

ANNUAL REPORT 2019

Hamilton Conservation Authority



**Hamilton
Conservation
Authority**

A Healthy Watershed for Everyone

Our **Vision** - where we want to be

A healthy watershed for everyone

Our **Mission** - what we do

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



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Message from HCA's Board Chairman and CAO

This, our 2019 annual report, not only marks our first year of progress towards our new 5-year strategic plan goals but is also a rebirth of the HCA Annual Report.

While we remain grounded to our roots to protect people and property from natural hazards, we are now more than ever, connecting people with nature and launched a new and revitalized mission, vision and logo along with the new 5-year strategic plan.

Staff and the Board of Directors have made strong progress in all five priority areas. In 2019, we provided orientation to new Board members regarding the strategic plan and toured the watershed to assist our Board in setting strategic directions and priorities. We updated policies and provided training to staff to optimize organization performance, purchased land, carried out master planning work and undertook flood forecasting and monitoring for watershed health. We also engaged residents and the community with planting and invasive species removal for the benefit of our watershed, and invested in the further development of the Saltfleet Conservation Area to offset the impacts of climate change. We met with Provincial ministry staff and revisited our founding principles from our 1958 Spencer Creek Conservation Report to share our history and origins of our programs and services, all the while balancing the needs of the one million visitors to our owned and managed conservation areas.

We have much to be proud of. Many significant projects and programs were undertaken in the past year. These accomplishments are the result of the hard work and dedication of our professional staff, whose passion and commitment for our organization and watershed is tremendous. All of this would not have been possible without the support of many volunteers and the ongoing support of our major funder and partner, the City of Hamilton. We are pleased to highlight that work in the following pages and we look forward to continued progress in 2020.



Councillor Lloyd Ferguson
HCA Board Chairman



Lisa Burnside
HCA CAO

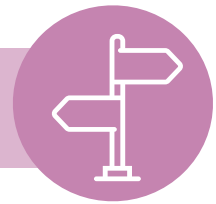




- **\$14 million**
in operating revenue collected
- **66% of revenues self generated**
- **Top three** self generated funding sources are: gate admission, marina operations and camping fees
- **70,000 followers** on HCA social media channels
- **2.3 million page views** to our HCA websites



Organizational Excellence



Organizational Excellence is focused on ensuring corporate and financial viability and the HCA's relevance in the community.

2019 Highlights

- Funding relationships resulted in over half a million dollars in grants for projects such as summer student positions, Canal Park, flood plain mapping, design work for Saltfleet Conservation Area and species at risk.
- Supported a dynamic work culture, safety and professional development and effectiveness of staff through:
 - Enhancing staff communication skills with training to assess individual communication styles as well as online training to enhance and develop leadership and management skills with the focus on leading people, presentation skills, coaching and time management.
 - Improving knowledge of common invasive plant species in our watershed through in house workshops for conservation area and construction staff.
 - Undertaking an external Health & Safety Audit to identify areas of strengths and opportunities for the HCA safety program. These findings will be implemented in 2020.
- Streamlining several policies to enhance business service delivery including:
 - An updated Purchasing Policy to ensure competitive, fair and open purchasing processes that advance HCA's commitment to economic, environmental, and social responsibility.
 - An updated Land Securement Strategy to identify priority lands for the next 10 years.
 - Implemented a Client Services Standard Commitment for our planning and regulations program to provide timely reviews and approvals as well as continuous process improvements.
- Promoted our new 5-year Strategic Plan and logo on Cable 14, at the City of Hamilton, at the Township of Puslinch budget presentation, as well as at the Foundation Annual General Meeting, and shared through HCA media channels.
- Undertook key first steps to modernize the HCA records system with the creation of an in house records management committee, adoption of a records management policy and records retention schedule and completing 40% of the physical records inventory process.
- Collaborated and shared services and expertise through numerous forums and working groups with neighbouring conservation authorities and other partners, including the Latornell Conservation Symposium and Conservation Areas Workshop. HCA staff participated, presented and assisted with the organization of the events.



- **84** permits were issued in total
- **10** Major permits were issued
- **100%** of Major permit applications were processed within the 90 day service target in our Client Service Standards
- **74** Minor permits were issued
- **91%** of Minor permit applications were processed within the 30 day service target in our Client Service Standards
- **30** flood forecasting and warning messages
- **8** sites monitored for water levels
- **10** sites monitored for precipitation
- **4** sites monitored for snow pack





Water Management is undertaken to protect the watershed for people, property, flora and fauna, and natural resources through flood and erosion control, water quality programs, low flow augmentation and adaption strategies to adapt to changing climatic conditions.

2019 Highlights

- Undertook flood plain mapping for the Stoney Creek Numbered Watercourses, Battlefield Creek and Stoney Creek.
- Enhanced flood control infrastructure, including two major dam projects funded through the Provincial Water and Erosion Control Infrastructure funding program for:
 - Paint and corrosion removal and mechanical and electrical upgrades to radial gates at Christie Lake dam; and
 - Concrete maintenance and repairs at Valens Lake dam.
- Reviewed a combined total of 176 permit applications and planning applications to provide for the protection of people and property from natural hazards.
- Monitored water quality in Spencer, Chedoke, Ancaster and Borer's Creeks. This is part of on-going work with the City of Hamilton and partners on the Hamilton Harbour Remedial Action Plan (HHRAP). Annual monitoring report was completed and submitted to HHRAP, the City of Hamilton and the Ministry Environment, Conservation and Parks.
- Continued to invest in monitoring programs and networks, including assessing impacts of nutrient and sediment loading through:
 - Provincial water quality and groundwater quality monitoring that was completed for six surface water sites and seven groundwater sites.
 - Annual Rothsay water quality sampling program to assess and confirm no water quality issues with regards to effluent discharges to watercourse and Christie Lake.
 - Annual City of Hamilton water monitoring projects including groundwater well inspections at 85 wells, groundwater well water quality sampling at 33 wells, and erosion site monitoring at 22 sites.
- Continued stewardship programs for restoration projects including:
 - Implementing 18 stormwater projects through the Low Impact Development grant program. This includes 13 disconnected downspouts, 3 rain barrel installations, 1 rain garden and 1 permeable pavement site, resulting in the diversion of over 600,000 litres of stormwater from the combined sewer system in urban Hamilton.
- Participated as a member of the Bay Area Climate Change Council.

- **4,597** hectares (11,360 acres) of land is owned or managed by HCA, which represents approximately 10% of our watershed area
- **772** hazard trees were removed by HCA forestry staff from conservation areas and rental properties
- **513** ash trees that were affected by Emerald Ash Borer were removed
- **4** carp (only 2 adults and 2 juveniles) were observed following the 2018 carp die-off at Valens Lake
- **1** new native fish species. Yellow Bullhead was recorded at Valens Lake Conservation Area
- Through masterplan surveys, ecology staff identified:
 - **400** species of plants in the Beverly Swamp
 - **25%** of all plant species found in the watershed are from the Beverly Swamp
 - **325** plant species in the Fletcher Creek Ecological Preserve
 - **35** different plant communities
 - **65** different bird species



Natural Heritage Conservation

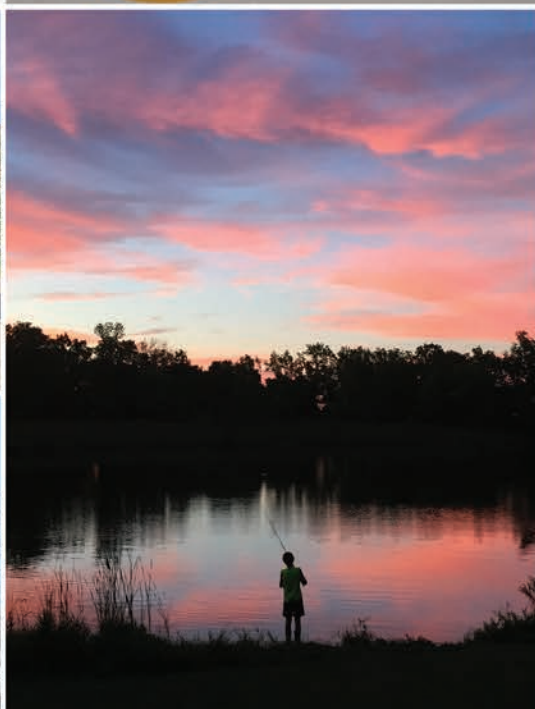


Natural Heritage Conservation is the conservation, restoration and enhancement of watershed natural areas and ecology.

2019 Highlights

- Invested in the further development of the Saltfleet Conservation Area to offset the impacts of climate change:
 - Acquired 10.18 hectares (25.16 acres) of land, bringing the total size of the conservation area to 108.7 hectares (267.12 acres).
 - Undertook background studies and a design plan for the establishment of two wetlands as a part of the Wetland Restoration Program.
- Carried out invasive species control and habitat restoration projects, including:
 - Working with volunteers to remove Common Buckthorn at Borer's Falls Conservation Area and control Dog Strangling Vine at the York Road and Lower Spencer Creek properties.
 - Protection of endangered Red Mulberry habitat through removal of thousands of Common Buckthorn plants to support Provincial recovery plan efforts for one of the largest remaining Red Mulberry populations in Canada.
 - Partnered with the City of Hamilton for gypsy moth spraying, with 3 hectares of HCA lands in the Dundas Valley being treated.
- Enhanced the natural heritage features of the Eramosa Karst Conservation Area through a buffer planting project along Rymal Road with funding from the Friends of Eramosa Karst.
- Continued and expanded aquatic and terrestrial monitoring programs for the purposes of assessing watershed health:
 - Monitored 10 Ecological Monitoring and Assessment Network (EMAN) plots to assess tree health, ground vegetation and tree regeneration in HCA's Conservation Areas.
 - Conducted bird monitoring and deer browse surveys in the Dundas Valley and Iroquois Heights Conservation Areas to contribute to the assessment of forest health.
 - Completed an aerial deer survey to identify the number of deer wintering in the Dundas Valley and Iroquois Heights Conservation Areas.
 - Monitored watercourses throughout the watershed, including 26 sites for benthic invertebrates, 18 sites for fish, and 20 sites for temperature.
 - Conducted monitoring of completed restoration projects, including the Christie Lake. Conservation Area Pond Decommissioning and Stream Restoration Project, and the Lower Spencer Creek Fish Habitat Enhancement Project.
 - Installed and monitored 200 Willow and Dogwood plantings at Fifty Point Conservation Area for the purpose of stream corridor habitat enhancement.

- **1,000,000+** people visited HCA's owned and managed conservation areas
- **100%** of HCA electrical campsites at Valens Lake and Fifty Point were reserved every weekend from June to October
- **15,000** visitors attended the Christie Antique & Vintage Shows
- **6,000+** people purchased an HCA Membership Pass
- **37** film shoots were hosted at HCA conservation areas



Conservation Area Experience



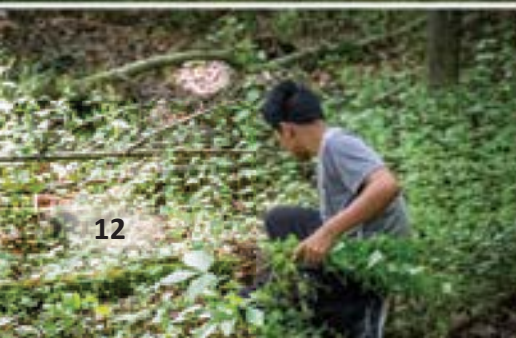
Conservation Area Experience is the provision of high quality, diverse conservation areas that promote outdoor recreation, health and well-being and strengthen public awareness of the importance of being in or near our conservation areas.

2019 Highlights

- Updated and developed the Valens Lake Conservation Area Master Plan and the Fletcher Creek, Beverly Swamp and Lafarge 2000 Trail Management Plans with the work being done in-house by HCA staff which included ecological surveying of 1535 hectares of land and three public consultation sessions.
- Developed a Board approved visitor and parking management strategy document to guide visitation and parking issues at HCA conservation lands.
- Incorporated the pilot shuttle bus service for Spencer Gorge Conservation Area as an ongoing part of the Christie Lake Conservation Area operations.
- Invested in projects to enhance and expand recreation experiences including:
 - Completing Canal Park viewing platform.
 - Improving over 700 metres on the Dofasco Trail boardwalk with new wood.
 - Completing the conversion of Merrick Orchard pavilion from its previous historical use as a cider shack.
 - Replacing trail bridge and rerouting trail to Dundas Peak at Spencer Gorge Conservation Area.
 - Assessing 115.4 kilometres of HCA trails for accessibility using the High Efficiency Trail Assessment Process (HETAP).
 - Undertaking entrance improvements at Westfield Heritage Village Conservation Area, including a revitalized gatehouse, automatic gates, front parking lot with lighting and work was also undertaken for water system upgrades and expansion.
 - Completed a design plan for protection of Lake Ontario shoreline at Fifty Point Conservation Area.
- Worked with partners and HCA representatives on committees and councils for the Cootes to Escarpment Program and the Hamilton Burlington Trails Council.
- Identified revenue generation investments and opportunities in our conservation areas through:
 - Successfully obtaining site plan and building permits for new seasonal cabins at Valens Lake. Construction is underway with occupancy in 2020.
 - Purchasing a new marine mobile boatlift for the Fifty Point Conservation Area Marina, with larger boat handling capacity. This allows HCA to access an additional new market of boat owners.
 - Adding a new pay and display machine at Tew Falls parking lot.



- **200+** schools participated in outdoor environmental and cultural heritage programs
- **Schools from Texas and France** visited Westfield Heritage Village
- **23** volunteer events were hosted
- **824** volunteers donated their time which translates to:
- **1,778+** volunteer hours worked
- **865** native trees planted by volunteers
- **485** bags of garbage collected by volunteers
- **93** bags of invasive species removed by volunteers



Education and Environmental Awareness



Education and Environmental Awareness is the opportunity to provide outdoor learning experiences for students, teachers and the community, increasing knowledge and awareness of the value of our environment and heritage.

2019 Highlights

- Enhanced outdoor environmental programs, including a new Invasive Species Program, with a portion of the experience focused on the removal of invasive species from the Dundas Valley. This resulted in:
 - High school students removing 60 garbage bags of Garlic Mustard over three weeks. Interpretive signage was created to educate the public on the students' work and inform them of upcoming pull events and how to remove Garlic Mustard from their own properties.
 - Over 1,000 Gypsy Moth egg masses being scraped from trees by students and later destroyed.
 - Students trimming dead branches, creating rabbit habitat shelters, and removing invasive European Buckthorn to improve forest health.
- Westfield's Maple Syrup program increased its numbers by 50%. There is also a growing interest in our Indigenous program, "When Two Paths Meet", which provides students and adults the ability to participate in education and which supports awareness and Reconciliation.
- Enhanced stewardship programs for both urban and rural areas through the Hamilton Watershed Stewardship Program, including:
 - Continued administration of the City of Hamilton's Well Decommissioning Program.
 - Undertook 7 projects to manage invasive species, with improvements to 1.5 acres of meadow habitat and 1.6 acres of forest habitat.
 - Completed 9 planting projects, creating and improving 3 acres of forest habitat and 1.3 acres of wetland habitat.
 - Installed 3 habitat features, including Bird Safe snow treatment and Barn Swallow nesting habitat structures.
 - Carried out 2 natural channel enhancement projects, resulting in the enhancement and improvement of 1.7 km of streams.
 - Presented 3 Watershed Steward Awards to community landowners in recognition of their commitment to land stewardship and natural heritage conservation.
 - Hosted and attended 19 education and outreach events with 2,000 people in attendance. High lights include the Salmon Stroll, the annual Watershed Stewards Appreciation Day and several stewardship-run volunteer events.
- Promoted the connection between environmental health and human wellness through the Healthy Hikes campaign to encourage residents to step into nature at our conservation areas.

Message from the Hamilton Conservation Foundation

Who we are

The Hamilton Conservation Foundation helps protect and enhance natural and cultural legacies by raising and stewarding funds for the Hamilton Conservation Authority.

The Foundation raises funds in three key areas:

- Acquiring and Protecting Environmentally Sensitive Land
- Teaching Children About Nature
- Celebrating Cultural Heritage

2019 at a glance

In 2019, the Foundation contributed over \$535,000 to support Conservation Authority programs and projects, including:

- Outdoor Environmental Education – \$117,379
- Canal Park Viewing Platform construction – \$100,000
- Dofasco 2000 Boardwalk Restoration – \$100,000
- Merrick Cider Shack conversion – \$25,000



New Initiatives in 2019

- Launch of a new Tribute Tree Program, which raised over \$13,500 for plantings across the Hamilton watershed.
- A new annual “Green Carpet” fundraising and awareness event was held at the Westdale Theatre with a near sell-out crowd. Guests heard Adam Shoalts share stories and footage from the adventures that inspired his latest book, Beyond the Trees. The event raised funds and awareness for the Foundation.
- A concert at the new Canal Park Viewing Platform, which brought donors and community members to this Cootes to Escarpment EcoPark hub.







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