Common	1
Wild Bergamot	<i>Monarda fistulosa</i>	Common	1
Black-eyed Susan	<i>Rudbeckia hirta</i>	Common	10
Canada Goldenrod	<i>Solidago canadensis</i>	Common	2
			100

Bank Seed Mix

Common Name	Latin Name	City of Hamilton Status	% of Mix
Creeping Bentgrass	<i>Agrostis stolonifera</i>	Common	30
New England Aster	<i>Symphotrichum novae-angliae</i>	Common	1
Fox Sedge	<i>Carex vulpinoidea</i>	Common	25
Bottlebrush Grass	<i>Elymus hystrix</i>	Common	7
Fowl Mannagrass	<i>Glyceria striata</i>	Common	7
Fowl Bluegrass	<i>Poa palustris</i>	Common	25
Black-eyed Susan	<i>Rudbeckia hirta</i>	Common	5
			100

Wet Meadow Marsh Mix

Common Name	Latin Name	City of Hamilton Status	% of Mix
Swamp Milkweed	<i>Asclepias incarnata</i> ssp. <i>incarnata</i>	Common	1
New England Aster	<i>Symphyotrichum novae-angliae</i>	Common	1
Swamp Aster	<i>Symphyotrichum puniceum</i> var. <i>puniceum</i>	Common	1
Fox Sedge	<i>Carex vulpinoidea</i>	Common	35
Virginia Wildrye	<i>Elymus virginicus</i> var. <i>virginicus</i>	Common	35
Spotted Joe-Pye-Weed	<i>Eutrochium maculatum</i>	Common	1
Harlequin Blue Flag	<i>Iris versicolor</i>	Common	1
Soft Rush	<i>Juncus effusus</i> ssp. <i>solutus</i>	Common	5
Rice Cutgrass	<i>Leersia oryzoides</i>	Common	1
Square-stemmed Monkeyflower	<i>Mimulus ringens</i>	Common	1
Dark-green Bulrush	<i>Scirpus atrovirens</i>	Common	8
Cottongrass Bulrush	<i>Scirpus cyperinus</i>	Common	1
Blue Vervain	<i>Verbena hastata</i>	Common	9
			100

Early Succession Wet Meadow Mix

Common Name	Latin Name	City of Hamilton Status	% of Mix
New England Aster	<i>Symphyotrichum novae-angliae</i>	Common	1
Swamp Aster	<i>Symphyotrichum puniceum</i> var. <i>puniceum</i>	Common	1
Bebb's Sedge	<i>Carex bebbii</i>	Common	4
Fringed Sedge	<i>Carex crinita</i>	Common	1
Pointed Broom Sedge	<i>Carex scoparia</i>	Common	2
Awl-fruited Sedge	<i>Carex stipata</i>	Common	4
Fox Sedge	<i>Carex vulpinoidea</i>	Common	25
Showy Tick-trefoil	<i>Desmodium canadense</i>	Common	1
Virginia Wildrye	<i>Elymus virginicus</i> var. <i>virginicus</i>	Common	25
Tall Mannagrass	<i>Glyceria grandis</i>	Common	2
Soft Rush	<i>Juncus effusus</i> ssp. <i>solutus</i>	Common	4
Path Rush	<i>Juncus tenuis</i>	Common	3
Great Blue Lobelia	<i>Lobelia siphilitica</i>	Common	1
Wild Bergamot	<i>Monarda fistulosa</i>	Common	1
Fowl Bluegrass	<i>Poa palustris</i>	Common	25
			100

Black Walnut Tolerant Species

Common Name	Latin Name	City of Hamilton Status	Sun	Moisture
Black-eyed Susan	<i>Rudbeckia hirta</i>	Common	Full	Dry
Smooth Aster	<i>Symphyotrichum laeve</i>	Common	Full	Dry
New England Aster	<i>Symphyotrichum novae-angliae</i>	Common	Full	Dry/Moist
Sky Blue Aster	<i>Symphyotrichum oolentangiense</i>	Common	Full	Dry
Wild Bergamot	<i>Monarda fistulosa</i>	Common	Full	Dry/Moist
Michigan Lily	<i>Lilium michiganense</i>	Common	Full	Moist
Red-osier Dogwood	<i>Cornus sericea</i>	Common	Full	Moist
Canada Wild-ginger	<i>Asarum canadense</i>	Common	Part/Shade	-----
Tall Anemone	<i>Anemone virginiana</i> var. <i>virginiana</i>	Common	Part/Shade	-----
Jack-in-the-pulpit	<i>Arisaema triphyllum</i> ssp. <i>triphyllum</i>	Common	Part/Shade	-----
Heart-leaved Aster	<i>Symphyotrichum cordifolium</i>	Common	Part/Shade	-----
Tall Bellflower	<i>Campanula americanum</i>	Common	Part/Shade	-----
Virginia Waterleaf	<i>Hydrophyllum virginianum</i>	Common	Part/Shade	-----
Spotted Geranium	<i>Geranium maculatum</i>	Common	Part/Shade	-----
Woodland Sunflower	<i>Helianthus divaricatus</i>	Common	Part/Shade	-----
Old-field Cinquefoil	<i>Potentilla simplex</i>	Common	Part/Shade	-----
Zigzag Goldenrod	<i>Solidago flexicaulis</i>	Common	Part/Shade	-----
Woolly Blue Violet	<i>Viola sororia</i>	Common	Part/Shade	-----
Bottlebrush Grass	<i>Elymus hystrix</i>	Common	Part/Shade	-----

Cover Crop

A cover crop should be utilized with each of the seed mixes. The cover crop will act as a nurse crop, providing short term erosion control and weed control. Note that winter will kill both oat plants and oat seed, so there is no carry over from year to year.

Hamilton Conservation Authority does not support the use of Annual Rye (*Lolium multiflorum*) as a nurse crop. Recent research indicates that Annual Rye can inhibit the growth of other species thereby hindering the establishment of native vegetation. It can also be confused with and potentially hybridize with Perennial Rye (*Lolium perenne*).

While utilizing a single species as a nurse crop may be acceptable, a mix of two (2) or more species establishes quicker providing enhanced coverage and stabilization. Some suggested cover crops are provided below.

Common Name	Latin Name
Cultivated Oats	<i>Avena sativa</i>
Buckwheat	<i>Fagopyrum esculentum</i>
Canada Wildrye	<i>Elymus canadensis</i>
Creeping Bentgrass	<i>Agrostis stolonifera</i>



Memorandum

TO: Board of Directors

FROM: Lisa Burnside, Chief Administrative Officer (CAO)

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

PREPARED BY: Jonathan Bastien, Water Resources Engineering

DATE: February 25, 2019

RE: Current Watershed Conditions as of February 25, 2019

CURRENT WATERSHED CONDITIONS – February 25, 2019

Current Water Levels in Major Area Watercourses

Water levels and flows are currently slightly elevated to elevated in all watercourses [Upper Spencer Creek at Safari Road, Middle Spencer Creek at Highway 5, and Lower Spencer Creek at Market Street, Ancaster Creek at Wilson Street, Redhill Creek at Barton Street, and Stoney Creek at Queenston Road].

However, at all gauges there are currently no watercourse flooding or significant public safety concerns.

Current Lake Ontario Water Levels

Currently, Lake Ontario is about 20 cm above average water levels for this time of year. The Lake Ontario mean daily water level is currently approximately 74.80 m IGLD85.

Current Storages in HCA Reservoirs

Based on current reservoir levels at Christie Lake Dam (approximately 766.20 ft.), the reservoir is presently slightly above typical winter operating level range (765 to 766 ft.),

and is at about 22 percent of its preferred maximum (summer) storage capacity (corresponding to a water level of 773 ft.).

Based on current reservoir levels at Valens Dam (274.15 m), the reservoir is presently near its typical winter operating level range (274.15 - 274.30 m), and is at about 42 percent of its preferred maximum (summer) storage capacity (corresponding to a water level of 275.5 m).

Current Soil Conditions

Soil moisture in the surface and root-zone soils are expected to be moist to wet and fully to partially frozen.

RECENT STORM EVENTS

During the period of mid-January to now, there were no significant watercourse flooding or Lake Ontario Shoreline erosion / flooding events. However, three storm events warranted issuing flood messages and close monitoring of conditions.

Watercourse Flooding

February 5:

Partial melting of the snowpack occurred during the period between February 3 to 8. In addition, a total of approximately 15 mm of freezing rain was received across the watershed on February 6.

This snowmelt resulted in elevated water levels and flows in area watercourses, with the maximum water levels occurring on February 5. In addition, there was also the expectation (unobserved) of localized flooding of low-lying areas that typically flood during higher WLs, including natural floodplain, portions of farmed fields, and wooded areas (particularly in Upper and Middle Spencer Creek, as well as Upper Stoney Creek watersheds).

However, there were no reports, observations, or expectations, of widespread or significant localized watercourse flooding.

Prior, during, and after this storm event, HCA engineering staff closely monitored conditions, and issued the following messages to communicate the potential watercourse flooding conditions to the City and public:

- Flood Watch on February 4
- Updated Flood Watch on February 6
- Termination of Flood Watch on February 8

February 24:

Partial melting of the snowpack occurred during the period between February 21 to 24, with the majority of the melt occurring on February 24. In addition, a total of approximately 10 mm of rain / freezing rain was received across the watershed on February 24.

This snowmelt and rain resulted in elevated water levels and flows in area watercourses, with the maximum water levels occurring on February 24. In addition, there was also the expectation (unobserved) of localized flooding of low-lying areas that typically flood during higher WLs, including natural floodplain, portions of farmed fields, and wooded areas (particularly in the Upper Stoney Creek watershed).

However, there were no reports, observations, or expectations, of widespread or significant localized watercourse flooding.

Prior, during, and after this storm event, HCA engineering staff closely monitored conditions, and issued the following messages to communicate the potential watercourse flooding conditions to the City and public:

- Watershed Conditions Statement (Flood Outlook) on February 22nd

Lake Ontario Shoreline Flooding and Erosion

Forecasts expected sustained east winds of up to 35 km/hr, with wind gusts of up to 65 km/hr.

In the lead up to, and during, this potential storm event, HCA engineering staff closely monitored conditions, and issued the following messages to communicate the potential Lake Ontario Shoreline erosion / flooding to the City and public:

- Watershed Conditions Statement (Flood Outlook) on February 8th
- Flood Watch – Lake Ontario Shoreline on February 10th
- Termination of Flood Watch – Lake Ontario Shoreline on February 13th

Maximum Lake Ontario water levels in the area were approximately 75.2 m IGLD85 on February 12. Maximum wave heights of up to 2.1 m were expected. However, there were no reports or observations of significant shoreline erosion or flooding.

RECENT PRECIPITATION SUMMARY

The total precipitation amounts received in the HCA watershed over the last few months are average, and do not indicate drought conditions.

FORECASTED WATERSHED CONDITIONS

Watercourse Flooding

There are currently no significant rainfall or snowmelt events (+20 mm in a day) anticipated for the watershed over the next 2 weeks.

Lake Ontario Shoreline Erosion/Flooding

There are currently no significant Lake Ontario Shoreline erosion / flooding events anticipated within the watershed over the next 2 weeks.

According to International Lake Ontario – St. Lawrence River Board weekly briefing information, Lake Ontario water levels are expected to remain above seasonal average values through the winter unless exceedingly dry conditions return.

SYNOPSIS

As of February 25, 2019, no responses are required concerning significant watercourse flooding, Lake Ontario shoreline erosion / flooding, or watershed drought.



Upcoming 2019 HCA & Partner Events

Sundays at Westfield

12:30 – 4:00 pm

Westfield Heritage Village

1049 Kirkwall Road, Rockton, ON L0R 1X0

Every Sunday and public holiday from March to the end of October you can immerse yourself in Westfield's unique historic setting. Authentically costumed volunteers will take you back to earlier times and places through fun and educational demonstrations and activities. Westfield has many historical buildings to visit, including log homes, a one room schoolhouse, railway station, print shop, inn and blacksmith's shop. Step up to the counter at the General Store for sweet treats and stop by the Gift Shop for unique finds. You can also enjoy Westfield's trails and natural areas, set on 500 beautiful acres. For more information visit www.westfieldheritage.ca

Maple Syrup Festival

March 3, 10, 17, 24 & 31

Wednesday, March 13, Thursday, March 14 of March Break

10:00 – 4:00 pm

Westfield Heritage Village

1049 Kirkwall Road, Rockton, ON L0R 1X0

Discover one of Canada's most time-honoured and tasty traditions. Explore historical and modern methods of making of maple syrup from the tree to the table. Families can purchase and enjoy a delicious, reasonably-priced pancake breakfast. For more information visit www.westfieldheritage.ca