

**FULL AUTHORITY MEETING  
Wednesday, October 16, 2019  
9:30 a.m.  
Ball's Falls Centre for Conservation  
Glen Elgin Room  
3292 Sixth Avenue, Jordan, ON**

**A G E N D A**

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**CALL TO ORDER**

*The Niagara Peninsula Watershed is located on the traditional territory of Indigenous peoples dating back countless generations. We want to show our respect for their contributions and recognize the role of treaty-making in what is now Ontario.*

**1. ADOPTION OF AGENDA**

- a) Addition of items
- b) Change in order of items
- c) Adoption of Agenda

**2. DECLARATION OF CONFLICT OF INTEREST**

**3. PRESENTATIONS AND DELEGATIONS**

- a) Presentation by Member Leah Feor RE: Sustainable Development Page # 1
- b) Presentation by C.A.O. Gayle Wood RE: The Conservation Authorities Act (to be tabled)

**4. ADMINISTRATIVE BUSINESS**

- a) Approval of the Minutes of the Full Authority meeting dated September 18, 2019 Page # 9
- b) Approval of the Closed Session Minutes of the Full Authority meeting dated September 18, 2019 (under separate cover)
- c) Approval of the Minutes of the Full Authority (Orientation) meeting dated September 27, 2019 Page # 18
- d) Approval of the Minutes of the Audit & Budget Committee meeting dated October 7, 2019 Page # 21
- e) Approval of the Minutes of the Public Advisory Committee meeting September 25, 2019 Page # 25

- f) Correspondence from the Mining and Lands Tribunal dated August 19, 2019 RE: Appeal Against 2017 General Levy Assessment Page # 28
- g) Correspondence from J. Yurek, Minister of the Environment, Conservation and Parks dated September 23, 2019 RE: Consultation with Conservation Authorities on Bill 108 Page # 30
- h) Correspondence to J. Yurek, Minister of the Environment, Conservation and Parks from AMO dated October 9, 2019 RE: Bill 108 Page # 31
- i) Chair's Remarks
- j) Chief Administrative Officer Comments

## 5. BUSINESS FOR INFORMATION

- a) Report No. FA-128 -19 RE: Watershed Management Status Q3 Report Page # 33
- b) Report No. FA-131 -19 RE: Land Q3 Page # 43
- c) Report No. FA-133 -19 RE: Capital Projects Q3 Page # 57
- d) Report No. FA-135-19 RE: Integrated Watershed Planning and Information Management Q3 Page # 60
- e) Report No. FA-138 -19 RE: October update-AG Recommendations Page # 65
- f) Report No. FA-139-19 RE: Response to Questions raised at the Board Orientation Session Page # 85
- g) Report No. FA-141 -19 RE: Communications, Community Outreach and Volunteers 2019 Q3 Page # 92
- h) Report No. FA-143-19 RE: Media Coverage and Communications Update Report-September 2019 Page # 102

**6. BUSINESS FOR CONSIDERATION**

- a) Report No. FA-114-19 RE: Levy Differential Reserve (to be tabled)
- b) Report No. FA-132-19 RE: MOU – Glanbrook Conservation Club Page # 132
- c) Report No FA-134-19 RE: 2019 Restoration Project Approvals for October Page # 116
- d) Report No FA-137-19 RE: Appointments to Committees – Hellinga and Kawall Page # 121
- e) Report No. FA-142-19 RE: Trout Unlimited Canada Twelve Mile Creek Restoration Memorandum of Agreement Page # 123
- f) Report No. FA-144-19 RE: Q2 Finance and Reserve Report – Year to Date Ending Sept 30, 2019 Page # 133
- g) Report No. FA-145-19 RE: 2020 Capital Budget – Lise Gagnon, Director Corporate Services will present and offer an overview the draft capital budget. Page # 138
- h) Report No. FA-147-19 RE: CAO Recruitment Consultant – P.O. Change Order Page # 449
- i) Report No. FA-148-19 RE: Policy Update – Performance Reviews Page # 455

**7. BUSINESS – In Camera**

- a) Advice that is subject to solicitor-client privilege, including communications necessary for that purpose
- b) Labour relations, Human Resources or employee negotiations
- c) Personal matters about identifiable individual(s), including NPCA employees

**8. NOTICE OF MOTION**

**9. NEW BUSINESS**

**10. ADJOURNMENT**



# Should the Niagara Peninsula Conservation Authority Produce a Sustainable Development Report?

Presented by Leah Feor to the NPCA board on October 16<sup>th</sup>, 2019

Prepared by ENBUS601 Students

Leah Feor - lfeor@uwaterloo.ca

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Victor Simone - v2simone@uwaterloo.ca

Geneva Walker - g7walker@uwaterloo.ca

Source: Niagara Peninsula Conservation Authority, (n.d)

## Land Acknowledgement

- Anii Bzohoo, Hello and welcome, today I would like to acknowledge that the land on which we gather is the traditional territory of the Haudenosaunee, Attiwonderonk and Anishinaabe peoples. This territory is covered by Treaty 3, of 1792, the Niagara Purchase Treaty 381, the Haldimand Treaty, the Simcoe Patent, Treaty 4 of 1743 and the Treaty of Niagara. We are within the lands protected by the "Dish With One Spoon" wampum agreement between the Haudenosaunee and Anishinaabe peoples. I acknowledge this gathering place is home to many First Nations, Métis, and Inuit peoples and remember that I share this land, with those who have occupied it since time immemorial. I give thanks for being able to use this space today, and for that I say Chee- Miggwech

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## AGENDA

- Overview of the NPCA
- A Commitment to Sustainable Development at the NPCA
- Three Pillars of Sustainable Development
  - Economic Resiliency
  - Environmental Adaptation
  - Social Trust
- Critical Analysis
- Next Steps

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## Niagara Peninsula Conservation Authority (NPCA)

- Role of Conservation Authorities in Ontario
- How the NPCA is funded
- Overview of the organization
  - 42 conservation areas within its watershed
  - 50 full-time permanent positions, 40-50 seasonal employees, 40 temporary staff for the annual Thanksgiving Festival
  - Approximately 942 volunteers.
- Two major reasons for the current state of the NPCA
  - Changes to the Conservation Authorities Act
  - Auditor General of Ontario: Special Audit of the Niagara Peninsula Conservation Authority
- A time of transition and the opportunity for new strategic priorities

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## Defining Sustainable Development

"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

World Commission on Environment and Development. (1987)



Source: Concept Draw (n.d.). 5

## A Commitment to Sustainable Development at the NPCA

- Sustainable development strategically aligns with the work of the NPCA
- Demonstrate leadership and innovation
- Main drivers for reporting on sustainable development
  - Strengthen trust
    - Opportunity to enrich relationships with stakeholders
    - Measuring and reporting on key achievements and outstanding challenges
  - Cost savings
    - Operating efficiencies to meet increased demand for services due to a changing climate
    - Provide greater return on taxpayer dollars invested
    - Example: Niagara River Remedial Action Plan

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## AGENDA

- Overview of the Niagara Peninsula Conservation Authority (NPCA)
- A Commitment to Sustainable Development at the NPCA
- **Three Dimensions of Sustainable Development**
  - **Economic Resiliency**
  - **Environmental Adaptation**
  - **Social Trust**
- Critical Analysis
- Next Steps

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## Economic Resiliency

### Key Principles and Connection to NPCA

- Operating efficiencies
  - cost control through footprint reduction, employment and volunteers.
- Diversification of revenue
  - Attract new investment from donors.
- Accountability
  - Fortright financial and non-financial disclosures.

*"...prioritizing sustainable development and climate action, and capturing the economic benefits of doing so, is our best shot at building a new kind of economy that works for everyone, everywhere."*

- Paul Polman, former CEO of Unilever

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# Environmental Adaptation

## Key Principles and Connection to NPCA

- Water Protection
  - Watershed management, data collection, drinking water protection.
- Biodiversity
  - Replanting native flora, minimize loss and support recovery.
- Climate Change
  - Preservation/restoration of natural infrastructure, flood risks, internal emissions.
- At the NPCA, environmental principles are based on a management cycle which includes assessment, planning, & management; implementation & permitting; compliance & enforcement; and monitoring.

*"Protecting, restoring, and sustainably managing biodiversity is our best defense in a world of rapidly changing climate."*

– Steve Hounsell,  
Chair, Ontario Biodiversity Council

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# Social Trust

## Key Principles and Connections to NPCA

- Accessibility
  - Access to information, physical accessibility, access to green space, and financial accessibility.
- Stakeholder engagement
  - Indigenous engagement and collaboration with accordance to UNDRIP, building upon Internal and external trust in our stakeholders.
- Leveraging partnerships through education
  - Raising awareness through education, nature deficient disorder, investing in sustainability leaders of tomorrow.

*"We absolutely believe that on any and every issue that affects the rights and interests of our people--whether we're talking about land development...things of that nature--there's a legal requirement, and that must remain the responsibility of the government."*

– Chief Phil Fontaine, 2008

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## AGENDA

- Overview of the Niagara Peninsula Conservation Authority (NPCA)
- A Commitment to Sustainable Development at the NPCA
- Three Dimensions of Sustainable Development
  - Economic Resiliency
  - Environmental Adaptation
  - Social Trust
- **Critical Analysis**
- **Next Steps**

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## Critical Analysis

- Should NPCA produce a Sustainable Development Report?

Opportunities	Constraints
Taking on a Leadership Role	Taking a "Chance"/ Cultural Shift
Strengthening Trust with Stakeholders	Commitment of Time and Resources
Strengthening Accountability	Financial Costs

- **YES!**
  - It starts with a sustainability plan
  - Link to the new Strategic Plan, embed into the Business Plan and Annual Workplan

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## Next Steps for the NPCA

In order to operationalize the NPCA's commitment to sustainable development:

1. Establish the NPCA's definition of Sustainable Development
2. Establish principles of sustainable development under the 3 pillars of:
  - economic resiliency;
  - environmental adaptation; and
  - social trust
3. Develop a sustainable development policy to formalize the NPCA's commitment
4. Define practical, meaningful, and cost-effective metrics and protocols consistent with the NPCA's sustainable development principles

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## Questions?

*Thank you!*

Source: Nlagu, Nnamdi Conservation Authority, (n.d).

## References

- Carol Philips (2019). Ohni:kara An Aspiring Global Geopark (Policy Brief #37) [PDF]. Retrieved from <http://www.niagaraknowledgeexchange.com/resources-publications/ohnikara-an-aspiring-global-geopark-policy-brief-37/>
- Chief Phil Fontaine. (2008, April 16<sup>th</sup>). *Standing Committee on Aboriginal Affairs and Northern Development, Meeting #25*. Open parliament, <https://openparliament.ca/committees/aboriginal-affairs/39-2/25/chief-phil-fontaine-3/>
- Concept Draw (n.d.). Path to sustainable development: Sustainable development - Venn diagram. Retrieved July 23, 2019, from <https://www.conceptdraw.com/examples/sustainable-development-in-venn-diagram>
- Conservation Ontario. (2019). Conservation Authorities Act. [Webpage]. Retrieved from <https://conservationontario.ca/policy-priorities/conservation-authorities-act/>
- Native Land Digital (2015). Native Land. Retrieved from <https://native-land.ca/>
- Niagara Peninsula Conservation Authority, (n.d). Ball's Falls. Retrieved August 24, 2019, from <https://npca.ca/parks/balls-falls>
- Niagara Peninsula Conservation Authority, (n.d). Our Voice. Retrieved August 24, 2019, from <https://npca.ca/our-voice>
- Niagara Peninsula Conservation Authority. (2019). *2018 Annual Report*. Retrieved from [https://npca.ca/images/uploads/board\\_files/2018\\_Annual\\_Report.pdf](https://npca.ca/images/uploads/board_files/2018_Annual_Report.pdf)
- Niagara Peninsula Conservation Authority. (2019, August 19). *Province moves to constrain Conservation Authorities' programs and services* [Press release]. Retrieved from <https://npca.ca/our-voice/post/province-moves-to-constrain-conservation-authorities-programs-and-services>
- Office of the Auditor General of Ontario. (2018). *Special Audit of the Niagara Peninsula Conservation Authority* Retrieved from [http://www.auditor.on.ca/en/content/specialreports/specialreports/NPCA\\_en.pdf](http://www.auditor.on.ca/en/content/specialreports/specialreports/NPCA_en.pdf)
- Toronto Regional Conservation Authority. (2013). Sustainability Report 2013-2013. [PDF]. Retrieved from <https://trca.ca/app/uploads/2016/09/TRCASustainabilityReport2012-2013final.pdf>
- United Nations. (n.d). About the Sustainable Development Goals. [Webpage]. Retrieved from <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>
- World Commission on Environment and Development. (1987). *Our common future*. Oxford ; New York: Oxford University Press.



**FULL AUTHORITY  
MEETING MINUTES**

**Wednesday, September 18, 2019**

**9:30 a.m.**

**Ball's Falls**

**Centre for Conservation – Glen Elgin Room  
3292 Sixth Avenue, Jordan, ON**

**NOTE:** The archived recorded meeting is available on the NPCA website. The recorded video of the Full Authority meeting is not considered the official record of that meeting. The official record of the Full Authority meeting shall consist solely of the Minutes approved by the Full Authority Board. *NPCA Administrative By-law Section 14.5*

**MEMBERS PRESENT:**

D. Bylsma (Chair)  
S. Beattie  
R. Brady  
D. Coon-Petersen (arrived 9:51 a.m.)  
D. Cridland  
M. Difruscio (Honorary Member)  
L. Feor  
R. Foster  
D. Huson (departed at 12:58 p.m.)  
J. Ingrao  
B. Johnson  
K. Kawall  
B. Mackenzie  
J. Metcalfe  
R. Shirton  
E. Smith  
B. Steele (not in attendance after reconvening at 12:37 p.m.)  
M. Woodhouse  
B. Wright

**MEMBERS ABSENT:**

B. Clark  
G. Zalepa

**STAFF PRESENT:**

G. Wood, CAO / Secretary – Treasurer  
G. Bivol, Interim Clerk  
R. Bisson, Manager, Communications and Public Relations  
A. Christie, Acting Senior Manager, Operations and Special Projects  
M. Ferrusi, Human Resources Consultant  
L. Gagnon, Director, Corporate Services  
S. Gillis, Restoration Project Lead  
D. MacKenzie, Director, Watershed Management  
S. Miller, Senior Manager, Water Resources and Restoration  
E. Navarro, Communications Specialist  
G. Verkade, Manager, Information Management and Technology Systems

**OTHERS PRESENT:** D. Heyworth Official Plan Policy Consultant, Niagara Region  
S. Norman, Senior Planner, Niagara Region  
W. Rapley

The Chair called the meeting to order at 9:32 a.m. and introduced the new Members of the Board.

## 1. ADOPTION OF AGENDA

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a) Addition of Items

Resolution No. FA-182-19

Moved by Board Member Beattie

Seconded by Board Member Cridland

**THAT** the following items **BE ADDED** to the agenda:

- Approval of Full Authority Closed Session Meeting Minutes dated August 14, 2019 as tabled.

**CARRIED**

b) Change in Order of Items - None

c) Adoption of Agenda

Resolution No. FA-183-19

Moved by Board Member Brady

Seconded by Board Member Beattie

**THAT** the agenda **BE ADOPTED** as amended.

**CARRIED**

## 2. DECLARATIONS OF CONFLICT OF INTEREST

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Member Wright declared a non-pecuniary interest on agenda items 6.c), 6.e) and 6.f). as he was a past staff member at the NPCA and my have dealt with these items through his employment at the NPCA.

## 3. PRESENTATIONS (and/or Delegations)

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- a) Presentation by Mr. David Heyworth Official Plan Policy Consultant, Niagara Region RE: Creating a New Niagara Official Plan – Mr. Heyworth provided background information regarding the creation of the new Niagara Official Plan, an update on the status of the priority background studies and an overview of the consultation framework. Members posed questions and discussion ensued.
- b) Presentation by Mr. Sean Norman, Senior Planner, Niagara Region RE: Natural Environment Work Program for the New Niagara Official Plan – Mr. Norman provided an overview of the natural environment work program which is currently underway in support of the new Niagara Official Plan. Discussion ensued with Members posing questions.

Resolution No. FA-184-19  
Moved by Board Member Foster  
Seconded by Board Member Ingrao

**THAT** the following presentations **BE RECEIVED**:

- a) PowerPoint presentation by Mr. David Heyworth Official Plan Policy Consultant, Niagara Region RE: Creating a New Niagara Official Plan;
- b) PowerPoint presentation by Mr. Sean Norman, Senior Planner Niagara Region RE: Natural Environment Work Program for the New Niagara Official Plan.

**CARRIED**

#### **4. ADMINISTRATIVE BUSINESS**

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- a) Approval of the Minutes of the Full Authority meeting dated August 14, 2019
- b) Approval of the Minutes of the Audit & Budget Committee meeting dated September 5, 2019
- c) Approval of the Minutes of the CAO Selection Committee meeting September 10, 2019

Resolution No. FA-185-19  
Moved by Board Member Shirton  
Seconded by Board Member Steele

**THAT** the following minutes **BE ADOPTED**:

- Minutes of the Full Authority Meeting dated August 14, 2019;
- Minutes of the Full Authority Closed Session Meeting dated August 14, 2019 to remain private and confidential as tabled;
- Minutes of the Audit & Budget Committee meeting dated September 5, 2019.

**CARRIED**

Approval of Full Authority Closed Session Meeting Minutes dated August 14, 2019 as tabled

Resolution No. FA-186-19  
Moved by Board Member Steele  
Seconded by Board Member Shirton

**THAT** the minutes of the CAO Selection Committee meeting dated September 10, 2019 **BE ADOPTED** save and except Recommendation # No. SC-32-19 to be referred to staff for follow-up in accordance with the NPCA Procurement Policy and a report back to the Board.

**CARRIED**

d) Correspondence:

- 1) Ontario Transfer Payment Agreement with MNR dated April 1, 2019
- 2) Ontario Transfer Payment Agreement (Drinking Water Source Protection 2019-2020 Program) dated April 1, 2019
- 3) Correspondence from the City of Hamilton dated August 2, 2019 RE: 2020 Budget Submission for the NPCA
- 4) Niagara Region – 2020 Budget Planning dated August 15, 2019
- 5) MECP – Office of the Minister letter dated August 16, 2019
- 6) NPCA letter to Minister Yurek dated August 21, 2019

- 7) Town of Pelham letter dated August 16, 2019
- 8) Mining and Lands Tribunal 2016 General Levy dated August 19, 2019
- 9) Mining and Lands Tribunal 2018 General Levy dated August 19, 2019
- 10) Mining and Lands Tribunal 2019 General Levy dated August 19, 2019
- 11) Headwaters Newsletter dated August 22/23, 2019
- 12) Conservation Ontario letter dated August 23, 2019
- 13) Conservation Halton Letter to Premier & MECP dated August 28, 2019
- 14) Conservation Ontario Letter dated August 30, 2019
- 15) Correspondence from John Lynn dated September 4, 2019
- 16) Correspondence from Mickey DiFruscio dated September 9, 2019

Resolution No. FA-187-19

Moved by Board Member Feor

Seconded by Board Member Foster

**THAT** the following items of correspondence **BE RECEIVED** for information:

- 1) Ontario Transfer Payment Agreement with MNRF dated April 1, 2019;
- 2) Ontario Transfer Payment Agreement (Drinking Water Source Protection 2019-2020 Program) dated April 1, 2019;
- 3) Correspondence from the City of Hamilton dated August 2, 2019 RE: 2020 Budget Submission for the NPCA;
- 4) Niagara Region – 2020 Budget Planning dated August 15, 2019;
- 5) MECP – Office of the Minister letter dated August 16, 2019;
- 6) NPCA letter to Minister Yurek dated August 21, 2019
- 7) Town of Pelham letter dated August 16, 2019;
- 8) Mining and Lands Tribunal 2016 General Levy dated August 19, 2019;
- 9) Mining and Lands Tribunal 2018 General Levy dated August 19, 2019;
- 10) Mining and Lands Tribunal 2019 General Levy dated August 19, 2019;
- 11) Headwaters Newsletter dated August 22/23, 2019;
- 12) Conservation Ontario letter dated August 23, 2019;
- 13) Conservation Halton Letter to Premier & MECP dated August 28, 2019;
- 14) Conservation Ontario Letter dated August 30, 2019;
- 15) Correspondence from John Lynn dated September 4, 2019;
- 16) Correspondence from Mickey DiFruscio dated September 9, 2019.

**CARRIED**

e) Chairman's Remarks

The Chair spoke on the re-appointment of Mickey DiFruscio as an Honorary Board Member and allowed Member DiFruscio the opportunity to address the proceedings. The Chair also highlighted his recent meetings including Audit & Budget, C.A.O. Selection Committee, a Big Brothers/Big Sisters event at Jordan Harbour, Board Member Orientation and a recent meeting with M.P.P. Oosterhoff.

f) Chief Administrative Officer Comments

Ms. Wood welcomed Honorary Member DiFruscio; read some recent client feedback which praised staff and highlighted the upcoming Ball's Falls Thanksgiving Festival. She also spoke on the forthcoming planned Board Member training session.

## 5. BUSINESS FOR INFORMATION

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- a) Report No. FA-121-19 RE: Board Members' Access to Corporate Records – Discussion ensued.

Resolution No. FA-188-19

Moved by Board Member Huson

Seconded by Board Member Feor

**THAT** Report No. FA-121-19 RE: Board Members' Access to Corporate Records **BE REFERRED** to the Governance Committee for discussion.

**CARRIED**

- b) Report No. FA-122-19 RE: Update – Response to the Auditor General's Recommendations

- c) Report No. FA-127-19 RE: Media Coverage and Communications Update Report for August 2019

Resolution No. FA-189-19

Moved by Board Member Foster

Seconded by Board Member Cridland

**THAT** the following reports **BE RECEIVED** for information:

- a) Report No. FA-121-19 RE: Board Members' Access to Corporate Records;
- b) Report No. FA-122-19 RE: Update – Response to the Auditor General's Recommendations;
- c) Report No. FA-127-19 RE: Media Coverage and Communications Update Report for August 2019.

**CARRIED**

## 6. BUSINESS FOR CONSIDERATION

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- a) Report No. FA-91-19 RE: Draft NPCA Client Service Standards for Plan and Permit Review

Resolution No. FA-190-19

Moved by Board Member Hellinga

Seconded by Board Member Ingrao

- 1. **THAT** Report No. FA-91-19 RE: Draft NPCA Client Service Standards for Plan and Permit Review **BE RECEIVED**.
- 2. **THAT** the Board **DIRECT** staff to circulate the Draft NPCA Client Service Standards for Plan and Permit Review to each municipality within the NPCA jurisdiction for comment.
- 3. **THAT** the Board **DIRECT** staff to post the Draft NPCA Client Service Standards for Plan and Permit Review on the NPCA website for a minimum of 30 days for public comment.
- 4. **THAT** the Board **DIRECT** staff to bring a Report of the final draft document to the November 20, 2019 Board Meeting for review and approval.

**CARRIED**

b) Report No. FA-100-19 RE: Water Data Management System Purchase

Resolution No. FA-191-19

Moved by Board Member Ingrao

Seconded by Board Member Foster

1. **THAT** Report No. FA-100-19 RE: Water Data Management System Purchase **BE RECEIVED**.

2. **THAT** the Board **APPROVE** the purchase of a water data management system.

**CARRIED**

c) Report No. FA-101-19 RE: Updated Standing Committees Terms of Reference – Discussion ensued.

Resolution No. FA-192-19

Moved by Board Member Johnson

Seconded by Board Member Smith

1. **THAT** Report No. FA-101-19 RE: Updated NPCA Terms of Reference - Standing Committees **BE RECEIVED** for information.

2. **THAT** Member Kawall **BE APPOINTED** to the Audit and Budget Committee.

3. **THAT** Member Smith **BE APPOINTED** to the Governance Committee.

**CARRIED**

d) Report No. FA-102-19 RE: 2020 Budget Guidelines and Draft Operating Budget - Ms. Gayle Wood, NPCA Chief Administrative Officer provided a presentation via PowerPoint entitled The History of Conservation Authorities/NPCA Funding and Budgeting and Ms. Lise Gagnon, Director, Corporate Services presented the 2020 Draft Operating Budget. Lengthy discussion ensued. After the adoption of the following two resolutions, the Board recessed from 12:10 p.m. until 12:37 p.m..

Resolution No. FA-193-19

Moved by Board Member Smith

Seconded by Board Member Metcalfe

**THAT** the PowerPoint presentation from Gayle Wood, Chief Administrative Officer entitled The History of Conservation Authorities/NPCA Funding and the presentation from Lise Gagnon, Director, Corporate Services Budgeting regarding the 2020 Draft Operating Budget **BE RECEIVED**.

**CARRIED**

Resolution No. FA-194-19

Moved by Board Member Kawall

Seconded by Board Member Mackenzie

1. **THAT** the Draft NPCA Operating and Capital Budget Guidelines Document – 2020 **BE RECEIVED**.

2. **THAT** Report No. FA-102-19 RE: 2020 NPCA Operating Budget **BE APPROVED** for discussion with participating municipal staff.

3. **THAT** NPCA staff **REPORT** the results of discussions with participating municipal staff to the October 16, 2019 Board of Directors' meeting.

**CARRIED**

e) Report No. FA-104-19 RE: 2019 Restoration Project Approvals for September

Resolution No. FA-195-19

Moved by Board Member Mackenzie

Seconded by Board Member Metcalfe

1. **THAT** Report No. FA-104-19 RE: 2019 Restoration Project Approvals for August **BE RECEIVED**.
2. **THAT** the approved Restoration Program 2019 projects and associated grant estimates identified in Appendix 2 of Report No. FA-104-19 - 'Management Approved Restoration Projects List September 2019' **BE APPROVED**.

**CARRIED**

f) Report No. FA-119-19 RE: MOU – Glanbrook Conservation Club

Resolution No. FA-196-19

Moved by Board Member Shirton

Seconded by Board Member Metcalfe

1. **THAT** Report No. FA-119-19 RE: MOU with Glanbrook Conservation Committee **BE RECEIVED** for information.
2. **THAT** the NPCA Board **AUTHORIZE** the Chair and CAO to execute a 3-year Trail Maintenance Agreement with the Glanbrook Conservation Committee (GCC) regarding the Tyneside Trail at Binbrook Conservation Area.

**DEFERRED**

g) Report No. FA-120-19 RE: Staff Response – Terms of Reference Public Advisory Committee

Resolution No. FA-197-19

Moved by Board Member Beattie

Seconded by Board Member Shirton

**THAT** Report No. FA-115-19 RE: NPCA Public Advisory Committee (PAC) **BE RECEIVED** for information.

**CARRIED**

Resolution No. FA-198-19

Moved by Board Member Beattie

Seconded by Board Member Shirton

1. **THAT** Report No. FA-120-19 RE: Staff Response - Terms of Reference - Public Advisory Committee **BE RECEIVED** for information.
2. **THAT** the Board of Directors **APPROVE** the revised Terms of Reference (TOR) for the NPCA Public Advisory Committee (PAC).

**CARRIED**

- h) Report No. FA-123-19 RE: Creating a Human Resources Action Plan

Resolution No. FA-199-19

Moved by Board Member Woodhouse

Seconded by Board Member Smith

**THAT** Report No. FA-123-19 RE: Creating a Human Resource Action Plan **BE RECEIVED**.

**CARRIED**

Resolution No. FA-200-19

Moved by Board Member Feor

Seconded by Board Member Kawall

**THAT** the priorities in Report No. FA-123-19 RE: Creating a Human Resource Action Plan **BE APPROVED** save and except those identified as long-term priorities.

**CARRIED**

## 7. BUSINESS – IN CAMERA

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- a) Advice that is subject to solicitor-client privilege, including communications necessary for that purpose
- b) Labour relations, Human Resources or employee negotiations
- c) Land Acquisition
- d) Personal matters about identifiable individual(s), including NPCA employees

Resolution No. FA-201-19

Moved by Board Member Woodhouse

Seconded by Board Member Smith

**THAT** the meeting of the Board of Directors of the Niagara Peninsula Conservation Authority **CONVENE** in closed session at 1:08 pm in accordance with Section 11.1 of the NPCA Administrative By-law for the discussion on:

- a) Labour relations, human resources or employee negotiations;
- b) Land acquisition and
- c) Personal matters about identifiable individual(s), including NPCA employees.

**CARRIED**

Resolution No. FA-202-19

Moved by Board Member Smith

Seconded by Board Member Wright

**THAT** the meeting of the Board of Directors of the Niagara Peninsula Conservation Authority **RECONVENE** in open session at 2:27pm.

**CARRIED**

Resolution No. FA-203-19

Moved by Board Member Shirton

Seconded by Board Member Metcalfe

**THAT** the Board **DIRECTS** the C.A.O. to proceed as instructed in closed session in respect to Item 7.a).

**CARRIED**

Resolution No. FA-204-19

Moved by Board Member Beattie

Seconded by Board Member Cridland

**THAT** with respect to Closed Session Item 7.b) Report No. FA-125-19 RE: Land Acquisition, staff **BE DIRECTED** to proceed as instructed in closed session.

**CARRIED**

Resolution No. FA-205-19

Moved by Board Member Cridland

Seconded by Board Member Foster

1. **THAT** the following items **BE RECEIVED** to remain private and confidential:
  - a) September, 2019 - Legal Update
  - b) Report No. FA-125-19 RE: Land Acquisition
2. **THAT** the correspondence from the Ministry of the Solicitor General dated August 13, 2019 be received into the public record.

**CARRIED**

## 8. NOTICE OF MOTION

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None.

## 9. NEW BUSINESS

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None.

## 10. ADJOURNMENT

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Resolution No. FA-206-19

Moved by Board Member Hellinga

Seconded by Board Member Ingraio

**THAT** this meeting be hereby adjourned at 2:33 p.m..

**CARRIED**

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Dave Bylsma  
Chair  
Niagara Peninsula Conservation Authority

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G. Bivol  
Interim Clerk  
Niagara Peninsula Conservation Authority



**FULL AUTHORITY (WORKSHOP)  
MEETING MINUTES**

**Friday, September 27, 2019**

**9:30 a.m.**

**Ball's Falls**

**Centre for Conservation – Glen Elgin Room  
3292 Sixth Avenue, Jordan, ON**

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**MEMBERS PRESENT:**

D. Bylsma (Chair)  
S. Beattie  
D. Cridland  
L. Feor (attended at 9:44 a.m.; departed 12:30 p.m.)  
R. Foster  
J. Ingrao  
K. Kawall (departed 3:27 p.m.)  
B. Mackenzie  
J. Metcalfe  
R. Shirton (departed 2:50 p.m.)  
E. Smith  
M. Woodhouse  
B. Wright

**MEMBERS ABSENT:**

R. Brady  
B. Clark  
D. Coon-Petersen  
D. Huson  
B. Johnson  
B. Steele  
G. Zalepa

**STAFF PRESENT:**

G. Wood, CAO / Secretary – Treasurer  
G. Bivol, Interim Clerk  
A. Christie, Acting Senior Manager, Operations and Special Projects  
(arrived at 11:33 a.m.)  
J. Culp, Supervisor, Permits and Compliance (arrived 1:18 p.m.)  
D. Deluce, Senior Manager Planning and Regulations  
M. Ferrusi, Human Resources Consultant  
L. Gagnon, Director, Corporate Services  
D. MacKenzie, Director, Watershed Management  
S. Miller, Senior Manager, Water Resources and Restoration  
E. Navarro, Communications Specialist  
G. Verkade, Manager, Information Management and Technology  
Systems

**OTHERS PRESENT:**

J. Dinner, Board Governance Services  
W. Rapley  
S. Van Haren, P.Eng., WSP Canada  
J. Wigley, Partner, Gardiner Roberts LLP

The Chair called the meeting to order at 9:30 a.m..

## 1. ADOPTION OF AGENDA

---

a) Addition of Items

None.

b) Change in Order of Items

None.

c) Adoption of Agenda

Resolution No. FA-207-19

Moved by Board Member Foster

Seconded by Board Member Shirton

**THAT** the agenda **BE ADOPTED**.

**CARRIED**

## 2. DECLARATIONS OF CONFLICT OF INTEREST

---

None declared.

## 3. PRESENTATIONS (and/or Delegations)

---

a) Orientation on the NPCA – Ms. Gayle Wood, Chief Administrative Officer / Secretary - Treasurer presented via PowerPoint. Members posed questions. Discussion ensued.

b) Board Governance Training - John T. Dinner, President, Board Governance Services offered an interactive presentation on governance, the role of the Board of Directors/Committees, the Board Chair, staff, management, boardroom relationships/culture and Board/staff relationships.

Media Statement by the Board Chair - At 11:00 a.m., the proceedings were interrupted for a public statement by the Board Chair in support of the organizations and ongoing rallies for action on the climate change emergency.

Following the continuation of the board governance session by John Dinner, the Board recessed at 12:55 p.m. until 1:18 p.m..

c) Welland River Floodplain Mapping Project:

i) History of the Project - Steve Miller, P.Eng., Senior Manager, Water Resources and Restoration presented via PowerPoint.

ii) Mapping Project Presentation - Steven Van Haren, P.Eng., Manager, Land Development Infrastructure, WSP Canada presented. Members posed questions. Discussion ensued.

iii) NPCA Floodplain Policies - David Deluce, Senior Manager, Planning and Regulations spoke. Discussion ensued.

- d) Board Responsibility as a Hearing Board under Section 28 of the Conservation Authorities Act - Jonathan Wigley, Partner, Gardiner Roberts LLP presented to the Board. Discussion ensued.

Resolution No. FA-208-19

Moved by Board Member Foster

Seconded by Board Member Shirton

**THAT** the following PowerPoint presentations **BE RECEIVED**:

- a) Orientation on NPCA by Ms. Gayle Wood, Chief Administrative Officer / Secretary -Treasurer;
- b) Board Governance Training by John T. Dinner, President, Board Governance Services;
- c) Welland River Floodplain Mapping Project:
  - i) History of the Project by Steve Miller, P.Eng., Senior Manager, Water Resources and Restoration;
  - ii) Mapping Project Presentation by Steven Van Haren, P.Eng., Manager, Land Development Infrastructure, WSP Canada;
  - iii) NPCA Floodplain Policies by David Deluce, Senior Manager, Planning and Regulations; and
- d) Board Responsibility as a Hearing Board under Section 28 of the Conservation Authorities Act by Jonathan Wigley, Partner, Gardiner Roberts LLP.

**CARRIED**

#### 4. BUSINESS – IN CAMERA

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None.

#### 5. ADJOURNMENT

---

Resolution No. FA-209-19

Moved by Board Member

Seconded by Board Member

**THAT** this meeting be hereby **ADJOURNED** at 3:56 p.m..

**CARRIED**

---

Dave Bylsma  
Chair  
Niagara Peninsula Conservation Authority

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Grant Bivol  
Interim Clerk  
Niagara Peninsula Conservation Authority

**AUDIT AND BUDGET COMMITTEE  
MEETING MINUTES**

Monday, October 7, 2019  
9:30 a.m.  
Ball's Falls Centre for Conservation  
Glen Elgin Room  
3292 Sixth Avenue, Jordan, ON

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<b>MEMBERS PRESENT:</b>	J. Metcalfe, Vice Chair S. Beattie D. Bylsma (ex-officio) R. Foster K. Kawall B. Wright
<b>ABSENT:</b>	B. Steele
<b>OTHERS:</b>	J. Hellinga E. Smith (arrived 10:09 a.m.)
<b>STAFF PRESENT:</b>	G. Bivol, Committee Clerk R. Bisson, Manager, Communications and Public Relations A. Christie, Acting Senior Manager, Operations and Special Projects J. Fazekas, Acting Superintendent, Ball's Falls Conservation Area L. Gagnon, Director Corporate Services E. Gervais, Procurement Specialist D. MacKenzie, Director, Watershed Management S. Miller, Senior Manager, Water Resources and Restoration G. Verkade, Senior Manager, Integrated Watershed Planning and Information Management

## 1. CALL TO ORDER (BY THE VICE CHAIR)

---

Committee Vice Chair Metcalfe called the meeting to order at 9:30 a.m. and turned the proceedings over to the Committee Clerk to call the election of the Chair.

## 2. ELECTION OF CHAIR AND VICE CHAIR

---

The Committee Clerk called for scrutineers, outlined the election process and called three times for nominees to the position of Chair.

Recommendation No. A&BC-25-19  
Moved by Board Member Beattie  
Seconded by Board Member Foster

**THAT** the following individuals **BE APPOINTED** as scrutineers: Adam Christie and Darren MacKenzie.

**CARRIED**

Recommendation No. A&BC-26-19

Moved by Board Member Foster

Seconded by Board Member Beattie

**THAT** the following Member **BE NOMINATED** as Chair of the Audit and Budget Committee: J. Metcalfe.

There being only one nominee for the position of Audit and Budget Committee Chair, the Committee Clerk announced that Member Metcalfe, having accepted the appointment, would be the Audit and Budget Committee Chair. He then turned the proceedings over to Chair Metcalfe to conduct the vote for a Vice Chair. The Chair called three times for nominations to the Vice Chair position. Members Foster and Kawall accepted their respective nominations.

Recommendation No. A&BC-27-19

Moved by Board Member Beattie

Seconded by Board Member Bylsma

**THAT** the following Member **BE NOMINATED** as Vice Chair of the Audit and Budget Committee: R. Foster.

Recommendation No. A&BC-28-19

Moved by Board Member Wright

**THAT** the following Member **BE NOMINATED** as Vice Chair of the Audit and Budget Committee: K. Kawall.

Recommendation No. A&BC-29-19

Moved by Board Member Kawall

Seconded by Board Member Foster

**THAT** nominations for the position of Vice chair **BE** deemed **CLOSED**.

**CARRIED**

With the closing of nominations, the election of Vice Chair proceeded. Member Foster was elected and announced as Vice Chair of the Audit and Budget Committee.

## **2. ADOPTION OF AGENDA**

---

Recommendation No. A&BC 30-19

Moved by Board Member Beattie

Seconded by Board Member Foster

**THAT** the NPCA Audit and Budget Committee agenda be adopted.

**CARRIED**

## **3. DECLARATIONS OF INTEREST**

---

There were no declarations of pecuniary interest.

#### 4. PRESENTATIONS (and/or Delegations)

---

- a) PowerPoint presentation by L. Gagnon, Director of Corporate Services RE: 2020 Capital Budget – Subsequent to her presentation, Ms. Gagnon and NPCA staff addressed questions of the Members. Discussion ensued.

Recommendation No. A&BC 31-19

Moved by Board Member Foster

Seconded by Board Member Beattie

**THAT** the PowerPoint presentation by L. Gagnon, Director of Corporate Services RE: 2020 Draft Capital Budget **BE RECEIVED**.

**CARRIED**

#### 5. BUSINESS FOR INFORMATION

---

There were no items for information.

#### 6. BUSINESS FOR CONSIDERATION

---

- a) Minutes of the Audit and Budget Committee Meeting dated September 5, 2019 – The approval process for minutes was discussed with staff given suggestions for streamlining the process.

Recommendation No. A&BC 32-19

Moved by Board Member Foster

Seconded by Board Member Beattie

**THAT** the minutes of the Audit and Budget Committee meeting dated September 5, 2019 **BE APPROVED**.

**CARRIED**

- b) Report No. A&BC-06-19 RE: 2020 Draft Capital Budget – Discussion ensued. Member Beattie requested notation in the minutes that he would be voting against the recommendation to forward the 2020 Draft Capital Budget for final Board approval.

Recommendation No. A&BC-33-19

Moved by Board Member Kawall

Seconded by Board Member Foster

**THAT** Report No. A&BC-06-19 RE: 2020 Draft Capital Budget **BE RECEIVED**.

**AND THAT** the 2020 Draft Capital Budget **BE RECOMMENDED** to the Board of Directors for approval.

**CARRIED**

Recommendation No. A&BC 34-19  
Moved by Board Member Foster  
Seconded by Board Member Beattie

**THAT** the staff **BE DIRECTED** to prepare a report for the Full Authority meeting RE: reserves, terms and conditions, policy, procedure, historical analysis and recommendations.

**CARRIED**

## 7. NEW BUSINESS

---

There were no new business items.

## 8. ADJOURNMENT

---

Recommendation No. A&BC-35-19  
Moved by Board Member Bylsma  
Seconded by Board Member Beatty

**THAT** the NPCA Audit and Budget Committee **BE** hereby **ADJOURNED** at 11:12 p.m.

**CARRIED**

---

J. Metcalfe  
Committee Chair

---

Grant Bivol,  
Committee Clerk



**PUBLIC ADVISORY COMMITTEE  
MEETING MINUTES**

**Wednesday, September 25, 2019  
5:30 p.m.**

**Ball's Falls Centre for Conservation  
Boardroom  
3292 Sixth Avenue, Jordan, ON**

---

<b>MEMBERS PRESENT:</b>	D. Bylsma, Committee Chair J. Ariens S. Bousseau H. Korosis (arrived 5:50 p.m.) D. Pont
<b>MEMBERS ABSENT:</b>	D. Dick Y. Hopkins A. Kirkby
<b>STAFF PRESENT:</b>	G. Wood, C.A.O. Secretary – Treasurer G. Bivol, Interim Clerk K. Royer, Co-ordinator, Volunteer and Community Outreach

The Committee Chair called the meeting to order at 5:33 p.m.

## **1. ADOPTION OF AGENDA**

---

Chair Bylsma explained roles and introduced attendees.

Recommendation No. PAC-05-19

Moved by Member Pont

Seconded by Member Bousseau

**THAT** the agenda for the meeting of the NPCA Public Advisory Committee dated September 25, 2019 meeting **BE APPROVED**.

**CARRIED**

## **2. DECLARATIONS OF CONFLICT OF INTEREST**

---

None declared.

## **3. PRESENTATIONS**

---

There were no presentations or delegations at the meeting.

## 4. ADMINISTRATIVE BUSINESS

---

- a) Minutes of the Public Advisory Committee – June 27, 2019

Recommendation No. PAC-06-19

Moved by Member Bousseau

Seconded by Member Pont

**THAT** the minutes of the Public Advisory Committee meeting dated June 27, 2019 **BE RECEIVED** with clerical corrections noted.

**CARRIED**

- b) Chair's Remarks

The Chair spoke on the purpose and role of the Committee and the transformation underway at the NPCA.

- c) Chief Administrative Officer Comments

Ms. Wood introduced herself and spoke on the status of the Auditor General's recommendations and the new 21 Member Board. Discussion ensued.

## 5. BUSINESS FOR INFORMATION

---

- a) NPCA Board Report No. FA-120-19 RE: PAC TOR Staff Response – Ms. Royer, Co-ordinator, Volunteer and Community Outreach spoke to report. Members posed questions.

Recommendation No. PAC-07-19

Moved by Member Korosis

Seconded by Member Pont

**THAT** NPCA Board Report No. FA-120-19 RE: PAC TOR Staff Response **BE RECEIVED** for information.

**CARRIED**

- b) Update on PAC recruitment process – Ms. Royer offered a verbal update on the status of the recruitment process. Discussion ensued.

## 6. BUSINESS FOR CONSIDERATION

---

- a) NPCA Climate Change Strategy and Action Plan 2019-2020 – Ms. Wood spoke on the Board strategy and potential linkages with the Public Advisory Committee. Members discussed participation in the plan, the best means of engaging the Committee and re-aligning Committee membership to address future involvement in the action plan. Lengthy discussion ensued culminating in the following motion.

Recommendation No. PAC-08-19

Moved by Member Korosis

Seconded by Member Pont

**THAT** Public Advisory Committee **ADVISES** the NPCA Board of Directors that they would be pleased to be part of the Climate Change Strategy and Action Plan; and

**THAT** given the importance of this issue to the overall health of the watershed, the PAC **RECOMMENDS** that its membership be increased by one to allow for the recruitment of a member with climate change expertise related to NPCA watershed.

**CARRIED**

## **7. NEW BUSINESS**

---

None.

## **8. ADJOURNMENT**

---

Recommendation No. PAC-09-19

Moved by Member Pont

Seconded by Member Korosis

**THAT** this meeting of the NPCA Public Advisory Committee be hereby adjourned at 7:50 p.m.

**CARRIED**

---

Dave Bylsma  
Public Advisory Committee Chair

---

Grant Bivol  
Clerk to the Committee

---

# Mining and Lands Tribunal

## Tribunal des Mines et des Terres



**ISSUE DATE:** August 19, 2019

**CASE NO.:** CA 005-16

**PROCEEDING COMMENCED UNDER** section 27.1(1) of the *Conservation Authorities Act*, R.S.O. 1990, c. C. 27, as amended

Appellant:	City of Hamilton
Respondent:	Niagara Peninsula Conservation Authority
Subject:	Appeal against the 2017 General Levy Assessment of the Niagara Peninsula Conservation Authority
Property Address/Description:	N/A
Municipalities:	City of Hamilton
MLT Case No.:	CA 005-16
MLT Case Name:	Hamilton v. Niagara Peninsula Conservation Authority

**Heard:** In writing

### **APPEARANCES:**

#### **Parties**

City of Hamilton

Niagara Peninsula  
Conservation Authority

#### **Counsel**

Byrdena MacNeil

Paul DeMelo

**DECISION OF THE TRIBUNAL DELIVERED BY D. STEPHEN JOVANOVIĆ**

## REASONS

### Background

[1] The City of Hamilton (“Appellant”) filed an appeal with the Office of the Mining and Lands Commissioner, (now the Mining and Lands Tribunal) (“Tribunal”) on November 25, 2016.

[2] A consent to dismiss this appeal without costs, dated June 3, 2019, was executed and filed by Byrdena MacNeil, counsel for the Appellant.

[3] A consent to dismiss this appeal without costs, dated August 14, 2019, was executed and filed by Paul DeMelo, counsel for the Respondent.

### DECISION

[4] The Tribunal directs that this appeal be dismissed.

[5] The Tribunal further directs that no costs shall be payable by either party to this appeal.

*“D. Stephen Jovanovic”*

D. STEPHEN JOVANOVIC  
ASSOCIATE CHAIR

If there is an attachment referred to in this document,  
please visit [www.elto.gov.on.ca](http://www.elto.gov.on.ca) to view the attachment in PDF format.

### **Mining and Lands Tribunal**

A constituent tribunal of Tribunals Ontario - Environment and Land Division  
Website: [www.elto.gov.on.ca](http://www.elto.gov.on.ca) Telephone: 416-212-6349 Toll Free: 1-866-448-2248

Ministry of the Environment,  
Conservation and Parks

Ministère de l'Environnement,  
de la Protection de la nature et des  
Parcs

Office of the Minister

Bureau du ministre

777 Bay Street, 5th Floor  
Toronto ON M7A 2J3  
Tel.: 416-314-6790

777, rue Bay, 5<sup>e</sup> étage  
Toronto (Ontario) M7A 2J3  
Tél. : 416.314.6790



SEP 23 2019

357-2019-2240

Mr. Dave Bylsma  
Chair  
Niagara Peninsula Conservation Authority  
250 Thorold Road West, 3<sup>rd</sup> Floor  
Welland ON L3C 3W2

Dear Mr. Bylsma:

RECEIVED

DATE: SEP 30 '19 AM 11:40

To: [Signature]

☒ CHAIR, NPCA

☐ CAO OFFICE ☐ CORP. SERVICES

☐ WATERSHED ☐ OPERATIONS

Thank you for your letter. I appreciate you taking the time to write me.

We will connect with you in the near future about upcoming consultations with conservation authorities, municipalities and stakeholders. However, in the meantime please feel free to contact my staff, Holly Fullager, at [holly.fullager@ontario.ca](mailto:holly.fullager@ontario.ca) or 437-224-6690 at any time to discuss any questions you may have.

I look forward to continuing to work with you.

Thank you again for taking the time to write me.

Sincerely,

Jeff Yurek  
Minister of the Environment, Conservation and Parks

Sent via email to: [minister.mecp@ontario.ca](mailto:minister.mecp@ontario.ca)

October 9, 2019

The Honourable Jeff Yurek  
Ministry of the Environment, Conservation and Parks  
777 Bay St., 5th Floor  
Toronto, ON  
M7A 2J3

Dear Minister Yurek:

At the September 27, 2019 meeting of the Association of Municipalities of Ontario Board of Directors, a number of matters were raised regarding the implementation of Schedule 2, *Conservation Authorities Act*, Bill 108.

While we await the implementing regulations, we are keenly aware that transition will take some time. Sufficient time to transition is required. Some preparatory work for creating implementing Bill 108 such as memoranda of understanding for some services are in place. However, most municipal governments and conservation authorities are commencing 2020 budget decisions now, and will not be able to fully implement MOUs for all non-mandatory services in the next three months. We would advise that it is better to plan an implementation for the 2021 fiscal year, provided all regulations are in place in the first quarter of 2020.

Additionally, the activities that support the mandatory programs need to be articulated. Specifically, to what level of detail is field work, monitoring and the resulting documents required? Better defining the scope of activities to support mandatory programs is essential for two reasons.

First, different regions of the province will need different requirements to meet the mandatory programs in a meaningful way. We anticipate that there should be a grouping of expectations reflecting high growth areas (which need deeper level of detail), average growth areas (which would need less detailed effort), and low or no growth areas (which would need a minimum standard of effort).

Second, some conservation authorities will have capacity to meet the threshold of requirements set for their degree of growth and some may not. In the cases where capacity is lacking, a strategy needs to be developed that does not strain municipal financial capacity.

AMO would also like to see a more comprehensive conversation regarding non-mandatory activities. There are many perspectives on the value of CA activities that raise revenues and in turn lower the levy expectations and requirements. This range of

options needs local discussion. Further some consideration to dispute resolution needs to be taken. It is feasible that some local municipal governments may not agree on these discretionary activities and these different views will have fiscal impacts if not resolved in an orderly manner.

Similar matters were raised regarding the Blue Box. Your ministry developed a Blue Box mediation process with a very able facilitator, David Lindsay. This process brought all parties together to successfully resolve implementation concerns. We request a similar approach here, a working group of municipal government representatives, Ministry staff and Conservation Authority staff at a table to iron out principles for implementation.

We look forward to working with you on this very important matter.

Sincerely,

A handwritten signature in black ink, appearing to read 'J. McGarvey', with a long horizontal line extending to the right.

Jamie McGarvey  
AMO President

cc: The Honourable Steve Clark, Minister of Municipal Affairs and Housing  
Kim Gavine, General Manager, Conservation Ontario  
Ling Mark, Director, Great Lakes Inland Water Branch, Ministry of the Environment, Conservation and Parks  
Jennifer Keyes, Manager, Water Resources Section, Ministry of Natural Resources and Forestry

**Report To: Board of Directors**

**Subject: Watershed Management Status Q3 Report**

**Report No: FA-128-19**

**Date: October 16, 2019**

---

**Recommendation:**

**THAT** Report No. FA-128-19 RE: Watershed Management Status Q3 Report **BE RECEIVED** for information.

**Purpose:**

The purpose of this Report is to update the Board of Directors on the Watershed Management Team's activities and achievements during Q3 2019.

**Background:**

**A. Plan Review & Regulations**

The Development Reviews Division is responsible for reviewing *Planning Act* applications and Building Permit applications where there is a feature regulated by the NPCA.

During the third quarter of 2019, the Watershed Management Department reviewed 64 *Planning Act* applications (various type and complexity)/Niagara Escarpment Commission Development Permit applications, 57 Building Permit applications, and 29 property information requests. Planning staff also provided comments on 58 pre-consultation proposals and processed 86 work permits under Section 28.

Staff also responded to various inquiries from the public and local municipalities, as well as attended weekly consultation meetings with the local municipalities and conducted various site inspections.

The Compliance and Enforcement staff received a total of 33 complaints during Q3 and issued 4 Notices of Violation. Of the 33 complaints in Q3, 3 have been resolved. The remainder will show in the Q4 statistics.

**Figure 1: NPCA Watershed, No. of Applications by Type, July 2019 - September 2019**

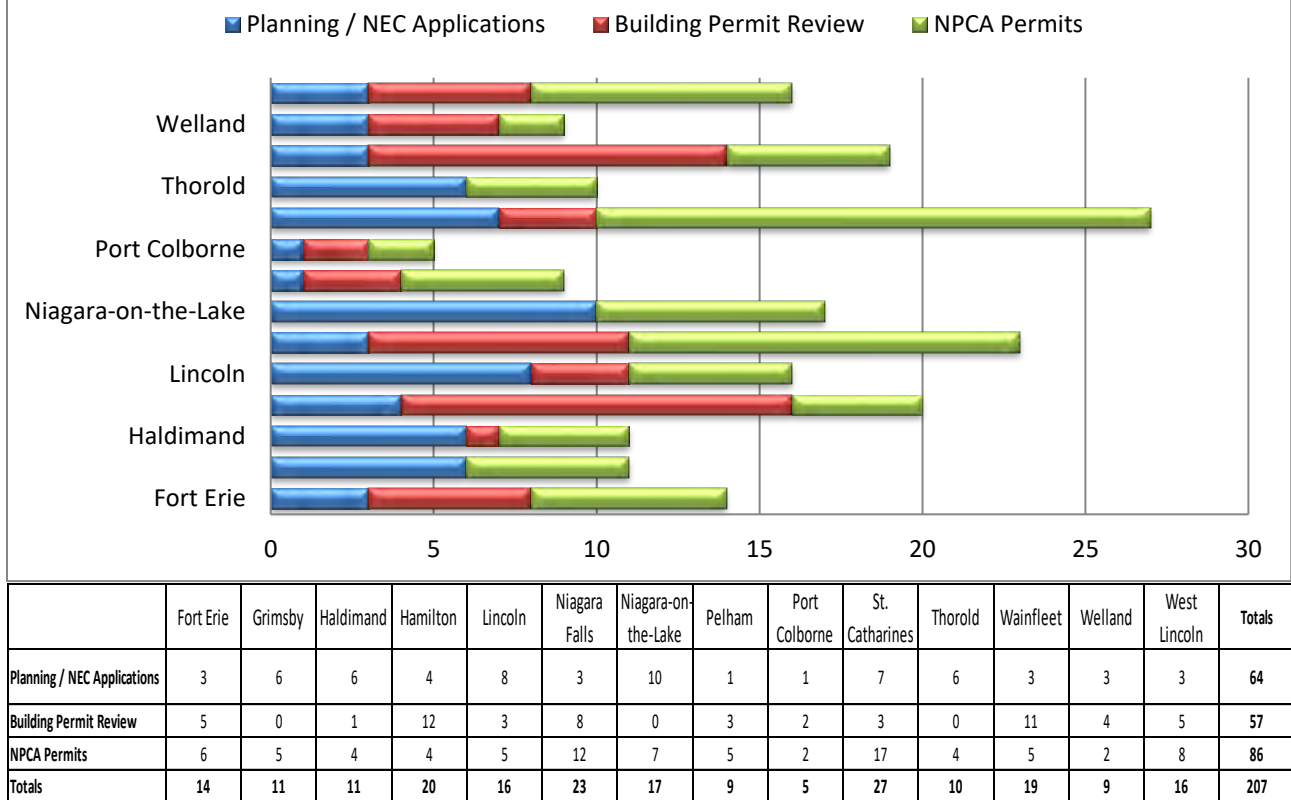


Figure 1. Number of Regulation Permit Application Reviews Completed Q3

**Figure 2: Total No. of Applications (%), July 2019 - September 2019**

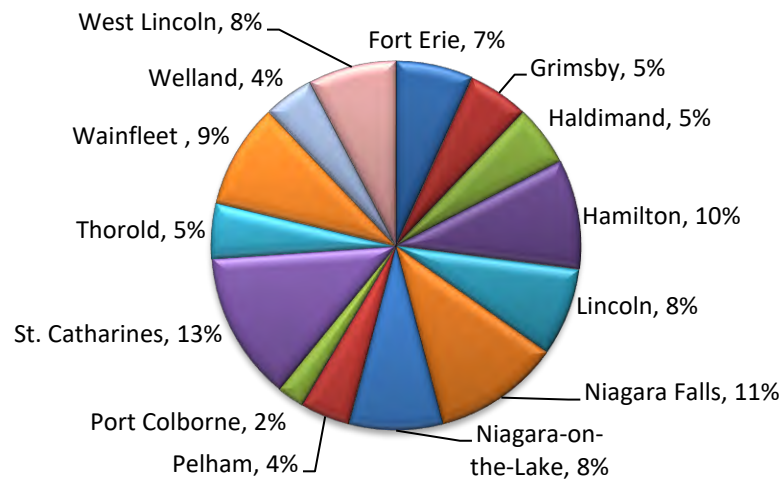


Figure 2. Application Break Down by Percentage for Each Municipality Q3

<b>PERMIT PROCESSING TIME</b>			
	Q3	Year to Date	2018 Year end
Total Reviews	86	213	315
Total Review Days	2085	4098	6710
Total Review Time (Days)	24	19	21

Table 1. Permit Processing Time

## **B. Water Resources Programs**

During the 3rd quarter of 2019, key milestones of the Water Resources Programs activities included:

### **1. Source Water Protection Program**

- Received Transfer Payment Agreement Funding from the MECP for the 2019-2020 program.
- The Source Protection Committee met in July to discuss proposed updates to the Source Protection Plan and Assessment Report.
- The NPCA met with Niagara Region to discuss proposed modifications to the DeCew Reservoir and how this has the potential to require the Source Protection Plan and the associated Assessment Report to be updated.
- The Source Water Protection Committee is still waiting on MECP to name the Chair of the Committee.

### **2. Water Quality Monitoring Program**

- Staff are continuing routine monitoring at all 80 water quality monitoring stations. This monitoring will be performed monthly until December at all stations and samples will be analyzed for general chemistry, nutrients, metals and bacteria.
- Staff have been participating in the investigation E.coli contamination of Queens Royal Beach *E. coli* with the Town of NOTL and MECP for the Niagara River Remedial Action Plan. Based on the work, the Town is moving forward on several initiatives to reduce E.coli loading to the Niagara River.
- Staff have conducted a *E. coli* investigation at Binbrook Conservation Area related to summer beach postings. The preliminary results of the investigation have confirmed the source of the contamination as gull (bird). Further investigation may be needed and Binbrook staff will investigate measures to control gull contamination.



Picture 1. Staff collecting an E.coli sample from the beach sand at Binbrook Conservation Area

- Staff completed the annual monitoring and technical memo of Perfluorinated compounds (PFCs) at Binbrook Conservation Area. ***Concentrations of PFC compounds were found to be below Health Canada drinking water guidelines.***
- Provincial Groundwater Monitoring Network (PGMN): Staff continue to visit monitoring wells for manual downloads and perform QA/QC check on groundwater level data as part of their routine data maintenance protocol. Staff are currently completing the fall water quality sampling.
- Geomorphological studies of five NPCA monitoring stations using the Ontario Stream Assessment Protocol. These are important studies for diagnosing potential stressors of water quality for each watershed.



Picture 2. Photo of staff conducting a stream structure study.

- Staff completed spring monitoring of groundwater for the Balls Falls Centre of Conservation septic system. This is part of the MECP's Certificate of Approval to operate the Centre's septic system.
- To date, staff have processed 34 data requests from other governmental agencies, consultants, and academic institutions.
- The NPCA has received seven (7) applications and completed 4 projects under the Well Water Decommissioning Program.

### 3. Flood Forecasting and Warning Program

- Throughout the third quarter of 2019, the NPCA had issued numerous Flood Watch bulletins warning residents of a potential for flooding from high water levels on Lake Erie and Lake Ontario. While localized flooding and erosion was experienced, no major flooding or erosion damage due to wave action was reported during these events.

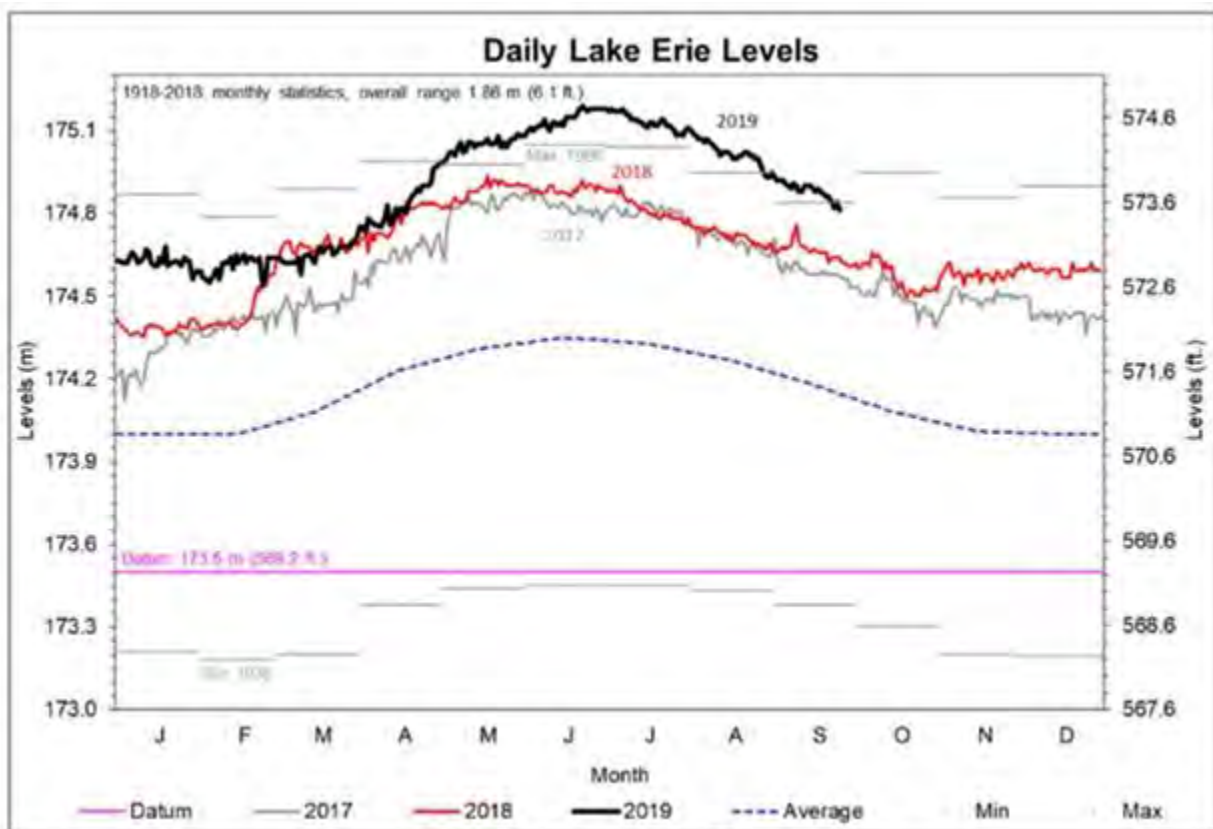


Figure 3. Lake Erie - As of September 26, Lake Erie's static water level was 174.81m. This water level is 66cm above average and 1cm below the record-high set at this time back in September of 1986. Lake Erie's water levels are expected to decline over the coming weeks.

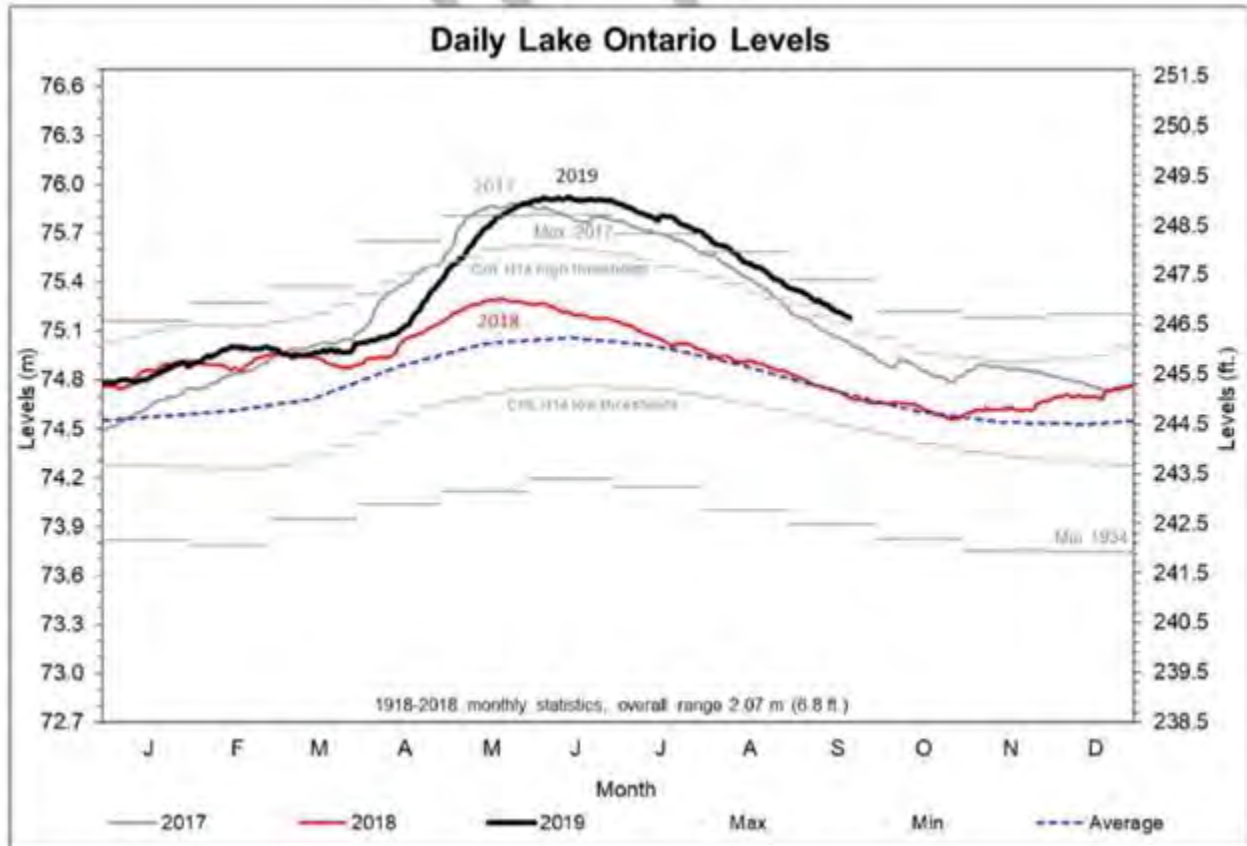


Figure 4. Lake Ontario - As of September 26, Lake Ontario's static water level was 75.16m which is 45cm above average for this time of year and 76cm below this year's peak level of 75.92m recorded on June 15, 2019. Lake Ontario's water levels are expected to decline over the coming weeks.

- Staff continued to monitor daily water levels at our 15 stream gauge stations, climatic data at our 15 climate stations, and undertake routine maintenance, calibration, and inspections at all 30 installations, as part of the NPCA's routine Flood Forecasting and Warning duties. The public can now easily access this real-time water level and rainfall information through the NPCA's updated website at:

<https://npc.ca/conservation#conservation-watershed>.

#### 4. Water Resources Engineering

- As per Board direction, the NPCA is presently organizing the Welland River Floodplain Mapping Information Sessions to be held at four locations during the month of October.

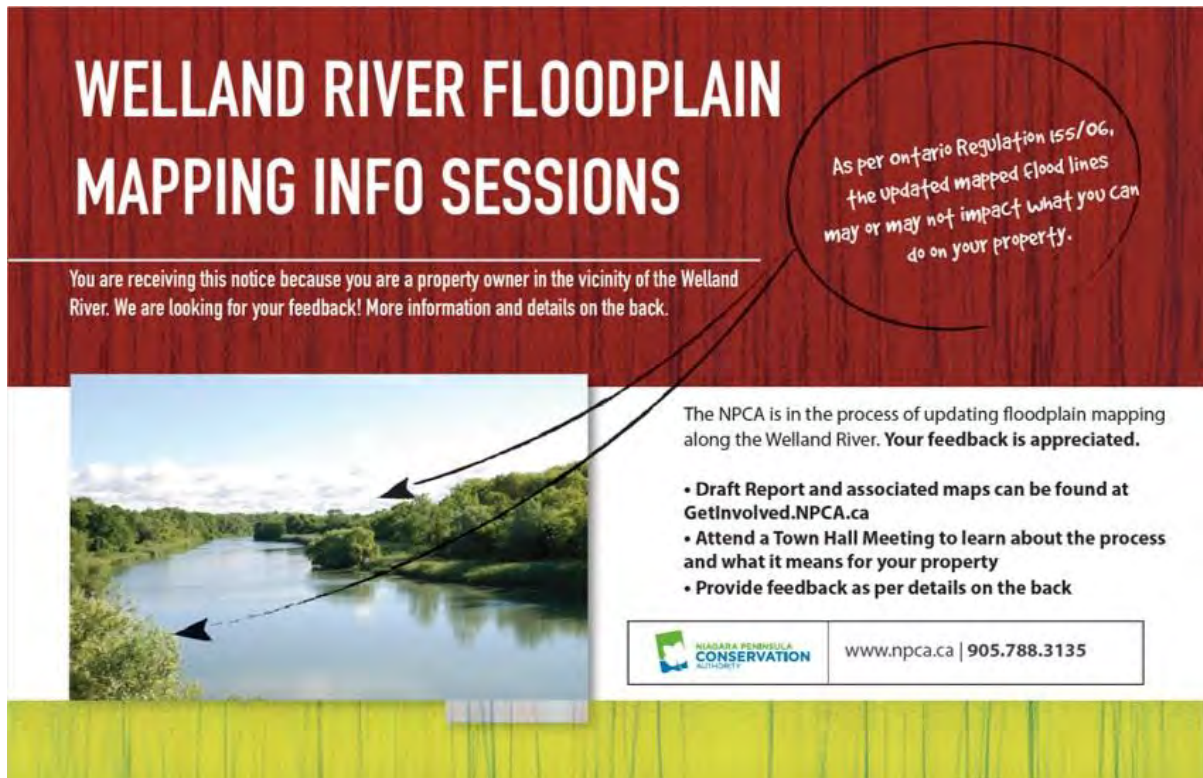


Figure 5. Welland River Floodplain Town Hall Meeting Mail Out Front Side



Figure 6. Welland River Floodplain Town Hall Meeting Mail Out Reverse Side

- Binbrook Dam Morning Glory Outlet Joint Repairs – Inspection of the 2.5m diameter concrete Morning Glory outlet spillway indicated that the concrete pipe sections were straight and in good condition. A total of 5 full contraction/expansion joints were observed to have joint sealant filling in the approximately 25mm (1.0”) wide gap between the pipe segments. The sealant material was observed to be loose or missing from all the lower sections of the joint due to the action of flowing water and debris. As such, the NPCA had recently commissioned a qualified contractor (Rankin Construction) to remove all existing sealant and replace with new joint sealant. The work was completed in mid-September.



Picture 3. Interior of the 2.5 m diameter concrete Morning Glory outlet spillway



Picture 4. Joint cleaned of old sealant.



Picture 5. Newly sealed joint.

- Haldimand County Lake Erie Shoreline Hazard Mapping and Risk Assessment – The NPCA is a partner in this study to develop consistent up-to-date hazard mapping across Conservation Authority jurisdictions within Haldimand County. NPCA staff participated in the second Public Education Center held mid-September at the Selkirk Community Center.

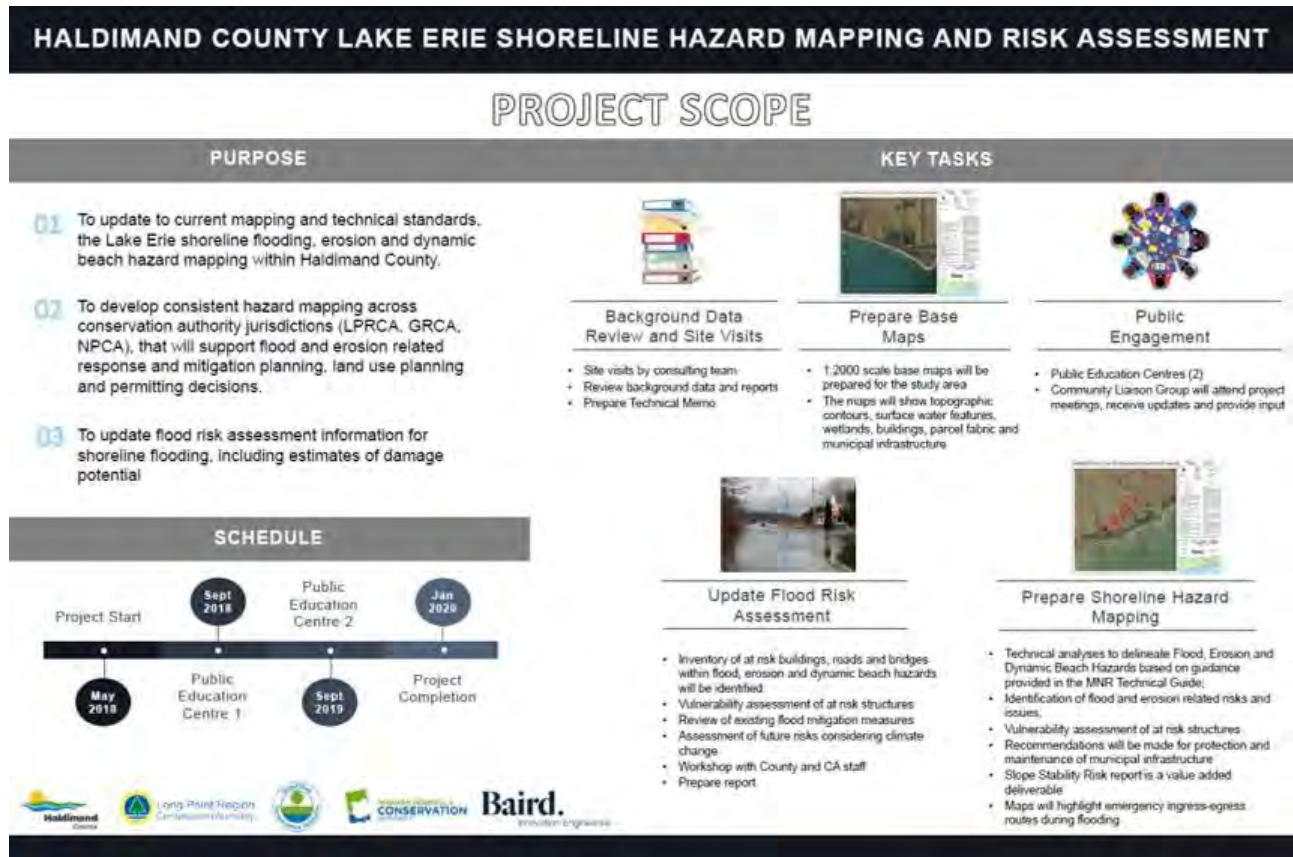


Figure 7. Haldimand County Lake Erie Shoreline Project Notification

### C. Regional Tree and Forest Conservation By-law

The NPCA is responsible for administering and enforcing Niagara Regions Tree and Forest Conservation By-law (No. 30-2008) on behalf of the Region.

During the third quarter of 2019, the NPCA Forester reviewed 21 files: 20 were directly related to the by-law (5 of which were a Good Forestry Practice permit application and final inspections), 1 involved completing a Managed Forest Plan for an NPCA property and 1 was a property information request. The NPCA Forester also provided assistance to the Permits and Compliance Program under Section 28 of the Conservation Authorities Act, as they have also been appointed a Provincial Offences Officer by the Board of the NPCA.

**Financial Implications:**

All works carried out during Q3 were part of the approved 2019 budget.

**Links to Policy/Strategic Plan:**

Works conducted in Watershed Management during Q3 are either part of our Mandate under the Conservation Authorities Act or in relation to Memorandum's of Understanding/Agreement. Our Water Quality testing directly aligns with our current Strategic Plan.

**Related Reports and Appendices:**

There are no direct related reports or appendices for this report.

**Authored by:**

Original Signed by

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Darren MacKenzie, C.Tech., rcsi  
Director, Watershed Management

**Submitted by:**

Original Signed by

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D. Gayle Wood, BES, CMMIII  
Chief Administrative Officer/Secretary-Treasurer

*Prepared with input from D. Deluce, Senior Manager, Planning & Regulations; S. Miller, Senior Manager Water Resources, D. Drennan, R.P.F.*

**Report To: Board of Directors**

**Subject: Q3 Update Report – Lands and Operations**

**Report No: FA-131-19**

**Date: October 16, 2019**

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**Recommendation:**

**THAT** Report No. FA-131-19 RE: Q3 Land Status Report **BE RECEIVED** for information.

**Purpose:**

The purpose of this report is to update the Board members regarding third quarter activities in the Department of Land on a quarterly basis.

**Background:**

The Land department maintains forty-two Conservation Areas while enhancing visitors experience. The teams focus is on connecting people to nature, conservation, and the environment by creating exceptional experiences for people of all ages.

**Discussion:**

The third quarter is an active season for NPCA Operations and Strategic Initiatives services, including the peak season of conservation areas and campgrounds, increased facilities rentals, programming, day use and events.

**Financial Implications:**

There are no financial implications associated with this report.

**Related Reports and Appendices:**

Appendix 1: Q3 Land Update

**Authored by:**

*Original signed by:*

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Adam Christie,  
Acting Senior Manager of Operations  
and Special Projects

*Original signed by:*

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Alicia Powell, B.Sc., MA, PhD(c)  
Acting Manager, Strategic Initiatives

**Submitted by:**

*Original signed by:*

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D. Gayle Wood, BES, CMMIII  
Chief Administrative Officer /  
Secretary-Treasurer



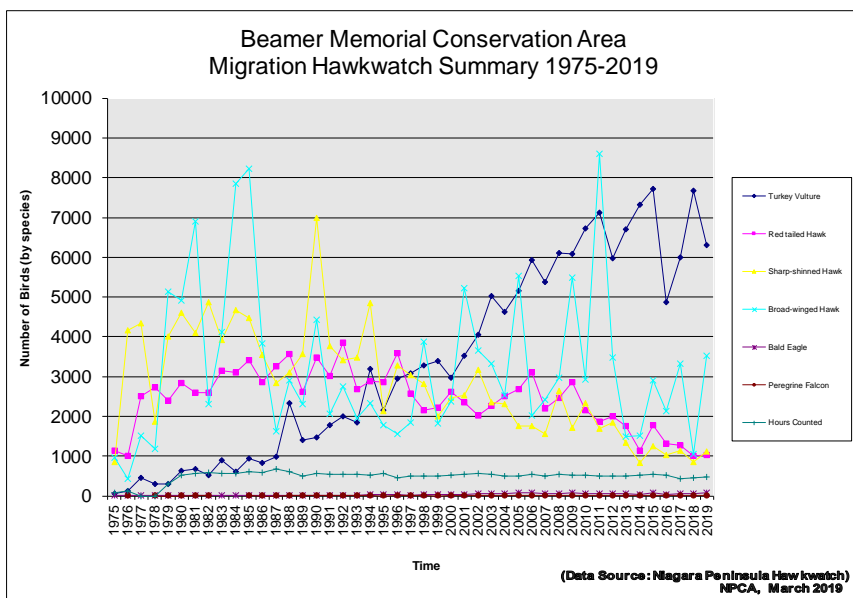
# Q3 2019

## Land

# Ecology

## Beamer Memorial Conservation Area

With the monitoring of migrating raptors over Beamer Memorial Conservation Area, the Niagara Peninsula Hawkwatch group (NPH) is able to evaluate bird populations, and with long term data, help to identify and support where species management may be needed. In 2019, the NPH efforts indicates a spring migration total of 12,828 raptors over Beamer Memorial Conservation Area, which is near the annual average despite the wet spring weather. Further to this, Black vultures are seen as a “regular rarity” as this species’ range moves further north in recent years; Sharp-shinned hawks, Northern Goshawk, and Cooper’s hawk numbers show a decline, with Sharp-shinned and Northern Goshawk, Northern Harrier and American Kestrel, and Red tailed hawk showing declines elsewhere in North America as well. Forest habitat including large tract, contiguous forests and contiguous grasslands are habitats likely limiting these species. The NPCA continues to include these vegetative communities in its existing properties and features for future land acquisitions.



## Binbrook Conservation Area

Staff are determining solutions to reduce the occurrences of E.Coli beach closures at the site.

## Hedley Forest Conservation Area

On July 31, 2019, the Canadian Food Inspections Agency (CFIA) conducted an Oak Wilt survey at the site, as part of their mandate of plant protection in the federal government of Canada. Hedley Forest CA was one of their sites where they inspected up to 50 oak trees (primarily red oak) and took branch samples from trees displaying signs or symptoms of oak wilt. This disease is caused by fungus and reacts by developing tyloses (cell outgrowths) and gums which restrict the flow of water and nutrients through the tree causing eventual death. The survey purpose is to address any potential affects to the forestry industry regarding the trade of wood products, by reducing the spread of the fungus and disease.

## Long Beach Conservation Area

The Canadian Food Inspection Agency's (CFIA) plant protection mandate. Further information indicated a complete inventory of the hemlock is required for the site to accurately assess control/management options. Survey data gaps in Southern Ontario to be collectively completed also. Control options to be discussed with their multi agency committee.



*Hemlock Woolly Adelgid*

## St. Johns Conservation Area

Public concerns were noted over increased algae in the pond, in addition to, park visitors removing tadpoles and turtles from the pond. To assist in ensuring a balanced ecosystem, site signage and staff inform area users not to feed or take wildlife from the pond. The result of such activities can include: uneaten food in the pond which increases nutrients for algae to grow, the loss of tadpoles, frogs and turtles that would consume algae, and the loss of vegetation in and around the pond resulting in increased sunlight penetration on the water making conditions more favourable for algae growth. The NPCA continues to deliver this message to site users and attempt to plant more trees/shade and shoreline vegetation to assist in eliminating factors that increase algae. Additional site signage and social media has been implemented, and ongoing monitoring and adaptive management of the site is conducted, to help to address these aspects.

## St. Johns Valley Centre Conservation Area

The invasive species, Tree of Heaven and Phragmites, were reviewed at the site, with solutions for implementation outlined by staff.

## Smith Ness Conservation Area

The site agreement prairie is monitored to ensure conformance for 5 years. To date, the site monitoring of the agreement prairie indicates conformance containing: 50-80% grass, and three grass species of which one is greater than 50 cm. The remaining sections consist of flowers and legumes, with removal of some woody material to occur this fall. Additional grasses will be augmented in spring 2020 to increase the grass component closer to 80%.

## Wainfleet Bog Conservation Area

- a) No fire concerns have been reported or observed to date this year. One lightning strike was reported near the site by the Ontario Ministry of Natural Resources and Forestry in Haliburton. The site area is checked by staff and moist soils have assisted in preventing fires at the site.
- b) Water well data is part of the on-going monitoring at the site for site restoration. Replacement of data loggers and several wells has been completed by staff to update the existing network of wells.

## Woodend Conservation Area

On October 3, a planting was completed by staff and volunteers to repair the impacted forest understorey using tree saplings, shrub, and herbaceous materials. Fence enclosures were also installed around the planted areas to protect the new plantings and enable site regeneration.



Well and Data logger

## Other Conservation Area Ecological Activity

### NPCA Hunting Program

#### a) General: Hunting Permits

There were 97 NPCA Hunting Permits issued for NPCA hunting areas during the third quarter of 2019 for a total of 301 issued Hunting Permits. Of these 69 individuals are residents from outside the NPCA administrative watershed area.

In comparison to the previous year for the same time (third quarter in 2018),

- 15% increase from the same quarter/timeframe in 2018.
- monies generated from hunting permits during this quarter is \$3880, for a total of \$12,040 in 2019.

#### b) 2019 NPCA Controlled Waterfowl Hunting Program

The Waterfowl Hunting Program began September 28 at Binbrook and Mud Lake Conservation Areas. This program continues to Dec. 14, and November 30 respectively. For the first two weeks of the program, a lottery draw was conducted for the hunting blinds. There were twenty-four applicant for Binbrook CA and fourteen applicants for Mud Lake CA.

## Geocache

No new geocache applications were received or approved.

## External Research Permits on CA Lands

- a) Great Lakes Coastal Monitoring was completed at the Balls Falls Laundry parcel. A diversity of bird and anuran (frogs and toads) species were observed in 2018, with 43 wetland and terrestrial bird species, and 6 species of frogs and toads. This provides additional baseline details for our site.
- b) Beech leaf disease (*Litylenchus crenateae*) research has been proposed to measure and compare the impact of beech leaf and beech bark disease, to answer questions about the implications of beech leaf disease, i.e. how quickly it progresses, do multi-year infections lead to decline and mortality of beech trees and understory trees. This included monitoring plots within the St. Johns Conservation Area assessed every 2 years for 10 years, dependent on funding and disease progression. Additional details on the research is pending.

## NPCA Land Acquisition Strategy

Staff is presently updating the NPCA Land Acquisition Strategy to ensure all points of the Attorney General are incorporated. The final draft is proposed for December 2019.

## Conservation Areas Q3 Highlights

### Binbrook CA

#### Events

##### Perseids Meteor Shower

Over 200 members of the public attended the Annual Perseids Meteor Shower Event. Members of the Hamilton Amateur Astronomers were on hand to provide an up-close look at the meteorological event while offering education on night sky activity. Overnight camping was offered to guests attending the event.

##### Annual Movie Night

The NPCA partnered with an external event company to host the first annual movie on the water night at Binbrook CA. The events featured Jaws being played on an outdoor movie screen while guests watched the movie on the beach and in inflatables on the lake. The event was very successful, and staff will look to host a similar event in 2020.



#### Revenues

After a major increase in revenue in 2018 Binbrook CA continues to increase revenues in 2019. At the end of August in 2018 Binbrook CA generated \$347,285.00. At the end of August in 2019

Binbrook CA generated \$411,057.65 (18% increase). Binbrook CA continues to grow in popularity with the added services of the splash pad, Inflatable Water Park and Treetop Trekking. With a revenue yearly budget of \$362,500 Binbrook CA will surpass the budget substantially.

## Capital

All 2019 Capital Projects at Binbrook CA will be completed by the end of the year. The purchase of a new tractor and Treetop Trekking building and amenities were all completed in Q3.

## Chippawa Creek Conservation Area

### Bass Fishing Derby

On Saturday July 13, Chippawa Creek held the 6<sup>th</sup> annual Douglas E. Elliot Bass Derby. The derby went from 7am to 1pm. The event had 115 participants with a variety of adults and children. Staff weighed 40 bass on the day with the largest fish weighing in just over 3lbs. The event was a success with a good turn out and great weather.



## Revenues

Chippawa Creek CA has had another successful season. The parks Q3 revenues exceeded expectations and despite poor weather in May and June the park has increased revenues from 2018. At the end of August in 2018 Chippawa CA generated \$343,658 and in 2019 the park has generated \$357,611.47 (4% increase).

## Capital

Chippawa Creek CA's only 2019 capital project is in progress. A new cistern was purchased and will be installed in October.

## Long Beach Conservation Area

### Events

#### Bolerama

The 9<sup>th</sup> annual Bolerama weekend was a huge success at Long Beach CA. The Ontario Bolerama had their 19th gathering of this light weight molded fiberglass camping trailer style. Their theme this year was "**Wheel Appeal**". From when they first met in Earlton Ontario in 2001, every year after they have gathered together and enjoyed a nice community camping experience. This year will be the ninth gathering at the Long Beach Conservation Area for the Ontario Bolerama. This is an informal group from all around Canada and the USA that enjoys camping in these trailers. The term Bolerama is a generic term to reference this class of trailer. All Molded Fiberglass Trailers are encouraged to come on out for a great camping weekend.



#### Revenues

Long Beach CA has had an extremely successful season and continues to grow in popularity. At the end of August in 2019 the park generated \$406,245 in revenue. In 2019, the park has generated \$451,024.76 (11% increase). Adding new 30amp campsites on the North side has made a major impact in revenues in 2019.

#### Capital

Long Beach CA has 1 of 4 capital projects completed at the end of Q3 (Sewer Pipe replacement). The Lagoon project was worked on during Q3 and will be completed by the end of the year. Both the Park Road Upgrades and New Comfort Station will be carried over to 2020.

## Ball's Falls Conservation Area

### Capital

Ball's Falls Conservation Area has 6 capital projects slated for 2019. Wifi boosting in main park, 7<sup>th</sup> avenue roadway and Thanksgiving Festival Ticket Booths were all completed in Q3. All Ball's Falls capital projects will be completed by the end of the year except for Interpretive / Education Facility Upgrade's which will be carried over to 2020.

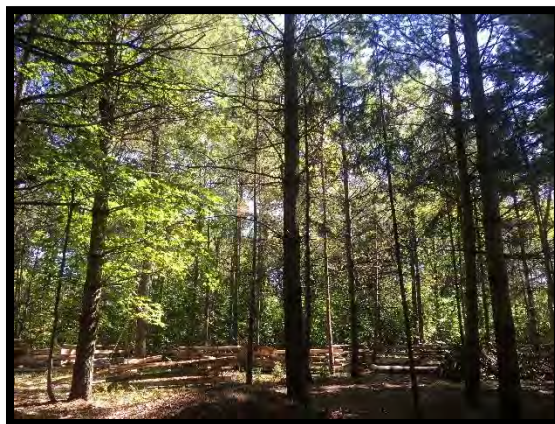
### Capital Education Projects

#### Historical Village Signage

New interpretive signage for the Ball's Falls Historic Village were delivered at the end of Q3. Staff will endeavor to have the new signs in place in the village in time for the Thanksgiving Festival.

### Ball's Falls Forest Playscape

At the end of Q3, the forest playscape project is near completion, with the intended soft opening of the area over Thanksgiving weekend. This project would not be possible without the dedicated efforts of NPCA volunteers and staff to the efficient and careful completion of this exciting project at Ball's Falls. The new forest playscape will offer outdoor activities that are inclusive to children and students of all ages and provide an additional feature for guests to the conservation area.



## Niagara Peninsula BioBlitz

In August, the NPCA co-hosted the Niagara BioBlitz with the Canadian Wildlife Federation. This event was widely advertised through the generous contributions of the CWF. A number of conservation clubs and special guest speakers, along with NPCA staff, provided educational demonstrations, activities, presentations and guided hikes. The event was supported with a good turnout for a first-time event of this kind at Ball's Falls. The quality of presenters and activity stations at the event was remarked upon by a number of guests and representatives from the CWF. NPCA staff are looking into hosting another BioBlitz with the CWF in 2020, in an alternate season in order to further collection of species diversity.



## Facilities Rentals

Over the past quarter, staff have noticed an increase for inquiries on the chapel and for 2020 bookings. The improvements to the chapel and the grounds may have supported this increased interest.

Compliments from couples in this last quarter have been received regarding the appearance of our grounds, staff and overall experience at Ball's Falls. One couple in particular booked the venue from not ever having seen it in person as they live in BC, however knew they wanted to have their wedding here at Ball's Falls. This bride required a few extra concessions (earlier access) the day of her wedding so it would go off without a hitch. The entire SI team and operations came together and made a memorable day for this couple! (see attached if you wish to be included or attach along with the photo)

## Ball's Falls Facility Rentals\*

	2018	2019	+/- dollars	+/- %
<b>Big Barn</b>	\$127,443	\$133,981	\$6,537	\$5.13%
<b>Glen Elgin</b>	\$72,747	\$47,156	-\$25,592	-\$35.18%
<b>Church</b>	\$10,783	\$18,698	\$7,915	\$73.40%
<b>Outdoor Ceremonies</b>	\$13,717	\$15,546	\$1,829	\$13.33%
<b>Bridal Suite</b>	\$7,810	\$11,607	\$3,797	\$48.62%
<b>Total</b>	\$232,501	\$226,989	-\$5,513	-\$2.37%

\*(As of August 31, 2019)



Hey Catherine and Ball's Falls team,

I just wanted to send out my most sincere thank you to all the hard work you have done, the patience you had for all my requests, and the willingness to be flexible to help make my dreams come true...

It has been my dream to get married at Balls Falls ever since I visited it for the first time with Dave (now husband). We glanced at the church and knew one day we would get married in it...

Catherine, my goodness. You are so wonderful. You listened to me on all our phone calls, you were so calm, so helpful. You explained everything to me until I ran out of questions. I understand you made some special exemptions for me and for that I am forever grateful. You are absolutely wonderful at your job and if there's someone I can tell about you it would be my pleasure to write them an email. I would like you to know you made a massive impact on my day, in the best way possible. Thank you for all your hard work.

I hope this email can make it to the grounds crew and the staff that were around as we got ready. You were all very professional and very helpful. If we had a question, you answered it very well or found someone who could. The barn, church and bridal suite were in immaculate condition. I hope all these people will be congratulated for all their hard work and customer service, from one very happy bride.

Lastly, and this may sound funny. But to whoever installed the sod/grass on the left side of the chapel sometime between when we were done setting up Thursday night and Friday morning you have my greatest gratitude. This must have been so much hard work! I have attached one of my favourite photos that I have received so far, because of you (all of you) that photo is perfect. Thank you.

Anyways, if there is any more I can do for any more of these people to make sure their efforts are recognized, it would be my pleasure. You are truly one excellent team. You should be very proud.

...

Sincerely, Courtney Tayler

## Thanksgiving Festival Update

As of the end of Q3, preparations for the 45<sup>th</sup> Annual Thanksgiving Festival were nearly completed, with marketing and printing being finalized. Logistics and permits are completed for the event, and set-up of the grounds has already begun. All vendors spots have been filled for this year's 45<sup>th</sup> Ball's Falls Thanksgiving Festival. We have over 170+ artisans that will be on the grounds ready to provide handmade products to guests ready to enjoy a family tradition. Staff look forward to hosting the 45<sup>th</sup> Annual Thanksgiving Festival.

## Camps and Education Programs

### Outdoor Overnight Adventure Program

This fall season marks the second year of the NPCA's Fall Outdoor Overnight Adventure Program for grades 5 – 8 with the DSBN held at Ball's Falls Conservation Area. The Overnight program was held in September, and the final session will take place in October following the Thanksgiving Festival, from September 23 – Oct 3 and Oct 16-17 with four sessions held on Monday-Tuesday and Wednesday-Thursday with four different DSBN schools. In total, approximately 200 students will have attended the program by the end of the fall session dates. The first three sessions in September were very successful, with staff receiving compliments and comments of high regard from visiting teachers and principals, including teachers who attended with their classes last year. NPCA staff are looking forward to completing the Fall session next quarter.

### Program Bookings

Program bookings for the fall session continued through Q3 in advance of the school year. Over this quarter, several bookings have been made for Spring 2020, including high school class visits for the 'Water Quality' and 'Human Impact' programs, as well as the popular Spring Awakening and Amazing Amphibians.

### Summer Day Camp

Ball's Falls Summer Adventure Day Camp took place over the third quarter, with full capacity over most of the summer. Due to increasing demand, camp capacity was increased to accommodate 32 campers per week, over 24 in previous years. Campers enjoyed a range of activities including archery, shelter building and scavenger hunts throughout the summer in themed adventure weeks.



Day Camp and Programming revenue accumulated in Q3 (up to August 31) was \$23,306.21, bringing the overall year-to-date revenue to \$90,115.10, which is \$10,100 above the forecasted budget.

## Summary

At the end of August, the NPCA's 4 active parks have generated \$1,679,517.03 in revenue compared to \$1,550,275.00 in 2018. Despite poor weather in May and June, all active parks have increased revenue with a combined increase of 8.34% in 2019. Parks have stayed on budget with expenses despite the increase in day use numbers.

**Report To: Board of Directors**

**Subject: 2019 Q3 Capital Projects Update**

**Report No: FA-133-19**

**Date: October 16, 2019**

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**Recommendation:**

**THAT** the 2019 Q3 Capital Projects update Report No. FA-133-19 **BE RECEIVED** for information.

**Purpose:**

The purpose of this report is to provide Board members with a quarterly report on the 2019 Capital Projects.

**Background and Discussion:**

A detailed Projects Report is attached as Appendix 1.

**Financial Implications:**

Financial totals are for monies already spent or monies committed to be spent, that may not have been processed at the time of the writing of this report.

**Related Reports and Appendices:**

Appendix 1: Updated 2019 Capital Projects Report

**Authored by:**

*Original signed by:*

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Lise Gagnon, CPA, CGA  
Director, Corporate Services

*Original signed by:*

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Adam Christie  
Acting Senior Manager of Operations  
and Special Projects

**Submitted by:**

*Original signed by:*

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D. Gayle Wood, BES, CMM III  
Chief Administrative Officer /  
Secretary-Treasurer

# Niagara Peninsula Conservation Authority - 2019 CAPITAL PROJECTS

Asset Class	SAGE Acct #	Location/Site	Project Name	Fiscal Year	Priority Ranking	Class'n	Status	Approved Budget 2019	Revised Forecast 2019	YTD Spend Sept 30, 2019
Building	8018-633	Ball's Falls	Historical Building Restoration and Improvements	2019		Land	In Progress	\$35,000.00	\$35,000.00	\$5,823.41
Building	8019-633	Ball's Falls	Thanksgiving Festival Ticket Booths	2019		Land	Complete	\$30,000.00	\$30,000.00	\$22,694.76
Building	8020-633	Ball's Falls	Interpretive / Education Facility Upgrades	2019		Land	In Progress	\$80,000.00	\$80,000.00	\$3,917.32
Equipment	8021-633	Ball's Falls	Wifi Boosting	2019		Land	Complete	\$14,000.00	\$25,000.00	\$3,572.48
Land Improvement	8022-633	Ball's Falls	Additional Roadway from 7th Ave into Park	2019		Land	Complete	\$75,000.00	\$34,610.00	\$33,540.10
Building	8023-633	Ball's Falls	Insulate and Heat Workshop	2019		Land	Complete	\$15,665.00	\$15,150.00	\$15,149.66
Equipment	8117-603	Binbrook	Tractor	2019		Land	Complete	\$70,000.00	\$70,000.00	\$4,777.63
Land Improvement	8118-603	Binbrook	Parking Capacity (Main Park)	2019		Land	Eliminated	\$95,000.00	\$95,000.00	
Land Improvement	8119-603	Binbrook	New Entrance (Plan/Permit)	2019		Land	Eliminated	\$30,000.00	\$0.00	
Building	8120-603	Binbrook	Water Tank and Equipment	2019		Land	In Progress	\$30,000.00	\$10,000.00	\$0.00
Land Improvement	8121-603	Binbrook	Treetop Trekking Building & Ammenities	2019		Land	In Progress	\$150,000.00	\$168,455.00	\$78,294.55
Land Improvement	8122-603	Binbrook	Treetop Trekking Parking	2019		Land	Complete	\$18,455.00	\$0.00	\$2,903.93
Equipment	8310-609	Chippawa Creek	Water Capacity Cistern and Plumbing	2019		Land	In Progress	\$35,000.00	\$35,000.00	\$4,765.93
Land Improvement	8311-609	Chippawa Creek	Beach Sand	2019		Land	Eliminated	\$8,000.00	\$0.00	
Equipment	8312-609	Chippawa Creek	Washer and Dryer	2019		Land	Eliminated	\$4,186.00	\$0.00	
Building	8228-643	Central Workshop	Gainsborough Drive Shed Roof Replacement	2019		Land	Complete	\$35,000.00	\$16,793.00	\$17,088.15
Equipment	8229-643	Central Workshop	New Mower	2019		Land	Complete	\$38,000.00	\$31,626.00	\$32,182.69
Land Improvement	8230-643	Central Workshop	Gainsborough Compound Fence	2019		Land	Complete	\$25,000.00	\$7,500.00	\$7,827.41
Building	8231-643	Central Workshop	Morgan's Point Comfort Station Renovation	2019		Land	Eliminated	\$25,000.00	\$0.00	
Equipment	8232-643	Central Workshop	Gainsborough Potable Water System	2019		Land	Eliminated	\$15,000.00	\$0.00	
Building	8233-643	Central Workshop	Morgan's Point Pavilion	2019		Land	Eliminated	\$60,000.00	\$0.00	
Land Improvement	8234-643	Central Workshop	St. John's Corner Dock Replacement	2019		Land	In Progress	\$40,000.00	\$13,600.00	\$0.00
Equipment	8235-643	Central Workshop	Picnic Tables - All CA Properties	2019		Land	Complete	\$60,000.00	\$60,000.00	\$37,506.13
Equipment	8236-643	Central Workshop	Waste and Recycling Containers	2019		Land	Complete	\$20,000.00	\$20,000.00	\$19,683.70
Land Improvement	8237-643	Central Workshop	New Park Signage	2019		Land	In Progress	\$50,000.00	\$50,000.00	\$7,454.46
Land Improvement	8238-643	Central Workshop	Ash Tree Removal	2019		Land	In Progress	\$70,000.00	\$70,000.00	\$44,777.73
Equipment	8239-643	Central Workshop	Double Walled Diesel tank and accessories	2019		Land	Complete	\$7,000.00	\$7,000.00	\$4,212.26
Land Improvement	8240-643	Central Workshop	Jordan Harbour Flag Pole	2019		Land	Complete	\$7,500.00	\$4,333.00	\$4,033.77
Land Improvement	8415-611	Long Beach	Sewer Pipe Replacement	2019		Land	Complete	\$75,000.00	\$75,000.00	\$69,186.62
Building	8416-611	Long Beach	North Side Comfort Station Renovations	2019		Land	In Progress	\$75,000.00	\$250,000.00	\$3,561.60
Building	8417-611	Long Beach	North Playground and Shade Structure	2019		Land	Deferred	\$75,000.00	\$0.00	\$0.00
Land Improvement	8418-611	Long Beach	Park Road Upgrades	2019		Land	In Progress	\$65,000.00	\$75,000.00	\$0.00

# Niagara Peninsula Conservation Authority - 2019 CAPITAL PROJECTS

Asset Class	SAGE Acct #	Location/Site	Project Name	Fiscal Year	Priority Ranking	Class'n	Status	Approved Budget 2019	Revised Forecast 2019	YTD Spend Sept 30, 2019
Building	8419-611	Long Beach	Cabins Pilot Revenue Generator	2019		Land	Eliminated	\$30,000.00	\$0.00	
Building	8009-633	Ball's Falls	Septic System Replacement	2018		Land	In Progress	\$70,000.00	\$78,500.00	\$6,767.04
Building	8011-633	Ball's Falls	Refurbish Big Barn and Field Centre (Scoping)	2018		Land	complete	\$25,000.00	\$5,000.00	\$2,421.89
Building	8012-633	Ball's Falls	St.George's Church Upgrades	2018		Land	Complete	\$45,000.00	\$47,000.00	\$47,827.20
Building	8013-633	Ball's Falls	Centre for Conservation Upgrades	2018		Land	Complete	\$50,201.00	\$48,644.00	\$4,514.46
Building	8014-633	Ball's Falls	Fury Cabin Refurbishments	2018		Land	Complete	\$40,000.00	\$49,000.00	\$49,862.40
Equipment	8017-633	Ball's Falls	Monitoring Well - CFC Septic	2018		Water	Complete	\$8,000.00	\$2,544.00	\$0.00
Land Improvement	8114-603	Blnbrook	Hazard Tree Removal	2018		Land	Eliminated	\$25,000.00	\$0.00	
Land Improvement	8114-603	Blnbrook	Tree Planting	2018		Land	In Progress	\$30,000.00	\$30,000.00	
Land Improvement	8223-643	Central Workshop	Tree Removal and Landscaping	2018		Land	Eliminated	\$150,000.00	\$0.00	
Land Improvement	8227-643	Central Workshop	Wainfleet Wetlands Parking Lot	2018		Land	Complete	\$15,000.00	\$12,000.00	\$0.00
Building	8307-609	Chippawa Creek	Main Washroom Renovation	2018		Land	Complete	\$75,000.00	\$48,038.00	\$0.00
Land Improvement	8412-611	Long Beach	Lagoon Project	2018		Land	In Progress	\$150,000.00	\$75,000.00	\$19,968.70
Building	8413-611	Long Beach	Electrical Upgrades - North Side	2018		Land	Complete	\$0.00	\$0.00	\$96,875.52
Land Improvement	8506-613	Ecology	Red Mulberry/Perch Culvert/Brook Trout	2018		Land	Eliminated	\$25,000.00	\$0.00	
Land Improvement	8507-613	Ecology	Fowler Toad Habitat	2018		Land	Eliminated	\$10,000.00	\$0.00	
Equipment	8615-677	IT	Annual Computer Replacement	2019		Corp Res	Complete	\$35,000.00	\$35,000.00	\$34,405.91
Equipment	8616-677	IT	Firewall	2019		Corp Res	In Progress	\$16,000.00	\$16,000.00	\$1,448.04
Equipment	8706-673	All Departments	Office Furnishings	2019		Corp Res	In Progress	\$38,000.00	\$38,000.00	\$20,840.37
Equipment	8824-681	Watershed	Water Quality Loggers	2019		Water	Complete	\$25,000.00	\$25,000.00	\$16,485.12
Equipment	8825-681	Watershed	T.C Water Level Loggers	2019		Water	Complete	\$5,000.00	\$5,000.00	\$3,601.29
Equipment	8826-681	Watershed	Groundwater Instrumentation	2019		Water	Complete	\$5,000.00	\$5,000.00	\$5,085.57
Equipment	8827-681	Watershed	Telemetry & Sensors	2019		Water	In Progress	\$10,000.00	\$10,000.00	\$1,828.63
Equipment	8828-681	Watershed	Survey / Leveling Equipment	2019		Water	In Progress	\$3,500.00	\$3,500.00	\$0.00
							<b>TOTAL</b>	<b>2,318,507</b>	<b>1,812,293</b>	<b>734,886</b>

**Report To: Board of Directors**

**Subject: Integrated Watershed Planning and Information Management Q3 Status Update**

**Report No: FA-135-19**

**Date: October 16, 2019**

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**Recommendation:**

**THAT** Report No. FA-135-19 RE: Integrated Watershed Planning and Information Management Q3 Status Update **BE RECEIVED** for information.

**Purpose:**

The purpose of this Report is to update the Board of Directors on the Integrated Watershed Planning and Information Management Team's activities and achievements during Q3 2019 relative to its workplan.

**Background:**

At the June Full Authority meeting the Board of Directors approved the Annual Workplans for the various departments and teams of the NPCA. Since the workplans were finalized at the end of Q2, this is the first opportunity to report on progress and highlight achievements towards the workplan to date for the new Integrated Watershed Planning and Information Management department in Corporate Services.

**Discussion:**

Integrated Watershed Planning

Staff commented on the Mapping Discussion Paper, Watershed Planning Discussion Paper (official response provided for information purposes at the June meeting), and reviewed the Natural Environmental Work Program, all as part of the continued response to the Niagara Region New Official Plan stakeholder consultation process. Staff have communicated the NPCA remains committed to partnering with Niagara Region on delivering integrated watershed planning in Niagara. Niagara Region staff formed a delegation to present on the New Official Plan process at the recent October Full Authority meeting.

NPCA hosted Niagara Region Planning staff in June to discuss and demonstrate as a natural resources management team (subject matter experts in natural heritage, ecological restoration, water resources, environmental planning and water resources engineering), the existing operational value of its watershed-based programs and services towards integrated watershed planning. It was reiterated many of the watershed planning elements and best practices, such as the adaptive management approach, are being implemented by the Authority (i.e. restoration).

NPCA also hosted Niagara Region Planning staff in July to specifically discuss NPCA's 'Nature For Niagara's Future' natural heritage system (NHS) assessment and the value of its findings towards the updating of Niagara Region environmental policy as part of the New Official Plan process. The focus of the meeting centered around the need for ecological objectives for the landscape, and that the current achievements towards such, be considered of value to the formation of the new environmental policies. Staff showed how the information from that study can be used to assess the performance of the provincial NHS.

Staff have published the Natural Areas Inventory, Nature For Niagara's Future, and its Watershed Plans in context of each other on the corporate website to communicate the adaptive management approach of natural resources in the NPCA watershed through the integrated watershed planning cycle.

Integrated Watershed Planning is now included in the approved 2020 operating budget. A Natural Areas Ecological Land Classification (ELC) Mapping update business case has been developed and is also to be considered for the 2020 capital budget.

The Watershed Analyst is now with the team after returning from maternity leave and focusing on the prioritization and targeting decision support and related analyses for the new revitalized Restoration Program and associated selection committee.

### Information Management

Information Technology policy gap analysis filling and standard operating procedure improvements continues with emphasis on enhancing security. The managed services provider has implemented a password policy that requires network users to change their passwords every 90 days with length, history, and complexity requirements. Further, migration to multifactor authentication is currently being implemented for staff access to its email exchange through the Microsoft Office 365 environment. Cyber threats are continuously managed through domain, personal email address and IP address monitoring by the managed services provider. Compromised credentials are also monitored on the dark web and staff passwords are changed if instances occur. Proactive measures to educate staff about phishing and social engineering are also being conducted. Offsite network backup and archiving as a third redundancy to NPCA's backup and disaster recovery is being brought forward for consideration as part of the capital budget.

A mobile device policy will be presented to the Board in November.

Staff continue to support the Agenda Management solution developed using NPCA's SharePoint capabilities using its existing Microsoft Office 365 environment. Technology Infrastructure reviews have been completed as part of the CityView 'Workspace' migration project in support of the Planning and Regulations team. The implementation of an Electronic Document Management System identified in the 2019 capital project has been deferred until a broader discussion and evaluation of the Authority's needs can be completed.

In terms of other 2019 Capital Projects, the Annual Computer Replacements have been completed under budget. A Firewall project for the Conservation Areas with computer assets is currently in progress by the managed services provider and forecast to be completed at the end of Q4 without an anticipated upset. This includes setting up a Network Area Storage (NAS) and wireless access point at each site as well.

### Geographic Information Systems

Significant achievement towards completing the migration to ArcGIS Enterprise has occurred. Staff have designed and created numerous SQL Geodatabases to house spatial data to be deployed in the new organizational enterprise wide GIS platform. Geodatabases have been tested to ensure security and desired operability within the organization. Spatial data has begun to be migrated from the old GIS platform (ArcGIS Server) into the new (ArcGIS Enterprise). This will be an ongoing process. An associated distribution strategy of spatial data for the various departments within the organization (which datasets are to be utilized by each department) has also been created.

Efforts have also focused on designing and creating the initial Internal GIS Open Data Portal to house location of GIS data and GIS Applications afforded by the new system. Devised conceptional look and feel for our public web GIS Open Data portal to house GIS data and information for the public, of which a report to the Board will be forthcoming in either November or December.

In terms of staff support, GIS staff have generated various statistics for the Draft Welland River Floodplain project, provided technical insight with regards to the web-based Alert System for flood alert warnings. Web maps to replace costly Google maps reliance within our NPCA website are being created. Various cartography efforts and map development has been conducted for staff during this period.

Staff have provided comment and support to Conservation Ontario with respect to negotiating the next Enterprise License Agreement (ELA) with ESRI that Conservation Authorities use to access ArcGIS software licensing at reduced rates.

A letter of intent to participate in the Land Information Ontario Imagery Strategy's Southwestern Ontario Orthoimagery Project (SWOOP) 2020 acquisition has been submitted to the province. An associated business case has been included for consideration as part of the 2020 capital budget.

A GIS Administrator has been hired in place of the former GIS Analyst position in order to properly reflect the role and current needs of the organization as it continues to mature with respect to GIS.

### Restoration

Workplan for the revitalized restoration program was approved by the Board in June for 2019. Workplan for the 2020 program is currently being developed and will be brought to the Board for consideration in November, including prioritization of sub watersheds to focus on based on land cover statistics and water quality matrix. The program has also been actualized in the 2020 operating budget.

To date in 2019, 13 out of the 26 currently approved projects have been completed. Nine tree planting projects seeing 37650 trees planted for a total of 19 ha (47.10 acres) reforested, and four wetland restoration projects completed totaling 1 ha of wetland created.

In August staff promoted the new Restoration Program directly to 45 external organizations, including local area municipalities and NGO's. Additional promotion was achieved through advertisements in the Hamilton Spectator, Farmer's Monthly and Niagara this Week.

A Memorandum of Agreement (MOA) for working collaboratively with Ducks Unlimited was approved by the Board in July. A Memorandum of Agreement for working collaboratively with the Niagara Chapter of Trout Unlimited Canada is for consideration at this month's board of Directors meeting as well. Similarly, NPCA is seeking MOA's with the Haldimand Stewardship Council and Land Care Niagara and continues dialogue on those fronts.

A strategy on how to incorporate the OPG funding for Welland River restoration into the existing grant program will be communicated and considered at the next quarterly meeting between both agencies.

### Niagara River Remedial Action Plan

Staff have remained very effective at coordinating and implementing the Niagara River Remedial Action Plan (RAP) in spite of its funding challenges and uncertainty.

Administrative support for the entire RAP structure has been ongoing, including financial reporting to funding agencies, managing RAP project finances, meeting planning & organization with various external partners, and preparation & distribution of meeting records. Staff have managed content (original and curated) of the Niagara River RAP website, including keeping the document library up to date, adding links to archived E-newsletters, and preparing original content to highlight collaborative monitoring activities towards RAP goals ([ourniagarariver.ca/lyonscreek-monitoring2019/](http://ourniagarariver.ca/lyonscreek-monitoring2019/)). Enhanced digital engagement occurred through social media outlets (Twitter, Facebook, Instagram) and a monthly E-newsletter containing original and curated content was delivered to over 250 subscribers.

Continued implementation of a Niagara River Fish Consumption Survey to gather information about the types of fish people eat and how often they eat fish from the Niagara River. Summary of interim results are in preparation.

Continued fostering of Indigenous engagement for the Niagara River RAP through a fish consumption project in collaboration with the Mississaugas of the Credit First Nation (MCFN) and two other nearby Areas of Concern leaders (i.e., Hamilton Harbor and Toronto waterfront) The project manager participated in two MCFN events to share information about the project with MCFN community members.

Lead the development of a bi-national poster board with staff from Niagara Parks and New York State Department of Environmental Conservation to highlight habitat restoration efforts on both sides of the Niagara River. NPCA staff attended the U.S. Areas of Concern conference in Cleveland, OH to present the information and highlight bi-national cooperation toward improving the Niagara River.

A preliminary Project Charter has been drafted in preparation of applying for and securing funding to deliver the final phases of the RAP on its way to delisting.

**Financial Implications:**

All works carried out during Q3 were part of the approved 2019 budget.

**Related Reports and Appendices:****Authored by:**

*Original signed by:*

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Geoff Verkade  
Senior Manager, Integrated Watershed Planning/Information Management

**Reviewed by:**

*Original signed by:*

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Lise Gagnon, CPA, CGA  
Director, Corporate Services

**Submitted by:**

*Original signed by:*

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D. Gayle Wood, BES, CMMIII  
Chief Administrative Officer/Secretary-Treasurer

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**Report To: Board of Directors**

**Subject: Update - Auditor General Report Recommendations**

**Report No: FA-138-19**

**Date: October 16, 2019**

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**Recommendation:**

**THAT** Report No. FA-138-19 RE: Update - Auditor General Report Recommendations October 16, 2019 **BE RECEIVED** for information.

**Purpose:**

The purpose of this report is to provide a monthly update to the Board of Directors regarding continued progress in responding to the Auditor General's Report and recommendations.

**Background:**

The Auditor General of Ontario attended the May 3, 2019 Board of Directors' meeting to present her findings regarding the ***Special Audit of the Niagara Peninsula Conservation Authority, September 2018***. At the May 3<sup>rd</sup> meeting staff, through Report No. FA-50-19, provided an Update regarding the NPCA's progress in responding to the Auditor General's recommendations.

The Auditor General advised the Board that she and her team will return in 2020 to undertake an additional review to ensure her recommendations were addressed.

**Discussion:**

At the May 3, 2019 meeting the Board of Directors requested that a Standing Report be received at their monthly meetings to provide Board members with continuous updates in addressing the Auditor General's recommendations.

Attached to Report No. FA-138-19 is an Appendix, dated October 16, 2019 regarding NPCA's responses to the Auditor General's recommendations. The column entitled ***NPCA Response*** outlines, in red, progress made since the September Board of Directors' meeting.

**Financial Implications:**

The draft 2020 budget, will address any recommendations of the Auditor General requiring funding submissions, including addressing staffing gaps, required capital projects and updating floodplain mapping.

**Related Reports and Appendices:**

Appendix 1: Auditor General's Recommendations and NPCA Response – Updated October 16, 2019

**Submitted by:**

*Original signed by:*

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D. Gayle Wood, BES, CMMIII  
Chief Administrative Officer/Secretary-Treasurer

TABLE: Auditor General’s Recommendations and NPCA Response - Updated October 16, 2019

LEGEND:

- Ministry of Environment, Conservation and Parks (MECP)
- Ministry of Natural Resources and Forestry (MNR)
- NPCA Board of Directors (BD)
- Board/CAO (BC)
- CAO/Municipalities (CM)
- Ministry/Conservation Ontario (MCO)
- NPCA Operations Staff (OPS)

Lead and Rec. #	AUDITOR GENERAL RECOMMENDATIONS	NPCA RESPONSE	INITIATED	TARGETTED COMPLETION	COMPLETE
(MOECP) # 1	To ensure effective oversight of conservation authorities’ activities through boards of directors, we recommend that the Ministry of the Environment, Conservation and Parks clarify board members’ accountability to the conservation authority.	<p>MOECP launched two reviews under the Environmental Registry of Ontario on April 5, 2019 - <b>Modernizing conservation authority operations and Focusing conservation authority’s development permits on the protection of people and property.</b> This provincial review will assist in addressing Recommendation 1.</p> <p>Bill 108 <i>More Homes, More Choices Act</i> as passed by the legislator on June 4, 2019. This included Schedule 2 – revisions to <i>The Conservation Authorities Act</i>. <i>Revisions include a “duty on every member of an authority to act honestly and in good faith with a view to further the objects of the act.”</i></p> <p>Orientation with the Board of Directors began on June 10, 2019 with a session for the four new members joining NPCA as publicly appointed members from the Region of Niagara. Orientation on accountability continued at the June 19, 2019 meeting regarding confidentiality and code of conduct. <b>A full Board Orientation/Training and Development session occurred on September 27, 2019 including the Boards’ obligations under The Statutory Powers and Procedures Act. Monthly training will continue at each Board meeting in accordance with a report approved by the Board.</b></p> <p>NPCA understands that the Province is currently working on regulations under Bill 108.</p>	X	2020	
(BD) # 2	To ensure that the Niagara Peninsula Conservation Authority (NPCA) Board of Directors has the necessary independence and objectivity to oversee the NPCA’s activities effectively, we recommend that the NPCA Board:				

Lead and Rec. #	AUDITOR GENERAL RECOMMENDATIONS	NPCA RESPONSE	INITIATED	TARGETTED COMPLETION	COMPLETE
(BD) # 2.1	Adhere to its Code of Conduct, which states that Board members are to refrain from unduly influencing staff, being respectful of staff's responsibility to use their professional expertise and corporate perspective to perform their duties;	<p>The NPCA Governance Committee reviewed the Code of Conduct (contained within the Administrative By-law) and provided recommendations to the Full Authority in February and March 2019.</p> <p>A further review of the By-law was completed at the July 24, 2019 meeting of the Governance Committee.</p> <p>An additional review has been scheduled for the Governance Committee on October 22, 2019, regarding the NPCA Code of Conduct Policy and Investigation Procedure.</p>	X	Q4 2019	
(BD) # 2.2	Update its Code of Conduct to clearly define the circumstances and relationships that could lead to an actual or perceived conflict of interest beyond those defined in the Municipal Conflict of Interest Act.	As part of the Q4 continued review of the Administrative By-law, the Board will define circumstances that could lead to an actual or perceived conflict of interest.	X	Q4 2019	
(BC) # 3	To ensure that members of the Niagara Peninsula Conservation Authority (NPCA) Board of Directors collectively have the skills, experience and training necessary to oversee the NPCA's activities effectively, we recommend that the NPCA Board:				
(BD) #3.1	Determine the types of skills and experience required on the Board based on the NPCA's mandate and develop and implement a strategy to address any gaps.	<p>The Board of Directors responded to a March 1, 2019 letter from Niagara Region regarding board competencies (skills and experience). A list of competencies was approved by the Board at their April 17, 2019 meeting through Resolution No. FA-113-19.</p> <p>Both the Board of Directors and the NPCA Public Advisory Committee have been requested to develop profiles to be posted on the website. Based on this, a gaps analysis can be completed, and a strategy developed to address any gaps.</p> <p>Niagara Region appointed five new public appointees to the Board whose first meeting with NPCA was June 19, 2019 and June 28, 2019 respectively. An Orientation meeting for four members on June 10, 2019. <b>Additional appointees appointed by the Region on August 15, 2019 had an Orientation Session on September 10, 2019.</b></p> <p>Report No. FA-107-19 on a Training and Development Program for the Board was approved at the August 14, 2019 Board meeting.</p>	X	Q3 2019	

Lead and Rec. #	AUDITOR GENERAL RECOMMENDATIONS	NPCA RESPONSE	INITIATED	TARGETTED COMPLETION	COMPLETE
(BD) # 3.3	Assess the current role of its advisory committee to determine whether it is sufficient in fulfilling any gaps in Board skills and competencies, and revise as necessary;	<p>The Board of Directors received a list of the Advisory Committees for 2019 at its March 20th meeting, which was further updated at its June meeting. A Report on the NPCA Public Advisory Committees, with recommendations for a revised Terms of Reference was considered by the Board of Directors at their June 2019 meeting.</p> <p>The PAC met on June 27, 2019 to review their Terms of Reference and provide recommendations on Committee vacancies. The development of “profiles” for each PAC member will be developed in the fall of 2019.</p> <p>Profiles/Bios for all NPCA Board of Directors are now on the Authority website. New member profiles will be added as they become appointed in August.</p> <p>The Terms of Reference for the PAC was approved at the September 18, 2019 Board of Directors meeting. PAC is in the process of recruiting new members for the Boards’ approval. Once approved, a skills and competency analysis will be completed for both the Board of Directors and PAC.</p>	X	Q4 2019	
(BC) # 3.4	Identify initial and ongoing Board governance training needs.	<p>The current Board of Directors were provided with an updated Member Handbook in January 2019. Initial Orientation training with the Board was launched on March 20, 2019.</p> <p>To date training has occurred through orientation sessions, a session with the lawyer regarding confidentiality and legal matters, and staff presentations on water quality monitoring, restoration and the Niagara River Remedial Action Plan.</p> <p>A Report on Board Training was approved at the August 14<sup>th</sup> meeting. The 2019 Training Program was approved to include:</p> <ul style="list-style-type: none"> <li>• One day training session (Effective Governance, Overview of NPCA, including legal and statutory responsibilities, Welland River Floodplain Mapping, Responsibilities as a Hearing Board under Section 28)</li> <li>• Administrative By-law including the Code of Conduct,</li> <li>• Budget process and 2020 Budget approval,</li> <li>• Conservation Authorities Act,</li> <li>• Introduction to Strategic Planning.</li> </ul>	X	Q4 2019	
(M) # 4	We recommend that the Ministry of the Environment, Conservation and Parks:				

Lead and Rec. #	AUDITOR GENERAL RECOMMENDATIONS	NPCA RESPONSE	INITIATED	TARGETTED COMPLETION	COMPLETE
(M) # 4.2	Once Section 40 is proclaimed, make a regulation prescribing requirements for board composition that result in board members having the independence and objectivity they need to fulfill their oversight responsibilities;	Response to this recommendation is dependent upon the province's review noted above.  Consultations regarding regulations prescribing Bill 108 have not occurred as of the updating of this report.		2020	
(MCO) # 4.3	Work with Conservation Ontario and conservation authorities to determine whether governance training should be developed and delivered province-wide for board members of conservation authorities.	Response to this recommendation is dependent upon the province's review noted above.  Consultations regarding regulations prescribing Bill 108 have not occurred as of the updating of this report.		2020	
(BD) # 5	To ensure that the Niagara Peninsula Conservation Authority (NPCA) Board of Directors has all the information it needs to effectively oversee the NPCA and improve its oversight when needed, we recommend that the NPCA Board:				
(BD) # 5.1	Regularly evaluate the performance of the NPCA's Chief Administrative Officer, as required by its policies;	A Performance Evaluation system has been developed for all staff.  The CAO's contract was renewed by the Board in July with an extension to December 31, 2019.  A performance review of the CAO was conducted by the Chair and Vice Chair and presented to the Board and approved at the August 14, 2019.  Performance Appraisals for staff have been initiated on their anniversary date.	X	Q3 and Q4 2019	
(BC) # 5.2	Develop performance indicators to facilitate the Board's evaluation of its oversight processes and activities;	Performance indicators regarding Board evaluation will be developed for approval in Q4.  The Governance Committee reviewed board governance and performance at their July 24, 2019 meeting and directed staff to review seeking external consulting assistance in this regard which will occur in the Fall of 2019.	X	Q4 2019	
(BD) # 5.3	Regularly evaluate both its collective performance and the performance of individual Board members.	Both collective Board performance and individual Board member performance tools have been developed by the CAO and were forwarded to the Governance Committee for review at their July 24, 2019 meeting.  Staff will seek an outside consultant to assist with the Boards' performance review in November or December of 2019.	X	Q4 2019	

Lead and Rec. #	AUDITOR GENERAL RECOMMENDATIONS	NPCA RESPONSE	INITIATED	TARGETTED COMPLETION	COMPLETE
(BD) # 6.1	Clarify its Board policies to specify the meetings and other functions for which Board members may receive per diem payments in the future;	<p>The Governance Committee reviewed and clarified per diems in February 2019. Board members receive one per diem per day if attending NPCA meetings, despite the number of meetings attended.</p> <p>The per diem and honorarium policy is updated and outlined in the Administrative By-law.</p> <p>Further review of the By-law occurred at the July 24, 2019 by the Governance Committee so that a final Administrative By-Law update can be forwarded to the Board in Q4 for approval.</p> <p>A Governance Committee meeting is scheduled for October 22, 2019 to further ensure clarity around the per diem and honorarium policy.</p>	X	Q4 2019	
(BD) # 6.2	Continue to publish information on actual Board per diems and other expenses annually online.	Municipalities require board expenses to be reported annually. This information for 2018 was provided to participating municipalities. Member expenses for 2019 will be posted at year end on the NPCA website under the heading <i>Administration – Reports</i> and will continue to be published annually.	x	Q1 annually commencing 2020	X
(OPS) # 7	To ensure that the Niagara Peninsula Conservation Authority (NPCA) has complete and up-to-date information about flood risks within its watershed, we recommend that the NPCA:				
(OPS) # 7.1	Assess the risk to communities around the unmapped watercourses;	<p>The NPCA has completed flood plain mapping for 42% of the watershed. Flood plain mapping is currently underway for the Welland River, 9 watercourses in Grimsby and Lincoln, and 2 watercourses in St. Catharines.</p> <p>The NPCA met with the Watershed Floodplain Committee on June 13, 2019 to review updated flood lines and discuss public consultation. The Board of Directors is currently in discussion regarding the Welland River floodplain mapping. The first drafts of the other studies are scheduled to be reviewed in Q2 of 2019.</p> <p>Report No. FA-89-19 regarding a risk assessment was considered by the Board on August 14, 2019.</p>	X	Q4 completion of mapping and adopted by Board	
(OPS) # 7.2	Determine the time and cost for completing and updating floodplain maps;	<p>A five-year capital forecast for the remaining 58% of mapping to be completed will be placed in the 2020 budget and beyond. A minimum of \$200,000 per year over 5 to 7 years will be required to address the mapping deficiency.</p> <p>Once all mapping is completed, mapping updates are required on all watercourses. This cost was addressed in Report No. FA-89-19, considered at the August 14, 2019 Board meeting and in the 2020 budget preparation through a Capital Business Cases to the participating municipalities.</p>	X	<p>Q4 - Business Cases for funding</p> <p>Completion of mapping by 2026 subject to funding being received</p>	

Lead and Rec. #	AUDITOR GENERAL RECOMMENDATIONS	NPCA RESPONSE	INITIATED	TARGETTED COMPLETION	COMPLETE
(M) # 8	To ensure that conservation authorities have complete and up-to-date information about flood risks within their watershed, we recommend that the Ministry of Natural Resources and Forestry work with Conservation Ontario to:				
(M) # 8.1	Establish clear responsibility and criteria for developing and updating floodplain maps across the province;	NPCA is waiting for this information from MNRF.			
(M) # 8.2	Review current funding levels to conservation authorities to determine how floodplain mapping can be completed in a timely manner.	<p>Transfer payments to CA's for natural hazards were reduced by 50% on April 13, 2019. The NPCA provincial transfer payment is now \$90,000 for the 2019/20 provincial fiscal year.</p> <p>Provincial funding to update flood plain mapping has not been available since 1996. Funding for updated mapping must be sought from participating municipalities, who may choose not to fund updates.</p> <p>Report No. FA-89-10 entitled <i>NPCA Floodplain Update</i> was developed and considered at the August 14, 2019 Board meeting, including costs associated with updated mapping. Business Cases for updated mapping will be presented through the 2020 Capital Budget in October 2019.</p>	x	Q3 2019	
(OPS) # 9	To ensure that development is directed away from areas of natural hazards where there is an unacceptable risk to public health and safety or of property damage, we recommend that the Niagara Peninsula Conservation Authority (NPCA):				
(BD/OPS) # 9.1	Finalize, as soon as possible, its policies for reviewing development proposals and work permit applications;	<p>The NPCA Policy document was updated and approved in September 2018 through Report No. 60-18 and it became effective November 1, 2018. Staff have been directed to follow the new policy document as approved.</p> <p>Housekeeping amendments and an update on the consultation policy were forwarded to the Board for approval through Report FA-60-19 on June 19, 2019. Housekeeping amendments were approved, and public consultation is being sought on policy items not considered to be of a minor nature.</p> <p>Staff will review the policy on an ongoing basis to determine if there are any refinements to be made and will bring those proposed changes to the Board for approval.</p> <p>Report No. FA-74-19 was approved at the August 14, 2019 Board meeting regarding updates to the Valley Land policies.</p>	x	Q4 2018	

Lead and Rec. #	AUDITOR GENERAL RECOMMENDATIONS	NPCA RESPONSE	INITIATED	TARGETTED COMPLETION	COMPLETE
(BD/OPS) # 9.2	In finalizing such policies, ensure that the criteria for where development is allowed is consistent with Section 3.1 of the Provincial Policy Statement and the Conservation Authorities Act.	NPCA Policies are consistent with Section 3.1 of the Provincial Policy Statement.	X	Q4 2018	X
(OPS) # 10	To ensure that staffing decisions are focused on improving the operations of the Niagara Peninsula Conservation Authority (NPCA) to fulfill its legislative mandate and provide effective and efficient services, we recommend that the NPCA:				
(OPS) # 10.1	Develop a human resources (HR) plan that identifies current and future HR needs, as they relate to the strategic direction of the NPCA;	<p>An organizational review was completed and approved by the Board on April 17, 2019. Staff alignments follow the NPCA's Strategic Plan 2018 - 2021.</p> <p>It is noted that this Strategic Plan was developed and approved by the previous Board of Directors and should be further reviewed by the current Board. Future staff needs were identified as part of the organizational review.</p> <p>Upon further review of the Strategic Plan by the new Board, a staffing/skills analysis will be completed as part of a Human Resources Plan.</p> <p>A Human Resources Plan was approved by the Board at their September 18, 2019 meeting.</p>	X	2020	X
(OPS) # 10.2	In developing such an HR plan, review its staffing mix to determine the appropriate level of administrative and corporate support staff;	<p>The April 2019 organizational review has identified staffing gaps for the Board to review and consider in relation to 2020 funding requests. Discussions are ongoing regarding the appropriate level of administrative and corporate support required. Discussion is ongoing regarding whether an administrative "pool" is more effective than having an administrative support staff member assigned each Division.</p> <p>Report FA-123-19 was considered at the September 18, 2019 Board of Directors' meeting.</p>	X	Q4 2019	X
(OPS) # 10.3	Base future HR decisions on its HR plan;	The HR Plan requires Board approval and will be reviewed annually as part of the budget development commencing with the preparation of the 2020 budget.	X	Q4 2019	X
(BD/CAO) # 10.4	Provide information about planned re-structuring decisions, including their financial implications, to the NPCA Board prior to implementing such decisions.	<p>The 2019 organization review was discussed and approved by the Board on April 17, 2019. This review was accompanied by a financial assessment.</p> <p>Further restructuring was reviewed and approved by the Board of Directors at their June meetings.</p>	X	Q2 2019	X

Lead and Rec. #	AUDITOR GENERAL RECOMMENDATIONS	NPCA RESPONSE	INITIATED	TARGETTED COMPLETION	COMPLETE
(OPS) # 11	To ensure that reports of possible and known violations are appropriately addressed in a timely manner, we recommend that the Niagara Peninsula Conservation Authority:				
(CAO/OPS) # 11.1	Determine the number of enforcement staff necessary to address violations on a timely basis and staff accordingly;	<p>A Supervisor of Permits and Compliance was hired in March 2019 via Board Report No. FA-25-19. An additional compliance staff was hired through Report No. FA-98-19 when an existing compliance staff member was re-assigned to the restoration program. This Supervisor has 3 staff members, addressing both regulatory and forestry violations. A year-end review of compliance and staffing will be done for the Board's consideration.</p> <p>Given current permitting and enforcement requirements, an additional enforcement position has been included in the draft 2020 Operating budget approved by the Board at their September 18, 2019 meeting.</p>	X	Q4 2019	X
(OPS) # 11.2	Ensure that enforcement staff obtain the necessary training to discharge their responsibilities;	All NPCA compliance staff have received Level 1 Conservation Ontario Compliance training as of March 2019.	X	Q2 2019	X
(BD/OPS) # 11.3	Revise its enforcement policy to provide guidance on the progressive actions enforcement staff should take to address violations taking into consideration the significance of the violations;	<p>Conservation Ontario has updated a Manual on behalf of all conservation authorities regarding Section 28 of the Act. Progressive actions to address violations are included as part of the Manual. NPCA was actively involved in the review and updating of the Manual through the Conservation Ontario Regulatory Advisory Committee.</p> <p>The Manual will be implemented when the Province has approved regulations under Bill 108.</p>	X	Q4 2019	
(BD/OPS) # 11.4	Revise its enforcement policy to require that enforcement activities be sufficiently documented and ensure that staff adhere to the policy;	Procedures regarding documentation of enforcement activities will be completed as part of the Manual implementation.	X	Q4 2019	
(OPS) # 11.5	Use CityView to track reports of possible violations.	<p>Compliance staff are now placing a flag on properties when there are violations, in order to advise other NPCA staff to refer to Compliance staff should they be working on a file related to one under violation.</p> <p>An update to CityView to handle Compliance/Violation issues is underway and should be completed by October 1, 2019.</p>	X	Q4 2018	
(OPS) # 12	To ensure that the Niagara Peninsula Conservation Authority (NPCA) can proactively identify unlawful activities before they result in risk to people, property and the environment, we recommend that the NPCA:				

Lead and Rec. #	AUDITOR GENERAL RECOMMENDATIONS	NPCA RESPONSE	INITIATED	TARGETTED COMPLETION	COMPLETE
(OPS) # 12.1	Institute a mandatory reporting mechanism for landowners to notify the NPCA that approved work has been completed in compliance with the conditions of the permit, and follow up with landowners who fail to report;	As of April 2019, a dedicated e-mail has been placed on the landowners permit form for applicants to send notifications to the NPCA email address, including photos. This email is directed to the Supervisor, Permits and Compliance and his staff to ensure all staff are aware and checking the email regularly. There is also a Factoid which has been developed, to be included with the permits outlining to the applicant what their obligations are once the permit is issued. The permit issuance is now accompanied by this Factoid.	X	Q2 2019	X
(OPS) # 12.2	Develop a risk-based plan to conduct site visits to ensure that landowners have completed the approved work in compliance with the conditions of the permit;	The risk-based plan was finalized and presented to the Board of Directors, through Report No. FA-59-19, at their June 19, 2019 meeting.	X	Q2 2019	X
(OPS) # 12.3	Update its website to provide information to the public about activities that are prohibited under the Conservation Authorities Act and how the public can report suspected violations to the NPCA	A Fact Page has been created and is posted on the website. Included on the webpage is a dedicated link that will create a form to be filled out and submitted to the Supervisor, Permits and Compliance to review and assign. This will be tracked to ensure all complaints are documented. There is also a dedicated phone number to allow for complaints to be called in. This number is monitored by the Supervisor or designated staff.	X	Q2 2019	X
(BD/OPS) # 13	To ensure that restoration funding is directed toward projects that best achieve the goals of the restoration program, we recommend that the Niagara Peninsula Conservation Authority, regardless of its chosen program delivery model, develop and implement a strategy to better target areas of the watershed based on water quality monitoring and other information on the health of the watershed.	A re-vitalized Restoration Program was approved by the Board of Directors on April 17, 2019. The new program includes a vision, principles, goals and is based on the CAA mandate, the NPCA Strategic Plan and our Watershed Report Cards. The new program will follow recommendations from the Dillon Report and Auditor General's recommendations. Ultimately, sub watershed plans, and implementation strategies should be developed/updated in order to ensure that restoration projects are targeted to priority areas.  Restoration Program Guidelines and a 2019 workplan were considered and approved by the Board of Directors on June 19, 2019.	X	Q2 2019	X
(BD/OPS) # 14	To ensure that funding from Ontario Power Generation (OPG) helps improve the health of the Welland River as agreed to, we recommend that the Niagara Peninsula Conservation Authority (NPCA):				

Lead and Rec. #	AUDITOR GENERAL RECOMMENDATIONS	NPCA RESPONSE	INITIATED	TARGETTED COMPLETION	COMPLETE
(OPS) # 14.1	Seek clarification with OPG regarding its expectations for how the remaining funds are to be spent;	<p>NPCA senior staff with met with senior OPG staff on three occasions - May 25, 2018, August 29, 2018 and October 31, 2018. NPCA discussed past spending with OPG staff on August 29, 2018 and a Draft MOU and protocols for future spending was established on October 31, 2018.</p> <p>An NPCA/OPG staff meeting was held in May 2019 and an updated MOU discussed.</p> <p>The Board of Directors received and approved the MOU their June 19, 2019 meeting through Report No. FA-55-19. The MOU addresses both funding and budgets.</p>	X	Q2 2019	X
(BD/OPS) # 14.2	Revise, as necessary, the formal agreement between the NPCA and OPG to outline such expectations;	<p>The NPCA's 2018 Financial Audited Statements were approved by the Board of Directors on April 17, 2019 setting the stage for a subsequent meeting with OPG. This meeting was scheduled for May 6, 2019 to finalize the Draft MOU, discuss expenditure of funds and establish reporting requirements. The final MOU was approved by the Board through Report No. FA-55-19 on June 19, 2019, detailing goals and objectives for funding allocation.</p> <p>OPG and NPCA will meet on October 2, 2019 to discuss progress on the 2019 projects.</p>	X	Q2 2019	X
(OPS) # 14.3	Develop and implement a plan that identifies the projects and their locations for which the remaining funds will be spent, ensuring that such projects focus efforts on areas of concern based on the watershed plans that have been developed for the Welland River.	The approved MOU (Report No. FA-55-19), included a plan that identifies projects and their locations, ensuring that these projects focus on priority areas of concern. Quarterly meetings with OPG will be held to ensure that project targets are met.	X	Q2 2019	X
(OPS) # 15	To ensure that lands are acquired to help the Niagara Peninsula Conservation Authority (NPCA) fulfill its mandate, we recommend that the NPCA:				
(BD/OPS) # 15.1	Review and revise its land acquisition goals—both in its latest 2015 plan and in its 100-year plan—for reasonableness and to reflect the NPCA's responsibilities under the natural hazard policies of the Provincial Policy Statement;	Staff have commenced a review of NPCA Conservation Area Master Plans, the Land Acquisition Plans and goals with a view to refining land acquisition targets. <b>These reports will be available for review by the Board of Directors by the end of 2019.</b>	X	Q4 2019	

Lead and Rec. #	AUDITOR GENERAL RECOMMENDATIONS	NPCA RESPONSE	INITIATED	TARGETTED COMPLETION	COMPLETE
(BD/OPS) # 15.2	Improve its current land acquisition criteria to provide clear direction on which lands should be acquired;	<p>An initial land acquisition criteria list has been developed. When reviewing a land acquisition opportunity, the following will be considered:</p> <ul style="list-style-type: none"> <li>• Protection of areas of ecological significance including wetlands, woodlands, ANSI's and species of concern or at risk;</li> <li>• Enhancing biodiversity;</li> <li>• Creating connectivity to CA lands, within CA lands or with other public lands;</li> <li>• Protection of, and access to shorelines;</li> <li>• Financial considerations, such as market value, donation of land, land taxes, maintenance costs, NPCA funding available;</li> <li>• Size of the property;</li> <li>• Continued ability to address water quality issues.</li> </ul>	X	Q4 2019	
(BD/OPS) # 15.3	Prioritize its current land acquisition criteria to reflect the revised goals;	<p>Once the land acquisition criteria have been drafted, staff will recommend a ranking of the criteria to be considered and approved by the Board.</p> <p>Once staff have completed the land acquisitions criteria, the Geographic Information Systems (GIS) Division will formulate prioritized areas based on values to define what properties are a priority for the NPCA to consider in terms of acquisition.</p>	X	Q4 2019	
(BD/OPS) # 15.5	Develop and implement a plan to achieve its land acquisition goals;	The updated Land Acquisition Strategy will include an implementation plan.		2020 and beyond	
(BD/OPS) # 15.6	Monitor and report to the NPCA Board of Directors on land acquisition progress.	<p>Currently staff provide Quarterly Progress Reports to the Board from all Divisional Program areas. Land Acquisition progress and monitoring will be part of this process. Currently NPCA has made one property acquisition for 2019, of which the Board approved.</p> <p>Report FA-125-19 was considered by the Board of Directors at their September 18, 2019 meeting in terms of potential acquisition.</p>	X	2019 ongoing	
(BD/OPS) # 16	To enable the Niagara Peninsula Conservation Authority (NPCA) to assess its performance in fulfilling its mandate, we recommend that the NPCA:				

Lead and Rec. #	AUDITOR GENERAL RECOMMENDATIONS	NPCA RESPONSE	INITIATED	TARGETTED COMPLETION	COMPLETE
(BD/OPS) # 16.1	Develop performance indicators that are tied to its mandate and overall program goals;	<p>NPCA has completed Watershed Report Cards since 2012 which include four key performance indicators.</p> <p>Further, NPCA is part of Conservation Ontario's Watershed Report Card system. Our most recent Report Card was completed in 2018 and focused on performance indicators associated with:</p> <p style="padding-left: 40px;">Groundwater Quality Surface Water Quality Forest Conditions Wetland Cover</p> <p>The Watershed Report Card will be continually updated every 5 years.</p> <p>Additional performance indicators will be developed by staff by Q4 2019 for Board review and approval.</p>	X	<p>2017 ongoing</p> <p>Q4 2019</p>	
(OPS) # 16.2	Establish targets against which each indicator will be assessed;	<p>Current indicator grades have been established and some targets have been considered:</p> <p style="padding-left: 40px;">Groundwater – current grade = B. The target is to maintain grade. Surface Waters – current grade = D. No target is established. Forest Cover – current grade = D. No target is established. Wetland Cover – current grade = B. The target is to maintain grade.</p> <p>It is important to note that targets for both surface water quality and forest cover should be established through updated sub watershed plans.</p> <p>Staff will develop targets for performance indicators for review and approval by the Board of Directors by Q4 2019.</p>	X	<p>2017 ongoing</p> <p>Q4 2019</p>	
(OPS) # 16.3	Regularly collect and analyze information about the impact of its programs and services on the Niagara Peninsula watershed to help adjust programs on an ongoing basis;	<p>NPCA has established a regular program for collecting and analyzing information. In particular, surface water quality is monitored at 80 sites throughout the watershed and groundwater is monitored at 50 watershed sites.</p> <p>Staff will assess additional information to be collected on all program areas and services by Q4 2019 for review and approval by the Board of Directors.</p>	X	<p>ongoing</p> <p>Q4, 2019</p>	

Lead and Rec. #	AUDITOR GENERAL RECOMMENDATIONS	NPCA RESPONSE	INITIATED	TARGETTED COMPLETION	COMPLETE
(OPS) # 16.4	Review, and revise as necessary, its annual and quarterly reports to better reflect how the NPCA's initiatives and projects are helping the NPCA fulfill its mandate and overall program goals.	Quarterly and annual reports will be refined to outline how NPCA initiatives and projects are fulfilling our mandate and goals.  <i>The Annual Report outline will be reviewed by staff in Q4 of 2019 to ensure that the 2019 Report reflects recommendations made by the Auditor General regarding financial statements and performance measurements.</i>	X	Q4 2019	
(BD/OPS) # 17	To ensure that the Niagara Peninsula Conservation Authority (NPCA) follows fair and transparent recruitment and promotion processes, and that the best-qualified individuals are hired and promoted, we recommend that the NPCA:				
(BD/OPS) # 17.1	Update its recruitment policies to include the steps and documentation required to support hiring decisions and eliminate situations of real or perceived conflict of interest in recruitment and hiring;	The HR Policy and Recruitment Procedures are scheduled for refinement including outlining the steps and documentation process to support hiring decisions and outlining what constitutes a conflict of interest, perceived conflict of interest and how to proceed if identified.  The Recruitment Policy update was received and approved by the Board of Directors their June 19, 2019 meeting.	X	Q2 2019	X
(BD/OPS) # 17.2	Update its promotion policies to include the decision-making process required to be followed and documented for promotions and appointments;	Promotion Policies were approved by the Board at their August 14, 2019 meeting through Report No. FA-69-19	X	Q3 2019	X
(OPS) # 17.3	Assess staff's performance annually, as required by its policies;	A Performance Review System was implemented in the summer of 2018 for permanent and summer staff. Training and review of the system was completed in October 2018. Effective dates for each employee are currently being compiled, including a "reminder system" to ensure that Performance Reviews are completed on a timely basis. Further training with Supervisors, Managers and Directors will occur in 2019.  <i>A Performance Review was completed for the CAO and 2 Senior Managers to date in 2019.</i>	X	Q2 2018 and ongoing	
(BD/OPS) # 17.4	Provide quarterly updates to the NPCA Board of Directors on staffing changes and performance.	Quarterly updates on all NPCA program areas are provided to the Board of Directors, including human resources updates. Included in quarterly reviews are recruitment updates and changes to staff, including promotions, departures, retirements, etc.	X	ongoing	
(OPS) # 18	To ensure compliance with the Occupational Health and Safety Act, the Ontario Human Rights Code and the Ministry of Labour Code of Practice, we recommend that the Niagara Peninsula Conservation Authority (NPCA):				

Lead and Rec. #	AUDITOR GENERAL RECOMMENDATIONS	NPCA RESPONSE	INITIATED	TARGETTED COMPLETION	COMPLETE
(OPS) # 18.1	For every harassment or discrimination complaint or grievance filed, fully assess and document whether an investigation is required and, if it is, conduct it in an appropriate and timely manner;	<p>The NPCA's Harassment Policy was updated in 2016. As part of the procedures, a "checklist" will be developed to document actions taken up to and including whether an investigation is required for complaints of any nature.</p> <p>An update to the Workplace Harassment Policy was approved by the Board of Directors at their June 19, 2019.</p> <p>NPCA ensures that each complaint or grievance filed is documented, reported to the Board, investigated if required and a report provided to the initiator of the complaint.</p>	X	2016 Q2 2019 update	X
(BD/OPS) # 18.2	Use its ability, under its workplace harassment policy, to appoint an external investigator or develop mechanisms to ensure that complaints against the CAO are investigated by a party who does not report directly to the CAO;	As part of the Workplace Harassment Policy Update, a process for handling complaints against the CAO was developed and approved on June 19, 2019 recommending the use of an external investigator rather than in house staff.	X	Q2 2019	X
(BD/OPS) # 18.3	Provide additional information on grievances, staff complaints and investigations, including their subject and financial implications, as part of confidential updates to the NPCA Board of Directors.	General information on grievances, staff complaints and investigations have been reported to the Board effective Q2, 2018. This information is now contained in each quarterly report to the Board of Directors, in closed session. Board requests for further details on grievances, including financial implications will be dealt with in closed session meetings of the board.	X	2018 and ongoing	X
(BD/OPS) # 19	To ensure the Niagara Peninsula Conservation Authority (NPCA) operates as effectively and productively as possible, without workplace issues hindering its operations unnecessarily, we recommend that the NPCA:				
(OPS) # 19.1	Develop and implement an action plan to address workplace concerns;	<p>Initial documentation of workplace concerns commenced in 2017 with a staff survey. A second survey was completed in November 2018 and year over year results will be tracked and reviewed to create an Action Plan to address workplace comments, concerns and activities to address this input. The Interim CAO also launched an organizational review in April 2019 and invited all staff to provide comments (anonymously if desired) or to meet with her directly to discuss concerns.</p> <p>Workplace concerns which emerged during the CAOs April review were reported at the September Board meeting along with an Action Plan through Report FA-123-19.</p>	X	2017 to Q1 2019  Q4t	X

Lead and Rec. #	AUDITOR GENERAL RECOMMENDATIONS	NPCA RESPONSE	INITIATED	TARGETTED COMPLETION	COMPLETE
(BD/OPS) # 19.2	Present this action plan and related timeline to the NPCA Board of Directors for review and approval;	Overall concerns were reported to the Board in September 2019 through Report FA-123-19.  An updated Workplace Comments and Concerns Process and Action Plan was developed and approved for 2019 and 2020.	X	Q4 2019	X
(BD/OPS) # 19.3	Report on its progress in implementing the actions within the approved timeline.	Progress on workplace concerns will continue to be reported through Quarterly Reports to the Board of Directors.	X	Quarterly and ongoing	X
BD/(OPS) # 20	To ensure that the Niagara Peninsula Conservation Authority (NPCA) receives value for money spent on goods and services, we recommend that the NPCA:				
(OPS) # 20.1	Follow its procurement policies for the acquisition of goods and services;	Since March 2018 the NPCA has been conducting competitive procurements as per its existing policy as evidenced by the document "Planned Procurement".  Revisions regarding the use of Corporate Credit Cards has been completed which includes a specific policy regarding card use and a letter of understanding signed by each card holder.  Additional revisions to existing Purchasing & Procurement Policy are in progress and will be presented to the Board of Directors for approval in October 2019.	X	Q4 2019	
(BD/OPS) # 20.2	Revise its procurement policies to require that any needed services associated with unsolicited proposals be obtained in a transparent and competitive manner;	The Unsolicited Proposal Policy originally approved in July 2014 will be reviewed and amended as per the direction of the Board.	X	Q4 2019	

Lead and Rec. #	AUDITOR GENERAL RECOMMENDATIONS	NPCA RESPONSE	INITIATED	TARGETTED COMPLETION	COMPLETE
(OPS) # 20.3	Assess the benefits of establishing continuity and achieving cost savings from contracting with a preferred law firm for each field of law it requires services;	<p>The NPCA inquired through its Purchasing Group (Niagara Public Purchasing Committee) how other public entities are handling legal services and it was discovered that the majority of these Public entities have exemptions for Legal Services excluding them from competitive procurement.</p> <p>Following discussion with the Office of the Auditor General, it was suggested that NPCA contact TRCA for details on their procurement strategies regarding legal services. In October 2018, dialogue occurred between NPCA and TRCA and it was discovered that the TRCA established a Vendor of Record listing in January 2017 to handle its legal services.</p>	X	2018	X
(BD/OPS) # 20.4	Revise its procurement policies for legal services to implement the results of the above assessment.	<p>Using the above as a model, as suggested by the Office of the Auditor General, the NPCA will issue a Request for Proposal to establish vendors of record to handle its legal services.</p> <p>Certain legal services which are specialized may be recommended to the Board to be single sourced. This will be done through a resolution at the Annual General Meeting of the Board held in January of each year.</p>	X	Q4 2019	
(BD/OPS) # 21	To ensure that funds are available and that critical capital projects are completed in a timely manner, we recommend that the Niagara Peninsula Conservation Authority (NPCA):				
(OPS) # 21.1	Update the information in its asset management system to reflect the actual replacement cost of assets (when this information is available) and the estimated useful life of assets based on their condition;	<p>The NPCA included in its 2019 Operating Budget a position identified as Capital Project Specialist which will address each of the points outlined in Recommendation 21. The position will work in conjunction the Procurement Specialist to achieve the above goals.</p> <p>KPMG (the NPCA's third party auditor) has expertise in this specific area and has established contact with NPCA staff to assist in carrying out these objectives.</p> <p>This staff member will be responsible for developing the NPCA's Asset Management Plan and System, including all areas identified as Recommendations 21.1 to 21.5.</p> <p>The position has been posted and is presently being recruited.</p>	X	Q4 2019	

Lead and Rec. #	AUDITOR GENERAL RECOMMENDATIONS	NPCA RESPONSE	INITIATED	TARGETTED COMPLETION	COMPLETE
(OPS) # 21.2	Obtain reliable information to support replacement cost estimates and cost estimates for planned capital projects;	The new Capital Project Specialist will work with the Procurement Specialist to obtain reliable information on replacement cost for planned capital projects.	X	Q4 2019 ongoing	
(OPS) # 21.3	Prioritize capital projects using an objective assessment of needs;	The new Capital Project Specialist will work with Park Superintendents along with other front-line staff and Department Heads to prioritize capital projects using an objective assessment of needs.  This position is currently being recruited.	X	Q4 2019 ongoing	
(BD/OPS) # 21.4	Identify how the NPCA will obtain funding to undertake these projects;	The new Capital Project Specialist will work with Senior Management to identify funding sources for projects.		Q4 2019 ongoing	
(BD/OPS) # 21.5	Refine the capital plan, based on the above action items, and present it to the NPCA Board for approval.	The new Capital Project Specialist will work with all staff as required to constantly refine the Capital Plan for eventual Board approval.  For the 2020 Capital Budget, capital project proposals will be developed through Business Cases for the Board and municipal funding approval.		Q4 2019 ongoing	
(M) # 22	To ensure that conservation authorities have the necessary information to interpret and fulfill their legislative mandate, we recommend that the Ministry of the Environment, Conservation and Parks, upon proclamation of Section 40 of the Conservation Authorities Act:				
(M) # 22.1	Clearly describe for conservation authorities what the development of natural resources entails, and how it differs from “development” in general;	MOECP has launched two reviews under the Environmental Registry of Ontario on April 5, 2019 - <b>Modernizing conservation authorities’ operations - CAA and Focusing conservation authority’s development permits on the protection of people and property</b> . This provincial review will assist in addressing Recommendations 22.1 to 24.3.  As noted under recommendation #1, Bill 108 was passed on June 4, 2019. NPCA continues to work with the province and Conservation Ontario as we move toward establishing regulations which will enact Bill 108.  Conservation Ontario and all 36 conservation authorities are currently awaiting regulations from the province regarding legislative mandate. The Minister, ECP initiated consultation to the 36 CA’s around September 26, 2019 for the month of October.	X	2020	

Lead and Rec. #	AUDITOR GENERAL RECOMMENDATIONS	NPCA RESPONSE	INITIATED	TARGETTED COMPLETION	COMPLETE
(M) # 22.2	Provide guidance to help conservation authorities prioritize the objectives of their programs and services (conservation, restoration, development and management of natural resources);	NPCA is actively involved in providing comments to Conservation Ontario regarding the provincial government review.	X	2020	X
(M) # 22.3	Use its regulatory powers to establish minimum requirements and standards for conservation authorities' delivery of programs and services;	NPCA will ensure that minimum requirements and standards will be developed for programs and services. NPCA currently complies with response standards for commenting under The Planning Act.	X	2020	
(M) # 22.4	Establish the governance practices that it determines conservation authorities should be uniformly following province-wide:	NPCA will comply with governance practices recommended by the province.	X	2020	
(M) # 23	To ensure that conservation authority boards of directors are held to account appropriately, we recommend that the Ministry of the Environment, Conservation and Parks work with municipalities to develop and implement a formal, cost-effective and purposeful reporting process that includes a discussion of the outcomes of conservation authorities' activities.	NPCA will work through Conservation Ontario to request that CO/conservation authorities are part of the discussion with MECP and municipalities regarding reporting processes.	X	2020	
(M) # 24	To ensure that issues that are beyond conservation authorities' ability to manage themselves are dealt with appropriately and in a timely manner, we recommend that the Ministry of the Environment, Conservation and Parks (Ministry) work with municipalities to:				
(M) # 24.1	Determine the circumstances when Ministry and/or municipality intervention is warranted;	NPCA will work through Conservation Ontario to request that CO/conservation authorities are part of the discussion with MOECP and municipalities regarding intervention definitions and requirements.	X	2020	
(M) # 24.2	Establish mechanisms for the Ministry and/or municipalities to intervene when necessary in conservation authorities' operations;	NPCA will work through Conservation Ontario to request that CO/conservation authorities are part of the discussion with MOECP and municipalities regarding intervention definitions and requirements.	X	2020	
(M) # 24.3	Formalize such mechanisms through a memorandum of understanding between the Ministry, municipalities and conservation authorities that clearly establishes the roles and responsibilities of each party and when intervention is necessary.	NPCA will work with the Ministry, Conservation Ontario and participating municipalities to formalize an appropriate Memorandum of Understanding.	X	2020	

**Report To: Board of Directors**

**Subject: Board Orientation Session - Board Questions**

**Report No: FA-139-19**

**Date: October 16, 2019**

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**Recommendation:**

**THAT** Report No. FA-139-19 RE: Board Orientation Session - Board Questions **BE RECEIVED** for information.

**Purpose:**

The purpose of this report is to share with the Board of Directors questions that emerged from the Board Orientation Session and staff responses to those questions.

**Background:**

On Friday September 27, 2019, an Orientation Meeting was held with the Board of Directors, which included four sessions as follows:

- Overview of the NPCA programs and staffing,
- Governance Overview,
- Welland River Floodplain Mapping update, and
- Board Responsibilities under Section 28 Hearings – Statutory Powers Procedure Act.

Those Board Members having additional questions after this training session were requested to submit the questions to the Chief Administrative Officer. The Board requested that both questions and answers be forwarded to the October Board of Directors' meeting for information.

**Discussion:**

The following questions and answers are offered for information. Answers to Board questions are outlined in red below.

**Question #1:**

I received an email from a concerned citizen from Wainfleet. He was in the Gallery on Friday. I did ask [staff] if the new flood mapping results differed from the 2011 study not [the] 1985 study. Can this be clarified?

**Answer #1:**

Staff can confirm that the new Welland River 100-year flood elevations generated by this current WSP study are similar to the Welland River 100-year flood elevations calculated in the original 1985 study (by Dillon Engineering).

In contrast, the calculated flood elevations generated by the 2011 Welland River Flood Study (by Aquafor Beech Ltd.) were significantly higher along some areas of the Welland River than the two studies mentioned above.

**Question #2**

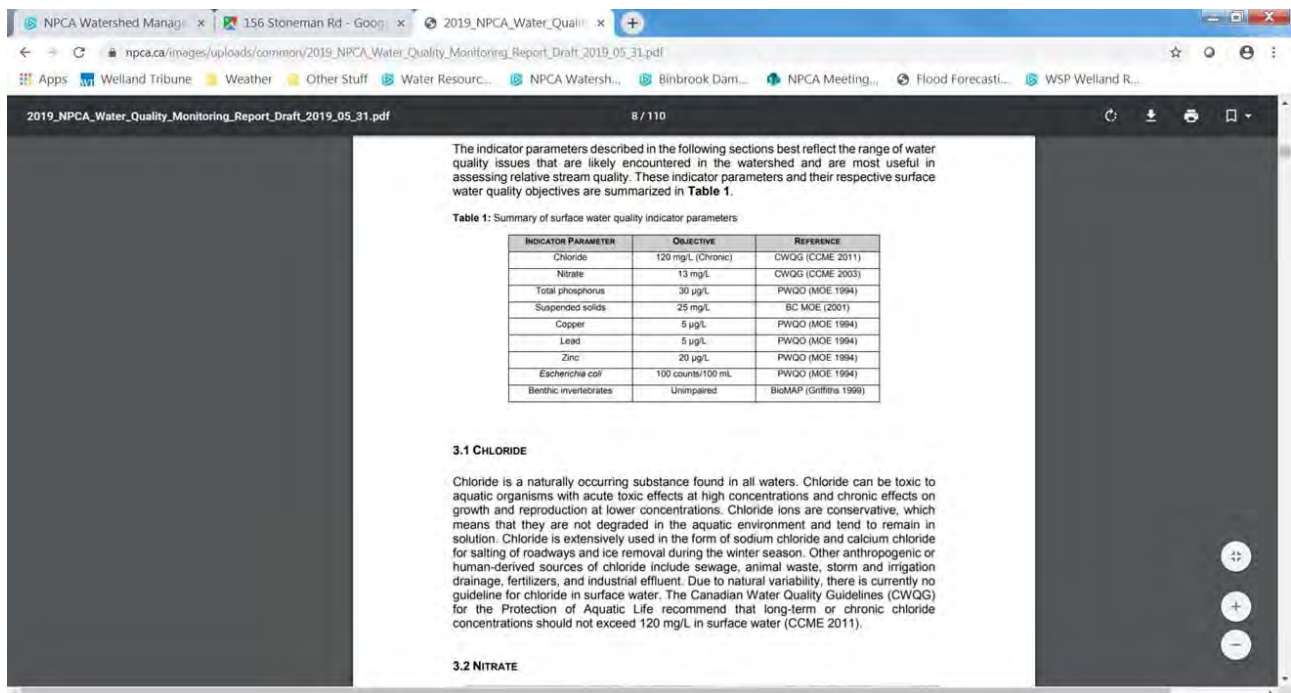
This is a two-part question.

- a. When the stream monitoring results are collected, are they tabulated such that they can be trended in a chart over time?
- b. Do the tested parameters include sodium and chloride which is being realized in streams and watercourses from de-icing activities?

**Answer #2:**

- a. To answer your first question, staff do indeed maintain our monitoring results in such a manner that the trends over time can be analyzed and tracked.
- b. With respect to [the] second question, the NPCA does test for both sodium and chloride as part of our monitoring program. Our annual Water Quality Monitoring Report (link to where it resides on our website attached below) describes chloride in detail as it is used as the indicator parameter to track the impacts of things like winter de-icing activities (please refer to the screen capture below). While not expressly mentioned in the Water Quality Monitoring Report, the NPCA does maintain an extensive sodium data set.

[https://npc.ca/images/uploads/common/2019\\_NPC\\_A\\_Water\\_Quality\\_Monitoring\\_Report\\_Draft\\_2019\\_05\\_31.pdf](https://npc.ca/images/uploads/common/2019_NPC_A_Water_Quality_Monitoring_Report_Draft_2019_05_31.pdf)



## Question #3

- There was a discussion on this at the orientation, but we did not come to a conclusion. Can we set as a standard (that we will hold ourselves to) for this term of the NPCA that the Chair speaks on behalf of the Board of Directors and CAO speaks on behalf of the corporation and no other members of the Board of Directors speak on behalf of either?

At the July 2019 meeting of the Board an updated Communications Protocol was provided to the Board indicating that the Chair should speak on behalf of the Board and the CAO on behalf of the corporation. If a media requests relates to a technical matter, such as with Flood Warnings, the CAO may ask our technical expert to speak for the corporation.

- A related question is – Can we set a standard for this term of the NPCA that when the NPCA is seeking public input on any topic, individual Directors will refrain from commenting?

The Board of Directors can set this standard if they wish.

- With respect to Board/Management relationships – can we set a standard that all Director requests of management must be initiated through the CAO or the Board Chair? (i.e. Directors should not be going directly to staff with any requests).

The Board has been requested to adhere to this protocol. Board members have been requested to ask questions or make requests through either the CAO or Senior Staff. If Board members make a request through Senior staff, those staff advise the CAO. The Board members have been excellent at following this protocol.

- d. The facilitator noted that governance process rigor is critically important, so can the Clerk clarify the following process issues:

Once the meeting agenda is approved, discussion must be limited to only the agenda items? In other words, a Director cannot introduce or speak to an issue that's not on the agenda.

Discussion should be focused on only those items approved in the agenda. Board members can request that additional items be added to the agenda under "New Business"; which should be declared at the beginning of the meeting and placed under New Business for further discussion. New Business should be restricted to matters of a time sensitive nature or matters of urgency that cannot wait until the next meeting. Notices of Motion should be identified under the "Notice of Motion" part of the agenda.

The only members that can approve the minutes of a meeting are members that were in attendance at that meeting?

According to Parliamentary protocols, "any person may move, second or correct the minutes and may vote to approve them" even if they did not attend the previous meeting. "Minutes are a legal statement of actions taken. The principle at play here is that an organization, and especially a corporation, speaks through its minutes. If your organization ever finds itself in court, the first question the judge may ask is to see a copy of the minutes. Every member should have a say...in something that important."

Ex-officio means that you can participate in the meeting, be counted for purposes of quorum, but you cannot raise motions or vote on motions?

Bourinot's Rules of Order are silent on this matter. However, on April 17, 2019, the Board of Directors approved Report No. FA-48-19 which directed an amendment to our Administrative By-Laws to appoint the Chair and Vice Chair as ex-officio, non-voting members of Standing Committees. The Board has directed further discussion on: whether an ex-officio member may constitute quorum, may raise motions and may vote on motions. The October 22, 2019 Governance Committee will deal with this matter when they review the Administrative By-Law further.

Is any Director request of management automatically considered to be direction to staff? For example, a Director says I would like to see a report on .... – is that considered direction to staff to prepare said report? Or is direction to management only made by the Chair or a motion of the Board of Directors?

A Director's request for staff to prepare a Report or complete additional work should be at the direction of the entire Board of Directors through either an approved resolution or direction noted in the minutes.

The Facilitator noted that Committees do not approve items, they can only recommend items for approval by the Board of Directors – can you please confirm that this is the NPCA practice?

This is correct. Committees provide recommendations to the Board. There is one exception. An Executive Committee can be created under Section 19 (1) of the Conservation Authorities Act. Through the Authority's Administrative By-Laws, an Executive Committee may be granted the power by the Board to act on certain items. NPCA does not have an Executive Committee.

#### Question #4

On the topic of governance process rigor, a primary tool for Directors are the policies of the organization. Can a table similar to the following be provided to the Board listing all operational and administrative policies? Please note that all cells (like Next reviewed) do not need to be filled in.

	Policy	Oversight Committee	Last Approved	Next Reviewed
<b>Administrative Policies</b>				
	HR Policy?			
	Recruitment Policy	BOD	June 19, 2019	
	Promotion Policy	BOD	August 14, 2019	
	Workplace Harassment Policy	BOD	June 19, 2019	
	Purchasing & Procurement Policy		December 16, 2015	
	Unsolicited Proposal Policy			
	Consultant Selection Policy		September 17, 2014	
<b>Operational Policies</b>				
	NPCA Policy Document			
	- Housekeeping	BOD	June 19, 2019	
<b>Other</b>				
	Administrative By-Laws			
	Code of Conduct	Governance Committee	July 24, 2019	Oct 22, 2019
	Conflict of Interest	Governance Committee		

#### Answer #4

Staff are in the process of preparing a list of Memorandums of Understanding and Policies. Policies can be addressed in the above noted table format if the Board wishes.

#### Question # 5

- Is there an accepted definition of the term "natural hazard" in regard to conservation? I know the Act itself does not define it, but has it been defined elsewhere in legislation or policy?

The use of the term Natural Hazards relates back to the Ministry of Natural Resources and Forestry's Technical Document 'Understanding Natural Hazards'. The definition first showed up in the 1997 Provincial Policy Statement as well.

The Province and Conservation Authorities (including Conservation Ontario) use the term Natural Hazard to describe processes that occur naturally and then use definitions such as hazardous lands (PPS/CAA), hazardous sites (PPS), flood hazard (PPS) to describe the features that would fit into the category of Natural Hazard. This is the standard across the Province.

Further, the definition of natural hazard or hazardous lands can be found in Section 28 (25) of the Conservation Authorities Act titled "Definitions":

**"hazardous land" means land that could be unsafe for development because of naturally occurring processes associated with flooding, erosion, dynamic beaches or unstable soil or bedrock; ("terrain dangereux").** This would also include items such as karst topography and Leda Clay.

- b. When assessing fines for violations, is that done by our compliance officers? Who decides the amount of the fine?

Conservation Authorities do not have set fines for Section 28 Regulation Violations. The only avenue that we have is to either a) work with the applicant to achieve voluntary compliance or b) issue a Summons to appear in court and proceed through the court system.

As part of the voluntary compliance, the applicant would need to obtain a permit from the CA to conduct the work based on the current fee schedule for the type of work proposed (i.e. if the violation was fill placement in a floodplain, the permit issued would be based on works in the floodplain and the permit fee associated with that would be charged).

There is an avenue to place surcharges on these permits in the future, but they must be identified in the fee schedule. This will be recommended in our 2020 comprehensive fee review. It should be noted that we are still waiting on the Regulation on fees by the Province to be issued which may dictate this as well.

- c. Is the Region resisting or embracing our attempts to be brought to the table in regard to the Natural Heritage System Assessment? What are they saying in this regard?

The Region was very receptive and met with NPCA about the value of the Natural Heritage System Assessment (Nature for Niagara's Future) project in July. Regional Planning staff were very curious about its ability to potentially quantify the achievement of the provincial natural heritage system policy in the Greenbelt and Growth Plans that Regional environmental policies must comply with in the New Official Plan.

**Financial Implications:**

There is not impact on the budget as a result of this report.

**Prepared and Submitted by:**

*Original signed by:*

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D. Gayle Wood, BES, CMMIII  
Chief Administrative Officer/Secretary-Treasurer

**Report To: Board of Directors**

**Subject: Communications, Community Outreach and Volunteers Q3 (2019)  
Status Report**

**Report No: FA-141-19**

**Date: October 16, 2019**

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**Recommendation:**

**THAT** Report No. FA-141-19 RE: Communications, Outreach and Volunteers Q3 (2019) Status Report **BE RECEIVED** for information.

**Purpose:**

The purpose of this Report is to provide the NPCA Board of Directors a summary of activities undertaken in the third quarter by communications, community engagement, community outreach and volunteers as per the 2018-2021 Strategic Plan document “Partners in Conservation”, A Shared Responsibility.

**Financial Implications:**

Distribution of Quarterly Reports is within the 2019 budget allocations.

**Links to Policy/Strategic Plan:**

**Related Reports and Appendices:**

Appendix 1: Communications, Outreach and Volunteers Q3 Status Report

**Authored by:**

*Original signed by:*

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Renee Bisson,  
Manager, Communications and Public Relations

**Submitted by:**

*Original signed by:*

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D. Gayle Wood, BES, CMMIII  
Chief Administrative Officer/Secretary-Treasurer

*This report was prepared in consultation with Kerry Royer, Community Outreach and Volunteer Coordinator and Erika Navarro, Communications Specialist.*

## **Appendix 1:**

### **Communications, Community Engagement, Outreach and Volunteers Q3 Status Report**

#### **PARTNERSHIPS AND OUTREACH**

The Community Engagement team had a very busy third quarter. Staff met with various partners, regarding ongoing projects including the Niagara Catholic District School Board, Niagara Region, Ohnia: kara Aspiring Global Geopark, Pathstone Mental Health, Ontario Power Generation, Carolinian Canada and many local libraries to discuss exciting partnership opportunities in the months and years ahead.

A few of these partnerships are highlighted or updated below:

#### **2021 Canada Summer Games**

The NPCA was contacted by the Legacy and Sustainability Coordinator for the Canada Games taking place in Niagara in the summer of 2021. The Committee is interested in placing turtles native to Niagara at the core of the games, including their mascot and theme. The partnership has been developing over the last year and the NPCA continues to work with the Legacy and Sustainability Coordinator on potential partnerships related to turtle conservation projects and habitat enhancement for turtles in the Niagara region, as well as the creation of a pollinator garden, helping with volunteer call-outs and the possibility of hosting community events. The NPCA has been invited to be one of a few sustainability partners involved in the curation of the 2021 Canada Summer Games Souvenir Book which will be a take away item for the thousands of athletes, coaches, volunteers and game attendees. The book will feature the natural and historical history of the Niagara Peninsula including natural heritage, geology, ecology, culture and more.

#### **Niagara Region International Plaza and Civic Park**

Vanessa Aykroyd, Landscape Architect with the Niagara Region, reached out to the NPCA mid-January to discuss a potential partnership for the construction of the International Plaza and Civic Park. The NPCA co-hosted two volunteer planting dates in September. Over 75 volunteers from Niagara Region, NPCA, community organizations, Niagara College and Brock University showed up to help plant almost 2000 native plants in the pollinator garden.

#### **Ohnia: kara Aspiring Global Geopark**

The NPCA continues to support the Ohnia: kara Aspiring Global Geopark by participating on the Steering Committee and lending support with partnership development, community outreach and recruitment of members for the new Advisory Committees specific to various stakeholder groups. The Geopark will also have a presence at the 2019 Ball's Falls Thanksgiving Festival.

#### **Pathstone Mental Health Natural Playground & Healing Garden**

NPCA staff provided in-kind support to the Pathstone Mental Health Natural Playground and Healing Garden through a "Back to Nature series" of public talks/programs geared towards children within 6-12 years of age, offered at the Pathstone facility on Fourth Avenue in St. Catharines between June and September 2019. The partnership goal is to eventually offer off-site group outings for therapists and clients to enjoy the natural setting at Ball's Falls Conservation Area.

## **Scouts Partnership**

NPCA Staff attended the Port Colborne Environmental Advisory Committee (PCEAC) meeting in March and were able to garner the support of the PCEAC to help the Scouts plant trees at the Camp DayHonDayLahQuah in Port Colborne. PCEAC donated \$1000 towards the planting of over 100 trees at the Camp in September 2019. An additional tree planting with the Scouts saw over 120 trees planted at Woodend Conservation Area to enhance the area that was planted in 2017 by the same troop. A total of 26 Scouts and leaders participated in the 2 planting events.

## **Public Advisory Committee**

The Public Advisory Committee met at the end of June and again in September. Members are positive about the Committee and looking forward to getting to work on some upcoming projects. New members were recruited to fill 5 vacancies on the Committee, Development, First Nations, Landowners, Agricultural South and Environmental. A sub-committee of the PAC met to review applications and recommendations for members will go to the NPCA Board of Directors at the October meeting for approval and appointment. The Terms of Reference were approved at the September Board of Directors meeting and the next meeting will be November 28<sup>th</sup>, 2019 at 5:30PM.

## **Pollinator Partners**

NPCA Staff has been meeting with various stakeholders, farmers and members of the public in an effort to pool resources and create common messaging surrounding the status of native pollinators in Niagara. The group has launched a new honey fundraiser with the local school boards, built a new website and created a new brand/logo. For more information about this citizen-led group please visit [www.pollinatorpartners.ca](http://www.pollinatorpartners.ca).

## **Comfort Maple Legacy Project**

The NPCA has been working with the Niagara Parks Commission and School of Horticulture to research and collect the maternal DNA of the tree. Initial work was completed in the spring but was not released publicly. The second phase of the project will be in the first week of October.

## **Mother Earth Day Celebration**

The NPCA was asked to partner with The City of Niagara Falls and Schools in Bloom to develop and participate in a new Environmental-focused event in May 2020. Although still in the beginning phases, the Fair will include a city cleanup, tree planting, public demonstrations and eco-friendly vendors at Fireman's Park.

## **VOLUNTEERS**

From July-September new volunteers were recruited to support the educational programs at Ball's Falls and the Ball's Falls Thanksgiving Festival. Howie and Mark, two regular volunteers that support Ball's Falls 2-4 times per week, have been instrumental in building three new ticket booths for the Ball's Falls Festival and for Binbrook Conservation Area. The team have also been very active in the development

of the Forest Free Play Area at Ball's Falls and in various repairs around the Conservation Area including the workshop, camp house and barn. The NPCA currently has a roster of over 1250 volunteers that are communicated with regularly by promoting volunteer opportunities, workshops, special events and career opportunities.

## **COMMUNITY OUTREACH & ENGAGEMENT EVENTS ATTENDED OR SUPPORTED**

Legend \*NPCA is lead organizer/major partner.

- \*Presentation: Experiencing Nature in Your Backyard, Lincoln Library – July 9
- \*Heritage Day at Ball's Falls Conservation Area – July 14
- \*Giant Act of Kindness – Garbage Cleanup at Wainfleet Wetlands with Giant FM – July 25
- \*Pathstone Mental Health: Back to Nature Series-Monarch Butterflies – August 8
- \*BioBlitz at Ball's Falls C.A. in partnership with the Canadian Wildlife Federation – August 24
- \*Yellow Fish Road – Scouts painting – Welland – August 24
- \*Big Brothers Big Sisters Event at Jordan Harbour with Niagara Rowing School – September 7
- \*Presentation – West Lincoln Public Library – Conservation in Niagara – September 12
- \*Pathstone Mental Health: Back to Nature Series-Yellow Fish Road™ – September 15
- \*Scouts tree planting – Woodend Conservation Area – September 15
- \*Pollinator Garden planting at Niagara Region Civic Square – September 20 & 21

## **UPCOMING EVENTS**

- Trout Unlimited and Soldier ON – Healing Waters – October 2
- \*Presentation – Niagara College Beekeeping class – October 2
- \*Understorey Planting – Woodend Conservation Area with Niagara College – October 3
- \*Annual Ball's Falls Thanksgiving Festival – October 11–14
- \*Ridgeway & District Garden Club – Pollinator planting at Stevensville CA – October 17
- Planting at Fireman's Park with City of Niagara Falls – October 18
- \*Protected Areas Workshop/Co-hosted with Carolinian Canada – November 13, Ball's Falls
- \*In the Zone Workshop/Co-hosted with Carolinian Canada – November 26, Ball's Falls

**Other meetings held by Communications staff:**

- Meetings with local media
- Stakeholder meetings with the Town of Lincoln
- Meeting to discuss partnership/sponsorship with the Niagara Ice Dogs
- Meeting to discuss future opportunities with BENCH Brewery
- Phone meetings to discuss St. Lawrence Seaway disposal of surplus lands
- Phone meeting to discuss upcoming screening in November with a local Metis independent film maker
- Meetings to discuss upcoming MOU with Niagara Parks Commission
- Meetings to discuss upcoming NPCA promo video produced by students at Niagara College.

**COMMUNICATIONS AND MARKETING****Social Media by the numbers**

The NPCA's social media continues to be a great resource for community outreach and education. Facebook, Twitter, and Instagram pages have been increasingly used to share more positive and proactive messages with NPCA's partners in conservation.

Using October 2017 as a benchmark for comparison, when a social media engagement strategy was implemented, all social media channels, followers, likes, and shares, have continued to increase in numbers:

Facebook Likes: 6,597 (increase of 1,585)

Facebook Followers: 6,953 (increase of 2,127)

Instagram Followers: 770 (increase of 522)

Twitter Followers: 3,462 (increase of 362)

Ball's Falls Facebook Likes: 2,455 (increase of 654)

Ball's Falls Facebook Followers: 2,605 (increase of 838)

Binbrook Facebook Likes: 4,070 (increase of 3,040)

Binbrook Facebook Followers: 4,263 (increase of 3,224)

Through the months of July, August and September, social media strategies were used to communicate projects, events, partnerships, and initiatives listed below:

- Corporate news and Board of Director meetings
- Educational programs and camps i.e. PD Day, Summer Camps, Fall Camps
- Source Water Protection-Water Wednesdays
- Human Resources announcements and career opportunities
- Watershed Statements/Flood Outlooks
- Weddings and Corporate Events (St. Catharines Standard Readers Choice)
- Partnership Highlights: Welland Jackfish, Port Colborne and District Conservation Club, Mariners Park Port Colborne, Niagara College Broadcasting Department, Humble and Kind Giant FM Cleanup, Niagara Ice dogs, Pathstone Mental Health Sessions, Glanbrook Conservation Committee, West Lincoln Public Library, Lincoln Public Library, St. Catharines Library, Big Brothers Big Sisters, Niagara Region Pollinator Garden
- Event Listings: Jaws Movie on the Water, Niagara Beekeepers Program Info Session, Ontario Bolerama, Stargazing events at Binbrook and Chippawa, Ball's Falls Thanksgiving Festival, Ball's Falls Heritage Day, Chippawa Bass Derby, Binbrook Movie Night
- Miscellaneous nature and wildlife shots from across the watershed in the form of Q&As, Trivia, Did You Know, etc. for social community engagement. Additionally, various volunteers contributed to social media content by sending videos and photos of their experiences, such as bluebird box monitoring.

### **Communication Materials/Collateral**

The communications department plays a key role in how stakeholders and the public perceive the Niagara Peninsula Conservation Authority. Through collaboration with each department, the communications team is successful in providing engaging storytelling to the public regarding the work of the organization.

Support is provided to each department through the creation of various marketing, advertising, or communications collateral, which includes press releases and advisories, pamphlets and brochures, traditional and social media advertisements, event promotion, presentations, web content, and more.

Below is a list of projects completed during the third quarter

- **Ontario Bolerama-** Created media release, media list for pitching, social media and web updates.
- **Niagara Peninsula Bioblitz-** Drafted media release in partnership with Canada Wildlife Foundation, pitched stories to the media and earned radio and print coverage.
- **Public Advisory Committee-** Once Terms of Reference were approved by the Board of Directors in July, the NPCA began a callout for applications in an effort to fill vacancies in the Public Advisory Committee. A campaign was launched to promote this project, with social media and promoted/boosted posts, an email campaign in partnership with Greater Niagara Chamber of

Commerce to target the business sectors, advertising across the watershed including Niagara this Week, Hamilton Spectator, and Glanbrook Gazette. The NPCA's engagement portal was used to house all information pertaining to the Committee and also allow applicants to fill out the form and submit resume.

- **Business cards-** For various staff members due to change in job titles and organizational structure.
- **Restoration Program-** Continued to update the new website to house information on the restoration program. Worked with graphic designer to create a variety of ads to distribute via Niagara this Week, Hamilton Spectator, Glanbrook Gazette and Farmers Monthly. This message was also complimented by a social media push.
- **Native Plant Guide-** We have begun a review of the Native Plant Guides from 2014. The next version will include updated information and feature a new partnership with Carolinian Canada. It is expected that these will be ready by EOY.
- **Advertising-** Communications team works directly with third party graphic designer to produce the appropriate social media graphics, print/digital advertising, and meet deadlines as required. In the third quarter, these ads focused on Floodplain Mapping, Wetland Policy Changes, Thanksgiving Festival, Corporate Engagement and Event Booking, Flooding Information from NPCA, Wedding features, and more.
- **Promotion for Library and Pathstone Partnerships-** From July to September, the NPCA participated in a number of talks, presentations, and demonstrations in partnerships with Grimsby Public Library, West Lincoln Public Library, and Pathstone Mental Health. Various dates were scheduled and promoted, to welcome the general public to explore new information provided by an NPCA staff member. These were promoted via social media, boosted/sponsored posts, media pitching, Eventbrite listing, and website event listings.
- **Corporate Signage-** The communications team is responsible for the development of all signage across departments and Conservation Areas. This may vary from regulations and hours of operations, wildlife protection, project and initiative promotion, etc. In the third quarter, five projects were completed: Tree Insect Signs for Long Beach Conservation Area, Catch and Release signage for Binbrook Conservation Area, Wildlife Protection signage for St. Johns Conservation Area, Waterfowl Hunting for Mud Lake Conservation Area, and Osprey Nesting signs for Binbrook Conservation Area.
- **Thanksgiving Festival-** To prepare for the upcoming Festival, the steering committee met a few times to discuss next steps and a strategy to complete the necessary projects to plan the event. For the communications and marketing portion, this included a callout for volunteers via social media and boosted posting which directed interested applicants to the Thanksgiving Festival website for more information.
- **Board Orientation and Budget Presentations-** Communications supported the Office of the CAO and Corporate Services with the development of a new slide decks for the Full Authority Orientation Session on September 27, and the 2020 Operations Budgeting process.

- **Biennial Tour Slide-** Communications staff presented to Conservation Ontario on September 30<sup>th</sup> regarding the upcoming Conservation Authorities Biennial Tour.

The communications team has also completed all marketing print materials for the Festival, which include a promotional rack card, special guest passes, print, digital, and billboard advertisements, together with a third-party graphic designer. Billboards, digital ads, and radio marketing was booked and scheduled with media partners such as Giant FM, Country 89, Bellmedia, Media City, and targeted digital and social media ads with Postmedia/Google/Facebook. The team also completed the order for branded Festival shirts, lanyards, banners, and signage for the park.

- **Welland River Floodplain Mapping-** The Niagara Peninsula Conservation Authority is in the process of updating floodplain mapping for the Welland River. An important part of this process is engaging the community, which is currently underway.

A complete social and print media marketing campaign was created to promote this work and obtain feedback or attendance at upcoming Town Halls. This consisted of seven advertisements to run on Niagara this Week, Welland Tribune, Niagara Falls Review, and Farmer's Monthly. This was also supported by a social media push and an e-newsletter. The engagement portal was used to house the necessary information, including feedback submitted by guests.

- **Wetland Policy Change Consultation-** A complete social and print media marketing campaign was created to promote the NPCA'S latest Wetland Policy Change and obtain feedback. This included seven advertisements to run on Niagara this Week, Welland Tribune, Niagara Falls Review, and Farmer's Monthly. This was also supported by a social media push and an e-newsletter. The engagement portal was used to house the necessary information, including feedback submitted by guests.

## Storytelling/Media Coverage

Communications and marketing efforts focused on highlighting the important work of the organization, including strategic initiatives, source protection program, events and community outreach, and corporate initiatives, among others. A few highlights of this quarter included the following stories/media releases:

- Long Beach Conservation Area Hosts 19<sup>th</sup> Annual Ontario Bolerama
- Public Notice Regarding Falsified Information
- Board of Directors Extends CAO Contract
- Niagara Peninsula Conservation Authority Hosts Niagara Bioblitz
- Province Moves to Constrain Conservation Authorities' Programs and Services
- Niagara Rowing School & NPCA Provide Kids with Outdoor Adventures at Jordan Harbour
- Niagara Region Pollinator Garden Planting Event
- NPCA Supports the Climate Change Rally
- Annual Ball's Falls Thanksgiving Festival Celebrates 45 Years

*The media coverage obtained from the above news can be found in monthly Media Coverage Reports, Appendix 1.*

## **Source Water Protection**

In partnership with Conservation Ontario and other Conservation Authorities, the NPCA participates in ongoing social media campaigns promoting clean water and the source water protection program in Niagara.

Communications was also present at the Source Protection Committee meeting on July 16, 2019.

Ongoing website maintenance continues to be important to ensure up-to-date information is always available. With the hiring of a Digital Marketing Specialist, the team will revisit the creation of information pamphlets and an e-newsletter to be distributed bi-monthly.

## **NPCA Website**

Throughout the third quarter, Communications continued to meet with various departments to further understand their website needs and ensure these were included in the revised project scope to the assigned website developer before end of year.

### **Updates and changes to the website included:**

- ✓ Changing photography to be a true representation of Niagara Peninsula Watershed
- ✓ Updated board member information and board meeting agendas, minutes, video links, etc. Biographies for each board member were created to provide the public with information on their elected board representatives, their qualifications, educational and work background, as well as contact information when available.
- ✓ Finalize restoration page with photos, content, contact information, forms and links
- ✓ Work with GIS/IT department to update NPCA website map capabilities and move from Google Maps API
- ✓ Add Search Bar to allow for easier searching capabilities and better flow
- ✓ Inclusion of past projects and documents such as Nature for Niagara's Future in Conservation webpage
- ✓ Consistent Client-Centric CA Review and Approval Process Checklist (as per Conservation Ontario)
- ✓ Creation of Thanksgiving Festival student positions form

## **Ongoing Website maintenance**

- ✓ Update content on the website as required
- ✓ Respond to specific requests from various departments
- ✓ Add events and media releases
- ✓ Add job postings for HR department
- ✓ Watershed Condition Statements- Flood Outlook
- ✓ Update website accessibility

**Report To: Board of Directors**

**Subject: Communications Update Report- September 2019**

**Report No: FA-143-19**

**Date: October 16, 2019**

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**Recommendation:**

**THAT** Report No. FA-143-19 RE: Communications Update Report **BE RECEIVED** for information.

**Purpose:**

To provide the Board of Directors with an update of media exposure surrounding the work of the NPCA in September 2019. This media coverage and communications update report will be provided to the Board of Directors as needed.

To assist with this, it is requested that Board Members to liaise with the CAO/Secretary Treasurer and/or Communications Department in advance of all media interviews in order to track NPCA related media coverage, provide communications support and key messaging if needed, and distribution and/or notification to the Board of Directors.

**Background:**

The Media Report consists of all media coverage for the month of September. This includes outlet names, dates of coverage, titles, links when available, tonality, and PR value.

**Discussion:**

An interview on Cogeco TV's Taking Niagara By Storm has been scheduled for December 2019, featuring CAO Gayle Wood. Additional media inquiries from CBC Hamilton have been received for story on the Comfort Maple. Multiple inquiries are expected to be received for live-eye news at the 45<sup>th</sup> Annual Ball's Falls Thanksgiving Festival.

No other pending/upcoming media opportunities that staff are aware of at this time.

**Financial Implications:**

Staff resources are budgeted for media relations.

## Media Releases

- Niagara Rowing School & NPCA Provide Kids with Outdoor Adventures at Jordan Harbour: <https://npca.ca/our-voice/post/niagara-rowing-school-npca-provide-kids-with-outdoor-adventures-at-jordan-harbour>
- Niagara Region Pollinator Garden Planting Event: <https://npca.ca/our-voice/post/niagara-region-pollinator-garden-planting-event>
- Niagara Supports the Climate Change Rally: <https://npca.ca/our-voice/post/npca-supports-the-climate-change-rally>
- Annual Ball's Falls Thanksgiving Festival Celebrates 45 Years: <https://npca.ca/our-voice/post/thanksgiving-festival-celebrates-45-years>

## Past & Upcoming Events:

- Managing Trees in Haldimand County Workshop- October 2 at Ruthven Park National Historic Site
- Step Into Nature Series- October 10 at West Lincoln Public Library
- 45<sup>th</sup> Annual Ball's Falls Thanksgiving Festival- October 11-14, 2019

## Related Reports and Appendices:

Appendix 1: Media Coverage Report- September 2019

## Authored by:

*Original signed by:*

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Erika Navarro, B.A. (Hon)  
Communications Specialist

## Reviewed by:

*Original signed by:*

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Renee Bisson  
Manager, Communications and Public Engagement

## Submitted by:

*Original signed by:*

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D. Gayle Wood, BES, CMMIII  
Chief Administrative Officer/Secretary-Treasurer



**Niagara Peninsula Conservation Authority**

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**MEDIA COVERAGE REPORT**

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**September 2019**

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**Total Media Hits: 23**  
**Estimated media impressions: 1,104,353**  
**Estimated PR value: \$60,604**

Outlet	Date	Headline	Link	Tone	Estimated Reach	PR Value/AVE
Online						
Newstalk 610 CKTB	Sept. 6, 2019	NPCA ISSUES ITS FLOOD OUTLOOK	<a href="https://www.iheartradio.ca/610cktb/news/npca-issues-its-flood-outlook-1.9926430">https://www.iheartradio.ca/610cktb/news/npca-issues-its-flood-outlook-1.9926430</a>	Neutral	113,000	\$4,400
Niagara Falls Review	Sept. 6, 2019	NPCA faces uncertainty amid provincial mandate changes	<a href="https://www.niagarafallsreview.ca/news-story/9544086-npca-board-gets-final-instalment-of-new-members/">https://www.niagarafallsreview.ca/news-story/9544086-npca-board-gets-final-instalment-of-new-members/</a>	Neutral	64,364	\$2,135
St. Catharines Standard	Sept. 6, 2019	NPCA faces uncertainty amid provincial mandate changes	<a href="https://www.stcatharinesstandard.ca/news-story/9585001-npca-faces-uncertainty-amid-provincial-mandate-changes/">https://www.stcatharinesstandard.ca/news-story/9585001-npca-faces-uncertainty-amid-provincial-mandate-changes/</a>	Neutral	203,370	\$6,500
Welland Tribune	Sept. 6, 2019	NPCA faces uncertainty amid provincial mandate changes	<a href="https://www.wellandtribune.ca/news-story/9528069-notl-appoints-lifelong-nature-conservation-enthusiast-to-npca-board/">https://www.wellandtribune.ca/news-story/9528069-notl-appoints-lifelong-nature-conservation-enthusiast-to-npca-board/</a>	Neutral	50,476	\$6,500
Niagara at Large	Sept. 9, 2019	Ford Wields Axe Over Activities Conservation Authorities Host to Fund Eco-Programs	<a href="https://niagaraatlarge.com/2019/09/09/ford-wields-axe-over-activities-conservation-authorities-host-to-fund-eco-programs/">https://niagaraatlarge.com/2019/09/09/ford-wields-axe-over-activities-conservation-authorities-host-to-fund-eco-programs/</a>	Neutral	N/A	N/A
Niagara this Week	Sept. 11, 2019	Concrete Gents Road Bridge too pricey for Wainfleet	<a href="https://www.niagarathisweek.com/news-story/9592051-concrete-gents-road-bridge-too-pricey-for-wainfleet/">https://www.niagarathisweek.com/news-story/9592051-concrete-gents-road-bridge-too-pricey-for-wainfleet/</a>	Neutral	12,687	\$1,876
Niagara at Large	Sept. 15, 2019	<b>Province's Say in Conservation</b> Authority Operations Should Be Limited To What It Contributes in Funding	<a href="https://niagaraatlarge.com/2019/09/15/provinces-say-in-conservation-authority-operations-should-be-limited-to-what-it-contributes-in-funding/">https://niagaraatlarge.com/2019/09/15/provinces-say-in-conservation-authority-operations-should-be-limited-to-what-it-contributes-in-funding/</a>	Neutral	N/A	N/A
The River	Sept. 19, 2019	POLLINATOR GARDEN TO BE PLANTED OUTSIDE NIAGARA REGION HEADQUARTERS	<a href="http://www.105theriver.ca/news1/pollinator-garden-to-be-planted-outside-niagara-region-headquarters/">http://www.105theriver.ca/news1/pollinator-garden-to-be-planted-outside-niagara-region-headquarters/</a>	Positive	N/A	N/A
Voice of Pelham	Sept. 19, 2019	NPCA board says no to fishing expedition	<a href="https://www.thevoiceofpelham.ca/2019/09/19/npca-board-says-no-to-fishing-expedition/">https://www.thevoiceofpelham.ca/2019/09/19/npca-board-says-no-to-fishing-expedition/</a>	Neutral	N/A	N/A

Niagara Independent	Sept. 20, 2019	NPCA board says no to fishing expedition	<a href="https://niagaraindependent.ca/npca-board-says-no-to-fishing-expedition/">https://niagaraindependent.ca/npca-board-says-no-to-fishing-expedition/</a>	Neutral	2,216	\$38
Sachem News	Sept. 20, 2019	Grand River Conservation Authority holding managing trees workshop	<a href="https://www.sachem.ca/community-story/9608552-grand-river-conservation-authority-holding-managing-trees-workshop/">https://www.sachem.ca/community-story/9608552-grand-river-conservation-authority-holding-managing-trees-workshop/</a>	Positive	10,579	\$388
Niagara Falls Review	Sept. 22, 2019	Volunteers plant pollinator garden at Niagara Region headquarters	<a href="https://www.niagarafallsreview.ca/news-story/9609637-volunteers-plant-pollinator-garden-at-niagara-region-headquarters/">https://www.niagarafallsreview.ca/news-story/9609637-volunteers-plant-pollinator-garden-at-niagara-region-headquarters/</a>	Positive	64,364	\$2,380
St. Catharines Standard	Sept. 22, 2019	Volunteers plant pollinator garden at Niagara Region headquarters	<a href="https://www.stcatharinesstandard.ca/news-story/9609637-volunteers-plant-pollinator-garden-at-niagara-region-headquarters/">https://www.stcatharinesstandard.ca/news-story/9609637-volunteers-plant-pollinator-garden-at-niagara-region-headquarters/</a>	Positive	203,370	\$6,500
Welland Tribune	Sept. 22, 2019	Volunteers plant pollinator garden at Niagara Region headquarters	<a href="https://www.wellandtribune.ca/news-story/9609637-volunteers-plant-pollinator-garden-at-niagara-region-headquarters/">https://www.wellandtribune.ca/news-story/9609637-volunteers-plant-pollinator-garden-at-niagara-region-headquarters/</a>	Positive	50,476	\$6,500
Niagara Falls Review	Sept. 24, 2019	<b>Point Abino pumps won't be restarted, council decides</b>	<a href="https://www.niagarafallsreview.ca/news-story/9611825-point-abino-pumps-won-t-be-restarted-council-decides/">https://www.niagarafallsreview.ca/news-story/9611825-point-abino-pumps-won-t-be-restarted-council-decides/</a>	Neutral	64,364	\$2,380
Niagara this Week	Sept. 24, 2019	<b>Point Abino pumps won't be restarted, council decides</b>	<a href="https://www.niagarathisweek.com/news-story/9611825-point-abino-pumps-won-t-be-restarted-council-decides/">https://www.niagarathisweek.com/news-story/9611825-point-abino-pumps-won-t-be-restarted-council-decides/</a>	Neutral	12,687	\$1,876
Thorold News	Sept. 24, 2019	Volunteers swarm to build pollinator garden	<a href="https://www.thoroldnews.com/local-news/volunteers-swarm-to-build-pollinator-garden-1709731">https://www.thoroldnews.com/local-news/volunteers-swarm-to-build-pollinator-garden-1709731</a>	Positive	N/A	N/A
Haldimand Press	Sept. 26, 2019	Learn to manage trees at workshop	<a href="https://haldimandpress.com/learn-to-manage-trees-at-workshop/">https://haldimandpress.com/learn-to-manage-trees-at-workshop/</a>	Positive	N/A	N/A
Print						
Niagara Falls Review	Sept. 26, 2019	Volunteers cultivate green space at Region Headquarters	<a href="http://edition.pagesuite-professional.co.uk/html5/reader/production/default.aspx?pubname=&amp;pubid=2bd8b995-6e4a-4ebd-aecb-fdccea0fa08b">http://edition.pagesuite-professional.co.uk/html5/reader/production/default.aspx?pubname=&amp;pubid=2bd8b995-6e4a-4ebd-aecb-fdccea0fa08b</a>	Positive	34,000	\$2,925

Niagara this Week	Sept. 26, 2019	Volunteers cultivate green space at Region Headquarters	N/A	Positive	161,400	\$9,744
St. Catharines Standard	Sept. 26, 2019	Volunteers cultivate green space at Region Headquarters	N/A	Positive	57,000	\$3,537
Welland Tribune	Sept. 26, 2019	Volunteers cultivate green space at Region Headquarters	N/A	Positive	33,00	\$2,925
Broadcast						
YourTV Cogeco Niagara	Sept. 26, 2019	The Niagara Region & the NPCA have partnered on a pollinator garden. The garden is one of several design elements in the International Plaza Project.	<a href="https://www.yourtv.tv/node/206616">https://www.yourtv.tv/node/206616</a>	Positive	N/A	N/A

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**Report To: Board of Directors**

**Subject: Trail Maintenance Agreement with Glanbrook Conservation Committee**

**Report No: FA-132-19**

**Date: October 16, 2019**

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**Recommendation:**

1. **THAT** Report No. FA-132-19 RE: MOU with Glanbrook Conservation Committee **BE RECEIVED** for information.
2. **THAT** Report No. FA-119-19 RE: MOU with Glanbrook Conservation Committee **BE RECEIVED** for information.
3. **THAT** the NPCA Board **AUTHORIZE** the Chair and CAO to execute a 3-year Trail Maintenance Agreement with the Glanbrook Conservation Committee (GCC) regarding the Tyneside Trail at Binbrook Conservation Area.

**Purpose:**

The purpose of this Report is to seek Board approval to enter into a formal agreement with the Glanbrook Conservation Committee for the maintenance of Tyneside Trail at Binbrook CA.

**Background:**

The Glanbrook Conservation Committee (GCC), established in 1990, consists of a group of passionate and knowledgeable, local community volunteers. The Committee's primary mandate is to work to improve the habitat for wildlife in what was previously Glanbrook Township; now part of the City of Hamilton. The GCC includes naturalists, environmentalists, bird watchers, hikers, canoeists, as well as anglers and hunters.

The majority of GCC activities occur at Binbrook Conservation Area in cooperation with NPCA staff. From helping to establish and maintain several hiking trails, to a large aquatic planting program and tree planting program, the GCC has improved the natural habitat for both wildlife and visitors in and around the shores of Lake Niapenco at the conservation area.

Below are some projects that the GCC are responsible for:

- Establishment, maintenance and monitoring of Bluebird trails at the Binbrook CA;

- Hyslop Bay Wetland Restoration project that involved the construction of a carp barrier, planting of aquatic plants, tree planting in the fields adjacent to the bay, construction of nesting structures;
- Building and supply of nesting box kits for schools, Scouts, Guides and other groups (over 900 kits supplied since 1991);
- Aquatics nursery program where they grew seed and planted over 30,000 wetland plant species;
- Development and maintenance of walking trails in different areas of the Conservation Area with construction of boardwalks and benches for use on the various trails;
- Year-round maintenance of the Tyneside parking area at the west end of the Conservation Area;
- Yearly tree planting program;
- Ongoing shoreline protection projects that have included anchoring of stumps, brush and logs to vulnerable shoreline areas;
- Placement of gabion stone over an 8m x 105m area on the main island of Lake Niapenco to create a pickerel spawning bed and protect the island from wave erosion;
- Fish structure program; and
- Ongoing year-round pick-up of litter over the entire Conservation Area.

A MOU between the Glanbrook Conservation Committee and the Niagara Peninsula Conservation Authority was approved at the October 21, 2015 NPCA Board meeting for a three-year term from January 1, 2015 to December 31, 2018. With the expiration of the agreement ending December 31, 2018 there is currently no agreement between the GCC and NPCA. Staff met with GCC representatives in August 2019 and have agreed that the original MOU worked well for both organizations.

## **Discussion:**

The NPCA is grateful for the contributions made by the GCC over the years. This proposed Agreement will continue to increase communication between the GCC and NPCA staff. The agreement makes sure both parties are compliant with the Ministry of Labour, WSIB, and the Ontario Occupational Health and Safety Act. This proposed Agreement continues to give staff and volunteers a clearer direction.

## **Financial Implications:**

The proposed Agreement recommends to, *“Reimburse the Glanbrook Conservation Committee for supplies and materials up to a maximum of \$2000 per annum.”* These materials and supplies are all in relation to the improvement of the NPCA owned trail and any additional materials/supplies will be returned to the park with the completion of projects. Further, NPCA staff recommends utilizing the funds received from the Camp Marydale Agreement for boat launch access (\$4000/2019, \$4000/2020) to support this agreement.

## **Related Reports and Appendices:**

Appendix 1: GCC Tyneside Trail Maintenance Agreement

Appendix 2: Tyneside Trail Map

## **Authored by:**

*Original signed by:*

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Adam Christie  
Acting Senior Manager of Operations and Special Projects

## **Submitted by:**

*Original signed by:*

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D. Gayle Wood, BES, CMMIII  
Chief Administrative Officer/Secretary-Treasurer

**THE NIAGARA PENINSULA CONSERVATION AUTHORITY  
THE GLANBROOK CONSERVATION COMMITTEE**

**October 1, 2019 – December 31, 2022**

**For**

**Binbrook Conservation Area (TYNESIDE TRAIL)  
Maintenance Agreement**

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**Parties to the Agreement:**

**Niagara Peninsula Conservation Authority (NPCA)**

**And**

**The Glanbrook Conservation Committee (GCC)**

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**PURPOSE**

The purpose of this Agreement is to describe the framework that will be undertaken by the Glanbrook Conservation Committee in cooperation with the Niagara Peninsula Conservation Authority.

**BACKGROUND**

The Glanbrook Conservation Committee is a local conservation group committed to providing safe and enjoyable visitor experience at the Binbrook Conservation Area. The Committee is also involved in many projects which improve wildlife habitat throughout the property.

The committee members have been assisting with the maintenance of the Tyneside Trail for a number of years and are still interested in its continuous improvement. Recognizing this, the Conservation Authority proposed to enter into an agreement whereby the committee contracts to undertake maintenance activities at Binbrook Conservation Area, specific to the Tyneside Trail. This allows the NPCA to clearly identify their maintenance needs and to compensate the committee for their work.

**OBJECTIVES**

The Glanbrook Conservation Committee will work with the NPCA to maintain the Tyneside Trail. The Club will also monitor the Tyneside Trail and advise the NPCA when maintenance or repair is required.

**FUNDRAISING**

The NPCA will allow the Glanbrook Conservation Committee to promote and conduct fundraising activity on NPCA property. All fundraising activities must be approved by the NPCA

prior to the activity taking place. The NPCA reserves the right to approve or reject all fundraising activity performed by the Glanbrook Conservation Committee.

## **TRAINING**

All active members of the Glanbrook Conservation Committee must complete all prescribed Health and Safety training by the NPCA prior to performing any work on NPCA property. The training will include, but is not limited to the following;

- Annual successful completion of WHMIS
- Successful completion of Ministry of Labour Worker Awareness

The NPCA will provide all training modules and material to the GCC. The GCC will be responsible for administering all aforementioned training and remit all necessary documentation to the NPCA as needed.

### **The Glanbrook Conservation Committee commits to:**

- i) Maintain the Tyneside Trail in a safe and suitable condition,
- ii) Advise the Conservation Authority if any of the Tyneside Trail structures or facilities have been damaged or need repair.
- iii) Allow for public access and enjoyment of the Tyneside Trail.

### **The Niagara Peninsula Conservation Authority commits to:**

- i. Reimburse the Glanbrook Conservation Committee for supplies and materials up to a maximum of \$2000 per annum.
- ii. Respond to the Committee as to the approval or rejection of GCC purchases

## **IMPLEMENTATION**

- Each organization will assign project leads as appropriate, and schedule a start-up meeting
- The GCC and the NPCA representatives will meet at the start of the contract period and annually thereafter to discuss progress
- The GCC shall purchase materials or supplies using its own funds and submit receipts to the NPCA for re-imbursement. The NPCA reserves the right to approve or reject any/all submitted receipts by the GCC.
- GCC will forward to the NPCA, on an annual basis, a financial report pertaining to how the funds are dispersed.
- Both the NPCA and the GCC shall agree to the aforementioned terms prior to any work being performed on NPCA property.
- Either party may withdraw from this Agreement providing 90 days written notice.

**CONTACTS:**

Glanbrook Conservation Committee  
Brett Harrington – Chair

Niagara Peninsula Conservation Authority  
Gayle Wood – Chief Administrative Officer /  
Secretary Treasurer

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**Name**

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**Name**

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**Date**

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**Date**

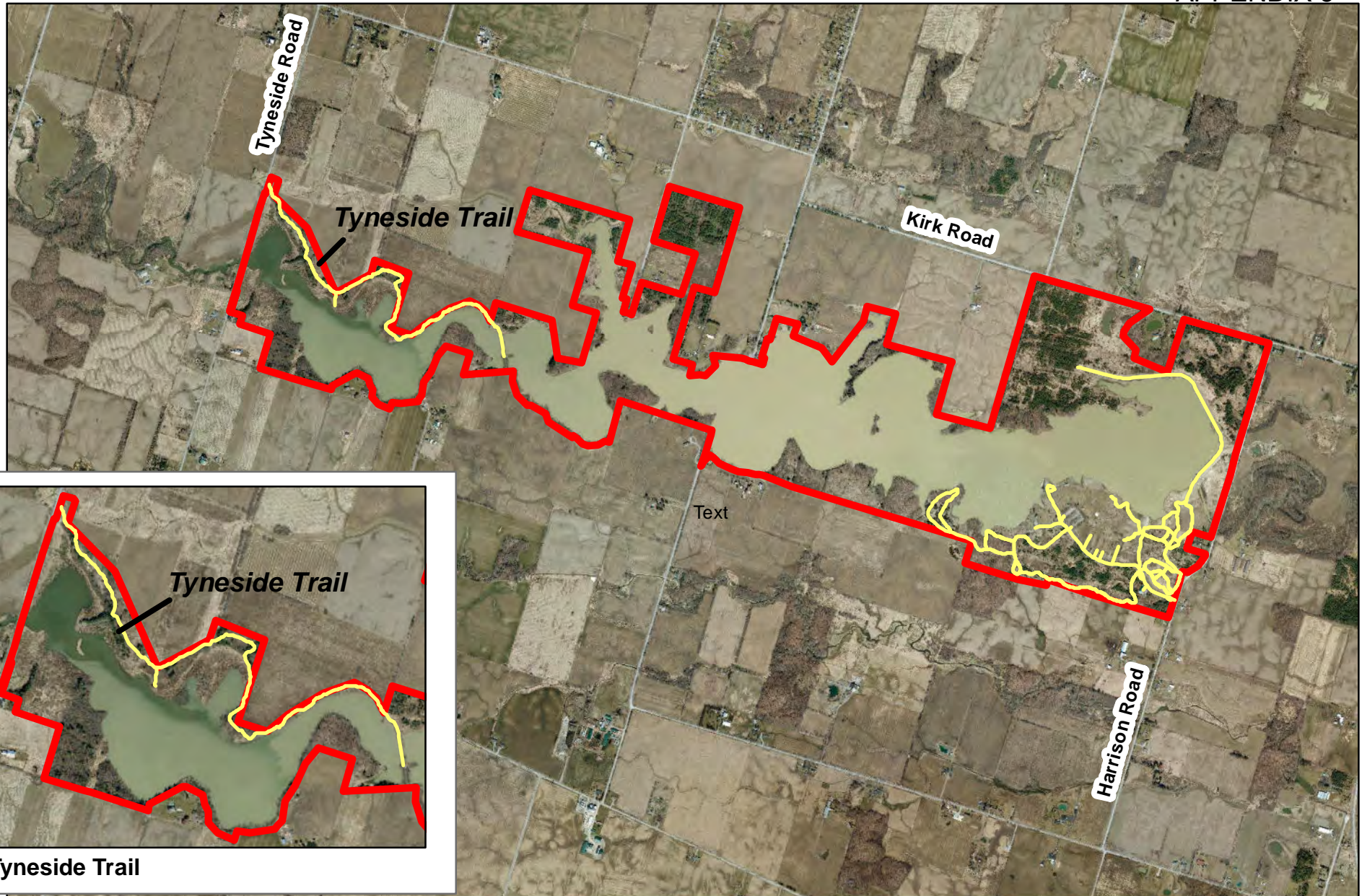
Niagara Peninsula Conservation Authority  
Dave Bylsma – Chair

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**Name**

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**Date**



## Binbrook Conservation Area- Tyneside Trail Location



### Legend



Conservation Area Boundary  
Airphoto 2010



NPCA Trails

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0.5

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2

Kilometers



October 2015: KF

**Report To: Board of Directors**

**Subject: 2019 Restoration Project Approvals for October**

**Report No: FA 134-19**

**Date: October 16, 2019**

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**Recommendation:**

1. **THAT** Report No. FA-134-19 RE: 2019 Restoration Project Approvals for October **BE RECEIVED.**
2. **THAT** the approved Restoration Program 2019 projects and associated grant estimates identified in Appendix 2 of Report No. FA-134-19 - 'Management Approved Restoration Projects List September 2019' **BE APPROVED.**

**Purpose:**

The purpose of this Report is to provide the Board of Directors with management's approval of Restoration Program applications, by providing a summary of projects recently selected by the standing staff Restoration Program Review Committee, as well as seek Board approval of funding for these projects.

**Background:**

At the June 2019 Full Authority meeting the board received for information, the 2019 Workplan for the Restoration Grant program, including Program Guidelines detailing project eligibility, funding rates and ceilings. Project Evaluation Criteria and standing staff Review Committee information was also circulated. Monthly Authority meetings were identified as the avenue with which to present management's approval of selected projects for final funding approval by the board.

To date, the Board of Directors has financially endorsed management's approval of twenty-seven (27) projects selected by the staff Review Committee (see Appendix 1.). All twenty-seven projects are in partnership with private landowners through the NPCA watershed and totaled \$235,715.52 in disbursements from the 2019 restoration program.

## **Discussion:**

At the September 26, 2019 NPCA Restoration Program Review Committee, staff selected four (4) projects for board financial approval (see Appendix 2 for details). These projects will see 2.89 ha of forest planted, approximately 400m of riparian buffer established, and one (1) nutrient management (manure storage improvement) project completed. Two (2) of the projects are in partnership with private landowners, the third is in partnership with Land Care Niagara, while the fourth is in partnership with the Friends of One Mile Creek and the Town of Niagara-on-the-Lake.

The Review Committee will meet again in November to review any additional project applications for 2019. At this meeting, the committee will also review applications received by the November 1<sup>st</sup>, 2019 deadline for 2020 restoration projects. If needed, a second application intake date will be added in early 2020. The committee will also continue its discussion on a strategy for prioritizing and targeting restoration activities for the 2020 and beyond as per the Auditor General's recommendation and best practices with respect to integrated watershed management.

In keeping with the Guiding Principles of the Restoration Program, staff continue to reengage with several significant traditional partner organizations. These partnerships allow the NPCA and our partners to leverage funds and organizational capacities to reduce our financial contribution to these projects and increase the total number of projects completed. Staff continue working on negotiating Memorandums of Understanding with these and other significant partners as identified in the 2019 program workplan.

## **Financial Implications:**

NPCA provides a portion of the costs for approved projects. Matching dollars are required from landowners or other partners.

The projects approved to date from 2019 restoration program budget to date total a \$235,715.52. contribution from NPCA. Total project costs are \$643,153.94. As can be seen, NPCA has leveraged our funding substantially. (Refer to Appendix 1)

Total NPCA projected contributions to the selected projects for consideration as part of this October Report is an additional \$25,114.55 from the NPCA 2019 restoration program budget. The total cost for these four projects is projected to be \$201,792.19. A significant leveraging of NPCA investment is demonstrated in these projects. (Refer to Appendix 2).

The 2019 Budget allocated for the restoration program was \$500,000.00. Of this funding, around \$120,000.00 was allocated to staffing, expenses, materials, supplies and mileage. Projections to year end indicate that around \$119,170.00 remain to allocate to approved projects.

## **Related Reports and Appendices:**

Appendix 1: 2019 Restoration Project Approvals to Date

Appendix 2: Management Approved Restoration Projects List September 2019

**Authored by:**

*Original signed by:*

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Steve Gillis  
Restoration Project Lead

**Reviewed by:**

*Original signed by:*

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Geoff Verkade  
Senior Manager, Integrated Watershed Planning/  
Information Management

**Reviewed by:**

*Original signed by:*

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Lise Gagnon, CPA, CGA  
Director, Corporate Services

**Submitted by:**

*Original signed by:*

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D. Gayle Wood, BES, CMMIII  
Chief Administrative Officer/Secretary-Treasurer

Management Approved Restoration Projects List - 2019 Total

Project Number	Project Type	Project Description	Watershed	Partner	Partner	Landowner	Total Estimated			Approval
					Projected Funds	Projected Cost	NPCA Projected Cost	Cost	NPCA %	
RP201903001	Tree Planting	9 acre tree planting	20 Mile Creek	Land Care Niagara	\$10,368.00	\$3,018.82	\$8,142.32	\$21,224.43	75%	
RP201903003	Tree Planting	8.9 acre tree planting	Central Welland River	Land Care Niagara	\$10,252.80	\$1,858.42	\$8,371.58	\$21,414.90	75%	
RP201903004	Tree Planting	8.6 acre tree planting	Upper Welland River	Land Care Niagara	\$9,907.20	\$7,572.35	\$7,805.04	\$20,313.92	75%	
RP201903005	Tree Planting	3 Acre Tree planting	CWR- Unnamed Creek	Land Care Niagara	\$3,456.00	\$1,556.01	\$3,065.56	\$8,021.56	67%	
RP201905001	Wetland	0.3 Ha Wetland	15 Mile Creek	Ducks Unlimited	\$10,000.00	\$1,000.00	\$2,500.00	\$13,500.00	19%	
RP201905002	Wetland Restoration	0.2 Ha Wetland	BeaverdamsCreek	Ducks Unlimited	\$6,000.00	\$1,000.00	\$2,040.00	\$9,040.00	23%	
RP201905003	Wetland Restoration	0.5 acre wetland planting	UWR- Mill Creek	Ducks Unlimited	\$3,456.00	\$1,000.00	\$2,080.00	\$18,080.00	12%	June
RP201903006	Tree Planting	5.3 acre tree planting	Coyle Creek	Land Care Niagara		\$3,200.56	\$9,601.67	\$12,802.23	75%	
RP201903007	Tree Planting	4.7 acre tree planting	Point Abino Drain	Land Care Niagara		\$2,859.12	\$8,577.35	\$11,436.47	75%	
RP201903008	Tree Planting	2.5 acre tree planting	Barlett Creek	Land Care Niagara		\$763.66	\$6,187.27	\$6,950.93	75%	
RP201903009	Tree Planting	1.6 acre tree planting	CWR- Unnamed Creek	Land Care Niagara	\$4,148.00	\$381.83	\$1,145.49	\$5,675.32	20%	
RP201903010	Tree Planting	3.3 acre tree planting	SNF Lyons Creek	Land Care Niagara		\$2,062.42	\$6,187.27	\$8,249.69	75%	
RP201904001	Instream/Riparian	Riparian/Instream restoration	Walker's Creek			\$1,875.00	\$5,625.00	\$7,500.00	75%	
RP201904002	Instream/Riparian	Riparian/Instream restoration	Welland River			\$1,000.00	\$3,000.00	\$4,000.00	75%	
RP201905001	Wetland Restoration	0.75 acre wetland planting	15 Mile Creek			\$1,250.00	\$5,000.00	\$6,250.00	75%	
RP201905003	Wetland Restoration	0.5 acre wetland planting	UWR- Mill Creek			\$1,250.00	\$5,000.00	\$6,250.00	75%	
RP201905004	Wetland Restoration	2.5ac wetland construction	CWR- Parkers Creek	Ducks Unlimited	\$5,000.00	\$2,500.00	\$15,000.00	\$22,500.00	67%	
		2.5ac wetland planting				\$1,666.67	\$5,000.00	\$6,666.67	75%	
RP201905005	Wetland Restoration	1 acre wetland	40 Mile Creek	Ducks Unlimited	\$5,000.00	\$3,000.00	\$12,000.00	\$20,000.00	60%	
		1 acre wetland planting				\$1,666.67	\$5,000.00	\$6,666.67	75%	
RP201905006	Wetland Restoration	1 acre wetland	20 Mile Creek	Ducks Unlimited	\$5,000.00	\$5,000.00	\$15,000.00	\$25,000.00	60%	
		1 acre wetland planting				\$1,666.67	\$5,000.00	\$6,666.67	75%	
RP201905007	Wetland Restoration	1 acre wetland	6 Mile Creek	Ducks Unlimited	\$5,000.00	\$3,000.00	\$12,000.00	\$20,000.00	60%	
		1 acre wetland planting				\$1,666.67	\$5,000.00	\$6,666.67	75%	
RP201905008	Wetland Restoration	0.7 acre wetland planting	20 Mile Creek			\$1,666.67	\$5,000.00	\$6,666.67	75%	
RP201905009	Wetland Restoration	1.1 acre wetland	Welland River	Ducks Unlimited	\$5,000.00	\$5,000.00	\$15,000.00	\$25,000.00	60%	
		1.1 acre wetland planting				\$1,666.67	\$5,000.00	\$6,666.67	75%	
RP201905010	Wetland Restoration	1.24 acre wetland	West Wolf Creek	Ducks Unlimited	\$5,000.00	\$5,000.00	\$15,000.00	\$25,000.00	60%	
		1.24 acre wetland planting				\$1,666.67	\$5,000.00	\$6,666.67	75%	
RP201905011	Wetland Restoration	1.0 acre wetland	Bearss Drain	Ducks Unlimited	\$5,000.00	\$3,000.00	\$12,000.00	\$20,000.00	60%	
		1.0 acre wetland planting				\$1,666.67	\$5,000.00	\$6,666.67	75%	
RP201905012	Wetland Restoration	0.6a acre wetland	Point Abino Drain	Ducks Unlimited	\$5,000.00	\$2,500.00	\$7,500.00	\$15,000.00	50%	
		0.6 acre wetland planting				\$1,666.67	\$5,000.00	\$6,666.67	75%	
RP201903014	Tree Planting	3.8 acre Tree planting	Kelly Drain	HSC, Forests Ontario	\$4,560.00	\$434.86	\$1,304.75	\$6,299.43	21%	July
RP201903013	Tree Planting	5.4 acre Tree planting	Elsie Creek UWR	HSC, Forests Ontario	\$19,040.00	\$703.21	\$1,582.22	\$21,852.84	7%	
RP201903012	Tree Planting	5.9 Acre Tree Planting	40 Mile Creek			\$2,842.05	\$8,526.15	\$11,368.20	75%	August
RP201907001	Manure Storage	Manure Storage	20 Mile Creek	APC	\$35,000.00	\$137,306.13	\$12,000.00	\$184,306.13	7%	
RP201904004	Riparian	Riparian Tree Planting	1 Mile Creek	Town of NOTL in-kind		\$650.00	\$1,950.00	\$2,600.00	75%	
RP201904003	Instream/Riparian	Riparian Tree Planting	Black Creek			\$879.47	\$2,638.40	\$3,517.86	75%	
					\$156,188.00	\$218,463.94	\$260,830.07	\$643,153.94	September	

Management Approved Restoration Projects List									
Project Number	Project Type	Project Description	Watershed	Partner	Partner Projected	Landowner Projected Cost	NPCA Projected Cost	NPCA %	Total Estimated Cost
RP201903012	Tree Planting	5.9 Acre Tree Planting	40 Mile Creek			\$2,842.05	\$8,526.15	75%	\$11,368.20
RP201907001	Manure Storage	Manure Storage	20 Mile Creek	Agricultural Partnerships Canada	\$35,000.00	\$137,306.13	\$12,000.00	7%	\$184,306.13
RP201904004	Riparian	Riparian Tree Planting	1 Mile Creek	Town of NOTL in-kind		\$650.00	\$1,950.00	75%	\$2,600.00
RP201904003	Instream/Riparian	Riparian Tree Planting	Black Creek			\$879.47	\$2,638.40	75%	\$3,517.86
					\$35,000.00	\$141,677.65	\$25,114.55		\$201,792.19

**Report To: Board of Directors**

**Subject: Board Appointments to Committees**

**Report No: FA-137-19**

**Date: October 16, 2019**

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**Recommendation:**

1. **THAT** Report No. FA-137-19 RE: Board Appointments to Committees **BE APPROVED**.
2. **THAT** Member Hellinga **BE APPOINTED** to the Welland River Floodplain Committee and that Member Kawall be appointed to the Governance Committee.

**Purpose:**

The purpose of this report is to seek Board approval for additional appointments to NPCA Committees.

**Background:**

Normally, NPCA Committee appointments are done at the Annual General Meeting in January of each year. However, with members being appointed recently to the Board of Directors from the Region of Niagara, NPCA is still in the process of appointing Committee members for 2019.

Committees will be reviewed in January 2020 and appointments to those Committees will be updated at that time.

**Discussion:**

Member Hellinga has requested to be appointed to the Welland River Floodplain Committee and Member Kawall has requested to be appointed to the Governance Committee.

**Financial Implications:**

Given that the NPCA is in its fourth quarter, additional appointees to Committees will have minimal impact on the budget.

**Links to Policy/Strategic Plan:**

Committees enable the NPCA to have more detailed discussion on important issues such as governance and finance.

**Related Reports and Appendices:**

There are no appendices to this report.

**Submitted by:**

*Original signed by:*

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D. Gayle Wood, BES, CMMIII  
Chief Administrative Officer/Secretary-Treasurer

**Report To: Board of Directors**

**Subject: 2019 Trout Unlimited Canada Twelve Mile Creek Restoration  
Memorandum of Agreement**

**Report No: FA-142-19**

**Date: October 16, 2019**

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**Recommendation:**

1. **THAT** Report No. FA-141-19 RE: 2019 Trout Unlimited Canada Twelve Mile Creek Restoration Memorandum of Agreement **BE RECEIVED.**
2. **THAT** the 2019 Trout Unlimited Canada Twelve Mile Creek Restoration Memorandum of Agreement **BE APPROVED** for signature by the Chair and CAO/Secretary-Treasurer.

**Purpose:**

The purpose of this report is to provide the NPCA Board of Directors with the 2019 Trout Unlimited Canada (TUC) Twelve Mile Creek Restoration Memorandum of Agreement (MOA) detailing the renewed partnership between the NPCA and TUC to implement Twelve Mile Creek restoration projects.

**Background:**

Trout Unlimited Canada (DUC) is recognized as a leading agency in creek restoration and conservation. From the Niagara Chapter's formation in 2012, TUC and the NPCA have been working together with Niagara landowners to implement restoration projects across the headwaters of Twelve Mile Creek. The two organizations share a mutual interest in watershed restoration and conservation to the benefit of Twelve Mile Creek, Niagara's only cold-water stream with an existing population of brook trout.

At the April 2019 Full Authority meeting the Board approved the implementation of a revitalized Restoration Grant program better addressing the mandate of the Conservation Authorities Act, the NPCA Strategic Plan, and the Auditor General's recommendation to develop and implement a strategy to better target areas of the watershed based on water quality monitoring and other information on the health of the watershed.

At the June 2019 Full Authority meeting the Board received for information, the 2019 Workplan for the Restoration Grant Program. Identified within the 2019 Workplan was the goal to re-establish partnerships with like-minded organizations and negotiate Memorandum of Agreements with these

significant partners. A copy of FA-63-19 'Restoration Program Workplan' is attached to this Report as Appendix 1.

### **Discussion:**

In keeping with the Guiding Principles of the Restoration Program, staff have begun to reengage with several significant traditional partner organizations – including Trout Unlimited Canada. Partnerships with organizations such as Trout Unlimited Canada allows the NPCA and our partners to leverage funds and organizational capacities to reduce our financial contribution to these projects and increase the total number of projects completed.

The 2019 Trout Unlimited Canada Twelve Mile Creek Restoration Memorandum of Agreement (Appendix 2) details the basis for individual and joint obligations of each organization within the renewed partnership between the NPCA and TUC, including technical responsibilities and partner recognition. Addendums to this agreement, detailing individual projects and other joint ventures will be brought as "Schedules" before the NPCA Board of Directors for consideration as developed.

### **Financial Implications:**

There are no costs associated with entering into this Memorandum of Agreement with Trout Unlimited Canada at this time.

### **Related Reports and Appendices:**

- Appendix 1: FA-63-19 RE Restoration Program Workplan
- Appendix 2: FA-142-19 RE 2019 Trout Unlimited Canada Twelve Mile Creek Restoration Memorandum of Agreement.

### **Authored by:**

*Original signed by:*

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Stuart McPherson  
Restoration Project Lead

### **Reviewed by:**

*Original signed by:*

---

Geoff Verkade  
Senior Manager, Integrated Watershed Planning/  
Information Management

**Reviewed by:**

*Original signed by:*

---

Lise Gagnon, CPA, CGA  
Director, Corporate Services

**Submitted by:**

*Original signed by:*

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D. Gayle Wood, BES, CMMIII  
Chief Administrative Officer/Secretary-Treasurer

**Report To: Board of Directors**

**Subject: 2019 Restoration Program Workplan**

**Report No: FA-63-19**

**Date: June 19, 2019**

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**Recommendation:**

That Report No. FA-63-19 RE: 2019 Restoration Program Workplan **BE RECEIVED** for information.

**Purpose:**

The purpose of this report is to provide detailed information regarding the revitalized NPCA Restoration Program's implementation in 2019 and beyond.

**Background:**

At the April 17, 2019 Full Authority Board Meeting, the NPCA Board approved Resolution No. FA - 108-19, as follows:

Moved by: Board Member Heit  
Seconded by: Board Member Shirton

1. THAT Report No. FA-37-19 regarding revitalizing the NPCA Restoration Program be received.
2. THAT the proposed Restoration Program be approved for implementation as outlined in Report No. FA-37-19.

**Discussion:**

The revitalized NPCA Restoration program has three principle goals:

- 1) **Improve** water quality, wildlife habitat and forest cover to the benefit of local ecosystems and the overall health of the watershed;
- 2) **Monitor, assess and communicate the change** of these conditions in the watershed; and
- 3) **Enable innovative approaches, partnerships and solutions** to improve water quality, wildlife habitat, and forest cover.

These goals will be accomplished in part by renewing partnerships with like-minded organizations and reengaging with landowners across the watershed to target restoration projects in priority areas. Priority areas are determined by a variety of factors, including poor water quality, low forest cover and historic wetland loss (see Appendix 1 for more details).

Project applications can be submitted by partner organizations, and private and public landowners. Projects will be assessed by NPCA staff using an objective evaluation matrix. (See Appendix 2 for detailed evaluation criteria).

Consistent with best practices identified by the Auditor General, an *internal* review committee will be formed to select eligible projects to be awarded for funding. This committee will be comprised of NPCA staff with a diversity of skills related to ecosystem restoration (See Appendix 5 for the Restoration Program Review Committee Skills Matrix.) and will also focus on targeting and prioritization. Funding for applications recommended by the staff will be presented to the board for final approval at monthly Full Authority Meetings as required.

The Restoration program, beyond word of mouth through its operations, will be advertised widely through traditional media, social media and on the NPCA's website. The marketing strategy is being led and developed by the Authority's communications team.

Due to an instantaneous launch, in 2019 the program will have a rolling intake for applications, with the Restoration Program Review Committee meeting preferable monthly to approve eligible projects. For the 2020 program year, a set due date is planned to ensure the highest quality applications are selected through due process. This intake date will take place in September 2019, with approved applicants notified in December of 2019. A second intake date in 2020 is proposed if required and depending on uptake and quality of applications.

Through 2019, staff will:

- Determine solutions for file retention to ensure program files contain required documentation;
- Negotiate Memorandum of Understanding agreements with principal partner organizations;
- Refine evaluation criteria cyclically for more targeted restoration opportunities utilizing natural heritage system data as a part of the Integrated Watershed Management process;
- Determine further how Ontario Power Generation funds and project goals will be implemented;
- Develop monitoring guidelines as part of an Integrated Watershed Management cycle;
- Assess program delivery as part of an adaptive management cycle to update guidelines to reflect organizational priorities and watershed needs;
- Finalize documenting internal formal program procedures.

### **Financial Implications:**

Funds to support the implementation of the Restoration Program have been allocated in the 2019 NPCA budget.

Further restoration prioritization efforts in the workplan will help inform development of the NPCA's 2020 budget.

## **Related Reports and Appendices:**

Appendix 1: 2019 Restoration Program Guidelines  
Appendix 2: Guideline Appendices – Project Category and Evaluation Criteria  
Appendix 3: 2019 Restoration Program Application Form  
Appendix 4: 2019 Restoration Program **Draft** Landowner Agreement  
Appendix 5: 2019 Restoration Program **Draft** Partner Agreement  
Appendix 6: Restoration Program Review Committee **Draft** Terms of Reference  
Appendix 7: Restoration Program Review Committee Skills Matrix

## **Authored by:**

*Original signed by:*

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Steve Gillis  
Restoration Project Lead

*Original signed by:*

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Stuart McPherson  
Restoration Project Lead

## **Reviewed by:**

*Original signed by:*

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Geoff Verkade  
Senior Manager, Integrated Watershed Planning/Information Management

## **Reviewed by:**

*Original signed by:*

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Lise Gagnon, CPA, CGA  
Director, Corporate Services

## **Submitted by:**

*Original signed by:*

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D. Gayle Wood, BES, CMMIII  
Interim CAO/Secretary-Treasurer

**MEMORANDUM OF AGREEMENT  
NIAGARA PENINSULA CONSERVATION AUTHORITY (NPCA)  
AND  
Trout Unlimited Canada**

Agreement made in duplicate this \_\_\_\_\_ day of \_\_\_\_\_, 2019.

**BETWEEN:** **Niagara Peninsula Conservation Authority (NPCA)**  
250 Thorold Road, West  
Welland, Ontario, L3C 3W2  
  
hereinafter called the "Corporation"

- and -

**Trout Unlimited Canada**  
Suite 180-4000 Glenmore Court SE  
Calgary, Alberta T2C 5R8  
  
hereinafter referred to as the "Partner"

WHEREAS the Corporation and the Partner share a mutual interest in conservation to the benefit of the overall health of the Twelve Mile Creek watershed.

AND WHEREAS the Partner intends to implement restoration projects on privately and publicly owned lands in the headwaters of Twelve Mile Creek and Short Hills Provincial Park listed on Schedule 'A'. The Corporation will provide technical assistance, and may provide funding after gaining board approval to assist the Partner for the implementation of each restoration project conditional that each cooperating landowner meets partnership details.

NOW THEREFORE the Corporation and the Partner agree as follows:

**1. INTERPRETATION**

It is understood that the use of the term "Partner" is not intended and does not create a partnership at law between the parties.

**2. TERM**

This Agreement shall commence on the 19th day of September, 2019 and terminate on the 30th day of September, 2022.

**3. DESIGNATED REPRESENTATIVES**

- i) The Partner agrees that the Corporation, for the purposes of this Agreement, may act through any individual designated by the Corporation.
- ii) For the purposes of this Agreement the designated representatives for the

Corporation are: Geoff Verkade  
Niagara Peninsula Conservation Authority  
(905)-788-3135

for the Partner is: Dennis Edell  
Niagara Chapter Chair, Trout Unlimited Canada  
416-918-4448  
Or  
Brian Green  
Niagara Chapter Secretary, Trout Unlimited Canada  
905-892-5265

Both the Corporation and the Partner agree that they may designate a different representative by providing notice in writing.

**4. CORPORATION OBLIGATIONS**

- i) The Corporation agrees to participate in a program of habitat restoration of the Twelve Mile Creek Watershed; to provide partial financial support to projects that meet the NPCA Restoration Program criteria; are approved by the NPCA Board of Directors and implemented by the Partner. Projects implemented will be annually identified with specified

Corporation funding commitments made. The Schedule "A" project list will be completed as a collaborative effort between TUC and NPCA field staff and agreed to each fiscal year. Additional projects may be added to the project list Schedule A as an addendum and will be subject to the approval of the Corporation and the Partner.

- ii) The Corporation must obtain a signed Conservation Agreement with the legal project landowners and the Partner will provide necessary information that is required, for each project.
- iii) The Corporation agrees to provide to the Partner as requested, technical assistance for the purposes of landowner site visits/negotiations, project design and regulatory approvals.
- iv) The Corporation will optimize available funding from all sources to ensure the success of the Project and accommodate the cooperating landowner's ability to contribute to the Project.

#### **4. PARTNER OBLIGATIONS**

- i) The Partner agrees to participate as the project proponent and lead agency for project implementation including obtaining any and all required permits and approvals. This may include municipal bylaws, Conservation Authority approvals, permits to take water, fisheries or other federal approvals, consultation with First Nations, and Ministry of Natural Resources regulations and the Endangered Species Act assessments with registered mitigation plans whenever applicable.
- ii) The Corporation must obtain a signed Conservation Agreement with the legal project landowners and the Partner will provide necessary information that is required, for each project.
- iii) The Partner will secure quotations, hire contractors and equipment, provide construction supervision and all materials that may be required for the works.
- iv) The Partner agrees to demonstrate value for money by securing three quotations on any project cost over \$5,000.

#### **5. JOINT OBLIGATIONS**

- i) The parties agree to indemnify each other, keep indemnified and save each other harmless from and against all claims, demands, costs, actions, causes of action, expenses and legal fees, which may be taken or made against them arising from their existing and ongoing activities.
- ii) The parties agree to recognize the support of the each other in any publicly available document, signage or presentation that specifically refers to this project, including traditional and social media stories.
- iii) The parties agree to recognize our common goals in habitat restoration and when legally permitted openly share data with decision support value towards the adaptive management of the Twelve Mile Creek Watershed.
- iv) The parties agree to coordinate landowner outreach, with the Partner acting in a lead role; providing landowner contacts to the Corporation and promoting the NPCA Restoration Program where appropriate.
- v) The parties agree to participate in outreach and communications activities, jointly producing communication pieces and coordinating other outreach activities where appropriate.

#### **6. ENTIRE AGREEMENT**

The parties hereto agree that this Agreement embodies the entire Agreement between the parties and the Partner represents that in entering into this Agreement the Partner does not rely upon any previous oral or implied representation, inducement or understanding of any kind or nature.

#### **7. TERMINATION of AGREEMENT**

The NPCA shall have the right at any time, with or without cause, to cancel this agreement by giving the Partner thirty (30) days prior written notice to that effect. In the event of termination of this agreement by NPCA, either with or without cause, NPCA shall reimburse the Partner for all reimbursable costs incurred by the Partner to the date of cancellation, provided however, that the Partner shall not have the right to include as a cost of cancellation any profit or earnings that may have been realized by the Partner had the work not been terminated.

IN WITNESS WHEREOF the parties hereto have executed this Agreement

SIGNED, SEALED AND DELIVERED	)	
in the presence of	)	
	)	
	)	
	)	
_____ Witness as to execution by	)	_____ Gayle Wood
Gayle Wood	)	CAO & Secretary Treasurer
CAO & Secretary Treasurer	)	Niagara Peninsula Conservation Authority
Niagara Peninsula Conservation Authority	)	
	)	
	)	
	)	
_____ Witness as to execution by	)	_____ Dave Bylsma
	)	Chair, NPCA Board of Directors
	)	
	)	
	)	
_____ Witness as to execution by	)	_____ Silvia D'Amelio
	)	CEO
	)	Trout Unlimited Canada
	)	
	)	
_____ Witness as to execution by	)	_____ Dennis Edell
	)	Chair, TUC Niagara Chapter
	)	

**Schedule 'A' to MOA with PARTNER AGENCY**

This schedule lists the properties and NPCA funding commitments for habitat improvement projects to be implemented under this MOA. The owner's name, the legal address, the estimated area of wetland and uplands secured and the funding amounts available from the NPCA is listed for each project.

**The total NPCA funding contribution to these projects is \$     and is conditional on receipt of 1 copy of signed NPCA Conservation Agreement with the landowners and copies of construction invoices. The TUC will invoice the NPCA for each project completed.**

**Additional projects may be added as an addendum to this MOA subject to the agreement of the Corporation and the Partner.**

**Report To: Board of Directors**

**Subject: Financial and Reserve Report – Year to Date Ending June 2019**

**Report No: FA-144-19**

**Date: October 16, 2019**

**Recommendation:**

**THAT** Report FA-144-19 Respecting Financial Results – Year to Date ending Sept. 30, 2019 **BE RECEIVED** for information.

**Purpose:**

The purpose of this Report is to provide the Board of Directors with a summary of operations and capital expenditures versus revenues and to provide a comparison of actual results to the budget as approved by the Board.

**Discussion:**

The Report confirms the general financial oversight and compliance with Public Sector Accounting Board Standards.

**Financial Implications:**

The Revenue and Expenditure lines are within budget allocations identified during the budget preparation and approval cycle.

Please note the following anticipated financial pressures/challenges to Dec. 31, 2019:

<b>Legal Fees - as at September 30, 2019</b>	<b>Year to Date</b>	<b>ANNUAL</b>
<b>Department</b>	<b>Expenses</b>	<b>Budget</b>
CAO/Board and Administration	\$ 8,462	\$ 20,000
Human Resources	159,929	100,000
Corporate Resources	15,778	10,000
<b>Total - Legal Fees</b>	<b>\$ 184,169</b>	<b>\$ 130,000</b>
<b>Recruitment Expenses - as at September 30, 2019</b>		
Human Resources	\$ 25,496	\$ 5,000
<b>Total - Recruitment Expenses</b>	<b>\$ 25,496</b>	<b>\$ 5,000</b>

## **Related Reports and Appendices:**

### Appendix 1

- Operating Financial Report
- Non-Operating Financial Report
- Reserve Continuity Schedule

## **Prepared by:**

*Original signed by:*

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Lise Gagnon  
Director, Corporate Services

## **Submitted by:**

*Original signed by:*

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D. Gayle Wood, BES, CMM III  
Chief Administrative Officer/  
Secretary-Treasurer

Niagara Peninsula Conservation Authority				
OPERATING FINANCIAL REPORT				
For the 9 Months Ending September 30, 2019				
REVENUES	Year to Date Actual	Annual Budget	Actual to Budget Variance	
			Amount	%
MUNICIPAL FUNDING	6,152,282	5,878,105	274,177	104.7%
PROVINCIAL FUNDING	239,556	476,996	( 237 440)	50.2%
FEDERAL FUNDING	50,000	100,000	( 50 000)	50.00%
PARK OPERATIONS	1 856 630	1 892 600	( 35 970)	98.10%
PERMITS AND REGULATORY FEES	319 242	314 850	4 392	101.39%
OTHER REVENUE	155 574	235 200	( 79 626)	66.15%
INTEREST INCOME	68 917	60 000	8 917	114.86%
<b>TOTAL REVENUES</b>	<b>8,842,201</b>	<b>8,957,751</b>	<b>( 115 550)</b>	<b>98.7%</b>
<b>EXPENDITURES</b>				
SALARIES & BENEFITS	4,443,342	5,693,590	1,250,248	78.0%
OTHER EMPLOYEE RELATED	134 206	322 105	187 899	41.67%
BOARD AND VOLUNTEER	37 392	89 900	52 508	41.59%
PROFESSIONAL FEES	446 469	746 920	300 451	59.77%
OCCUPANCY COSTS	418 640	540 000	121 360	77.53%
VEHICLES AND EQUIPMENT	157 059	195 200	38 142	80.46%
PARK MAINTENANCE	335 247	395 500	60 253	84.77%
CONTRACTOR SERVICES	17,287	298,500	281,213	5.8%
DEBT SERVICING	29 575	27 980	( 1 595)	105.70%
EXPENSES	309 642	422 126	112 484	73.35%
MATERIALS AND SUPPLIES	53 424	112 930	59 506	47.31%
MARKETING AND PROMOTION	53,317	113,000	59,683	47.2%
<b>Total Expenditures</b>	<b>6,435,598</b>	<b>8,957,751</b>	<b>2,522,153</b>	<b>71.8%</b>

NIAGARA PENINSULA CONSERVATION AUTHORITY	
NON OPERATING - 2019	
<b>Non Operating Funding</b>	<b>Budget</b>
Municipal	1,172,980
Reserve	1,132,665
Deferred Revenue	18,455
<b>Non Operating Funding - Total</b>	<b>2,324,100</b>

		Approved	Year to Date Spend	Remaining Balance
<b>CAPITAL DISBURSEMENTS</b>	<b>2019 Budget</b>	<b>Carry Over - 2018</b>	<b>at Sept. 30, 2019</b>	<b>at Sept. 30, 2019</b>
Ball's Falls	249,665	178,707	196,091	232,281
Binbrook	393,455	0	85,976	307,479
Central Workshop/Gainsborough	452,500	13,460	174,766	291,194
Chippawa Creek	47,186	26962	4,766	69,382
Long Beach	320,000	245,726	189,592	376,134
Corporate Resources	89,000	50,000	56,694	82,306
Watershed	48,500	79443	27,001	100,942
<b>Capital Disbursements - Total</b>	<b>1,600,306</b>	<b>594,298</b>	<b>734,886</b>	<b>1,459,718</b>

<b>Directly to Reserves</b>	<b>Budget</b>
Capital	1,600,306
Debt Principal	483,705
Hamilton Land Reserve	100,000
General Operating Reserve	140,089
<b>Directly to Reserves</b>	<b>2,324,100</b>

NIAGARA PENINSULA CONSERVATION AUTHORITY				
STATEMENT OF CONTINUITY FOR CAPITAL & OPERATING RESERVES - 2019				
	Opening Balance	Authorized Appropriations	Actual Appropriations	Forecasted Balance
	31-Dec-18	2019	to 30-SEP-2019	31-Dec-19
<b>Capital Reserves</b>				
Equipment	107,258	0	0	107,258
General Capital	1,373,806	-1,334,443	506,214	545,577
Flood Protection Services	318,406	-59,443	0	258,963
Niagara Levy Differential	1,646,591	0	0	1,646,591
Land acquisition-Hamilton	1,100,000	100,000	-536,943	663,057
Land acquisition-Niagara	1,798,176	0	0	1,798,176
Land acquisition-Cave Springs	133,703	0	0	133,703
<b>Capital Reserves - Total</b>	<b>6,477,940</b>	<b>-1,293,886</b>	<b>-30,729</b>	<b>5,153,325</b>
<b>Operating Reserves</b>				
General Operating Reserve *	1,287,543	-192,576	0	1,094,967
Restoration Program	250,000	0	0	250,000
Tree Bylaw Agreement	82,371	0	0	82,371
<b>Operating Reserves - Total</b>	<b>1,619,914</b>	<b>-192,576</b>	<b>0</b>	<b>1,427,338</b>
<b>GRAND TOTAL RESERVES</b>	<b>8,097,854</b>	<b>-1,486,462</b>	<b>-30,729</b>	<b>6,580,663</b>

\* Unfunded employee future benefits liability \$73,200  
not included in General Operating Reserve total

**Report To: Board of Directors**

**Subject: 2020 NPCA Capital Budget**

**Report No: FA-145-19**

**Date: October 16, 2019**

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**Recommendation:**

1. **THAT** Report No. FA-145-19 RE: 2020 NPCA Capital Budget **BE APPROVED FOR DISCUSSION** with participating municipal staff.
2. **THAT** NPCA staff **REPORT** the results of discussions with participating municipal staff to the November 20, 2019 Board of Directors' meeting.

**Purpose:**

The purpose of this Report is to seek the Board of Directors approval of the recommendations from the Audit and Budget Committee regarding the 2020 capital budget for review with municipal staff.

**Background:**

In April 2019, the Niagara Peninsula Conservation Authority (NPCA) adopted a new budget process for the 2020 budget year. This new process included more in-depth provision of information to both the Audit and Budget Committee and the full Board of Directors. Further, the process included more discussion with municipal staff members prior to presentations to their Councils regarding the 2020 budget.

**Discussion:**

Based on direction received from the Committee, Board and participating municipalities, staff have prepared a NPCA Budget Guideline Book as well as a Draft 2020 Capital Budget. The Draft 2020 Capital Budget was reviewed by the Audit and Budget Committee on October 7, 2019.

The NPCA Budget Guideline Book was attached as Appendix 4 to Board Report #FA-102-19 entitled 2020 NPCA Operating Budget. Appendix 1 to this Report includes an updated 2020 Capital Budget Timeline. Appendix 2 contains the Draft 2020 Capital Budget as recommended to the Board of Directors from the Audit and Budget Committee on October 7, 2019.

## **Financial Implications:**

***The Conservation Authorities Act (CAA)*** Act enables capital projects and the funding thereof through Sections 24, 25 and 26. This is also further defined in the NPCA Budget Guideline Book.

## **Links to Policy/Strategic Plan:**

The NPCA's Strategic Plan 2018 – 2022 speaks to the importance of a financial strategy and strategic asset management. The new NPCA budget responds, in part, to the changes in the CAA that do not require regulations.

## **Related Reports and Appendices:**

Appendix 1: 2020 Capital Budget Timelines

Appendix 2: 2020 Draft Capital Budget

## **Authored by:**

*Original signed by:*

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Lise Gagnon, CPA, CGA  
Director, Corporate Services

## **Submitted by:**

*Original signed by:*

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D. Gayle Wood, BES, CMMIII  
Chief Administrative Officer/Secretary-Treasurer

## 2020 Capital Budget - Timeline

19-SEP to 6-OCT- 2019	Divisions prepare business cases, reviewed with Director Corporate Services
	Business cases include asset class, priority ranking, classification and funding source
7-OCT-2019	Draft Capital Budget to Audit and Budget Committee
16-OCT-2019	Draft Capital Budget to Full Authority
October 2019	Consultation with Municipal Partners:  Niagara - pending  Hamilton - 21-OCT-2019  Haldimand - pending
NOV-2019 to JAN-2020	Presentation to Municipal Council:  Niagara - 21-NOV-2019  Hamilton - 21-JAN-2020  Haldimand - pending

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# 2020 CAPITAL BUDGET

NPCA Audit and Budget Committee  
October 7, 2019



# Capital Disbursements – 2015 to 2019

Summary - Capital Disbursements - 2015 to 2020							
Year	CAO/Board	Corporate Services	Land Operations	Watershed	Land Acquisitions	Work-in-Progress	TOTAL
2019 *	-	89,000	1,279,067	48,500	536,943	-	1,953,510
2018 (actual)	-	53,646	634,148	121,041	150,644	236,916	1,196,395
2017 (actual)	-	100,317	1,170,630	271,988		133,075	1,676,011
2016 (actual)	-	170,783	619,647	67,227		540,502	1,398,160
2015 (actual)	-	298,042	383,875	33,172	1,033,070	70,672	1,818,831
TOTAL	-	711,789	4,087,368	541,928	1,720,657	981,165	8,042,907

\* Revised forecast - JULY-2019

**Niagara Peninsula Conservation Authority - 2020 CAPITAL PROJECTS**

Project Name	Division	Asset Class	Location/Site	Classification	Priority Ranking	Funding Source	Municipality	Proposed Budget 2020	Proposed Budget 2021	Proposed Budget 2022
Multi-Media Equipment	CAO/Board & Admin	Equipment	HQ - Welland	Operational Efficiency	4	Special Levy - ALL	ALL	\$10,000	\$0	\$ -
<b>Sub Total</b>	<b>CAO/Board &amp; Admin</b>							<b>\$ 10,000</b>	<b>\$ -</b>	<b>\$ -</b>
Asset Management Capital Planning Program	Corporate Services	Equipment	HQ - Welland	Operational Efficiency	5	Special Levy - ALL	ALL	\$30,000		
Data Centre Cyclical Server Refresh	Corporate Services	Equipment	HQ - Welland	Asset Integrity – Proactive Replacement	4	Special Levy - ALL	ALL	\$23,000		
Annual PC Replacements	Corporate Services	Equipment	Various	Asset Integrity – Proactive Replacement	4	Special Levy - ALL	ALL	\$45,000		
Office Network Backup and Archive	Corporate Services	Equipment	HQ - Welland	Operational Efficiency	4	Special Levy - ALL	ALL	\$6,500	\$400	\$ 400
Phone System	Corporate Services	Equipment	HQ - Welland	Asset Integrity – Imminent Breakdown	5	Special Levy - ALL	ALL	\$50,000		
Orthomagery Acquisition - SWOOP	Corporate Services	Equipment	HQ - Welland	Operational Efficiency	4	Special Levy - ALL	ALL	\$10,000		
Natural Areas ELC Mapping Update	Corporate Services	Equipment	HQ - Welland	Operational Efficiency	4	Special Levy - ALL	ALL	\$200,000		
Balls Falls Internet Improvement & Infrastructure	Corporate Services	Equipment	Balls Falls	Strategic Initiative	3	Special Levy - Niagara	Niagara	\$40,000		
Board Microphones	Corporate Services	Equipment	Balls Falls	Operational Efficiency	3	Special Levy - ALL	ALL	\$50,000		
<b>Sub Total</b>	<b>Corporate Services</b>							<b>\$ 454,500</b>	<b>\$ 400</b>	<b>\$ 400</b>
Shriner's Creek Modifications	Watershed	Water Control Structures	Niagara Falls	Operational Efficiency	3	Special Levy - Niagara	Niagara	\$80,000		
Flood Plain Mapping - Beaver Creek	Watershed	Equipment	West Lincoln	Code Compliance and Legislation	4	Special Levy - Niagara	Niagara	\$150,000	\$50,000	
Flood Plain Mapping - Grimsby/Lincoln	Watershed	Equipment	Grimsby & Lincoln	Code Compliance and Legislation	4	Special Levy - Niagara	Niagara	\$20,000		
Flood Plain Mapping - St. Catharines	Watershed	Equipment	St. Catharines	Code Compliance and Legislation	4	Special Levy - Niagara	Niagara	\$25,000		
Water Quality Equipment	Watershed	Equipment	Pelham	Asset Integrity – Proactive Replacement	3	Special Levy - Niagara	Niagara	\$35,000		
Virgil Dam Safety Study	Watershed	Water Control Structures	Niagara-on-the-Lake	Code Compliance and Legislation	4	Special Levy - Niagara	Niagara	\$60,000		
Stream Gauge Equipment	Watershed	Gauge Stations	Various	Operational Efficiency	3	Special Levy - ALL	ALL	\$20,000		
<b>Sub Total</b>	<b>Watershed</b>							<b>\$ 390,000</b>	<b>\$ 50,000</b>	<b>\$ -</b>
Binbrook - Septic System	Land Operations	Land Improvements	Binbrook	Critical	5	Special Levy - Hamilton	Hamilton	\$1,500,000		
Field Centre Restoration	Land Operations	Building	Balls Falls	Critical	5	Special Levy - Niagara	Niagara	\$35,000		
Tree Top Trekking - Building and Services	Land Operations	Building	Binbrook	Strategic Initiative	5	Special Levy - Hamilton	Hamilton	\$150,000		
Water Treatment System Upgrades	Land Operations	Building	Binbrook	Strategic Initiative	4	Special Levy - Hamilton	Hamilton	\$150,000	\$42,500	\$ 45,000
North Side Comfort Station - Long Beach	Land Operations	Building	Long Beach	Strategic Initiative	4	Special Levy - Niagara	Niagara	\$110,000		
Road Upgrade & Drainage - North Side - Long Beach	Land Operations	Land Improvements	Long Beach	Asset Integrity – Imminent Breakdown	4	Special Levy - Niagara	Niagara	\$232,000		
Electrical and Water (Ridge) - Long Beach	Land Operations	Land Improvements	Long Beach	Strategic Initiative	4	Special Levy - Niagara	Niagara	\$88,000		
Historical Building Restoration - Balls Falls	Land Operations	Building	Balls Falls	Strategic Initiative	4	Special Levy - Niagara	Niagara	\$100,000		
Barn - Wedding Updates	Land Operations	Works	Balls Falls	Strategic Initiative	4	Special Levy - Niagara	Niagara	\$90,000		
Tyneside Trail Upgrades - Binbrook	Land Operations	Land Improvements	Binbrook	Strategic Initiative	3	Special Levy - Hamilton	Hamilton	\$10,000		
Equipment Sustainment - Land Operations	Land Operations	Equipment	Various	Asset Integrity – Proactive Replacement	4	Special Levy - ALL	ALL	\$228,280	\$105,000	
Septic Design & Scope - Chippawa Creek	Land Operations	Land Improvements	Chippawa Creek	Code Compliance and Legislation	3	Special Levy - Niagara	Niagara	\$10,000		
Cistern - Gainsborough	Land Operations	Building	Gainsborough	Operational Efficiency	4	Special Levy - Niagara	Niagara	\$40,000		
Workshop Upgrades - Gainsborough	Land Operations	Building	Gainsborough	Asset Integrity – Proactive Replacement	4	Special Levy - Niagara	Niagara	\$100,000		
Workshop Renovations - Balls Falls	Land Operations	Building	Balls Falls	Operational Efficiency	3	Special Levy - Niagara	Niagara		\$200,000	
Centre for Conservation - Museum Upgrades	Land Operations	Building	Balls Falls	Strategic Initiative	3	Special Levy - Niagara	Niagara	\$80,000		
Pavilion - Balls Falls	Land Operations	Building	Balls Falls	Strategic Initiative	4	Special Levy - Niagara	Niagara		\$150,000	
Pavilion - Chippawa Creek	Land Operations	Building	Chippawa Creek	Asset Integrity – Proactive Replacement	3	Special Levy - Niagara	Niagara		\$150,000	
Speed Bumps - ALL	Land Operations	Land Improvements	Various	Operational Efficiency	4	Special Levy - ALL	ALL		\$100,000	
St. John's Historical Buildings (Design Phase)	Land Operations	Building	St. John's	Strategic Initiative	4	Special Levy - Niagara	Niagara		\$20,000	
CFC Pond Rehabilitation	Land Operations	Building	Balls Falls	Operational Efficiency	4	Special Levy - Niagara	Niagara		\$100,000	
CFC Renovations	Land Operations	Building	Balls Falls	Operational Efficiency	3	Special Levy - Niagara	Niagara		\$75,000	
Cave Springs Barn Removal	Land Operations	Building	Cave Springs	Asset Integrity – Imminent Breakdown	2	Special Levy - Niagara	Niagara		\$30,000	
Picnic Tables	Land Operations	Equipment	Various	Asset Integrity – Proactive Replacement	3	Special Levy - ALL	ALL		\$65,000	
<b>Sub Total</b>	<b>Land Operations</b>							<b>\$ 2,923,280</b>	<b>\$ 1,037,500</b>	<b>\$ 45,000</b>
<b>GRAND TOTAL</b>	<b>ALL DIVISIONS</b>							<b>\$ 3,777,780</b>	<b>\$ 1,087,900</b>	<b>\$ 45,400</b>

Niagara Peninsula Conservation Authority - 2020 CAPITAL PROJECTS - Sorted by Priority													
Project Name	Division	Asset Class	Location/Site	Fiscal Year	Classification	Priority Ranking	Grouping	Funding Source	Municipality	Status	Proposed Budget 2020	Proposed Budget 2021	Proposed Budget 2022
Asset Management Capital Planning Program	Corporate Services	Equipment	HQ - Welland	2020	Operational Efficiency	5	B-3	Special Levy - ALL	ALL	Draft	\$30,000		
Phone System	Corporate Services	Equipment	HQ - Welland	2020	Asset Integrity – Imminent Breakdown	5	B-2	Special Levy - ALL	ALL	Draft	\$50,000		
Binbrook - Septic System	Land Operations	Land Improvements	Binbrook	2020	Critical	5	G-1	Special Levy - Hamilton	Hamilton	Draft	\$1,500,000		
Field Centre Restoration	Land Operations	Building	Balls Falls	2020	Critical	5	C-3	Special Levy - Niagara	Niagara	Draft	\$35,000		
Tree Top Trekking - Building and Services	Land Operations	Building	Binbrook	2020	Strategic Initiative	5	C-3	Special Levy - Hamilton	Hamilton	Draft	\$150,000		
Sub Total						5					\$ 1,765,000	\$ -	\$ -
Multi-Media Equipment	CAO/Board & Admin	Equipment	HQ - Welland	2020	Operational Efficiency	4	B-1	Special Levy - ALL	ALL	Draft	\$10,000	\$0	\$ -
Data Centre Cyclical Server Refresh	Corporate Services	Equipment	HQ - Welland	2020	Asset Integrity – Proactive Replacement	4	B-2	Special Levy - ALL	ALL	Draft	\$23,000		
Annual PC Replacements	Corporate Services	Equipment	Various	2020	Asset Integrity – Proactive Replacement	4	B-2	Special Levy - ALL	ALL	Draft	\$45,000		
Office Network Backup and Archive	Corporate Services	Equipment	HQ - Welland	2020	Operational Efficiency	4	B-2	Special Levy - ALL	ALL	Draft	\$6,500	\$400	\$ 400
Orthoimagery Acquisition - SWOOP	Corporate Services	Equipment	HQ - Welland	2020	Operational Efficiency	4	B-3	Special Levy - ALL	ALL	Draft	\$10,000		
Natural Areas ELC Mapping Update	Corporate Services	Equipment	HQ - Welland	2020	Operational Efficiency	4	B-3	Special Levy - ALL	ALL	Draft	\$200,000		
Flood Plain Mapping - Beaver Creek	Watershed	Equipment	West Lincoln	2020	Code Compliance and Legislation	4	B-4	Special Levy - Niagara	Niagara	Draft	\$150,000	\$50,000	
Flood Plain Mapping - Grimsby/Lincoln	Watershed	Equipment	Grimsby & Lincoln	2020	Code Compliance and Legislation	4	B-4	Special Levy - Niagara	Niagara	Draft	\$20,000		
Flood Plain Mapping - St. Catharines	Watershed	Equipment	St. Catharines	2020	Code Compliance and Legislation	4	B-4	Special Levy - Niagara	Niagara	Draft	\$25,000		
Virgil Dam Safety Study	Watershed	Water Control Structures	Niagara-on-the-Lake	2020	Code Compliance and Legislation	4	I-1	Special Levy - Niagara	Niagara	Draft	\$60,000		
Water Treatment System Upgrades	Land Operations	Building	Binbrook	2020	Strategic Initiative	4	H-1	Special Levy - Hamilton	Hamilton	Draft	\$150,000	\$42,500	\$ 45,000
North Side Comfort Station - Long Beach	Land Operations	Building	Long Beach	2020	Strategic Initiative	4	C-3	Special Levy - Niagara	Niagara	Draft	\$110,000		
Road Upgrade & Drainage - North Side - Long Beach	Land Operations	Land Improvements	Long Beach	2020	Asset Integrity – Imminent Breakdown	4	C-3	Special Levy - Niagara	Niagara	Draft	\$232,000		
Electrical and Water (Ridge) - Long Beach	Land Operations	Land Improvements	Long Beach	2020	Strategic Initiative	4	C-3	Special Levy - Niagara	Niagara	Draft	\$88,000		
Historical Building Restoration - Balls Falls	Land Operations	Building	Balls Falls	2020	Strategic Initiative	4	C-3	Special Levy - Niagara	Niagara	Draft	\$100,000		
Barn - Wedding Updates	Land Operations	Works	Balls Falls	2020	Strategic Initiative	4	C-3	Special Levy - Niagara	Niagara	Draft	\$90,000		
Equipment Sustainment - Land Operations	Land Operations	Equipment	Various	2020	Asset Integrity – Proactive Replacement	4	B-4	Special Levy - ALL	ALL	Draft	\$228,280	\$105,000	
Cistern - Gainsborough	Land Operations	Building	Gainsborough	2020	Operational Efficiency	4	C-3	Special Levy - Niagara	Niagara	Draft	\$40,000		
Workshop Upgrades - Gainsborough	Land Operations	Building	Gainsborough	2020	Asset Integrity – Proactive Replacement	4	C-3	Special Levy - Niagara	Niagara	Draft	\$100,000		
Pavilion - Balls Falls	Land Operations	Building	Balls Falls	2020	Strategic Initiative	4	C-3	Special Levy - Niagara	Niagara	Draft		\$ 150,000	
Speed Bumps - ALL	Land Operations	Land Improvements	Various	2020	Operational Efficiency	4	H-1	Special Levy - ALL	ALL	Draft		\$ 100,000	
St. John's Historical Buildings (Design Phase)	Land Operations	Building	St. John's	2020	Strategic Initiative	4	C-3	Special Levy - Niagara	Niagara	Draft		\$ 20,000	
CFC Pond Rehabilitation	Land Operations	Building	Balls Falls	2020	Operational Efficiency	4	C-3	Special Levy - Niagara	Niagara	Draft		\$ 100,000	
Sub Total						4					\$ 1,687,780	\$ 567,900	\$ 45,400
Balls Falls Internet Improvement & Infrastructure	Corporate Services	Equipment	Balls Falls	2020	Strategic Initiative	3	B-2	Special Levy - Niagara	Niagara	Draft	\$40,000		
Board Microphones	Corporate Services	Equipment	Balls Falls	2020	Operational Efficiency	3	B-2	Special Levy - ALL	ALL	Draft	\$50,000		
Shriner's Creek Modifications	Watershed	Water Control Structures	Niagara Falls	2020	Operational Efficiency	3	I-1	Special Levy - Niagara	Niagara	Draft	\$80,000		
Water Quality Equipment	Watershed	Equipment	Pelham	2020	Asset Integrity – Proactive Replacement	3	B-4	Special Levy - Niagara	Niagara	Draft	\$35,000		
Stream Gauge Equipment	Watershed	Gauge Stations	Various	2020	Operational Efficiency	3	B-4	Special Levy - ALL	ALL	Draft	\$20,000		
Tyneside Trail Upgrades - Binbrook	Land Operations	Land Improvements	Binbrook	2020	Strategic Initiative	3	F-1	Special Levy - Hamilton	Hamilton	Draft	\$10,000		
Septic Design & Scope - Chippawa Creek	Land Operations	Land Improvements	Chippawa Creek	2020	Code Compliance and Legislation	3	G-1	Special Levy - Niagara	Niagara	Draft	\$10,000		
Workshop Renovations - Balls Falls	Land Operations	Building	Balls Falls	2020	Operational Efficiency	3	C-3	Special Levy - Niagara	Niagara	Draft		\$200,000	
Centre for Conservation - Museum Upgrades	Land Operations	Building	Balls Falls	2020	Strategic Initiative	3	H-1	Special Levy - Niagara	Niagara	Draft	\$80,000		
Pavilion - Chippawa Creek	Land Operations	Building	Chippawa Creek	2020	Asset Integrity – Proactive Replacement	3	C-3	Special Levy - Niagara	Niagara	Draft		\$ 150,000	
CFC Renovations	Land Operations	Building	Balls Falls	2020	Operational Efficiency	3	C-3	Special Levy - Niagara	Niagara	Draft		\$ 75,000	
Picnic Tables	Land Operations	Equipment	Various	2020	Asset Integrity – Proactive Replacement	3	B-4	Special Levy - ALL	ALL	Draft		\$ 65,000	
Sub Total						4					\$ 325,000	\$ 490,000	\$ -
Cave Springs Barn Removal	Land Operations	Building	Cave Springs	2020	Asset Integrity – Imminent Breakdown	2	C-3	Special Levy - Niagara	Niagara	Draft		\$ 30,000	
GRAND TOTAL	ALL PRIORITIES										\$ 3,777,780	\$ 1,087,900	\$ 45,400

## Niagara Peninsula Conservation Authority - 2020 CAPITAL PROJECTS

Project Name	Division	Asset Class	Proposed Budget 2020	Proposed Budget 2021	Proposed Budget 2022
Multi-Media Equipment	CAO/Board & Admin	Equipment	\$10,000	\$0	\$ -
<b>Sub Total</b>	CAO/Board & Admin		<b>\$ 10,000</b>	<b>\$ -</b>	<b>\$ -</b>

## Capital Project Detail - 2020

<b>Project Title:</b>	Multi-Media Equipment (Communications)	<b>Project #</b>	Pending
<b>G/L Account(s):</b>	Pending	<b>Asset Class</b>	Equipment
<b>Priority Classification:</b>	Operational Efficiency	<b>Division</b>	CAO/Board and Admin
<b>Priority Ranking:</b>	4	<b>Project Status</b>	Draft
<b>Site/Location:</b>	Various	<b>Grouping</b>	B-1
<b>Project Lead:</b>	Renee Bisson	<b>Project Start Date</b>	Jan-20
<b>Funding Source:</b>	Special Levy - ALL	<b>Project Completion</b>	Mar-20
<b>Partner (if applicable):</b>		<b>Municipality</b>	ALL

## PROJECT DESCRIPTION, RATIONALE, BACKGROUND, LINKAGES AND IMPLICATIONS

Provide a detailed description of the project, why the project needs to be done now and consequences of deferring the project. Include historical cost and typical asset life cycle. Indicate if the project is linked to any other current or future project (capital or operating) and any impact to related project(s) if this project is approved or deferred.

Equipment required to support the new Multi Media Marketing Specialist:

1. Computer tower, Dual monitors, laptop - included in IT equipment sustainment
2. Keyboard and mouse
3. Camera and peripherals/ancillary equipment:

**Gimble:** [https://www.google.com/aclk?sa=l&ai=DChcSEwJHhtWhie\\_kAhUVh4YKHRIQAK4YABAIGgl2dQ&sig=AOD64\\_3S-i1W03VGOPZfwLqM32jSAmE9gw&ctype=5&q=&ved=0ahUKEwiJ0c-](https://www.google.com/aclk?sa=l&ai=DChcSEwJHhtWhie_kAhUVh4YKHRIQAK4YABAIGgl2dQ&sig=AOD64_3S-i1W03VGOPZfwLqM32jSAmE9gw&ctype=5&q=&ved=0ahUKEwiJ0c-)

**Tripod:**

[https://www.google.com/search?rlz=1C1GCEU\\_enCA819CA819&biw=1536&bih=755&tbm=shop&sxsr=ACYBGNTrpkTxTP4XBeLoN6Ka\\_i7YpaEt6w%3A1569521029277&ei=hf2MXfu5EOTK5gKJ8b24BA&q=cost+of+a+professional+tripod+near+me&oq=cost+of+a+professional+tripod+near+me&gs\\_l=psy-ab-sh.3...29725.32036.0.32202.12.12.0.0.0.0.119.1020.11j1.12.0....0...1c.1.64.psy-ab-sh..0.2.208...35i304i39k1.0.vtBn4TPj4c#spd=9544489105776061921](https://www.google.com/search?rlz=1C1GCEU_enCA819CA819&biw=1536&bih=755&tbm=shop&sxsr=ACYBGNTrpkTxTP4XBeLoN6Ka_i7YpaEt6w%3A1569521029277&ei=hf2MXfu5EOTK5gKJ8b24BA&q=cost+of+a+professional+tripod+near+me&oq=cost+of+a+professional+tripod+near+me&gs_l=psy-ab-sh.3...29725.32036.0.32202.12.12.0.0.0.0.119.1020.11j1.12.0....0...1c.1.64.psy-ab-sh..0.2.208...35i304i39k1.0.vtBn4TPj4c#spd=9544489105776061921)

**Sony A Series Camera:**

[https://www.google.com/search?rlz=1C1GCEU\\_enCA819CA819&biw=1536&bih=755&tbm=shop&sxsr=ACYBGNStiDCKGoX8e2MnplbtYOWdq6\\_1Q%3A1569521168268&ei=EP6MXYKFEKP5wK1iY2gAg&q=cost+of+a+sony+camera+A73+near+me&oq=cost+of+a+sony+camera+A73+near+me&gs\\_l=psy-ab-sh.3...12683.15544.0.16562.11.10.1.0.0.0.111.838.8j2.10.0....0...1c.1.64.psy-ab-sh..0.0.0....0...\\_SanjFqzCO#spd=10236190319436514807](https://www.google.com/search?rlz=1C1GCEU_enCA819CA819&biw=1536&bih=755&tbm=shop&sxsr=ACYBGNStiDCKGoX8e2MnplbtYOWdq6_1Q%3A1569521168268&ei=EP6MXYKFEKP5wK1iY2gAg&q=cost+of+a+sony+camera+A73+near+me&oq=cost+of+a+sony+camera+A73+near+me&gs_l=psy-ab-sh.3...12683.15544.0.16562.11.10.1.0.0.0.111.838.8j2.10.0....0...1c.1.64.psy-ab-sh..0.0.0....0..._SanjFqzCO#spd=10236190319436514807)

**Lens 70:200 mm:**

[https://www.google.com/search?rlz=1C1GCEU\\_enCA819CA819&biw=1536&bih=755&tbm=shop&sxsr=ACYBGNRVJP6WN45LQBd44Wiw6UO29YbO4A%3A1569521867574&ei=ywCNXcvWIsWL5wKSvrnoBA&q=cost+of+a+sony+camera+A+series+70-200mm+lenses+near+me&oq=cost+of+a+sony+camera+A+series+70-200mm+lenses+near+me&gs\\_l=psy-ab-sh.3...136763.139128.0.141544.11.11.0.0.0.0.106.986.10j1.11.0....0...1c.1.64.psy-ab-sh..1.0.0....0.e8IPLxtADc#spd=14028410646949694736](https://www.google.com/search?rlz=1C1GCEU_enCA819CA819&biw=1536&bih=755&tbm=shop&sxsr=ACYBGNRVJP6WN45LQBd44Wiw6UO29YbO4A%3A1569521867574&ei=ywCNXcvWIsWL5wKSvrnoBA&q=cost+of+a+sony+camera+A+series+70-200mm+lenses+near+me&oq=cost+of+a+sony+camera+A+series+70-200mm+lenses+near+me&gs_l=psy-ab-sh.3...136763.139128.0.141544.11.11.0.0.0.0.106.986.10j1.11.0....0...1c.1.64.psy-ab-sh..1.0.0....0.e8IPLxtADc#spd=14028410646949694736)

**Lens 28:70 mm:** [https://www.google.com/search?rlz=1C1GCEU\\_enCA819CA819&biw=1536&bih=755&tbm=shop&sxsr=ACYBGNRBxVfm2MKnM\\_hrOwmaXGktfd-1mQ%3A1569521185703&ei=lf6MXY-vKseE5wL0pJ74DA&q=cost+of+a+sony+A7R+lenses+near+me&oq=cost+of+a+sony+A7R+lenses+near+me&gs\\_l=psy-ab-sh.3...107860.115600.0.115860.22.22.0.0.0.0.101.1767.21j1.22.0....0...1c.1.64.psy-ab-sh..0.1.91...35i304i39k1.0.KtLB\\_Ta2\\_dA#spd=702333561234116580](https://www.google.com/search?rlz=1C1GCEU_enCA819CA819&biw=1536&bih=755&tbm=shop&sxsr=ACYBGNRBxVfm2MKnM_hrOwmaXGktfd-1mQ%3A1569521185703&ei=lf6MXY-vKseE5wL0pJ74DA&q=cost+of+a+sony+A7R+lenses+near+me&oq=cost+of+a+sony+A7R+lenses+near+me&gs_l=psy-ab-sh.3...107860.115600.0.115860.22.22.0.0.0.0.101.1767.21j1.22.0....0...1c.1.64.psy-ab-sh..0.1.91...35i304i39k1.0.KtLB_Ta2_dA#spd=702333561234116580)

**Lens 14:24 mm:** <https://www.henrys.com/104863-SIGMA-14-24MM-F2-8DG-DN-SONY->

**High Speed/Capacity SD Cards (x3):** [https://www.google.com/search?rlz=1C1GCEU\\_enCA819CA819&biw=1536&bih=755&tbm=shop&sxsr=ACYBGNS9NBGjQ8SimSo0ARqUFM\\_-vNJAoA%3A1569522010000&ei=WQGNXdPXPm7b5gKFgr6lCw&q=cost+high+speed+capacity+SD+cards+near+me&oq=cost+high+speed+capacity+SD+cards+near+me&gs\\_l=psy-ab-sh.3...68728.78876.0.79142.70.47.0.0.0.0.150.4103.38j7.45.0....0...1c.1.64.psy-ab-sh..36.3.260...35i304i39k1j0i13k1.0.uL8bl75s6\\_E#spd=10575455106501585264](https://www.google.com/search?rlz=1C1GCEU_enCA819CA819&biw=1536&bih=755&tbm=shop&sxsr=ACYBGNS9NBGjQ8SimSo0ARqUFM_-vNJAoA%3A1569522010000&ei=WQGNXdPXPm7b5gKFgr6lCw&q=cost+high+speed+capacity+SD+cards+near+me&oq=cost+high+speed+capacity+SD+cards+near+me&gs_l=psy-ab-sh.3...68728.78876.0.79142.70.47.0.0.0.0.150.4103.38j7.45.0....0...1c.1.64.psy-ab-sh..36.3.260...35i304i39k1j0i13k1.0.uL8bl75s6_E#spd=10575455106501585264)

## Capital Project Detail - 2020

Project Title:	Multi-Media Equipment (Communications)	Project #	Pending
<b>Audio Recorder:</b> <a href="https://www.amazon.ca/Tascam-DR-100MKIII-192kHz-Portable-Recorder/dp/B01I54S1S0/ref=asc_df_B01I54S1S0/?tag=googleshop0c-20&amp;linkCode=df0&amp;hvadid=293032883233&amp;hvpas=1o3&amp;hvnetw=g&amp;hvrnd=18072691511265766408&amp;hvpone=&amp;hvpwo=&amp;hvqmt=&amp;hvdev=c&amp;hvdvcmld=&amp;hvllocint=&amp;hvllocphy=9000780&amp;hvtargid=pla-320622317506&amp;psc=1">https://www.amazon.ca/Tascam-DR-100MKIII-192kHz-Portable-Recorder/dp/B01I54S1S0/ref=asc_df_B01I54S1S0/?tag=googleshop0c-20&amp;linkCode=df0&amp;hvadid=293032883233&amp;hvpas=1o3&amp;hvnetw=g&amp;hvrnd=18072691511265766408&amp;hvpone=&amp;hvpwo=&amp;hvqmt=&amp;hvdev=c&amp;hvdvcmld=&amp;hvllocint=&amp;hvllocphy=9000780&amp;hvtargid=pla-320622317506&amp;psc=1</a>			
<b>Lapel Mic (x2):</b> <a href="https://www.google.com/search?rlz=1C1GCEU_enCA819CA819&amp;biw=1536&amp;bih=755&amp;tbm=shop&amp;sxsr=ACYBGNQ-0To6JowaL9-Xh2vvuKBT5kTFOA%3A1569522414642&amp;ei=7gKNXc7WJvCH5wLiuKT4CA&amp;q=cost+of+a+professional+lapel+mic+near+me&amp;oq=cost+of+a+professional+lapel+mic+near+me&amp;gs_l=psy-ab-sh.3...124444.128569.0.129162.25.19.0.0.0.95.1509.19.19.0....0...1c.1.64.psy-ab-sh..9.0.0....0.TOmgsdd7hes#spd=11333594861041746043">https://www.google.com/search?rlz=1C1GCEU_enCA819CA819&amp;biw=1536&amp;bih=755&amp;tbm=shop&amp;sxsr=ACYBGNQ-0To6JowaL9-Xh2vvuKBT5kTFOA%3A1569522414642&amp;ei=7gKNXc7WJvCH5wLiuKT4CA&amp;q=cost+of+a+professional+lapel+mic+near+me&amp;oq=cost+of+a+professional+lapel+mic+near+me&amp;gs_l=psy-ab-sh.3...124444.128569.0.129162.25.19.0.0.0.95.1509.19.19.0....0...1c.1.64.psy-ab-sh..9.0.0....0.TOmgsdd7hes#spd=11333594861041746043</a>			
<b>Camera Lights:</b> <a href="https://www.google.com/search?rlz=1C1GCEU_enCA819CA819&amp;biw=1536&amp;bih=755&amp;tbm=shop&amp;sxsr=ACYBGNRP8eK_mBHHLmpao8p3mws4i8hEg%3A1569522544726&amp;ei=cAONXdj9K4ji5gKey4zADA&amp;q=cost+of+a+professional+photography+lights+near+me&amp;oq=cost+of+a+professional+photography+lights+near+me&amp;gs_l=psy-ab-sh.3...100781.107659.0.108054.31.30.1.0.0.0.250.2754.27j2j1.30.0....0...1c.1.64.psy-ab-sh..1.1.87...35i304i39k1.0.1T0OYdRdPc#spd=11947084490365865820">https://www.google.com/search?rlz=1C1GCEU_enCA819CA819&amp;biw=1536&amp;bih=755&amp;tbm=shop&amp;sxsr=ACYBGNRP8eK_mBHHLmpao8p3mws4i8hEg%3A1569522544726&amp;ei=cAONXdj9K4ji5gKey4zADA&amp;q=cost+of+a+professional+photography+lights+near+me&amp;oq=cost+of+a+professional+photography+lights+near+me&amp;gs_l=psy-ab-sh.3...100781.107659.0.108054.31.30.1.0.0.0.250.2754.27j2j1.30.0....0...1c.1.64.psy-ab-sh..1.1.87...35i304i39k1.0.1T0OYdRdPc#spd=11947084490365865820</a>			
<b>Sony A Series Camera Battery Chargers (x2):</b> <a href="https://www.henrys.com/97634-SONY-BCQZ1-BATTERY-CHARGER-Z-SERIES.aspx?gclid=Cj0KCQjww7HsBRDkARIsAARsIT7DmW45R1QWuNUFobQZ1PjNHDZzLaOBm5FEzE83lo1ZLD2xPrAv-0aAs5WEALw_wcB">https://www.henrys.com/97634-SONY-BCQZ1-BATTERY-CHARGER-Z-SERIES.aspx?gclid=Cj0KCQjww7HsBRDkARIsAARsIT7DmW45R1QWuNUFobQZ1PjNHDZzLaOBm5FEzE83lo1ZLD2xPrAv-0aAs5WEALw_wcB</a>			
<b>4. Flat screen monitor and wall mount for movie editing:</b>			
<b>Monitor:</b> <a href="https://www.thebrick.com/products/rca-43-smart-4k-uhd-led-television-rnsmu4336?gclid=Cj0KCQjww7HsBRDkARIsAARsIT5Bhjs0g2uiRrjK20QNX-umt8MRJHEzQ9aao7C4_AhRD3dAJAVb8aAtI_EALw_wcB">https://www.thebrick.com/products/rca-43-smart-4k-uhd-led-television-rnsmu4336?gclid=Cj0KCQjww7HsBRDkARIsAARsIT5Bhjs0g2uiRrjK20QNX-umt8MRJHEzQ9aao7C4_AhRD3dAJAVb8aAtI_EALw_wcB</a>			
<b>Wall Mount:</b> <a href="https://www.google.com/search?rlz=1C1GCEU_enCA819CA819&amp;biw=1536&amp;bih=755&amp;tbm=shop&amp;sxsr=ACYBGNRgjFMNHDbqq5Y08arlkHxAvzOlzQ%3A1569522873087&amp;ei=uQSNXev_BOzK5gK356WgCQ&amp;q=cost+of+a+48+inch+flat+screen+tv+with+wall+mount+near+me&amp;oq=cost+of+a+48+inch+flat+screen+tv+with+wall+mount+near+me&amp;gs_l=psy-ab-sh.3...25497.26793.0.27064.2.2.0.0.0.0.76.142.2.2.0....0...1c.1.64.psy-ab-sh..0.0.0....0.vXyQj6B2A1g#spd=2722189420486542748">https://www.google.com/search?rlz=1C1GCEU_enCA819CA819&amp;biw=1536&amp;bih=755&amp;tbm=shop&amp;sxsr=ACYBGNRgjFMNHDbqq5Y08arlkHxAvzOlzQ%3A1569522873087&amp;ei=uQSNXev_BOzK5gK356WgCQ&amp;q=cost+of+a+48+inch+flat+screen+tv+with+wall+mount+near+me&amp;oq=cost+of+a+48+inch+flat+screen+tv+with+wall+mount+near+me&amp;gs_l=psy-ab-sh.3...25497.26793.0.27064.2.2.0.0.0.0.76.142.2.2.0....0...1c.1.64.psy-ab-sh..0.0.0....0.vXyQj6B2A1g#spd=2722189420486542748</a>			
NEEDS ANALYSIS & BENEFITS			
Indicate project benefits, i.e. improving health and safety, customer service, increased ROI, heritage, educational, etc.			

The NPCA does not have a graphic designer on staff and has historically outsourced these services. This creates a longer turn-around time for design and print, and is more costly to the organization. The NPCA does not have an appropriate photo or video library or archives of its properties, projects or events. The NPCA has had to purchase photos for many marketing initiatives, websites and also outsource video services which has been very costly. In order to compete in the market and stay within other CA communication best practices, the NPCA needs to modernize its approach, which requires a new digital strategy to disseminate mandate, corporate messaging, and special projects. The Multi Media Marketing Specialist was approved by the Board to support the newly streamlined Communications Department.

This position was posted in September and interviews will be scheduled within the next two weeks for a start date for late October early November.

## Capital Project Detail - 2020

Project Title: Multi-Media Equipment (Communications)

Project #

Pending

## RISKS &amp; MITIGATION STRATEGY

Indicate project risks and proposed mitigation; include risk assessments if the project is deferred (low/medium/high) and any risks during or post implementation. Include direct costs of not proceeding (if known) as well as any performance or service related risks.

The current workload of the Communications Department is not sustainable. After the elimination of two senior positions earlier in the year, the department has struggled to complete all necessary tasks. The previous communications budgets were not appropriate for the current needs, and there was a large amount of spending on outsourcing to third parties who don't fully understand the company brand or mandate. In 2018 alone, the fees for outsourcing graphic design is estimated at \$80K, in addition to \$20K minimum for video and photography services. A new Multi Media Marketing Specialist will be able to absorb these additional responsibilities, provide high-quality marketing support for ad campaigns, public consultations and digital strategies from an informed position, while saving the organization money. To not hire this position at this time would be a high risk and create an unsustainable workload for the existing staff for the unforeseen future.

## PROJECT COST &amp; FORECAST

Description	Prior Year(s)	2020	2021	2022	2023	2024+
Planning						
Design						
Pre-Construction						
Construction						
Internal salaries & benefits						
Internal resources - non-salary						
Warranty						
Facilities						
Equipment		10,000				
Contingency						
Other						
<b>TOTAL</b>	-	<b>10,000</b>	-	-	-	-

## PROJECT MILESTONES

Percent Complete	25%	50%	75%	100%
Projected Date (month/year) milestone met				Q1

## CASH FLOW PROJECTION (Current Year Only)

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Projected cash flow requirements - current year	10,000			

## Capital Project Detail - 2020

Project Title: Multi-Media Equipment (Communications)

Project #

Pending

## OTHER

Asset useful life:

5 years

Projected impact on operations annually:

\$

-

Return on investment (ROI)

gain from investment:

cost of investment:

10,000

ROI:

Payback Period

Year

Investment

Annual Savings/Revenues

Cumulative Cost (savings)

0

1

2

## NOTES

Name and Title

Signature

Date

# Niagara Peninsula Conservation Authority - 2020 CAPITAL PROJECTS

Project Name	Division	Asset Class	Proposed Budget 2020	Proposed Budget 2021	Proposed Budget 2022
Asset Management Capital Planning Program	Corporate Services	Equipment	\$30,000		
Data Centre Cyclical Server Refresh	Corporate Services	Equipment	\$23,000		
Annual PC Replacements	Corporate Services	Equipment	\$45,000		
Office Network Backup and Archive	Corporate Services	Equipment	\$6,500	\$400	\$ 400
Phone System	Corporate Services	Equipment	\$50,000		
Orthoimagery Acquisition - SWOOP	Corporate Services	Equipment	\$10,000		
Natural Areas ELC Mapping Update	Corporate Services	Equipment	\$200,000		
Balls Falls Internet Improvement & Infrastructure	Corporate Services	Equipment	\$40,000		
Board Microphones	Corporate Services	Equipment	\$50,000		
<b>Sub Total</b>	<b>Corporate Services</b>		<b>\$ 454,500</b>	<b>\$ 400</b>	<b>\$ 400</b>

**Niagara Peninsula Conservation Authority**

**Capital Project Detail - 2020**

<b>Project Title:</b>	Balls Falls Internet Improvements and Infrastructure	<b>Project #</b>	Pending
<b>G/L Account(s):</b>	Pending	<b>Asset Class</b>	Equipment
<b>Priority Classification:</b>	Strategic Initiative	<b>Division</b>	Corporate Services
<b>Priority Ranking:</b>	3	<b>Project Status</b>	Draft
<b>Site/Location:</b>	Balls Falls	<b>Grouping</b>	B-2
<b>Project Lead:</b>	Geoff Verkade	<b>Project Start Date</b>	Jan-20
<b>Funding Source:</b>	Special Levy - Niagara	<b>Project Completion</b>	Dec-20
<b>Partner (if applicable) :</b>		<b>Municipality</b>	Niagara

**PROJECT DESCRIPTION, RATIONALE, BACKGROUND, LINKAGES AND IMPLICATIONS**

*Provide a detailed description of the project, why the project needs to be done now and consequences of deferring the project. Include historical cost and typical asset life cycle. Indicate if the project is linked to any other current or future project (capital or operating) and any impact to related project(s) if this project is approved or deferred.*

The internet at Balls Falls is currently provided wirelessly due to limited options with Internet Service Providers and the accessibility of the site for high speed services. The current service works however several speed and downtime issues have occurred. New fiber internet has emerged in the vicinity that would offer a more cost effective and reliable service to the site. This project would establish the necessary infrastructure to complete the internet distribution throughout the conservation area and improves its speed and reliability opening up additional economic opportunities for the Center for Conservation and Historic Village on premise. The funds are required to purchase a tower at the Center to receive a dedicated high speed fiber based wireless internet connection locally from a provider as well as install internet fiber cabling from the Center to valley area of the park to supply the new WIFI access points installed by means of a 2019 capital project.

**NEEDS ANALYSIS & BENEFITS**

*Indicate project benefits, i.e. improving health and safety, customer service, increased ROI, heritage, educational, etc.*

Reliable internet at Balls Falls has been an issue and concerns since the construction of the Center for Conservation limiting its marketability. At times the internet service onsite has affected the Authority livestream of its Board of Directors meetings. In 2019 a more dense collection of WIFI access points were installed throughout the valley to improve internet access coverage for POS machines during the Thanksgiving Festival. Faster more reliable dedicated service to the Historic Village and valley area of the park would enable innovations in outdoor and heritage education and would eliminate need to bring in costly mobile Bell Internet hub to feed the network during the Festival.

## Niagara Peninsula Conservation Authority

## Capital Project Detail - 2020

Project Title: Balls Falls Internet Improvements and Infrastructure

Project #

Pending

## RISKS &amp; MITIGATION STRATEGY

Indicate project risks and proposed mitigation; include risk assessments if the project is deferred (low/medium/high) and any risks during or post implementation. Include direct costs of not proceeding (if known) as well as any performance or service related risks.

Risk includes continuing to rely on an internet service that has performed intermittently at times and limits the Conservation Areas marketability for revenue generating opportunities at the site, as well as innovative program and education deliver. NPCA will need to continue to support and maintain a server on site as well to address file access issues until a better internet provision is available to enable a wide area network connection to the main office. Mitigation is to continue to monitor and prescribe existing bandwidth allocation from the current ISP across the park, and make sure staff on site can continue with operations by duplicating critical data onsite during outages or poor service performance.

## PROJECT COST &amp; FORECAST

Description	Prior Year(s)	2020	2021	2022	2023	2024+
Planning						
Design						
Pre-Construction						
Construction						
Internal salaries & benefits						
Internal resources - non-salary						
Warranty						
Facilities						
Equipment		40,000				
Contingency						
Other						
<b>TOTAL</b>	-	<b>40,000</b>	-	-	-	-

## PROJECT MILESTONES

Percent Complete	25%	50%	75%	100%
Projected Date (month/year) milestone met		Q1	Q2	Q3

## CASH FLOW PROJECTION (Current Year Only)

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Projected cash flow requirements - current year		40,000		

## Niagara Peninsula Conservation Authority

## Capital Project Detail - 2020

Project Title: Balls Falls Internet Improvements and Infrastructure

Project #

Pending

OTHER

Asset useful life: 15 years

Projected impact on operations annually: \$ -

Return on investment (ROI)

gain from investment:

cost of investment:

40,000

ROI:

Payback Period

Year

Investment

Annual Savings/Revenues

Cumulative Cost (savings)

0

1

2

## NOTES

Added almost 5k to the quote to account for potential inflationary costs to materials, as well as fact quote does not include the tower cost as a line item.

Name and Title

Signature

Date



# ESTIMATE

**Regional Wifi**  
486 Grantham Avenue  
Saint Catharines, Ontario L2M 6W2  
Canada

Mobile: 905-329-1183  
Toll free: 1(888)275-0843  
[www.regionalwifi.com](http://www.regionalwifi.com)

BILL TO  
**Niagara Peninsula Conservation  
Authority**  
Adam Christie  
[achristie@npca.ca](mailto:achristie@npca.ca)

**Estimate Number:** 137

**Estimate Date:** November 28, 2017

**Expires On:** December 1, 2017

**Grand Total (CAD):** \$35,581.59

Items	Quantity	Price	Amount
<b>1 off</b> Ubiquiti USG Pro 4	1	\$578.14	\$578.14
<b>1 off</b> Ubiquiti Air Fiber 24 HD	2	\$3,995.00	\$7,990.00
<b>1 off</b> Ubiquiti UAP-Outdoor-AC	10	\$710.00	\$7,100.00
<b>1 off</b> Ubiquiti 24 Port POE Switch	1	\$719.99	\$719.99
<b>1 off</b> Fiber Cable By the Foot	2500	\$3.00	\$7,500.00
<b>1 off</b> 10 Gig SFP+ modules	2	\$75.00	\$150.00
<b>1 off</b> Shop Materials	1	\$250.00	\$250.00
<b>Labour</b> 1 Hr Labor	90	\$80.00	\$7,200.00



# ESTIMATE

**Regional Wifi**  
486 Grantham Avenue  
Saint Catharines, Ontario L2M 6W2  
Canada

Mobile: 905-329-1183  
Toll free: 1(888)275-0843  
[www.regionalwifi.com](http://www.regionalwifi.com)

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<b>Subtotal:</b>	\$31,488.13
HST 13% (75597 6321 RT0001):	\$4,093.46
<hr/>	
<b>Total:</b>	\$35,581.59
<hr/>	
<b>Grand Total (CAD):</b>	<b>\$35,581.59</b>

## Lise Gagnon

---

**From:** Serge Paquin <serge@skycomp.ca>  
**Sent:** September 16, 2019 12:01 PM  
**To:** Lise Gagnon; Geoffrey Verkade  
**Subject:** Fiber build

So NRBN came back to use on Fiber build and the minimum fee would be \$150k to get to that site. We are still waiting to hear back from Bell and I'll dig up the other wireless provider today and reach back out to him.

Serge.  
The information contained in this communication, including any attachment(s), may be confidential, is intended only for the use of the recipient(s) named above. If the reader of this message is not the intended recipient, you are hereby notified that any disclosure of this communication, or any of its contents, is prohibited. If you have received this communication in error, please notify the sender and permanently delete the original and any copy from your computer system. Thank-you. Niagara Peninsula Conservation Authority.

## Capital Project Detail - 2020

<b>Project Title:</b>	Board Microphones	<b>Project #</b>	Pending
<b>G/L Account(s):</b>	Pending	<b>Asset Class</b>	Office Equipment
<b>Priority Classification:</b>	Operational Efficiency	<b>Division</b>	Corporate Services
<b>Priority Ranking:</b>	3	<b>Project Status</b>	Draft
<b>Site/Location:</b>	Balls Falls Center for Conservation	<b>Grouping</b>	B-3
<b>Project Lead:</b>	Geoff Verkade	<b>Project Start Date</b>	Jan-20
<b>Funding Source:</b>	Special Levy - ALL	<b>Project Completion</b>	Dec-20
<b>Partner (if applicable) :</b>		<b>Municipality</b>	ALL

## PROJECT DESCRIPTION, RATIONALE, BACKGROUND, LINKAGES AND IMPLICATIONS

*Provide a detailed description of the project, why the project needs to be done now and consequences of deferring the project. Include historical cost and typical asset life cycle. Indicate if the project is linked to any other current or future project (capital or operating) and any impact to related project(s) if this project is approved or deferred.*

The Niagara Peninsula Conservation Authority hosts and live streams its monthly Board of Director's meetings from the Balls Falls Center for conservation. There is currently not enough delegate units for the membership and members have to share units. The audio amplification system is required due to the nature of the Glen Elgin room and its acoustics so that the gallery attending meetings can hear the discussion, and to feed the audio of the live stream. The current system is difficult to use and often the gallery still can not hear members speak during the meeting. This project would replace the existing system with a more reliable and easier to use system and add additional delegate units so that each member would have a dedicated unit.

## NEEDS ANALYSIS &amp; BENEFITS

*Indicate project benefits, i.e. improving health and safety, customer service, increased ROI, heritage, educational, etc.*

The current system has been deemed problematic to use and is not providing the audio amplification satisfactorily in the room. NPCA needs to be highly transparent in its governance process.

## Capital Project Detail - 2020

Project Title: Board Microphones

Project #

Pending

## RISKS &amp; MITIGATION STRATEGY

Indicate project risks and proposed mitigation; include risk assessments if the project is deferred (low/medium/high) and any risks during or post implementation. Include direct costs of not proceeding (if known) as well as any performance or service related risks.

Risks include investing in a costly system at current membership levels. Mitigation could be to use the current system until NPCA's governance issues are sorted out with respect to membership and to reconsider alternative solutions at that point.

## PROJECT COST &amp; FORECAST

Description	Prior Year(s)	2020	2021	2022	2023	2024+
Planning						
Design						
Pre-Construction						
Construction						
Internal salaries & benefits						
Internal resources - non-salary						
Warranty						
Facilities						
Equipment		50,000				
Contingency						
Other						
<b>TOTAL</b>	-	<b>50,000</b>	-	-	-	-

## PROJECT MILESTONES

Percent Complete	25%	50%	75%	100%
Projected Date (month/year) milestone met		Q1		Q2

## CASH FLOW PROJECTION (Current Year Only)

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Projected cash flow requirements - current year		50,000		

## Capital Project Detail - 2020

Project Title: Board Microphones

Project #

Pending

## OTHER

Asset useful life: 5 years

Projected impact on operations annually: \$ -

## Return on investment (ROI)

gain from investment:

cost of investment:

50,000

ROI:

## Payback Period

Year

Investment

Annual Savings/Revenues

Cumulative Cost (savings)

0

1

2

## NOTES

Based on this quote plus an additional 15 delegate units. 50K includes 1.5K inflation increase (3%) to price from 2015 value.

Capital Projects Coordinator (J. Fazekas) recommends this solution, looked at 3 in 2015.

Procurement Specialist (E. Gervais) still trying to get it quoted more currently from alternative vendors, ESC no longer present online or phone.

Name and Title

Signature

Date



**Order**

404

Date 11/05/2015

Client JEFF- BALS FALLS CONSERVATION

Ship To Balls Falls Conservation Area  
3292 Sixth Avenue, Jordan, ON,  
L0R 1S0  
905-562-5235

Item No	Qty	Unit	Description	Tax	Unit Price	Amount
PARTS BIN 8	10	EACH	SENNHEISER ADN WIRELESS DELEGATE UNIT - DIGITAL, TWIN LOUDSPEAKER DSP LIMITER #504748		1,098.99	10,989.90
PARTS BIN 8	1	EACH	SENNHEISER ADN WIRELESS CHAIRMAN UNIT - DIGITAL, TWIN LOUDSPEAKER, SDP LIMITER #504745		1,098.99	1,098.99
PARTS BIN 8	1	EACH	SENNHEISER CENTRAL UNIT FOR 40 ADN DELEGATES, INTEGRATED PC WITH PRE-INSTALLED CONTROL #505555		4,398.00	4,398.00
PARTS BIN 8	1	EACH	SENNHEISER ADN WIRELESS ANTENNA MODULE #505715		1,758.90	1,758.90
PARTS BIN 6	11	EACH	SENNHEISER ADN-W RECHARGEABLE BATTERY PACK #504744		274.00	3,014.00
PARTS BIN 5	11	EACH	SENNHEISER ADN-W MIC 15-39 GOOSENECK REMOVABLE MICROPHONE FOR ADN-W, 39CM #504750		153.00	1,683.00
PARTS BIN 8	2	EACH	SENNHEISER ADN WIRELESS 10 GANG BATTERY CHARGER, RACKMOUNT OR TABLE TOP #505721		2,198.00	4,396.00
SERVICE	1	EACH	COMPLETE INSTALLATION AND DEMONSTRATION ON HOW TO USE SYSTEM BY ELECTRIC SOUND CREW CERTIFIED INSTALL TECHNICIAN DS AUDIO REPRESENTATIVE. Thank you for the opportunity Melissa Monte Electric Sound Crew HST (ON) on sales		999.99	999.99
					13.00%	3,684.04
<b>Total</b>						<b>\$32,022.82</b>

COMMENTS:

info@electricsoundcrew.com  
2900 Argentia Rd Unit#8  
Mississauga, ON  
L5N 7X9  
GST/HST No. 867817674

## Capital Project Detail - 2020

<b>Project Title:</b>	Natural Areas ELC Mapping Update	<b>Project #</b>	Pending
<b>G/L Account(s):</b>	Pending	<b>Asset Class</b>	Equipment
<b>Priority Classification:</b>	Operational Efficiency	<b>Division</b>	Corporate Services
<b>Priority Ranking:</b>	4	<b>Project Status</b>	Draft
<b>Site/Location:</b>	Main Office	<b>Grouping</b>	B-3
<b>Project Lead:</b>	Geoff Verkade	<b>Project Start Date</b>	Jan-20
<b>Funding Source:</b>	Special Levy - ALL	<b>Project Completion</b>	Dec-20
<b>Partner (if applicable) :</b>		<b>Municipality</b>	ALL

## PROJECT DESCRIPTION, RATIONALE, BACKGROUND, LINKAGES AND IMPLICATIONS

*Provide a detailed description of the project, why the project needs to be done now and consequences of deferring the project. Include historical cost and typical asset life cycle. Indicate if the project is linked to any other current or future project (capital or operating) and any impact to related project(s) if this project is approved or deferred.*

The Niagara Peninsula Conservation Authority mapped its watershed's natural areas at the Community Series level (furthest level of interpretation afforded by aerial photography) of Ecological Land Classification (ELC) protocol during the Natural Areas Inventory (NAI) from 2006 to 2009. This information was captured at large scales in order to meet the various business needs of NPCA programs, including operational decision support to its planning and permit review services. It was subsequently analyzed from a systematic perspective in order to form our current understanding of the landscape through the 'Nature for Niagara's Future' assessment project, and informed the 2012 and 2018 Watershed Report Cards. It is now being used by the Authority's revitalized restoration program to aid prioritization and project targeting and is critical for the success of its adaptive management cycle. Despite these current dependencies, the information is limited in value owing to the fact it is now ten years old and the landscape has changed due to ongoing development and other land use changes, and ongoing natural processes such as succession. This project proposes to update the existing mapping and several key derivatives by hiring an ELC consultant to perform ortho interpretation and field validation. The updated mapping would adhere to large scale mapping specifications prescribed by the NPCA, preserve the NPCA's NAI spatial identifiers organizing them for reporting purposes, migrate the Community Series classification to the most current version of ELC, integrate the most current OWES wetland mapping from the province, incorporate value from the historic Forest Resources Inventory mapping for the watershed, create standard land use planning derivatives such as general wooded area and wetland patches, and perform adequate field surveys to support validation. An additional consultant will be hired to perform an independent QA/QC on the final product to ascertain its accuracy achievement at a 90% confidence interval.

## Capital Project Detail - 2020

Project Title: Natural Areas ELC Mapping Update

Project #

Pending

## NEEDS ANALYSIS &amp; BENEFITS

*Indicate project benefits, i.e. improving health and safety, customer service, increased ROI, heritage, educational, etc.*

The Niagara Peninsula Conservation Authority is a local natural resources management agency. In order to manage natural resources effectively it is imperative that iterative inventories and assessment of natural areas and features be conducted as part of the adaptive management approach and to make informed natural resources management recommendations that would be of value to its local land use planning partners. The update of the NPCA's Natural Areas ELC Mapping is critical for its revitalized Restoration program. As a natural resources management tool, restoration activities must be targeted to areas that support clearly defined ecological objectives for the landscape. Areas to prioritize for restoration must be informed by an understanding of the trends on the landscape in terms of natural cover and the associated types such as ELC affords, and how that impacts water quality. This mapping will also be required to update the NPCA's Watershed report card which cyclically would be published again in early 2022. The 2018 watershed report card could not update its forest cover and wetland metrics from the 2012 report card because the existing mapping had not been updated. Beyond requiring the updated mapping for strategic purposes it is also used in day to day operations by the NPCA. NPCA Policies Section 8.1.2.3c identifies the use of the data to help identify areas of potential unevaluated wetland subject to NPCA review. Further, several NPCA policies cite the regulation of features using an ecosystem approach most often detailed through an Environmental Impact Statement (EIS) of which the Region of Niagara's Guidelines for such include ELC mapping as minimum requirement, regardless of scope. NPCA Conservation land acquisition strategy and decision support activities also require ELC mapping input. Updated large scale ELC mapping to the Community Series level across the watershed is a critical base inventory for its program and service delivery and offers value to the broader local land use planning community of practice by providing a point of departure for EIS and environmental consultants to use, reducing costs for proponents going through the application process.

## RISKS &amp; MITIGATION STRATEGY

*Indicate project risks and proposed mitigation; include risk assessments if the project is deferred (low/medium/high) and any risks during or post implementation. Include direct costs of not proceeding (if known) as well as any performance or service related risks.*

Main risk is NPCA not being able to deliver on its mandate for lack of this information, and suffering in terms of its reputation if it can not make meaningful natural resources management decisions that are evidence based with scientific process behind it such as using spatially and temporally current and industry standard information products like ELC. Mitigation would include using the existing 10 year old inventory for the value it offers, by caveating any management decisions based from it based on its known limitations, and requiring proponents to map themselves at their cost to meet application requirements. Staff will have to spend costly more time in the field determining site conditions and changes throughout the watershed when prioritizing and targeting restoration efforts, and correlating to ambient water quality conditions.

## Capital Project Detail - 2020

Project Title: Natural Areas ELC Mapping Update

Project #

Pending

## PROJECT COST &amp; FORECAST

Description	Prior Year(s)	2020	2021	2022	2023	2024+
Planning						
Design						
Pre-Construction						
Construction						
Internal salaries & benefits						
Internal resources - non-salary						
Warranty						
Facilities						
Equipment		200,000				
Contingency						
Other						
<b>TOTAL</b>	-	<b>200,000</b>	-	-	-	-

## PROJECT MILESTONES

Percent Complete	25%	50%	75%	100%
Projected Date (month/year) milestone met	Q1	Q2	Q3	Q4

## CASH FLOW PROJECTION (Current Year Only)

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Projected cash flow requirements - current year	50,000	50,000	50,000	50,000

## OTHER

Asset useful life:	5 years
Projected impact on operations annually:	\$ -
Return on investment (ROI)	gain from investment:
	cost of investment: 200,000

ROI:

Payback Period	Year	Investment	Annual Savings/Revenues	Cumulative Cost (savings)
	0			
	1			
	2			

## Capital Project Detail - 2020

Project Title: Natural Areas ELC Mapping Update

Project #

Pending

## NOTES

Similar project should occur cyclically every 5 years with the advent of new orthoimagery acquired in partnership with the Land Information Ontario Imagery Strategy project for our part of the province, typically called SWOOP.

Name and Title

Signature

Date

## Capital Project Detail - 2020

<b>Project Title:</b>	SWOOP 2020 Orthoimagery Acquisition	<b>Project #</b>	Pending
<b>G/L Account(s):</b>	Pending	<b>Asset Class</b>	Equipment
<b>Priority Classification:</b>	Operational Efficiency	<b>Division</b>	Corporate Services
<b>Priority Ranking:</b>	4	<b>Project Status</b>	Draft
<b>Site/Location:</b>	Main Office	<b>Grouping</b>	B-3
<b>Project Lead:</b>	Geoff Verkade	<b>Project Start Date</b>	Jan-20
<b>Funding Source:</b>	Special Levy - ALL	<b>Project Completion</b>	Dec-20
<b>Partner (if applicable) :</b>		<b>Municipality</b>	ALL

## PROJECT DESCRIPTION, RATIONALE, BACKGROUND, LINKAGES AND IMPLICATIONS

*Provide a detailed description of the project, why the project needs to be done now and consequences of deferring the project. Include historical cost and typical asset life cycle. Indicate if the project is linked to any other current or future project (capital or operating) and any impact to related project(s) if this project is approved or deferred.*

The Niagara Peninsula Conservation Authority uses orthoimagery, or digital aerial photography, critically in its day to day operations for decision support with respect to delivering its mandate. This project will facilitate the acquisition of new imagery in 2020 for the entire NPCA watershed through the province's Southwestern Ontario Orthoimagery Project (SWOOP). The NPCA leveraged this partnered approach through Land Information Ontario's Imagery Strategy with its SWOOP 2010 and 2015 acquisitions. Deliverables for this project include the stereo models used to rectify the imagery which can be subsequently used with softcopy photogrammetry solutions to update the NPCA's 1m contour supporting Digital Terrain Model which is a critical information requirement for the hydrologic and hydraulic analyses that derive floodplain mapping at its current spec.

## NEEDS ANALYSIS &amp; BENEFITS

*Indicate project benefits, i.e. improving health and safety, customer service, increased ROI, heritage, educational, etc.*

Orthoimagery is used everyday by NPCA staff to deliver plan review comments and issue permits. Our member municipalities use the same imagery to support its land use planning decisions as well. NPCA needs to remain current as service providers. Imagery also plays a critical decision support factor in all other NPCA program areas including restoration targeting, and the production of floodplain mapping. The NPCA's 1m contour supporting terrain model critical to its floodplain mapping production is also a derivative of the stereo models that accompany the imagery as a deliverable. Further, both the orthoimagery and the derivative DTM used are to create, update and maintain its other hazard datasets, and several other NPCA spatial business datasets.

## Capital Project Detail - 2020

Project Title: SWOOP 2020 Orthoimagery Acquisition

Project #

Pending

## RISKS &amp; MITIGATION STRATEGY

Indicate project risks and proposed mitigation; include risk assessments if the project is deferred (low/medium/high) and any risks during or post implementation. Include direct costs of not proceeding (if known) as well as any performance or service related risks.

Risks include not being able to discern ground conditions and context to make informed land use planning decisions as per NPCA's mandate. Further, not having the source material to derive, update and maintain most of the Authority spatial datasets will lead to stagnation in its ability to make informed decisions in its various programs and services as its information base's temporal resolution deteriorates.

## PROJECT COST &amp; FORECAST

Description	Prior Year(s)	2020	2021	2022	2023	2024+
Planning						
Design						
Pre-Construction						
Construction						
Internal salaries & benefits						
Internal resources - non-salary						
Warranty						
Facilities						
Equipment	5,877	10,000				10,000
Contingency						
Other						
<b>TOTAL</b>	<b>5,877</b>	<b>10,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>10,000</b>

## PROJECT MILESTONES

Percent Complete	25%	50%	75%	100%
Projected Date (month/year) milestone met				Q4

## CASH FLOW PROJECTION (Current Year Only)

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Projected cash flow requirements - current year			10,000	

## Capital Project Detail - 2020

Project Title: SWOOP 2020 Orthoimagery Acquisition

Project #

Pending

## OTHER

Asset useful life: 5 years

Projected impact on operations annually: \$ -

## Return on investment (ROI)

gain from investment:

cost of investment:

25,877

ROI:

## Payback Period

Year

Investment

Annual Savings/Revenues

Cumulative Cost (savings)

0

1

2

## NOTES

Name and Title

Signature

Date

## Lise Gagnon

**From:** Rick Wilson <RWilson@conservationontario.ca>  
**Sent:** August 25, 2015 10:17 AM  
**To:** Geoffrey Verkade  
**Subject:** SWOOP2015 Sub-Licence Agreement  
**Attachments:** SWOOP\_Agreement\_CO\_NPCA.pdf

**Follow Up Flag:** Follow up  
**Due By:** August 26, 2015 8:00 AM  
**Flag Status:** Flagged

Conservation Ontario has finalized the Partnership Agreement with MNRF for SWOOP2015 on behalf of CAs and worked with the Province on the drafting of Sublicence Agreements between CO and the CAs in order to facilitate the delivery of the spring 2015 photos and data as they are made available by FUGRO (see Mike's comments on the timing, below).

**By creating this partnership, the 16 participating CAs are saving roughly \$10,000 (~10%) collectively on their orders** (even more depending on the extent of their delivery request). Special thanks go to Terry Chapman (UTRCA), Zoe Green (GrandRCA) and Tracey McPherson (ABCA) for their work in negotiating with MNRF, providing feedback on legal documents and coordinating the preparation of the tile index on which the CA orders were based.

Attached to this e-mail is a copy of the Sub-Licence Agreement for signature by a representative of your CA. The agreement follows the same format as that of the Participant Agreement with MNRF including all the required terms and conditions (see section 4.3 of the Participant Agreement – Schedule A of the Sub-Licence Agreement).

Payment has been broken out as follows for the purposes of this agreement...

1. [First Installment], which shall be fifty percent (50%) of the Sub-Licensed Fee payable upon execution of the Sub-Licence agreement and upon receipt of an invoice from [CO];
2. [Final Installment], which shall be fifty percent (50%) of the Sub-Licensed Fee payable upon receipt of an invoice from [CO] which shall be no later than March 28, 2016 or within thirty (30) days of the date of delivery by the Supplier of the Sub-Licensed Products to the [CA].

The first installment invoice will go out in 2015. The final installment is almost certainly going to be invoiced in 2016. We have put the "no later than" clause in there because MNRF has indicated that they must receive payment this fiscal (before the end of March, 2016). In some cases this may be prior to final delivery from FUGRO – If this is an issue for your CA, please let me know prior to signing the document.

Detailed amounts for each of the CAs are available in the table below and are based on the tile order index submitted to MNRF (not the delivery index)...

CA	Tiles Ordered	Proportion	Cost*	1st Insta
Ausable Bayfield Conservation Authority	2500	6.06%	\$5,679.05	2,839
Cattfish Creek Conservation Authority	502	1.22%	\$1,140.35	570
Essex Region Conservation Authority	462	1.12%	\$1,049.49	524
Grand River Conservation Authority	6940	16.83%	\$15,765.03	7,882
Grey Sauble Conservation Authority	3522	8.54%	\$8,000.64	4,000
Conservation Halton	318	0.77%	\$722.38	361

Hamilton Region Conservation Authority	500	1.21%	\$1,135.81	567.
Kettle Creek Conservation Authority	526	1.28%	\$1,194.87	597.
Longpoint Region Conservation Authority	3009	7.30%	\$6,835.30	3,417
Lower Thames Valley Conservation Authority	3516	8.53%	\$7,987.01	3,993
Maitland Valley Conservation Authority	3322	8.06%	\$7,546.32	3,773
Niagara Peninsula Conservation Authority	2587	6.27%	\$5,876.68	2,938
Nottawasaga Valley Conservation Authority	971	2.36%	\$2,205.74	1,102
Saugeen Conservation	4685	11.36%	\$10,642.53	5,321
St. Clair River Conservation Authority	4450	10.79%	\$10,108.70	5,054
Upper Thames River Conservation Authority	3421	8.30%	\$7,771.21	3,885

\*Cost based on a per tile cost of \$2.271618603 – Invoice amount subject to HST

**Please sign and return the agreement to CO as soon as possible to ensure prompt execution of the contract.**

Sincerely,

Rick Wilson  
Information Management Coordinator  
Conservation Ontario  
120 Bayview Parkway,  
Newmarket, ON L3Y 3W3  
Tel. 905-895-0716 x. 230  
Fax. 905-895-0751

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**From:** Robertson, Mike (MNRF) [<mailto:mike.robertson@ontario.ca>]  
**Sent:** Monday, July 27, 2015 3:29 PM  
**To:** [tmcpherson@abca.on.ca](mailto:tmcpherson@abca.on.ca); [water@catfishcreek.ca](mailto:water@catfishcreek.ca); [jholland-hibbert@hrca.on.ca](mailto:jholland-hibbert@hrca.on.ca); [TDufour@erca.org](mailto:TDufour@erca.org); [jmarshall@grandriver.ca](mailto:jmarshall@grandriver.ca); [a.milanetti@waterprotection.ca](mailto:a.milanetti@waterprotection.ca); [Doug.Mallory@conservationhamilton.ca](mailto:Doug.Mallory@conservationhamilton.ca); [Clifford@kettlecreekconservation.on.ca](mailto:Clifford@kettlecreekconservation.on.ca); [gis@lprca.on.ca](mailto:gis@lprca.on.ca); [Jason.Wintermute@ltvca.ca](mailto:Jason.Wintermute@ltvca.ca); [jking@mvca.on.ca](mailto:jking@mvca.on.ca); [gverkade@npca.ca](mailto:gverkade@npca.ca); [hamo@nvca.on.ca](mailto:hamo@nvca.on.ca); [r.kleinecke@SVCA.ON.CA](mailto:r.kleinecke@SVCA.ON.CA); [cdurand@scrca.on.ca](mailto:cdurand@scrca.on.ca); [chapmant@thamesriver.on.ca](mailto:chapmant@thamesriver.on.ca); Rick Wilson; [bmcintosh@grandriver.ca](mailto:bmcintosh@grandriver.ca); [g.dangerfield@greysauble.on.ca](mailto:g.dangerfield@greysauble.on.ca); [Richard.Woodworth@conservationhamilton.ca](mailto:Richard.Woodworth@conservationhamilton.ca); [cevanitski@lprca.on.ca](mailto:cevanitski@lprca.on.ca); [phayman@scrca.on.ca](mailto:phayman@scrca.on.ca)  
**Cc:** Arnold, James (MNRF)  
**Subject:** RE: RE: SWOOP2015 CA Delivery files

One other thing that I neglected – as far as “when are the deliveries going to arrive” questions go – don’t ask – I’ll let you know – they’ll likely get started in December or January at the earliest.

Take care

Mike Robertson  
Imagery Project Manager  
Land Information Ontario  
Phone: (705) 755-1280  
E-mail: [mike.robertson@ontario.ca](mailto:mike.robertson@ontario.ca)

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**From:** Robertson, Mike (MNRF)  
**Sent:** July-27-15 3:25 PM  
**To:** 'tmcpherson@abca.on.ca'; 'water@catfishcreek.ca'; 'jholland-hibbert@hrca.on.ca'; 'TDufour@erca.org'; 'jmarshall@grandriver.ca'; 'a.milanetti@waterprotection.ca'; 'Doug.Mallory@conservationhamilton.ca'; 'Clifford@kettlecreekconservation.on.ca'; 'gis@lprca.on.ca'; 'Jason.Wintermute@ltvca.ca'; 'jking@mvca.on.ca';

'gverkade@npca.ca'; 'hamo@nvca.on.ca'; 'r.kleinecke@SVCA.ON.CA'; 'cdurand@scrca.on.ca';  
'chapmant@thamesriver.on.ca'; 'RWilson@conservationontario.ca'; 'bmcintosh@grandriver.ca';  
'g.dangerfield@greysauble.on.ca'; 'Richard.Woodworth@conservationhamilton.ca'; 'cevanitski@lprca.on.ca';  
'phayman@scrca.on.ca'

**Cc:** Arnold, James (MNRF)

**Subject:** RE: RE: SWOOP2015 CA Delivery files

Folks, we've had a few deliveries sent in already, which is fabulous – Doug Mallory gets one free tile of his choice for being the first responder☺ or, I'll buy him a small coffee ..... someday.

A couple of things that need to be considered when submitting your files:

- We have 79 partners submitting shapefiles and tracking those can be difficult if those files are not named properly.
  - Please try to follow this naming convention: *CA FULL NAME\_SWOOP2015\_DATE*
  - The preference would be a zip file containing all relevant files
- Confirm the set of deliverables (Complete/Subset)
- Confirm (or change) your address
- Make sure you cc James Arnold when sending those in to me – I will track them as they come in but James will be checking the shapefiles and putting the packages together for Fugro.

Thanks again!

Mike Robertson

Imagery Project Manager

Land Information Ontario

Phone: (705) 755-1280

E-mail: [mike.robertson@ontario.ca](mailto:mike.robertson@ontario.ca)

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**From:** Robertson, Mike (MNRF)

**Sent:** July-27-15 11:20 AM

**To:** 'tmcperson@abca.on.ca'; 'water@catfishcreek.ca'; 'jholland-hibbert@hrca.on.ca'; 'TDufour@erca.org';  
'jmarshall@grandriver.ca'; 'a.milanetti@waterprotection.ca'; 'Doug.Mallory@conservationhamilton.ca';  
'Clifford@kettlecreekconservation.on.ca'; 'gis@lprca.on.ca'; 'Jason.Wintermute@ltvca.ca'; 'jking@mvca.on.ca';  
'gverkade@npca.ca'; 'hamo@nvca.on.ca'; 'r.kleinecke@SVCA.ON.CA'; 'cdurand@scrca.on.ca';  
'chapmant@thamesriver.on.ca'; 'RWilson@conservationontario.ca'; 'bmcintosh@grandriver.ca';  
'g.dangerfield@greysauble.on.ca'; 'Richard.Woodworth@conservationhamilton.ca'; 'cevanitski@lprca.on.ca';  
'phayman@scrca.on.ca'

**Cc:** Arnold, James (MNRF)

**Subject:** RE: SWOOP2015 CA Delivery files

Folks,

I am cc'ing the CA contacts that are participating in the SWOOP2015 imagery project – please pass along to others if I have missed anyone.

The purpose of this e-mail is to fine tune the deliveries and extents for each of the CA's. As you know, we have taken a different approach for the SWOOP2015 project. The intent was to reduce the costs to CA's related to overlapping tiles by having MNRF/LIO enter into one agreement with Conservation Ontario for the costs of the acquisition. Each CA will enter into a Sub License Agreement with CO and would contribute their "share" of the acquisition costs to CO – which were determined by watershed, and no duplicates. CO will then pay MNRF/LIO the total amount from those CA contributions. Tracey McPherson worked with all 16 of the CA's involved in the SWOOP2015 project area and has generated a "final" tile index for the CA collective (attached). There were 41,231 tiles selected by the CA's, from the 44,631 tiles in SWOOP2015.

Rick Wilson will send out the Sub-License Agreements to all the CA's in the near future. Rick and I have worked with the lawyers and I think all is in order. Each CA will be billed individually, based on the tile selections that you submitted to Tracey back in January. Those tile selections were for billing purposes only. You'll be happy to know that the price per sq km has gone down to the lowest rate we have seen in any of our projects. There are 79 organizations (including the 16 CA's) contributing to the project. The public sector rate per sq km has been finalized at \$2.27, so that is the rate you will be invoiced from CO☺

Now that the funding and partnership is completed we will need to work on the CA delivery files. Next steps for each CA:

1. Using the attached CO SWOOP2015 Tile index – please select the tiles you are interested in receiving from Fugro. It does not matter to me how many you order – they are all paid for – so I expect that some CA's may even want an entire Source Protection area and most will want a buffer beyond their watershed. The only limitation that you have is to stay within the extents of the CO SWOOP2015 Tile index – no “extras” beyond this index can be selected.
2. The other thing that needs to be determined is the “suite” of deliveries each CA will want. The options are the Complete set, which includes the stereo products, or the Subset, which are basically just the ortho tiles. I will provide Fugro with the set of deliverables for each CA so let me know what you want.
  - a. I know a lot of you will be asking about the 40 cm point cloud so let me address that here – that product will not be delivered directly to partners by Fugro. MNRF/LIO will be getting those files so once we have them we can make arrangements with you to get them – no additional cost, but you'll probably have to send LIO a hard drive to load up.
3. Rick has worked with each of you to generate a mailing address list (attached). I am going to provide that information to Fugro for the deliveries – please check your address and contact information to make sure it is correct. Keep in mind that “RR#’s” and Post Office Box numbers are not accepted by Fedex – they need a physical address for deliveries.

I think that is about it for now, let me know if you have any questions. Thanks for your ongoing support folks!

Mike Robertson  
Imagery Project Manager  
Ministry of Natural Resources and Forestry  
2nd Floor, North Tower  
300 Water Street  
Peterborough, Ontario  
K9J 8M5

Phone: (705) 755-1280  
E-mail: [mike.robertson@ontario.ca](mailto:mike.robertson@ontario.ca)

**Conservation Authorities SWOOP2015 Sub-Licence Agreement, made this 31st day of July, 2015**

**BETWEEN:**

**Association of Conservation Authorities of Ontario**

(Hereinafter referred to as the "Sub-Licensor")

**AND:**

**Niagara Peninsula Conservation Authority**

(Hereinafter referred to as the "Sub-Licensee")

(each referred to as "Party" and collectively as "Parties")

**WHEREAS** the Sub-Licensor has entered into a Participant Agreement, attached as Schedule A in this Agreement, with Her Majesty the Queen in right of Ontario, as represented by the Minister of Natural Resources and Forestry ("Ministry") to use and access certain Licensed Products, as defined in Schedule 1 of the Participant Agreement;

**AND WHEREAS** the Sub-Licensor was issued letters of patent authorizing its continuation to the same extent as if it has been incorporated under Section 312 of the *Corporations Act (1990)* on March 4, 2005 as the Association of Conservation Authorities to, among other things, represent the interests of Conservation Authorities in Ontario, entered into the Participant Agreement on behalf of the Conservation Authorities included in this phase of the Project;

**AND WHEREAS** the Sub-Licensee wishes to have use of the Licensed Products, and has agreed to enter into this Agreement;

**AND WHEREAS** the Sub-Licensor has agreed to grant a sub-license to the Sub-Licensee to have the use of such Licensed Products, upon the terms and conditions herein;

**NOW THEREFORE** the Sub-Licensor and Sub-Licensee agree as follows:

**ARTICLE 1 –SUB-LICENCE**

1.1 The Sub-Licensor hereby grants to the Sub-Licensee a perpetual, non-exclusive, transferable, royalty free, fully paid, world-wide right and licence ("Sub-Licence") to use the Licensed Products listed in Schedule B ("Sub-Licensed Products"), to:

- (a) make and distribute an unlimited number of copies of the Sub- Licensed Products, provided that during the two (2) years following the Effective Date of

the Licence it may only do so for use internally within the Sub-Licensee's organization;

- (b) create, develop, produce and distribute Derivative Products, using the Sub-Licensed Products;
- (c) grant sub-sub-licenses in respect of the Sub-Licensed Products, in accordance with section 1.2 of this Agreement;
- (d) to provide, any of the Sub-Licensed Products to contracted service supplier(s) for any of the uses described in this section, provided that the Sub-Licensee takes such steps as are reasonably necessary to ensure that such contracted service suppliers use the Sub-Licensed Products only for the purpose of providing the contracted service and upon completion of the contracted service dispose of the Sub-Licensed Products either by destroying them or returning them to the Sub-Licensee. The Sub-Licensee shall be responsible for ensuring that a contracted service supplier uses and disposes of the Sub-Licensed Products in accordance with the terms of this Agreement; and
- (e) provide the Sub-Licensed Products where and as required by any Requirements of Law.

1.2 The Sub-Licensee may grant any Person who wishes to obtain the Sub-Licensed Products from it the right to use the Sub-Licensed Products by way of a sub-sub-licence agreement and any such sub-sub-licence agreement shall impose upon those parties the same terms and conditions, in favour of the Ministry as are set out in the Participant Agreement, as may be applicable, which shall in any case include the following provisions of the Participant Agreement: sections 4.6, 4.7, 4.8, 4.9, Article 5, the provision respecting the Ministry's right to terminate the Licence as provided in section 6.5 of the Participant Agreement.

1.3 The Sub-Licensee agrees to abide by the Participant's obligations and covenants of the Participant Agreement, in particular section 4.8, section 4.9 and Article 5. In addition, the Sub-Licensee acknowledges and accepts the provisions respecting the Ministry's right to terminate the Licence as provided in section 6.5 of the Participant Agreement, and in the event that the Licence is terminated, the Sub-Licence hereby granted shall also be terminated.

1.4 The Sub-Licensee will work directly with the Ministry Representative identified in the Participant Agreement for all operational aspects related to the access and use of the Sub-Licensed Products, including but not limited to the following:

- a. Communications;
- b. Identifying geographic areas of interest;
- c. Identifying the Sub- Licensed Products to be accessed;
- d. Acceptance of the Sub-Licensed Products directly from the Supplier; and
- e. Reporting of errors

12.5 The Sub-Licensors agree to meet and fulfill all of the Participant's obligations and covenants in the Participant Agreement.

12.6 The Intellectual Property Rights arising from any modification, improvement, development or translation of the Sub-Licensed Products or from the manufacture of Derivative Products, effected by or for the Sub-Licensee, shall vest in the Sub-Licensee or in such person as the Sub-Licensee shall decide.

12.7 In addition to the restrictions in this section, the Sub-Licensee may not do any of the following in respect of the Sub-Licensed Products:

- (a) sell, sub-sub-license, rent, transfer, disclose, reverse engineer, disassemble, decompile or adapt the Sub-Licensed Products or use them in any manner not expressly authorized by this Agreement;
- (b) alter or remove any copyright notice or proprietary legend contained in or on the Sub-Licensed Products. The Sub-Licensee agrees that any embodiment of the Sub-Licensed Products permitted under this Agreement will contain the following notice: "Includes material © [year] Queen's Printer - ALL RIGHTS RESERVED."

13 The Crown in right of Ontario has the sole ownership of all of the logos, brands, trade-marks and official marks of the Province of Ontario, (collectively referred to as "Provincial Marks") and the Sub-Licensee may not copy, print or display any of the Provincial Marks on any Derivative Product or promotional advertising, or use any of the Provincial Marks for any purpose whatsoever, without the express written permission from the Ministry, on behalf of the Crown in right of Ontario.

## **ARTICLE 2 – WARRANTY, INDEMNITY AND LIMITATION OF LIABILITY**

### **2.1 Limitations**

The Sub-Licensed Products shall be provided, "as is", without warranty or condition of any kind, express or implied from either the Sub-Licensors or the Ministry. The Sub-Licensee expressly waives all warranties or conditions not expressly set out in

this Agreement including, but not limited to, implied warranties or conditions of merchantable quality and fitness for a particular purpose and those arising by statute or otherwise in law or from course of dealing or usage of trade.

## **2.2 Responsibility of Sub-Licensee**

The Sub-Licensee shall be responsible to third parties for any and all Claims arising out of the Sub-Licensee's possession, use, disclosure or publication of the Sub-Licensed Products or Derivative Products or out of a breach of any term of this Agreement by the Sub-Licensee.

## **2.2 Limitation of Liability**

Neither the Sub-Licensors nor the Ministry shall be liable for any Claim arising out of or in connection with this Agreement, whether arising in contract, tort (including negligence and strict liability), breach of warranty or any other legal theory.

## **2.3 Sub-Licensee to Indemnify**

The Sub-Licensee shall indemnify the Sub-Licensors and the Ministry and respective appointees, employees, agents and contractors from all Claims against the Association of Conservation Authorities of Ontario, the Ministry, and any of their respective appointees, employees, agents or contractors arising out of the possession or use of the Sub-Licensed Products by either the Sub-Licensee or its sub-sub-licensee(s).

## **2.4 No Indemnities from Ministry**

Notwithstanding anything else in this Agreement to the contrary, any express or implied reference to the Ministry providing an indemnity or any other form of indebtedness or contingent liability that would directly or indirectly increase the indebtedness or contingent liabilities of the Ministry, whether at the time of execution of this Agreement or at any time during the Term, shall be void and of no legal effect.

## **2.5 The limitations, exclusions and disclaimers expressed in this Article 2 or elsewhere in this Agreement shall apply irrespective of the nature of any claim, cause of action, demand or proceeding, including but not limited to breach of contract, negligence, strict liability, tort or any other theory of law, and irrespective of whether such claim, cause of action, demand or proceeding relates to loss of rights, loss of or damage to property, injury or death, and shall survive any fundamental breach and any termination or expiration of this Agreement.**

## **2.6 This Article 2 shall survive the termination of this Agreement and/or the Sub-Licence.**

# **ARTICLE 3 – PAYMENT**

## **3.1 The Sub-Licensors will pay the Ministry the full amount of the Participant Contribution, as stated in the Participant Agreement.**

3.2 The Sub-Licensors will coordinate with the Ministry to determine the funding contribution required by each of the Conservation Authorities included in this Phase of the Project, the aggregate total of which shall amount to no more than the required Participant Contribution, and HST where applicable, as defined in the Participant Agreement;

3.3 The Sub-Licensee will pay its calculated portion of the Participant Contribution ("Sub-Licensed Fee") to the Sub-Licensors for its use of the Sub-Licensed Products, being \$5,876.68, and HST, where applicable, in accordance with the rates per square km as defined in the Participant Agreement, and is subject to adjustment as provided in section 2.2 and section 2.3 of the Participant Agreement.

3.4 The Sub-Licensee agrees to pay the Sub-Licensed Fee to the Sub-Licensors as follows in two installments, each by cheque payable to "Conservation Ontario" and delivered to:

**Jane Dunning**  
**Office Administrator**  
**Conservation Ontario**  
120 Bayview Parkway  
Newmarket, Ontario  
L3Y 3W3  
905-895-0716, ext 221  
Email: [jdunning@conservationontario.ca](mailto:jdunning@conservationontario.ca)

- i. \$2,938.34, which shall be fifty percent (50%) of the Sub-Licensed Fee payable upon execution of the Sub-Licence agreement and upon receipt of an invoice from the Sub-Licensors;
- ii. \$2,938.34, which shall be fifty percent (50%) of the Sub-Licensed Fee payable upon receipt of an invoice from the Sub-Licensors which shall be no later than March 28, 2016 or within thirty (30) days of the date of delivery by the Supplier of the Sub-Licensed Products to the Sub-Licensee.

#### **ARTICLE 4 - TERMINATION**

##### **4.1 Termination by Sub-Licensors**

The Sub-Licensors may immediately terminate the Sub-Licence upon giving notice to the Sub-Licensee where:

- (a) the Sub-Licensee's acts or omissions constitute a material breach of the Sub-Licence under this Agreement; or
- (b) the Sub-Licensee is adjudged bankrupt, makes a general assignment for the benefit of its creditors or a receiver is appointed on account of the Sub-Licensee's insolvency.

#### **4.2 Termination by Sub-Licensee**

The Sub-Licensee may terminate this Agreement and the Sub-Licence at any time upon written notification to the Sub-Licensor.

#### **4.3 Deletion of Sub-Licensed Products on Termination**

Upon termination of the Sub-Licence, the Sub-Licensee shall immediately delete or destroy all Sub-Licensed Products and any Derivative Products, except those for which the Sub-Licensor has accepted orders to sell, and shall provide notification to the Sub-Licensor thereof.

### **ARTICLE 5 - GENERAL**

5.1 Except as expressly provided otherwise in this Agreement, any capitalized term or phrase shall have its respective meaning as set out in the Participant Agreement.

5.2 The Sub-Licensee Address and Sub-Licensee Representative are as follows, and will be provided to the Sub-Licensor for coordination of delivery and receipt of the Licenced Products, as identified in Schedule 4 of the Agreement:

**Sub-Licensee Representative:**

Name: Geoff Verkade  
Title: Supervisor, GIS Services  
Organization: Niagara Peninsula Conservation Authority  
Address: 250 Thorold Road West, 3rd Floor, Welland, ON  
Email: gverkade@npca.ca

5.4 Each Party represents and warrants that it has the full right and power to enter into this Agreement and there is no agreement with any other Person which would in any way interfere with the rights of the other Party under this Agreement.

5.5 The Parties represent that their respective representatives have the authority to legally bind them to the extent permissible by law. The Parties may designate a different representative by providing notice in writing in accordance with the terms of this Agreement.

5.6 This Agreement embodies the entire agreement between the Parties and supersedes any prior understanding or agreement, collateral, oral or otherwise, existing between the Parties at the date of execution of this Agreement.

5.7 If any term or condition of this Agreement, or the application thereof to the Parties or to any Persons or circumstances, is to any extent invalid or unenforceable, the remainder of this Agreement, and the application of such term or

condition to the Parties, Persons or circumstances other than those to which it is held invalid or unenforceable, shall not be affected thereby.

- 5.8 The headings in this Agreement are for convenience of reference only and in no manner modify, interpret or construe this Agreement.
- 5.9 Neither Party shall be liable for damages caused by delay or failure to perform its obligations under this Agreement where such delay or failure is caused by an event beyond its reasonable control. The Parties agree that an event shall not be considered beyond one's reasonable control if a reasonable business person applying due diligence in the same or similar circumstances under the same or similar obligations as those contained in this Agreement would have put in place contingency plans to either materially mitigate or negate the effects of such event. Without limiting the generality of the foregoing, the Parties agree that force majeure events shall include natural disasters and acts of war, insurrection and terrorism but shall not include shortages or delays relating to supplies or services or lack of money or ability to pay any amounts owing under the Agreement. If a Party seeks to excuse itself from its obligations under this Agreement due to a force majeure event, that Party shall immediately notify the other Party of the delay or non-performance, the reason for such delay or non-performance and the anticipated period of delay or non-performance.
- 5.10 Notices shall be in writing and shall be delivered by postage-prepaid mail, personal delivery, email or facsimile and shall be addressed to, respectively, the Ministry Address to the attention of the Ministry Representative and to the Participant Address to the attention of the Participant Representative. Notices shall be deemed to have been given: (a) in the case of postage-prepaid mail, five (5) Business Days after such notice is mailed; or (b) in the case of personal delivery, email or facsimile one (1) Business Day after such notice is received by the Party to whom such notice is given. In the event of a postal disruption, notices must be given by personal delivery, email or by facsimile. Unless the Parties expressly agree in writing to additional methods of notice, notices may only be provided by the methods contemplated in this paragraph.
- 5.11 Any changes to this Agreement shall be by written amendment signed by the Parties. No changes shall be effective or shall be carried out in the absence of such an amendment.
- 5.12 This Agreement shall endure to the benefit of and be binding upon the Parties and their successors, executors, administrators and their permitted assigns.
- 5.13 This Agreement shall be governed by and construed in accordance with the laws of the Province of Ontario and the federal laws of Canada applicable therein.

## **Schedule “A”**

### **Conservation Ontario SWOOP2015 Participation Agreement**



Conservation  
Ontario Participation ,

## SCHEDULE B – LIST OF SUBLICENSED PRODUCTS

1. Project Level Data
  - a. AutoCorrelated\_DEM
    - i. Raster DEM (Digital Elevation Model) used to rectify imagery – 2 M \*.IMG files
    - ii. Read\_me file to help users understand the quality of the DEM and it's intended use
  - b. Flight\_Lines
    - i. Shapefiles with flight lines and way points
    - ii. Includes acquisition dates of when the imagery was acquired.
  - c. Flight\_Mission\_Reports
    - i. Contains the flight logs for each lift in the field, and also contains conditions as observed.
    - ii. Mission ID Naming Scheme - First 3 characters contain the GPS day, then next two characters contain the sensor number, next characters identify project/plane, and the last two digits indicate the lift number for the plan/sensor. Example: 1162213001701 = 116(day) 22(sensor) 130017(project/plane) 01(lift# for that sensor)
  - d. Metadata
    - i. Metadata that includes details about the project and data in .html format.
    - ii. Readme.txt files describing products
  - e. Quality\_Control\_Report
    - i. Available from MNRF upon request .
  - f. SWOOP2015\_Participant\_Tile\_Index
    - i. Shapefile containing the tiles selected of the area(s) of interest for an organization and will be used to "clip" a subset
    - ii. Defines the geographic extent for each delivery/organization
    - iii. Provided directly to Fugro by MNRF, as determined with each participating organization
2. SWOOP2015\_20cm\_8BIT\_Orthophotography
  - a. All tiles will be labelled/named with the following convention/scheme: (Sample tile label: 1km173000487202015PROJECT.tiff) --- where:
    - i. 1km – represents the tile extent (1km x 1km)
    - ii. 17 – represents the UTM zone that the imagery is located/projected in
    - iii. 3000 – represents the truncated easting value of the lower left corner of the tile
    - iv. 48720 – represents the truncated northing value of the lower left corner of the tile
    - v. 2015 – represents the year of acquisition of the imagery
    - vi. PROJECT – represents a Project name or identifier (to be determined by MNRF prior to acquisition)
    - vii. .tiff – represents the file format (TIFF or JP2)

- viii. *NOTE:* other associated image related files, such as world files etc. will be included, where applicable

- b. GEOTIFF
  - i. Full resolution (20cm) RGBNir geotiff tiles matching organizational area(s) of interest tile index
  - ii. Images provided in 1 km x 1km tiles as per prescribed naming conventions.
  - iii. Separated by UTM zone, where applicable
- c. JPEG2000
  - i. Compressed (10 to 1) RGBNir Jp2000 tiles matching organizational area(s) of interest tile index
  - ii. Images provided in 1 km x 1km tiles as per prescribed naming conventions.
  - iii. Separated by UTM zone, where applicable

- 3. Stereo\_Tiffs\_16bit\_RGBNiR\_&\_SocetSet\_Support\_&\_Shapefile\_Footprints
  - a. Stereo imagery
    - i. packaged in a manner for import into ERDAS Stereo Analyst
  - b. Flight\_Index\_Used\_for\_ERDAS\_Stereo\_Analyst
    - i. Shapefiles of stereo imagery in the following format
      - 1. L1\_1413\_130502\_162137\_RGBNB16L1 or
      - 2. L1\_1413\_130502\_162137\_RGBNN00L1
        - a. L1 - Leica naming for viewable stereo images
        - b. 1413 – Sensor
        - c. 130502 - 2013, may, day 2
        - d. 162137 - Time when the flight line started in UTC
        - e. RGBNB16L1 - Red, Green, Blue, (N) for NiR, Backward 16 degree, Leica L1 ie stereo
        - f. RGBNN00L1 - Red, Green, Blue, (N) for NiR, Nadir 0 degree, Leica L1 ie stereo
  - c. Aerial\_Triangulation\_Report
    - i. Residuals when comparing ground control vs stereo imagery parameters as they relate to each sensor.
    - ii. Merged Shapefile of AT block footprints
  - d. Camera\_Calibrations
    - i. Leica factory camera calibrations with updated parameters using Leica approved procedures in field.
  - e. GPS/IMU files as required for stereo products

## Lise Gagnon

---

**From:** Matthews, Bryce (MNRF) <bryce.matthews@ontario.ca>  
**Sent:** September 30, 2019 11:14 AM  
**To:** Geoffrey Verkade  
**Subject:** RE: SWOOP 2015 cost

Hi Geoff,

The agreement was with CO, so I do not exactly know what you paid them.

The rate was 2.27 per km sq.

I would budget at least \$3.

This time the agreement will be with CO, but u will pay us. Each CA's contribution will be outlined in the agreement.

B

**From:** Geoffrey Verkade <gverkade@npca.ca>  
**Sent:** September 27, 2019 12:21 PM  
**To:** Matthews, Bryce (MNRF) <bryce.matthews@ontario.ca>  
**Subject:** SWOOP 2015 cost

Hi Bryce,

Sorry I couldn't make London, hope you enjoyed meeting Brian from our offices.

Could you shoot me what NPCA paid for SWOOP 2015? I am making my capital business case for SWOOP 2020 so I need a rough number. I'll add contingency on it should the partnership not be as cost effective as it was in 2015.

This is somewhat time sensitive for me. If you could get me this at your earliest convenience I'd appreciate it. My case will be submitted by end of day Monday. Its written I just need to plunk in a number.

Gratefully,

Geoff Verkade

Senior Manager, Integrated Watershed Planning/Information Management  
Niagara Peninsula Conservation Authority

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## Capital Project Detail - 2020

<b>Project Title:</b>	Data Center Cyclical Server Refresh	<b>Project #</b>	Pending
<b>G/L Account(s):</b>	Pending	<b>Asset Class</b>	Equipment
<b>Priority Classification:</b>	Asset Integrity – Proactive Replacement	<b>Division</b>	Corporate Services
<b>Priority Ranking:</b>	4	<b>Project Status</b>	Draft
<b>Site/Location:</b>	Main Office	<b>Grouping</b>	B-2
<b>Project Lead:</b>	Geoff Verkade/Skycomp	<b>Project Start Date</b>	Jan-20
<b>Funding Source:</b>	Special Levy - ALL	<b>Project Completion</b>	Mar-20
<b>Partner (if applicable):</b>		<b>Municipality</b>	ALL

## PROJECT DESCRIPTION, RATIONALE, BACKGROUND, LINKAGES AND IMPLICATIONS

*Provide a detailed description of the project, why the project needs to be done now and consequences of deferring the project. Include historical cost and typical asset life cycle. Indicate if the project is linked to any other current or future project (capital or operating) and any impact to related project(s) if this project is approved or deferred.*

In 2015 the Niagara Peninsula Conservation Authority parted with the Region of Niagara for shared services with respect to information technology in order to be more autonomous and responsive to its business needs from an information management perspective through a managed services model from the private sector. A datacenter was established in the main office to provide the network infrastructure for NPCA's information architecture. Two servers were configured to host NPCA's information services and support its backup and disaster recovery strategy. One of these servers was replaced in 2017 as part of a datacenter refreshment strategy to stagger replacement costs biannually over the asset's 4 year life cycle based on warranty duration. This project is intended to replace the remaining original server purchased in 2015 as part of said datacenter refreshment strategy. The server will also increase the storage capacity of the network as it grows due to the ongoing implementation of several information systems/business solutions.

## NEEDS ANALYSIS &amp; BENEFITS

*Indicate project benefits, i.e. improving health and safety, customer service, increased ROI, heritage, educational, etc.*

The staggered biannually refreshment of one of the servers in the datacenter is critical in delivering a highly available technology environment for the Authority to manage its information architecture (the structural design of its shared information environments), and deliver information technology services to the Authority. Lifecycle of the servers is 4 years based on the ability to purchase warranty of the machine. Beyond the lifecycle replacement of the existing asset, the new server introduces additional storage capacity and processing power required by several existing information management systems on the network (ArcGIS Enterprise and CityView) , as well as providing spatial data services publicly (GIS Open Data Initiative).

## Capital Project Detail - 2020

Project Title: Data Center Cyclical Server Refresh

Project #

Pending

## RISKS &amp; MITIGATION STRATEGY

Indicate project risks and proposed mitigation; include risk assessments if the project is deferred (low/medium/high) and any risks during or post implementation. Include direct costs of not proceeding (if known) as well as any performance or service related risks.

Risks to the project are minimal. Server replacement and upgrades are standard and best practice regularly completed by the managed services provider. The other server in the datacenter and the one in the colocation environments can accommodate its hosts should there be any complications or emergency. Deferral of the project would mean relying on a server that is not covered under warranty at the end of its lifecycle and resources would be limited in application to the increased demand for processing power by our business solutions as upgrades and continuous improvement projects are implemented.

## PROJECT COST &amp; FORECAST

Description	Prior Year(s)	2020	2021	2022	2023	2024+
Planning						
Design						
Pre-Construction						
Construction						
Internal salaries & benefits						
Internal resources - non-salary						
Warranty						
Facilities						
Equipment		23,000				
Contingency						
Other						
<b>TOTAL</b>	-	<b>23,000</b>	-	-	-	-

## PROJECT MILESTONES

Percent Complete	25%	50%	75%	100%
Projected Date (month/year) milestone met				Q1

## CASH FLOW PROJECTION (Current Year Only)

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Projected cash flow requirements - current year	23,000			

## Capital Project Detail - 2020

Project Title: Data Center Cyclical Server Refresh

Project #

Pending

## OTHER

Asset useful life: 4 years

Projected impact on operations annually: \$ - Maintenance covered in Managed Services Agreement

## Return on investment (ROI)

gain from investment:

cost of investment:

23,000

ROI:

## Payback Period

Year

Investment

Annual Savings/Revenues

Cumulative Cost (savings)

0

1

2

## NOTES

Name and Title

Signature

Date



Prepared By:  
April Jean-Marie  
april@skycomp.ca  
(905) 228-0315



Prepared For:  
Niagara Peninsula Conservati  
Geoff Verkade

Date: Sep 12, 2019

## QUOTE

UNSAVED

Your technology support  
provider partner.

Description	Unit Price	Qty	Ext. Price
Lenovo ThinkSystem SR590, 192GB Ram, 8TB Usable Storage with 5 Year NBD Warranty.	\$18,575.20	1	\$18,575.20
Lenovo ThinkSystem SR590 7X99AD3DNA 2U Rack Server - 1 x Xeon Silver 4110 - 16 GB RAM HDD SSD - 12Gb/s SAS, Serial ATA, RAID Controller - 2 Processor Support - 0, 1, 5, 6, 10, 50, 60, JBOD RAID Levels - Matrox G200 16 MB Graphic Card - Gigabit Ethernet - Yes - 1 x 750 W			
Lenovo Intel Xeon 4110 Octa-core (8 Core) 2.10 GHz Processor Upgrade - 11 MB Cache - 3 GHz Overclocking Speed - 14 nm - Socket 3847 - 85 W			
(11) Lenovo 16GB DDR4 SDRAM Memory Module - 16 GB (1 x 16 GB) - DDR4 SDRAM - 2666 MHz - 1.20 V - Registered - 288-pin - DIMM			
(4) Lenovo 8 TB Hard Drive - 3.5" Internal - SAS (12Gb/s SAS) - 7200rpm - Hot Swappable			
Lenovo ThinkSystem SR550/SR590/SR650 x16/x8(or x16) PCIe FH Riser 2 Kit			
Lenovo ThinkSystem I350-T4 PCIe 1Gb 4-Port RJ45 Ethernet Adapter By Intel - PCI Express 2.0 x4 - 4 Port(s) - 4 - Twisted Pair			
Lenovo ThinkSystem 750W (230/115V, Platinum Hot-Swap Power Supply - 750 W - 120 V AC, 230 V AC			
Lenovo Standard Power Cord - For Server - 120 V AC, 230 V AC Voltage Rating - 10 A Current Rating			
ThinkSystem 2U CMA Upgrade Kit for Toolless Slide Rail - 1			
Lenovo Foundation Service - 5 Year Extended Warranty - Warranty - On-site - Maintenance - Parts & Labor - Physical Service			

1 of 2

## Capital Project Detail - 2020

<b>Project Title:</b>	Annual PC Replacements	<b>Project #</b>	Pending
<b>G/L Account(s):</b>	Pending	<b>Asset Class</b>	Office Equipment
<b>Priority Classification:</b>	Asset Integrity – Proactive Replacement	<b>Division</b>	Corporate Services
<b>Priority Ranking:</b>	4	<b>Project Status</b>	Draft
<b>Site/Location:</b>	All work locations	<b>Grouping</b>	B-2
<b>Project Lead:</b>	Geoff Verkade/Skycomp	<b>Project Start Date</b>	Jan-20
<b>Funding Source:</b>	Special Levy - ALL	<b>Project Completion</b>	Dec-20
<b>Partner (if applicable):</b>		<b>Municipality</b>	ALL

## PROJECT DESCRIPTION, RATIONALE, BACKGROUND, LINKAGES AND IMPLICATIONS

*Provide a detailed description of the project, why the project needs to be done now and consequences of deferring the project. Include historical cost and typical asset life cycle. Indicate if the project is linked to any other current or future project (capital or operating) and any impact to related project(s) if this project is approved or deferred.*

The Niagara Peninsula Conservation Authority currently has 66 computers managed under the managed services contract. Machines are purchased with a 5 year extended warranty and machines are recommended to be replaced within this timeframe to keep all assets under manufacturer warranty. There are currently 38 desktops of which 2 have GIS specifications, 28 are laptops and most deployments consist of 2 monitors to enable multi tasking (i.e.. viewing a digital map on one while crafting a comment letter in the other). This project will responsibly replace one fifth of the NPCA's computer inventory (shift from four year cycle), addresses some shuffling of assets around to make sure positions have the appropriate device for the role (a greater balance of laptops, GIS workstations, and a specialty multimedia workstation and associated equipment), and accounts for the growth positions identified and approved in the operating budget.

## NEEDS ANALYSIS &amp; BENEFITS

*Indicate project benefits, i.e. improving health and safety, customer service, increased ROI, heritage, educational, etc.*

The project proactively plans to replace a factored amount of the NPCA's inventory ensuring staff have computers adequate to perform successfully in their role. By replacing computers within the warranty window ensures that should an asset fail, it's fix or replacement does not carry financial implications.

## Capital Project Detail - 2020

Project Title: Annual PC Replacements

Project #

Pending

## RISKS &amp; MITIGATION STRATEGY

Indicate project risks and proposed mitigation; include risk assessments if the project is deferred (low/medium/high) and any risks during or post implementation. Include direct costs of not proceeding (if known) as well as any performance or service related risks.

Risks include not remaining compatible and adequate to run the Authority's information system business solutions (CityView, Sage, ArcGIS, Norming), as well as meeting the standard for support through the managed services provider contract.

## PROJECT COST &amp; FORECAST

Description	Prior Year(s)	2020	2021	2022	2023	2024+
Planning						
Design						
Pre-Construction						
Construction						
Internal salaries & benefits						
Internal resources - non-salary						
Warranty						
Facilities						
Equipment	35,000	45,000				
Contingency						
Other						
<b>TOTAL</b>	<b>35,000</b>	<b>45,000</b>	-	-	-	-

## PROJECT MILESTONES

Percent Complete	25%	50%	75%	100%
Projected Date (month/year) milestone met		Jan-20	Jul-20	Dec-20

## CASH FLOW PROJECTION (Current Year Only)

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Projected cash flow requirements - current year	30,000	5,000	5,000	5,000

## Capital Project Detail - 2020

Project Title: Annual PC Replacements

Project #

Pending

## OTHER

Asset useful life: 5 years

Projected impact on operations annually: \$ -

## Return on investment (ROI)

gain from investment:

cost of investment:

80,000

ROI:

## Payback Period

Year

Investment

Annual Savings/Revenues

Cumulative Cost (savings)

0

1

2

## NOTES

Name and Title

Signature

Date



## NPCA COMPUTER REPLACEMENT POLICY

SHVcomp Solutions, Inc.

Machine name	Computer Type	Location	User	Expiry Date	Estimated price	Notes
4CZ1300BSL	Laptop - T series	Balls Falls	Kerry Royer	9/12/2014	\$2,515.38	
2UA3260RWC	Desktop - M series	Balls falls	Jill Walters-Klamer	9/7/2016	\$1,490.47	
2CE40404ZM	Laptop - T series	Welland	Lisa McManus - old	2/4/2017	\$2,515.38	
2CE4230FFK	Laptop - T series	Welland	Kiana Zasso	7/12/2017	\$2,515.38	This is a cc
NPCA-MJ02RDFF	Desktop-P Series	Welland	Brian Lee	6/12/2018	\$2,212.53	
NPCA-5CB3050RBH	Laptop - T series	Welland	Brendan Disher	8/15/2018	\$2,515.38	Was a surr
NPCA-PC08B4NG	Laptop - T series	Welland	Geoff Verkade	12/6/2018	\$2,515.38	Means cur
NPCA-PC0A0WZU	Laptop - T series	Welland	Kim Frohlich	2/20/2019	\$2,515.38	
NPCA-PC09PBTF	Laptop - T series	Balls Falls	Jill Walters-Klamer	2/20/2019	\$2,515.38	
NPCA-MJ03NMJE	Desktop - Mseries	Wainfleet	Michael MacIntyre	5/23/2019	\$1,490.47	
NPCA-PC0BXXRT	Laptop - T series	Balls Falls	Erika Navarro-Meza	6/27/2019	\$2,515.38	
NPCA-PC0BXXPX	Laptop - T series	gainsborough	Jeff Fazekas	7/12/2019	\$2,515.38	
NPCA-PC0BXXSO	laptop-E series	Chippawa	Nate Devos	8/2/2019	\$1,691.59	
NPCA-PC0EBM8K	Laptop - T series	Balls Falls	Adam Christie	8/14/2019	\$2,515.38	
		Welland	Restoration Growth		\$1,691.59	
		Welland	Other 2020 Growth		\$1,691.59	
		Welland	Other 20202 Growth		\$1,691.59	
			subtotal		34,598.25	
		Welland	MultiMedia Laptop		5K	
		Welland	MultiMedia NAS		5K	
					44598.25	

## Capital Project Detail - 2020

<b>Project Title:</b>	Offsite Network Backup and Archive	<b>Project #</b>	Pending
<b>G/L Account(s):</b>	Pending	<b>Asset Class</b>	Office Equipment
<b>Priority Classification:</b>	Operational Efficiency	<b>Division</b>	Corporate Services
<b>Priority Ranking:</b>	4	<b>Project Status</b>	Draft
<b>Site/Location:</b>	Main Office	<b>Grouping</b>	B-2
<b>Project Lead:</b>	Geoff Verkade/Skycomp	<b>Project Start Date</b>	Jan-20
<b>Funding Source:</b>	Special Levy - ALL	<b>Project Completion</b>	Dec-20
<b>Partner (if applicable):</b>		<b>Municipality</b>	ALL

## PROJECT DESCRIPTION, RATIONALE, BACKGROUND, LINKAGES AND IMPLICATIONS

*Provide a detailed description of the project, why the project needs to be done now and consequences of deferring the project. Include historical cost and typical asset life cycle. Indicate if the project is linked to any other current or future project (capital or operating) and any impact to related project(s) if this project is approved or deferred.*

The Niagara Peninsula Conservation Authority network is configured for high availability with several redundancies incorporated to mitigate failures, disasters, and other threats. The NPCA datacenter is replicated offsite at its co-located server infrastructure in the managed service providers datacenter however in the event of disaster at both there is no offline offsite physical backups. Further the network incorporates a limited data retention function as this topic is typically address at the information management level through the implementation of a specific business solution. Deleted files are recoverable for a limited timeframe before the operating system starts using the disk space again. This project will see the acquisition of 14 external hard drives with capability to backup the entire NPCA network that will enable annual archives of the network as well as a roving 12 month snapshot of the network should the recovery of deleted files be necessary. The physical external hard drives will be stored offsite, meaning not the NPCA office or the NPCA infrastructure in the managed service providers datacenter so that if a massive compromise or failure at both environments occurs, a backup of the network would persist for business continuity. A 2018 archive of the NPCA network already exists.

## NEEDS ANALYSIS &amp; BENEFITS

*Indicate project benefits, i.e. improving health and safety, customer service, increased ROI, heritage, educational, etc.*

The project proactively plans to implement a third redundancy to the network from a back up and disaster recovery perspective that transcends the network configuration. Further, it address issues that have arisen in the past with data retention in the absence of a information system as a business solution to assist staff with implementing its data retention policies.

## Capital Project Detail - 2020

Project Title: Offsite Network Backup and Archive

Project #

Pending

## RISKS &amp; MITIGATION STRATEGY

Indicate project risks and proposed mitigation; include risk assessments if the project is deferred (low/medium/high) and any risks during or post implementation. Include direct costs of not proceeding (if known) as well as any performance or service related risks.

Risks include corporate data loss in extreme circumstances should the project be deferred. Further, in the absence of an electronic document management system implemented with data retention considerations, data can be deleted by accident or inappropriately, and if undetected, would eventually be entirely unrecoverable if deferred.

## PROJECT COST &amp; FORECAST

Description	Prior Year(s)	2020	2021	2022	2023	2024+
Planning						
Design						
Pre-Construction						
Construction						
Internal salaries & benefits						
Internal resources - non-salary						
Warranty						
Facilities						
Equipment		6,500	400	400	400	400
Contingency						
Other						
<b>TOTAL</b>	-	<b>6,500</b>	<b>400</b>	<b>400</b>	<b>400</b>	<b>400</b>

## PROJECT MILESTONES

Percent Complete	25%	50%	75%	100%
Projected Date (month/year) milestone met	Q1	Q2	Q3	Q4

## CASH FLOW PROJECTION (Current Year Only)

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Projected cash flow requirements - current year	6,500			

## Capital Project Detail - 2020

Project Title: Offsite Network Backup and Archive

Project #

Pending

OTHER

Asset useful life: 6 years

Projected impact on operations annually: \$ -

Return on investment (ROI)

gain from investment:

cost of investment:

8,100

ROI:

Payback Period

Year

Investment

Annual Savings/Revenues

Cumulative Cost (savings)

0

1

2

NOTES

Name and Title

Signature

Date



Prepared By:  
**April Jean-Marie**  
april@skycomp.ca  
(905) 228-0315




Prepared For:  
**Niagara Peninsula Conservati**  
**Geoff Verkade**

Date: **Sep 1, 2018**

## QUOTE

SPOQ3878

Your technology support  
provider partner.

Description	Unit Price	Qty	Ext. Price
WD My Book 8TB USB 3.0 desktop hard drive with password protection and auto backup software - USB 3.0 - Black - Retail - 256-bit Encryption Standard	\$367.74	14	\$5,148.36
			
StarTech.com 2-Port USB 3.1 (10Gbps) and eSATA PCIe Card - 1x USB-A and 1x eSATA - PCI Express x4 - Plug-in Card - 1 USB Port(s) - 1 USB 3.1 Port(s) - Linux, PC: PCIe CARD 1X U...	\$79.44	1	\$79.44
6FT USB CABLE A-A M/F EXT. 3.0	\$9.99	1	\$9.99
Solution Subtotal			\$5,237.79
Sales Tax			\$670.59
<b>Total</b>			<b>\$5,908.38</b>

To accept this quotation, sign here and return: \_\_\_\_\_

## **Lise Gagnon**

---

**From:** Geoffrey Verkade  
**Sent:** September 13, 2018 3:00 PM  
**To:** David Barrick  
**Cc:** Serge Paquin  
**Subject:** RE: Your quote is ready on QuoteValet.com

Hi David,

Below is one of those that didn't come up yesterday. Ok to approve, and if so preference where to charge (small upset)?

**Geoff Verkade**  
**Manager, Information Management and Technology Services**  
Niagara Peninsula Conservation Authority

**From:** Geoffrey Verkade  
**Sent:** Wednesday, September 05, 2018 11:41 AM  
**To:** David Barrick <dbarrick@npca.ca>  
**Cc:** Serge Paquin <serge@skycomp.ca>  
**Subject:** FW: Your quote is ready on QuoteValet.com

Hi David,

The link below is a quote from Skycomp that is some of the last action items following up from the krypto incident earlier this year. I believe we discussed this previously and you approved in concept however I haven't found a record in email to remind me of where we agreed to charge this too as it's a small upset.

It's the third redundancy to the back up our network (additional domain configuration measures were taken after the event as well to further prevent this from ever happening again). The network is backed up daily in both environments (office and offsite on our infrastructure in Skycomp's datacenter) on our NAS devices and RAID configurations, however when there is a human error such as in the krypto incident and the servers and back ups are compromised this quote provides the off network backup.

Its 14 roving external drives for monthly backups of the entire network that would be stored offline.

Before I approve I wanted to run this by you one last time and double check where were going to charge it too.

No doubt this also supports aspects of our retention policy as well.

Any questions let me know, can discuss at anytime,

**Geoff Verkade**  
**Manager, Information Management and Technology Services**  
Niagara Peninsula Conservation Authority

**From:** April Jean-Marie <april@skycomp.ca>  
**Sent:** Tuesday, September 04, 2018 1:14 PM

**To:** Geoffrey Verkade <[gverkade@npca.ca](mailto:gverkade@npca.ca)>  
**Subject:** Your quote is ready on QuoteValet.com

Hello Geoff,

I've prepared a quote for your cold storage solution for your data. Please let me know if you have any questions.

You can view it, accept it, or make changes to it through our website by clicking [here](#).

Best Regards,

**April Jean-Marie**

Skycomp Solutions Inc.  
80 King Street, Suite 415  
St. Catharines, ON L2R 7G1  
Canada

**Phone** (905) 228-0315  
**Fax** 905-892-8946  
**E-Mail** [april@skycomp.ca](mailto:april@skycomp.ca)

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## Capital Project Detail - 2020

<b>Project Title:</b>	Modern Phone System	<b>Project #</b>	Pending
<b>G/L Account(s):</b>	Pending	<b>Asset Class</b>	Equipment
<b>Priority Classification:</b>	Asset Integrity – Imminent Breakdown	<b>Division</b>	Corporate Services
<b>Priority Ranking:</b>	5	<b>Project Status</b>	Draft
<b>Site/Location:</b>	All Locations	<b>Grouping</b>	B-2
<b>Project Lead:</b>	Geoff Verkade	<b>Project Start Date</b>	Jan-20
<b>Funding Source:</b>	Special Levy - ALL	<b>Project Completion</b>	Dec-20
<b>Partner (if applicable):</b>		<b>Municipality</b>	ALL

## PROJECT DESCRIPTION, RATIONALE, BACKGROUND, LINKAGES AND IMPLICATIONS

*Provide a detailed description of the project, why the project needs to be done now and consequences of deferring the project. Include historical cost and typical asset life cycle. Indicate if the project is linked to any other current or future project (capital or operating) and any impact to related project(s) if this project is approved or deferred.*

The current phone system at the NPCA office is well past the end of its lifecycle. It is an older Nortel Norstar System and is still functioning however the service provider maintaining the system and updating it as changes are required has cautioned it can not guarantee that in future power outages, the programming may not be restorable in spite of the UPS that is currently mitigating shorter power losses. Further, the system does not currently include simple telecom functions such as call display, or the ability to transfer outside of the main office to Balls Falls or our other work locations. This project proposes to replace the existing system with modern telecom technology such as SIP trunking that will alleviate these current pain points with the existing system but also introduce operational costs savings due to the conversion to voice over internet. Scope includes system, handsets, and Power over Ethernet (PoE) switches for the datacenters at the main office and Balls Falls. On premise versus hosted solution to be determined through procurement process starting with an RFI to determine a solution, prior to RFP to acquire competitively.

## NEEDS ANALYSIS &amp; BENEFITS

*Indicate project benefits, i.e. improving health and safety, customer service, increased ROI, heritage, educational, etc.*

Current system could fail at any moment and impedes business efficiency. Technology to consider for the new system can reduce operating costs by eliminating the need for costly analogue voice lines compared to the costs of facilitating voice over IP. The new system, typically subscription based, will enable the Authority to communicate and forward calls to either their handset, computer (laptop), and corporate mobile phone enabling staff with flexible working capabilities. Additional functions as the call recording and archiving voicemails can add value to the NPCA's various compliance roles with the forest by law and its regulations.

## Capital Project Detail - 2020

Project Title: Modern Phone System

Project #

Pending

## RISKS &amp; MITIGATION STRATEGY

Indicate project risks and proposed mitigation; include risk assessments if the project is deferred (low/medium/high) and any risks during or post implementation. Include direct costs of not proceeding (if known) as well as any performance or service related risks.

Risk includes a total system failure limiting staff communication capabilities to email and corporate cell phones.

## PROJECT COST &amp; FORECAST

Description	Prior Year(s)	2020	2021	2022	2023	2024+
Planning						
Design						
Pre-Construction						
Construction						
Internal salaries & benefits						
Internal resources - non-salary						
Warranty						
Facilities						
Equipment		50,000				
Contingency						
Other						
<b>TOTAL</b>	-	<b>50,000</b>	-	-	-	-

## PROJECT MILESTONES

Percent Complete	25%	50%	75%	100%
Projected Date (month/year) milestone met	Q1		Q2	Q3

## CASH FLOW PROJECTION (Current Year Only)

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Projected cash flow requirements - current year			50,000	

## Capital Project Detail - 2020

Project Title: Modern Phone System

Project #

Pending

OTHER

Asset useful life: 5 years

Projected impact on operations annually: \$ -

Return on investment (ROI)

gain from investment:

cost of investment:

50,000

ROI:

Payback Period

Year

Investment

Annual Savings/Revenues

Cumulative Cost (savings)

0

1

2

NOTES

Name and Title

Signature

Date

Niagara Peninsula Conservation Authority  
Geoff Verkade  
250 Thorold Road West; 3rd Floor  
Welland, ON L3C 3W2



Telecable.ca & Security  
227 Bunting Road, Unit H  
St. Catharines, ON  
L2M 3Y2

## **Phone System Upgrade**

**Proposal for:**  
**Niagara Peninsula Conservation Authority**  
**30/09/2019**

## E-MetroTel uCX 250 PBX

100 Extension Phone Server with expansion slots for FXO cards

- 100 Extension maximum
- FREE Voicemail for all extensions
- FREE Unified Messaging (voicemail to email) for all extensions\*
- FREE Find me / Follow me for all extensions
- Expansion slots for FXO cards with easy installation
- 100+ Telephony features
- Nortel - Norstar / BCM / M1 / CS1000 – Digital and IP sets supported
- E-MetroTel - Infinity 5000 Series sets supported
- Standard SIP telephones and other manufacturer sets supported



\*Download brochure with link below - NEW Product!



\*Unified messaging requires an email address with SMTP server access to be used.

## E-MetroTel DSM16

E-MetroTel Digital Station Module - 16 Extensions

- Supports 16 digital telephones.
- Can be networked with multiple DSM16 modules.
- Works locally with UCX appliance or with Cloud Hosted.
- RJ21 Connector for digital telephones.
- RJ-45 LAN Connection.
- Status Indicator LED.



\*No Brochure Available

## E-MetroTel Infinity 5010 XSTIM/SIP Phone

Infinity 5010 - 10 button, innovative Gigabit Color IP Phone, with a 4.3" TFT-LCD - 480x272 pixel display.

- 4.3" TFT-LCD with 480 x 272 pixel.
- Display - 4.3" TFT-LCD with 480 x 272 pixel. Buttons - 10 programmable.
- Infinity 5010 is optimized for executive use for major decision makers and those needing more programmable buttons.
- Programmable buttons can be configured with UCX features like BLF, Auto-Dial, Forward, Call Pickup, and many other features.
- The 5010 features a high-resolution TFT-LCD display and HD quality audio.

Firmware: XSTIM or SIP

\*Download brochure with the link below



## E-MetroTel Infinity 5006 XSTIM/SIP Phone

Infinity 5006 - 6 button, innovative Gigabit Color IP Phone, with a 2.8" TFT-LCD - 320x240 pixel display.

- Display - 2.8" TFT-LCD with 320 x 240 pixels. Buttons - 6 programmable.
- Infinity 5006 is optimized for knowledge workers, contact center agents, and those needing fewer programmable buttons.
- The 5006 features a smaller high-resolution TFT-LCD display and HD quality audio.

Firmware: XSTIM or SIP

\*Download brochure with the link below



## E-Metrotel Infinity 5046 XSTIM/SIP Phone Expansion

Infinity 5046 - 40 Button expansion module, with an 800x480 pixel color graphic display.

- Display - 800 x 480 color graphic LCD.
- Buttons - 40 programmable.
- The 5046 expands the functional capability of your 5010 or 5006 device.
- Two page views allow for 40 programmable buttons that work as BLF, Auto-Dial, Speed Dial, Call Park, Pick Up, and numerous other UCX features.

Firmware: XSTIM or SIP



\*Download brochure with the link below



## SIP Offering

### Canadian owned and operated SIP Trunking



Telecable.ca & Security is proud to offer a 100% Canadian owned and operated solution for your SIP trunking needs. Our premium, enterprise class, SIP service provides access to most rate centers across Canada and the United States. Our SIP services are built with security and redundancy in mind to ensure your business communications stay up and running, no matter what. Our resources are shared across multiple systems and locations across North America, offering true g711 uncompressed voice

quality for a crystal clear communication.

By choosing Telecable.ca & Security as your trusted SIP provider you also gain access to our local, friendly technical support and billing. Reduce your monthly bills and choose Telecable.ca & Security as your local communications and security specialists.

## Rate Card:

### Unlimited Canada OR United States:

- \$27.95 / Channel / Month
- Unlimited incoming minutes
- Unlimited Canadian Provinces **OR** Unlimited Calling to Continental United States

### Unlimited Canada AND United States:

- \$29.95 / Channel / Month
- Unlimited incoming minutes
- Unlimited Canadian Provinces **AND** Unlimited calling to Continental United States

### DID (Phone Numbers):

- Canadian / United States Phone Number (DID - Any rate center): \$2.50 / Month
- Toll Free Numbers: \$3.00 / Number / Month - Incoming minutes \$0.05 / min

### Other Services:

- Local Number Porting (LNP) - \$19.95 / Number
- E911 Listing - \$1.50 / Listing / Month

- Setup Charge (Per Channel) - \$9.95 / Channel
- New DID Provisioning - \$4.95 / DID

## Niagara Peninsula Conservation Authority - Head Office

### 3 Year Warranty Included!

Description	Time/Quantity	Rate (CAD)	Tax	Discount	Total
› UCX250 base system 0x8	1	\$ 1,499.00	HST	\$ 0.00	\$ 1,499.00
› UCC Enterprise Expansion Block, 9 to 25 extensions	17	\$ 159.00	HST	\$ 0.00	\$ 2,703.00
› UCC Expansion Block of 20 extensions	20	\$ 99.95	HST	\$ 0.00	\$ 1,999.00
› UCC Expansion Block of 5 extensions	5	\$ 109.00	HST	\$ 0.00	\$ 545.00
› Digital Station Module for 16 digital extensions	4	\$ 999.00	HST	\$ 0.00	\$ 3,996.00
› ESSTDN-3. Standard Software Support (1st to 3rd year), per extension	1	\$ 1,950.00	HST	\$ 0.00	\$ 1,950.00
› Hardware Warranty. UCX250. 2nd and 3rd Year	1	\$ 499.00	HST	\$ 0.00	\$ 499.00
› Hardware Warranty for DSM16. 2nd and 3rd year.	4	\$ 399.00	HST	\$ 0.00	\$ 1,596.00
› VoIP Technician	20	\$ 120.00	HST	\$ 15.00	\$ 2,385.00
Subtotal:					\$ 17,172.00
HST (13%):					\$ 2,232.36
Total:					\$ 19,404.36

## Niagara Peninsula Conservation Authority - Balls Falls Office

### 3 Year Warranty Included!

Description	Time/Quantity	Rate (CAD)	Tax	Discount	Total
› UCX250 base system 0x8	1	\$ 1,499.00	HST	\$ 0.00	\$ 1,499.00
› Digital Station Module for 16 digital extensions	1	\$ 999.00	HST	\$ 0.00	\$ 999.00

Description	Time/Quantity	Rate (CAD)	Tax	Discount	Total
› Integrated 4P FXO Trunk card	1	\$ 499.00	HST	\$ 0.00	\$ 499.00
› ESSTDN-3. Standard Software Support (1st to 3rd year), per extension	1	\$ 239.70	HST	\$ 0.00	\$ 239.70
› Hardware Warranty. UCX250. 2nd and 3rd Year	1	\$ 499.00	HST	\$ 0.00	\$ 499.00
› Hardware Warranty for DSM16. 2nd and 3rd year.	1	\$ 399.00	HST	\$ 0.00	\$ 399.00
› VoIP Technician	8	\$ 120.00	HST	\$ 15.00	\$ 945.00
Subtotal:					\$ 5,079.70
HST (13%):					\$ 660.36
Total:					\$ 5,740.06

## Voice Services - Paid Monthly

Supplied by Telecable.ca & Security

Description	Time/Quantity	Rate (CAD)	Tax	Total
› Unlimited Canada AND United States	8	\$ 29.95	HST	\$ 239.60
› DID Phone Numbers	2	\$ 2.50	HST	\$ 5.00
Main Line + FAX				
› E911 Service	1	\$ 1.50	HST	\$ 1.50
Subtotal:				\$ 246.10
HST (13%):				\$ 31.99
Total:				\$ 278.09



## **PROPOSAL**

**For**

**Niagara Peninsula Conservation Authority**

**Attention: Geoffrey Verkade**

**Proposal prepared by:**

**Aaron Atkinson**

**Direct:** 519-913-3707

**Email:** [aaron@yovu.ca](mailto:aaron@yovu.ca)

**Web:** [www.YoVu.ca](http://www.YoVu.ca)

## What is YoVu?

YoVu Cloud Office Phone is a cutting-edge, INTERNET-based business phone service that offers organizations of all sizes a commercial grade phone system with no need for phone lines.




*"The Team at YoVu left us 2 trial phones which I gave to 2 of my heavy phone call volume users. They liked it so much we couldn't pry it from their hands. Also the web dashboard is great so it gives me lots of real time information on call statistics."*

**General Manager**

ROBERTSON  HALL  
INSURANCE

## Top Reasons Why Businesses Move to YoVu

- 1) YoVu is plug and play simplicity so switching to us is easy! YoVu can be setup in tandem with your old system with temporary numbers giving your staff time to get comfortable with it.
- 2) Super reliable and secure geographical redundant architecture located in top tier data centers to ensure reliability, call quality and uptime all the time.
- 3) Easy to use. With a couple of clicks, adjust your schedule, change your menu, upload music on hold advertisements and send calls anywhere.
- 4) Mobility, YoVu goes with you. Voice calls can be sent to your desk phone, cell phone, computer or all 3 at the same time. Download our mobile app to stay connected when out of the office.
- 5) Scalable, YoVu grows with you. Add users or locations on the fly.
- 6) Integrate your locations, colleagues are just an extension away, send your customers where they need to go!
- 7) Dozens of features- including our **New** Chat app plus other favorites include Call Recording and Reporting.
- 8) Awesome Canadian  Support!
- 9) 30-day money back guarantee.



- 10) Friendly contracts, 50% cancellation fees versus 100% industry standard & pro-rated add on users so your renewal dates are synchronized.

## YoVU User Profiles

Features	Standard	Agent	Supervisor
Extension, voicemail and local number	✓	✓	✓
No long-distance fees in Canada or USA**	✓	✓	✓
24/7 user friendly admin and end user portal	✓	✓	✓
Multi-level auto attendant	✓	✓	✓
Mobility integration with cell phone	✓	✓	✓
Smartphone client available iPhone/Android	✓	✓	✓
Voicemail to email	✓	✓	✓
Music on hold	✓	✓	✓
Call detail reporting - get statistics on your call volume (in & out)	✓	✓	✓
PC attendant console (drag and drop calls)	✓	✓	✓
Caller ID prefix	✓	✓	✓
Member of a hunt group (aka Ring group)	✓	✓	✓
Paging groups	✓	✓	✓
Conference in up to 3 lines	✓	✓	✓
Internal Chat 1:1	✓	✓	✓
Call recording		✓	✓
Agent Login/Logout		✓	✓
Queue Monitor		✓	✓
Advanced Call Center reports			✓
Assign Agents to Queues 2:1 Call Path ratio			✓
Coaching tools listen to calls live			✓
Make notes and score call recordings			✓

## Summary of Proposal

Description	Cost
<b>YO VU - Monthly Subscription</b>	\$1,599.28
<b>YO VU - Phone Hardware</b>	\$13,867.50
<b>YO VU - Professional Services (Install)</b>	\$800.00

*Taxes, shipping and environmental fees are additional*

**Proposal Expires:** November 30, 2019

**Contract Term:** 36 Month

## Monthly Cost of Service


Feature	Quantity	Monthly List per Extension	Discount	Monthly Cost per Extension	Subtotal
<b>YO VU User Subscriber - Standard</b>	80	\$39.99	50.01%	\$19.99	<b>\$1,599.28</b>
<b>Total per Month</b>					<b>\$1,599.28</b>

### Feature Add-Ons

- Virtual Fax \$19.99/month includes 400 pages overage rate \$0.06/page
- Call Recording \$3.95/month per user additional. (6-month storage).
- 10 Port Conference Bridge \$9.95 month per bridge.
- SMS unlimited incoming, 1000 outgoing. \$3.95/month per number
- Toll Free number \$3.95/month + \$0.029/min usage
- Additional numbers (numbers available across Canada & US) \$3/month per number

**\*\* Continental USA (48 States) and Canada except Nunavut, Yukon And Northwest Territories – additional per minute fee's apply.**

## One Time Costs for Phones & Professional Services

Feature		Quantity	Unit List Price	Discount	Unit Cost	Subtotal
<b>T54W</b>		10	\$360.00	25%	\$270.00	<b>\$2,700.00</b>
<b>T53</b>		50	\$235.00	25%	\$176.25	<b>\$8,812.50</b>
<b>T40G</b>		20	\$157.00	25%	\$117.75	<b>\$2,355.00</b>
<b>YOYU Setup - Customer Self Install with Remote Training</b>		80	\$10.00		\$10.00	<b>\$800.00</b>
<b>Total Upfront Cost</b>						<b>\$14,667.50</b>

*Note: All phones have a 1-year hardware warranty*

### Other Fees

- \$0.75/month E911 per location charge not included
- \$15 one time per number port charge (volume discounts available)

### Setup Options:

- **Remote Setup:** Our project team work with you remotely to ensure that the system is setup exactly to your specifications. Training will be provided remotely to ensure your employees are comfortable using the service. Our phones will ship labelled with extensions and ready to go, all you need to do is plug them in.
- **Optional Onsite Install and Training:** Our onsite service will schedule teams to provide onsite training and install at your location. Travel charges may apply, this service is not available in some areas.

## Selected Hardware Overview



**T54W**



**T53**

T53 VoIP telephone is a new model from Yealink , it includes a large screen making it easy to see who is calling. The large screen can tilt to reduce glare making it a very practical desk phone. The phone includes: 2 x Gigabit Ethernet, 8 x line keys, PoE required, AC optional, 3.7 inch backlit LCD, HD audio, RJ9 headset jack, 1 x USB (optional EHS support coming soon), optional Bluetooth support (requires adapter, SKU #BT40), optional Wi-Fi support (requires adapter, SKU #YKWF40 or SKU #YKWF50), add up to 3 expansion modules, SKU #EXP50, Opus audio codec support. Optional AC power supply, SKU #YKPSU2.

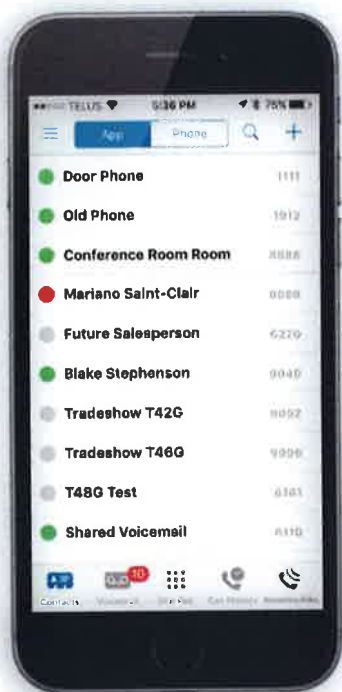


## T40G

The SIP-T40G is a feature-rich SIP phone that enhances daily inter-operability and unifies communications. The T40G is built with the Gigabit Ethernet for rapidly facilitating call handling, and its programmable keys help boast extensive productivity-enhancing features, like BLF, SCA, call transfer, etc. Meanwhile, equipped with the feature of Power over Ethernet (PoE), superb high definition (HD) sound quality and a rich visual experience, the SIP-T40G IP Phone maximizes your personal productivity in a superior way.

## Mobile Application

All your office features on the fly using our Android and iPhone application included with every user. Make and received calls on your office line using your cell phone.



## YoVu's User Friendly Portal



### Admin Portal

YoVu provides all users a simple but powerful web based administration portal which allows you to view statistics and control your users and calls from any Internet connection!

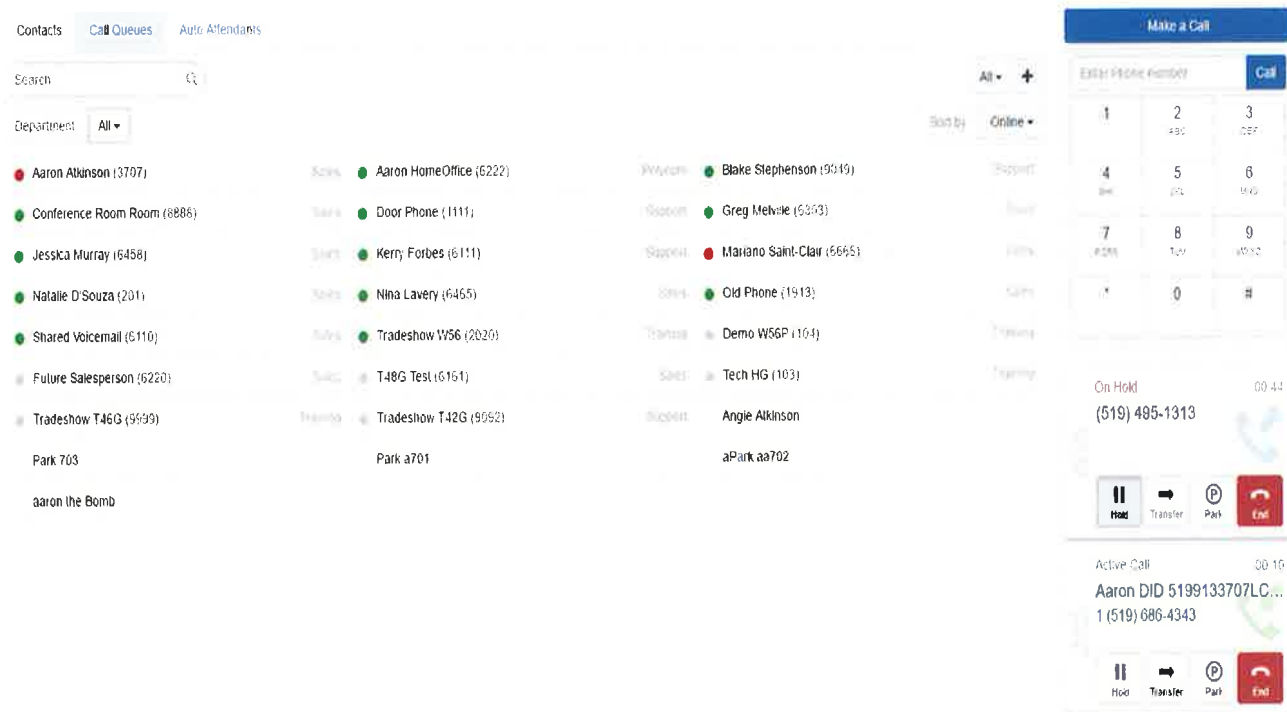
### End User Portal

Each user gets the power to control voicemail, call routing, Fax, listen to their recordings etc. easily from any web browser.



## Reception & End User Screen

Allow your high-volume phone users to manage calls coming into your business with an intuitive drag and drop interface



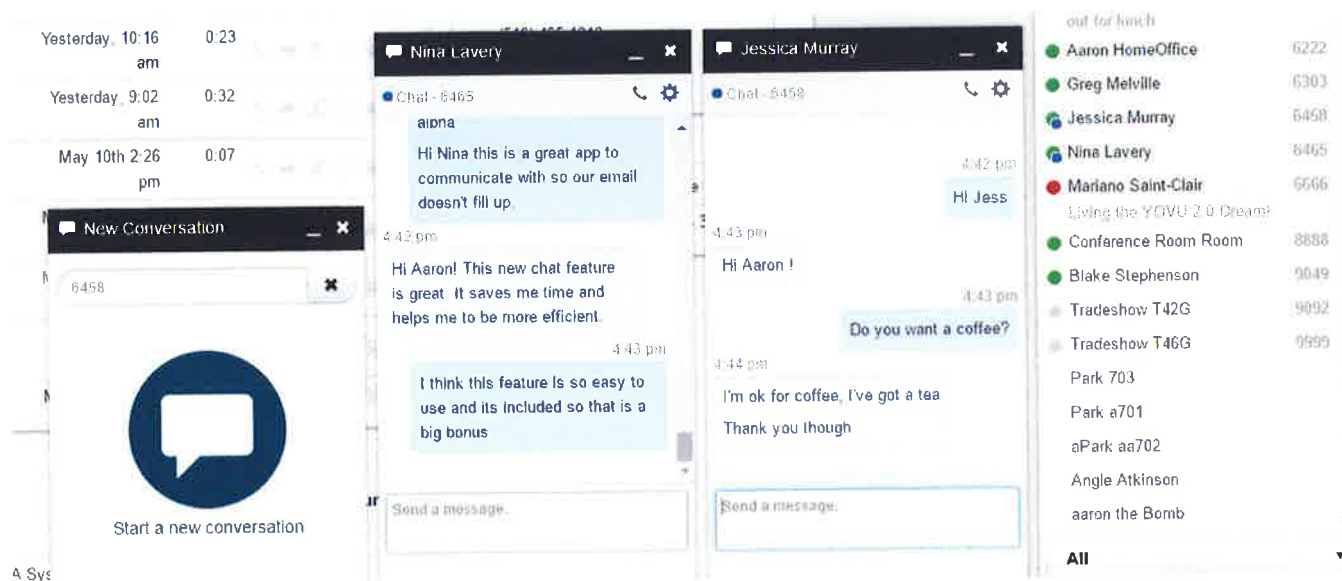
## Call Recording

View a history of all your calls and listen or download recordings of calls.



## Internal Chat 1:1

Connect with people in your company for efficient internal communications.

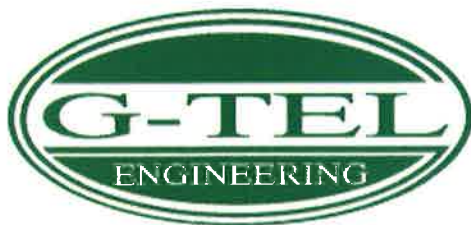


*"YoVu was great! Very professional and really took the time to learn about my business and provide a solution that met and exceeded my requirements. Deployment was a breeze. Were up and running in an hour. My staff and I are very pleased with the new phone system. The call quality is crystal clear and the added features and functionality are really helping us be more efficient with our business processes. All and all we are very happy with our decision and would recommend the YoVu cloud office phone system."*

**Dan Wright, President**



## Just Some of Our Happy Customers



## About Us

*LCA Systems is the parent of YoVU Cloud Office Phone the leader in simple to use Internet based Phone service. Our expertise enables companies to integrate voice communications and other collaboration tools seamlessly into their business process. Our mission is to improve overall business communications within your organization and with your customers by enabling your business with the best technology to collaborate more effectively.*

*As a Canadian small business, LCA Systems is able to deliver the highest possible levels of customer satisfaction (backed with lots of references), speedy implementation, ease of management, reduced cost of ownership and ongoing support.*

*LCA systems was founded in Jan 2011 and brings over 20 years of Telecommunication expertise to the table. Since its inception LCA Systems has implemented thousands of deployments across Canada, the USA and Internationally. We always strive to do right by our customers and believe that every customer should be a referral customer.*



*YOUR VOICE UNIFIED*

## Lise Gagnon

---

**From:** Greg Armbrust <service@armbrust.tech>  
**Sent:** September 26, 2019 11:37 PM  
**To:** Geoffrey Verkade  
**Subject:** Info on phone system  
**Attachments:** Cloud.docx; 7VoIP Features.docx; Open vs Closed.docx; Armbrust Telecommunication info NPC.docx

I'll try to get more info to you late tomorrow but here is some to start any questions let me know here to help - I'll get a better summary together Friday things that should be a must in a new system

Also remember if you don't have POE switches you will need them to power phones

Greg

Armbrust Telecommunications / ATI Security  
Phone: 905-735-9474  
Email: [Service@armbrust.tech](mailto:Service@armbrust.tech) / [sales@atisecurity.ca](mailto:sales@atisecurity.ca)  
Serving Niagara Since 1997  
<https://armbrust.tech>

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## Armbrust Telecommunications

What a new PBX should have

- Remote APP
- Voicemail to email
- on-site back up
- redundancy in the server
- work with all trunks (SIP and POTS / Bell lines)
- Call Q
- Multi Site
- IVR
- No licensing fees per month (not cost effective)
- Work with more than one phone. If not the risk of vendor lock-in, and limited flexibility. Many proprietary products can only function properly when used with other products owned by the same manufacturer. In other words, you're likely to be held hostage to proprietary handsets and peripherals that might be overpriced with limited functionality

## Yeastar S series hybrid solution

\$1450.00 one-time fee for the device – all phones from the other price sheet will work on this unit some of the big difference

- monthly saving
- can have onsite failure set up running two together - will work with out internet
- cloud back ups and on-site back ups
- works with POT lines (bell lines)

Cloud solution per month around \$1820.00 per month for 70 handsets

Hybrid solution per month around \$700.00 (with full warranty support all upgrades including firmware) Same functionality

\$1120.00 difference minimum



- 100 Users (expandable to 200)
- 30 Concurrent Calls (expandable to 60)
- Up to 16 FXS/FXO/BRI Ports
- Up to 8 GSM/CDMA/3G/4G Channels
- Up to 2 E1/T1/PRI Ports



#### Security

Protected from Internet hackers and viruses with builtin firewall, TLS, SRTP, and more.



#### Performance

Powered by Freescale ARM A8 industrial grade quad-core CPU processors.



#### Future-proof

Free lifetime software/firmware upgrade assures reliability over the years.



#### Easy to Use

Save time with streamlined installation. Manage PBX on the intuitive Web GUI.



#### Phone Provisioning

Automatically provision phones from Yealink, Snom, VTech, and more.



## Linkus Unified Communications App

Linkus is a unified communications app for Windows desktop, Mac desktop, iPhone and Android phones. Designed for Yeastar Cloud PBX and S-Series VoIP PBX, it transforms your desktop and mobile phone into a fully-featured office extension.

- Available using Windows, macOS, iOS, and Android
- Make and receive enterprise VoIP calls anywhere anytime
- Outlook Contacts, Google Contacts, Salesforce CRM and Microsoft Dynamics 365 integrated; more CRM to support
- Instant messaging and file sharing empowered by [Linkus Cloud Service](#)

[Learn More](#)

# Cloud Phone System: What It Is, How It Works, and Why to Choose It

- May 30, 2019

[Best Practices, Cloud PBX, Video](#)



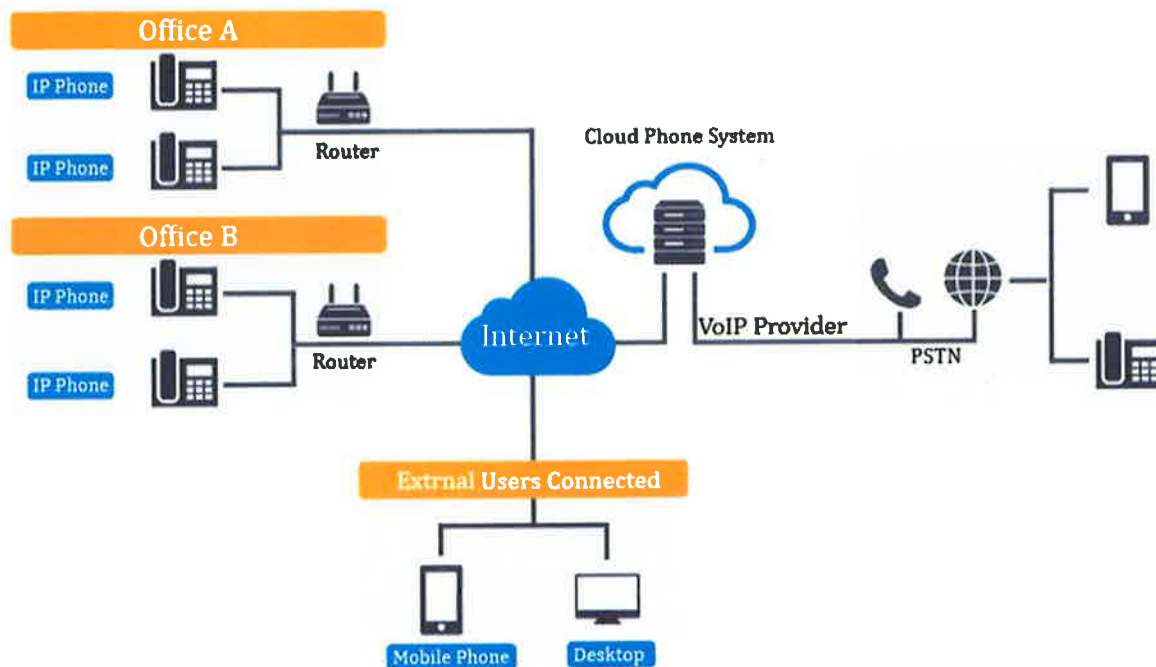
Cloud technology is accelerating today's businesses by offering more agile and affordable solutions. Business communications, as an essential cornerstone for any companies, is embracing this innovation too. More and more service providers have been offering cloud voice solutions for businesses of all sizes. This blog post will walk you through the cloud phone system from what it is and how it works to why and how to choose one.

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## What Is a Cloud Phone System and How Does It Work ?

A cloud phone system (a.k.a. cloud PBX, hosted PBX, and hosted phone system) is a VoIP phone system that is accessible over a cloud-based IP network. It is delivered entirely over the Internet and managed completely off-site, cutting down upfront investments in telecommunications infrastructure. The deployment and set up is quick and easy, freeing companies from IT overheads. Normally, you can purchase the cloud phone service from a service provider and pay on a subscription basis.

The diagram below is a simplified flow of how a cloud phone system works:



Simply put, with the business phone system hosted in the cloud, you make and receive calls using IP phones, mobile phones or other devices, and the voice traffic is carried over an Internet connection which in turn is connected to data centers sitting within the cloud.

## What Are the Benefits of a Cloud Phone System?

Savvy businesses are joining the shift to cloud phone systems for lots of reasons.



## Cost Savings & Future Proof

Every business, especially smaller companies, want to cut operational costs as much as it can. Cloud phone system is a budget-friendly option as it greatly reduces the upfront investments on equipment and regular occurring maintenance costs. In most cloud phone system installation, the only capital expense is purchasing the IP phones. The cloud phone system usually works on a simple per-user basis so that businesses can scale up the capacity by simply purchasing new licenses. The system is always ready to grow with your business. On the other hand, under such a pricing model, the company have greater predictability of their phone system and better control of their budget.

### **Limited Maintenance & Administrative Requirements**

Hosted off-site, a cloud phone system is centrally managed by phone service providers, requiring little technical expertise and IT personnel from customers to set up and configure the system. The responsibility of keeping the system updated also shifts from the customer to the service provider, and businesses have an always current phone system without dedicating budget and resources to maintain it. Administration of a cloud phone system is also simplified as long as you have an Internet connection, which is highly useful for companies with offices in different locations. IT admin can change the user settings through the web interface at any time, anywhere, with a few clicks.

### **Mobility & Geographical Flexibility**

With a cloud phone system, headquarters, branch offices, and teleworkers can all be unified, enjoying the same features and business continuity. For remote workers, the office is wherever they make it as long as the Internet connection is available. Some cloud phone system service providers offer free softphone apps that allow employees to use not only IP phones, but also desktops and smartphones as office extensions to make and receive calls, enabling employees to work from home, on the go, or as a full-time remote worker. Besides, cloud phone systems make it easy to connect geographically dispersed offices under one phone system and the administrator can manage it from any location.

### **Bonus: Unified Communications**

The cloud phone system is a perfect enabler of unified communications. Unified communications is all about making a wealth of communications channels and options into a single point of access. Cloud unified communications leads to more consistent and convenient communication with colleges and customers by allowing them to use their preferred channels. For example, when you are on a phone call through the desktop softphone and have to leave for a while, instead of having to hang up the phone, you can forward the call to your mobile

phone and keep on the conversation. Some providers also offer values in enhanced collaboration, such as instant messaging, presence, CRM integration, and more.

---

## Handy Features of Cloud Phone Systems

Leading cloud phone service providers offer unlimited features, such as auto attendants, conference, voicemail, call queue, without additional charges to your basic monthly fee. For your reference, below are some features of Yeastar Cloud Phone System that hits the most popular list and you can **watch the videos** to learn more:



**Call Forwarding:** As a basic feature of a phone system, call forwarding allows an incoming call to a designated destination under different conditions such as “When Busy”, “No Answer”, and “Always”. For instance, you can choose not to answer a call and forward it to a colleague or to voicemail.



**AutoCLIP:** AutoCLIP is a great help for handling returning calls. Here is the case. A salesman called his client but the call didn’t get picked up. Minutes Later, his client called back. Since his information has been stored, his call would be routed to the salesman directly.



**SIP Forking:** SIP forking refers to the process of “forking” a single call to multiple SIP endpoints. With SIP Forking, multiple SIP endpoints can be registered to one extension number, so the incoming call can ring many terminals at the same time and you can take the call from any of the devices.



**Ring Group:** Ring Group is used to distribute calls effectively among employees in particular departments. When there is an incoming call, all phones within the group ring sequentially or concurrently, depending on the ringing strategy you specify.



**Distinctive Ringtone:** Distinctive Ringtone distinguishes calls from different inbound routes. Calls coming from different inbound routes will play its own pre-configured ringtone. When a user hears the ringtone, he/she may notice the intention of the incoming call.



**Blacklist & Whitelist:** Blacklist is used to block incoming and/or outgoing calls, while those in the Whitelist are allowed to call in/called or both regardless of the blacklist

settings. Blacklist & Whitelist frees businesses from nuisance calls and builds a more secure phone system.

**Related:** [10 Must-Try Features of Yeastar Cloud PBX](#)

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## **Is a Cloud Phone System Right for you and When Is a Good Time to Switch?**

Today, some businesses have embraced cloud phone systems. Some are working on the migration. And others choose to stick with an on-premises PBX approach. The thing is, there is no ultimately better option. Considering the business size, needs, and budget, every business has its own set of requirements, so pick one that suits your business best.

Here is a list of businesses that might find a cloud phone system a perfect fit:

- Businesses short of IT staff and avoiding maintaining PBX equipment
- Seasonal businesses with fluctuating communications needs
- Companies operating at multiple sites
- Rapidly growing start-ups with unpredictable future capacity needs
- Businesses having a number of teleworkers and remote employees
- Companies lacking traditional office space

# 7 VoIP Features That Boost Small Business Customer Service

- August 22, 2019

[Use Case & Benefits, VoIP PBX](#)



“Companies that excel at the customer experience drive revenues 4% to 8% higher than those of their market,” according to [Bain](#). Attracting and retaining customers is always the key to business success. Customers all expect to get quick and personalized services catering to their needs. For small businesses which may not have that much staff as large enterprise to handle customer service, leveraging the following VoIP features will be a cost-effective way to boost customer satisfaction and outshine the competition.

## 1. Interactive Voice Response (IVR)

With IVR feature in the PBX system, even small businesses can provide customers with 24-hours services without costly human resources. The caller just needs to follow the instructions from the set menu and will be directed to the desired destination with the minimum waiting time. IVR automates the customer service by allowing self-service and personalized customer interaction, thus customers can obtain the right information to solve their issues. Being able to provide satisfactory answers to customers’ queries in the first ring leaves a good first impression on your customers and helps build a professional company image for small business.

## 2. Call Queue

Sometimes when your agents are too busy to answer an incoming call, it is a smart move to let it queue up while waiting for an available agent. Better than being on hold, going to voicemail, or getting a busy tone, the customer is informed that the agents can’t currently answer the call, and as soon as an agent is available, the queuing call will ring his extension immediately. For small business customer service, the call queue feature reduces the number of missed calls as well as the negative effect of busy signal on customer experience. By segmenting agents into several queues, you can even provide different service levels for different customer groups.

[Watch a short video to learn more about Call Queue.](#)

## 3. Unified Communications

Unified Communications consolidates VoIP calls, voicemail, instant messages, and CRM contacts data into a single platform accessible from mobile phones or desktops. By utilizing UC, your agents are no longer confined to the desk and able to work remotely from home or on the go. The presence feature allows your employees to see who else is available at that moment to handle the customer call without asking the customer to wait. You can even empower your customer service agents to chat with the right experts during the call so that customers can get instant resolution to their issues. With WebRTC Click-to-Call, your customers can initiate voice calls to your customer service team directly from the web page by clicking a button conveniently.

[Download free Linkus UC Softphone to experience unified communications.](#)

#### **4. Voicemail to Email**

With the Voicemail to Email feature, you'll always be in the know. When an agent is not available and has missed a call, this feature will help him respond to customers' voicemails a lot more efficiently. The voicemails will be saved as audio files and emailed to the agent immediately so that he can take care of the messages, at any time, even on the go. Moreover, he can easily prioritize messages by deleting them or keep them for on file for future reference. as well as direct specific messages to the appropriate recipient.

**Related:** [5 Magic Tricks You Can Play with S-Series VoIP PBX and Email](#)

#### **5. Call Recording**

To ensure the quality of the customer service, many small businesses use the call recording feature to better evaluate agents' performance. You can set up on-demand recording, phone-specific recording, or company-wide recording for inbound and outbound calls. When having new staff on board, those recording files can quickly get them familiar with general customer needs and frequently asked questions, as well as how to handle them. With call recording, you can also analyze the best and worst examples of the customer service to better equip your team. What's more, your agents can look up their previous conversations with customers they're dealing with to have a more comprehensive understanding of customer needs.

**Related:** [How to Use Call Recording to Monitor Calls for Training. Quality Control](#)

#### **6. Call Monitor**

Call Monitor feature allows a certain privileged user, such as a supervisor, to monitor other extensions during the calls. The ability to listen to a call without interference or join in the conversation as a third party is useful for customer service. Live call monitoring allows your experienced staff to coach on the spot and guide the call to make sure there are no missed

opportunities. Call monitor is a spy feature in Yeastar PBX System, and has three monitoring mode:

- Listen – you can only listen to the call but can't talk.
- Whisper – you can listen to and talk with the monitored extension without being heard by the other party.
- Barge-in – you can talk with both parties.

## **7. CRM Integration**

CRM is widely deployed in the business world to help manage a company's interaction with customers and sales prospects. Yeastar PBX System supports integration with popular CRM solution with access to Asterisk Management Interface (AMI). Besides easier call handling, such as Click to call, transfer, and hang up directly from CRM screen, your agents can also take real-time notes of their calls and keep detail records of their call history. CRM integration provides your customer service team with more information and options for each call they make and receive, and thus optimize customer service performance and operation.

**Related:** [5 Key Advantages to VoIP CRM Integration](#)

The performance of customer service contributes a lot to the brand building and brand loyalty of a small business. According to the [Harvard Business Review](#), increasing customer retention rates by 5% increases profits by 25% to 95%. Don't let your phone system limit your communication capability. Considering leveraging the above features to set your customer service apart? Sign up a free trial to experience them all.

# Open Standard PBX vs. Proprietary PBX, Which Way to Go?

• August 29, 2019

[Best Practices](#)



Your customer wants to overhaul their IP phone system or maybe migrate to one for the first time. Do you go with a proprietary or open standard system? Before you make the choice, it's important not to immediately dismiss either option. Understanding the ins and outs of each type of system as well as your customer's specific requirements is essential.

Let's examine some of the key strengths and disadvantages of each approach.

## 1. The Positives and Negatives of Open Standard PBX

Breaking the shackles of the proprietary technologies, open-standard PBX systems are open stack solutions leveraging the standard-based approach – for example, SIP – for the transmission of multimedia communications. Widely prevalent and acknowledged for its cross-system usability and flexibility, open-standard PBX systems don't have many disadvantages for a lot of businesses today. Along with essential telephony features, some leading-edge solutions like [Yeastar](#) also boast high-end unified communications out of the box. In general, open-standard PBX systems provide:

### **Better Value for Money:**

Open-standard PBX system is often associated with substantial saving, because it's simple to manage and, in most cases, there's little licensing fees to worry about. Compared with proprietary solutions that lock you into long-term service contracts or expensive system overhaul, open-standard solutions can be more cost-effective in many business scenarios.

### **Eliminate Risk of Vendor Lock-in:**

The true value of open-standard PBX come from being able to combine a mix of standard components to deliver innovative service. You can use almost any SIP phone, gateway or standard-based peripherals with the system, which contributes to user satisfaction and business productivity.

### **Easier to Install and Configure:**

If you are using a proprietary phone system, you will probably already know the difficulties that

occur when trying to install, use and maintain it. Instead, open-standard PBX systems are easy to use and manage. This can be especially true for those Asterisk-based ones with intuitive front-end GUI.

### **Interoperability and Customization:**

Customization is a big deal-breaker when it comes to phone systems. And open-standard PBXs win on this point. It's relatively easy to integrate with other standard-based applications such as databases, CRM, hotel PMS, call center and others to fulfill specific customer needs.

Although open-standard PBX systems, by and large, don't have many disadvantages, the whole system quality is highly dependent on vendors. Some free open solutions are claimed deficient in desired functions, professional support and frequent updates. It's therefore important to choose a reliable brand with a large customer base, state-of-the-art R&D resources and dedicated support team.

## **2. The Positives and Negatives of Proprietary PBX**

Proprietary PBX are "closed" system designed specifically by manufacturers, complete with their own branding. Most of the proprietary solutions like NEC or Panasonic are considered relatively reliable yet less attractive from a financial perspective. With a proprietary system, you get nearly all your hardware/software from one vendor, who'll support and warranty everything from the PBX to handsets. As such, some of the benefits include:

### **Uniform User Experience:**

In most cases, proprietary systems offer a uniform user experience. The whole VoIP system remains consistent across compatible hardware and software applications. So, you can expect a similar and familiar user experience with each device.

### **Manufacturer Support:**

With a proprietary system, your vendor has sole control over the updates, upgrades and modifications. As a corollary to this, you, as a reseller/distributor, might have greater control over the customers, but you'll need to invest more resources to master the complicated proprietary systems and interfaces for better customer support.

Alongside the benefits proprietary solution offer, there are some disadvantages can't be neglected. The biggest ones may come with the costs, the risk of vendor lock-in, and limited flexibility. Many proprietary products can only function properly when used with other products owned by the same manufacturer. In other words, you're likely to be held hostage to proprietary handsets and peripherals that might be overpriced with limited-functionality, which will bring negative effects to the sales process.

Another main thing to remember is that with a proprietary PBX system, you may not be able to achieve the same level of flexibility as open-standard solutions. Because proprietary ones usually don't allow for developer workarounds specific to the problem, likely, you will not be able to implement the smallest changes required to better adapt the solution to your business needs. And when complicated issues arise, your vendor is your only backup.

### **3. Forethought: Business Ecosystem and Potentials**

With the ever-expanding horizon and advances in the VoIP market, the key for a phone system to stay ahead is to keep pace with the market trends and offer viable solutions to fit into the larger universe of customer demands. And it's undeniable that **open-standard solutions have competitive edges**.

Proprietary's role as the primary innovator in the market has gone to the wayside. The prevalence of industrial open-standards such as SIP and open source telephony like Asterisk had revolutionized the ecosystem and brings more business potentials.

By leveraging the collective efforts from a vast global community of experts, emerging non-proprietary – i.e., open-standard – systems are gaining momentum. They bring benefits associated with open SIP and open source: stability, rapid development, flexibility, and, most importantly, cost savings. [Professional open-standard PBX](#) system like Yeastar that combines the flexibility of open source with the professionalism of proprietary solutions are widely welcomed.

With open-standard solutions being continuously developed, users are now given more freedom to inter-operate multiple applications and integrate data systems. Increasingly, integrators want them and end-users demand them for a higher level of price-performance value and eliminated risk of vendor lock-in. Although proprietary technologies still have their market share, the rising market demand for a more flexible solution will eventually tilt the balance.

### **The Bottom line**

Both proprietary and open-standard systems have clear strengths. It's important to know your customers and understand their needs. How much can they afford a new telephone system? What level of flexibility and customization do they require? Do they have in-house expertise for system maintenance? Asking the right questions will make the choice easier to offer a best-fit solution. After all, it's customers who have the final say for a deal.

## Yeastar Open-Standard PBX System

On-premises or in the Cloud: Embrace unrivaled Unified Communications



# Armbrust Telecommunications

Here are some options for desk phones – The T48s is a great phone with a nice display and touch screen  
– the Yealink 42S is a great phone for lunchrooms etc. great little phone

Desk phones Yealink 48S (50) \$23550.00

Lunchroom phones and lightly used locations Yealink T42S (20) \$4840.00

Conference phone (1) \$1214.00

Cordell phone (1) \$225.00 each

Installation is going to range from \$5500.00 to \$7000.00 really depends on the company

## Lines

Sip Trunking \$14.95 a month (So 10 lines would cost \$140.95)

## Hosted per seat cost

Depending again on the company you are looking at \$26.00 to \$58.00 per line a month

## SIP-T48S

The SIP-T48S IP Phone is a dynamic business communications solution for executives and professionals. This phone offers a large touch screen that makes switching between pages and applications swift, easy and convenient. The SIP-T48S is also with Yealink's Optima HD Voice technology, and wide-band codec of Opus for unparalleled audio clarity. Phone users will think they are sitting in the same room with one another. The phone uses Gigabit Ethernet technology for rapid call handling. Plus, it works in conjunction with Bluetooth USB Dongle and Wi-Fi USB Dongle. The new T4S series offers the same elegant appearance of the T4 line, but with improvements for greater interoperability and collaboration.



\$471.00 (Touch screen phone)



### High-quality Audio Experience

Easier to be heard and participate in the call. Support Yealink Optima HD voice and Noise Proof Technology.



### Intuitive and Ergonomic Design

Ease of use, low learning cost.  
Offers a 7-inch capacitive touch screen.  
Supports one USB port.



### Simplicity of Experience

The 7-inch multi-touch screen and the Teams-tailored interface.

\$660.00 each

## SIP-T46S

The SIP-T46S IP Phone is the ultimate communications tool for busy executives and professionals. In addition to offering better overall performance than the T460, this device has a faster interface with a rich, high-resolution TFT color display. Built with Yealink Optima HD technology and wideband codec of Opus, this device enables crystal clear communications. The SIP-T46S is also built with Gigabit Ethernet technology, for rapid call handling and use with accessories like a Bluetooth USB Dongle and a Wi-Fi USB Dongle. The new T4S series offers the same elegant appearance of the T4 line, but with improvements in greater interoperability and collaboration.



\$363.00 (Great display no touch screen)



\$1079.00 (Built in camera)

## SIP-T42S

The SIP-T42S IP phone is a dynamic business communications tool for superior voice communications and extended functionality. It has a faster, more responsive interface than the T42G and offers better overall performance. The SIP-T42S is a 12-line IP Phone with multiple programmable keys for enhancing productivity. It is with Yealink Optima HD Voice Technology and wideband codec of Opus for superb sound quality and crystal clear communications. What's more, the SIP-T42S is built with Gigabit Ethernet technology for rapid call handling. Plus, with an all-new USB port, the SIP-T42S boasts unparalleled functionality and expansibility with Bluetooth, Wi-Fi and USB recording features. The new T4S series offers the same elegant appearance of the T4 line, but with improvements for greater interoperability and collaboration.



\$242.00 ((Great phone for the price no colour display but cost is cheap))

## Yealink CP960



### High-quality Audio Experience

Easier to be heard and be involved in the conference room. Support Yealink Noise Proof Technology. Built-in 3-microphone array with 20-feet (6-meter) and 360° voice pickup range.



### Intuitive and Ergonomic Design

Ease of use, low learning cost. The 5-inch multi-touch screen and the Teams-tailored interface.



### Simplicity of Experience

Simplify deploy and manage. Multiple choices of deployment tools from Microsoft, Yealink and Unify square, and Auto-provision.

\$1214.00 (Great conference phone)



## Yeastlink MVC500 Room System For small rooms

### Key Features:



The Yealink MVC500 Room System delivers a native Microsoft Teams Rooms meeting experience. Designed for small meeting rooms, Yealink MVC500 Room System is a complete solution contains touch console, content sharing unit, audio and video peripherals, and mini-PC.



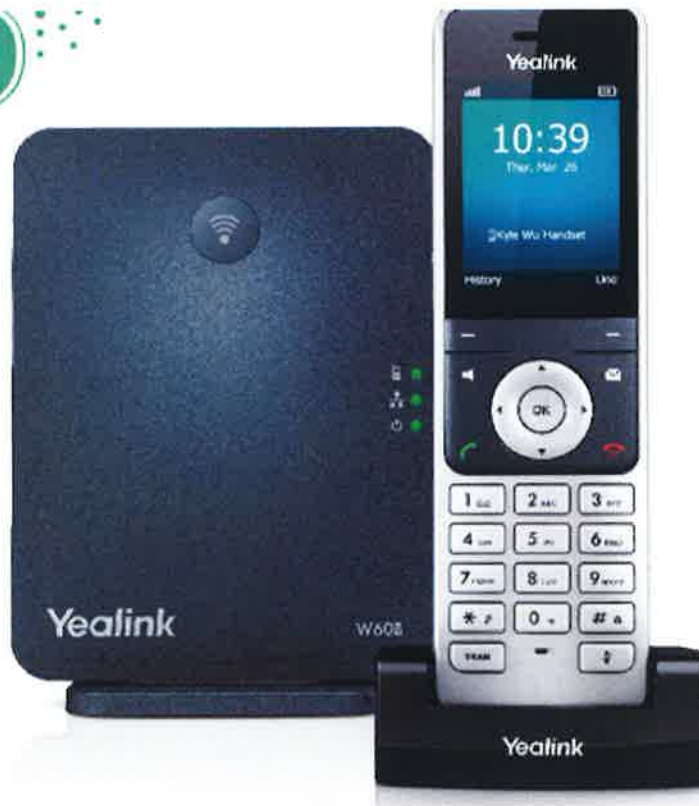
Yealink CPW90 Wireless Microphone has 10feet(3-meter) voice pickup range of every microphone unit. Come with its DECT technology, up to 50 meters communication distance could be ensured.



Yealink UVC50 optical PTZ camera, thanks to its wide-angle lens, a vivid face-to-face video conference is enabled.

**\$4049.00 (Full video room system)**

**HD**



**\$225.00 (Can add 8 phones to it at a cost of \$120.00 each)**

# QUOTE

SPOQ4789

Your technology support  
~~provider~~ partner.



Prepared By:  
Serge Paquin  
serge@skycomp.ca  
905-228-0315



Prepared For:  
Niagara Peninsula Conservati  
Geoff Verkade

Date: Oct 1, 2019

Description	Unit Price	Qty	Ext. Price
<b>Welland</b>			
HP 2530-48G-PoE Switch	\$2,999.00	2	\$5,998.00
HP 2530-24G-PoE+ Switch - 24 Ports - Manageable - 4 x Expansion Slots - 10/100/1000Base-T - Twisted Pair - Gigabit Ethernet - 4 x SFP Slots - 2 Layer Supported - 1U High - Desktop, Rack-mountable, Wall MountableLifetime Limited Warranty	\$1,989.00	1	\$1,989.00
<b>Ball's Falls</b>			
HP 2530-48G-PoE Switch (Synnex)	\$2,999.00	1	\$2,999.00
Solution Subtotal			\$10,986.00
Sales Tax			\$1,428.18
Total			\$12,414.18

To accept this quotation, sign here and return: \_\_\_\_\_

# QUOTE

SPOQ4790

Your technology support  
~~provider~~ partner.



Prepared By:  
Serge Paquin  
serge@skycomp.ca  
905-228-0315



Prepared For:  
Niagara Peninsula Conservati  
Geoff Verkade

Date: Oct 1, 2019

Description	Unit Price	Qty	Ext. Price
<b>Welland</b>			
HaaS Network Switch (24-Port)	\$40.00	5	\$200.00 <small>(First Monthly Payment) \$200.00 billed Monthly</small>
<b>Ball's Falls</b>			
HaaS Network Switch (24-Port)	\$40.00	2	\$80.00 <small>(First Monthly Payment) \$80.00 billed Monthly</small>
Recurring Amounts: \$316.40 Billed Monthly			
Solution Subtotal			\$280.00
Sales Tax			\$36.40
Total			\$316.40

To accept this quotation, sign here and return: \_\_\_\_\_

# Niagara Peninsula Conservation Authority - 2020 CAPITAL PROJECTS

Project Name	Division	Asset Class	Proposed Budget 2020	Proposed Budget 2021	Proposed Budget 2022
Shriner's Creek Modifications	Watershed	Water Control Structures	\$80,000		
Flood Plain Mapping - Beaver Creek	Watershed	Equipment	\$150,000	\$50,000	
Flood Plain Mapping - Grimsby/Lincoln	Watershed	Equipment	\$20,000		
Flood Plain Mapping - St. Catharines	Watershed	Equipment	\$25,000		
Water Quality Equipment	Watershed	Equipment	\$35,000		
Virgil Dam Safety Study	Watershed	Water Control Structures	\$60,000		
Stream Gauge Equipment	Watershed	Gauge Stations	\$20,000		
<b>Sub Total</b>	<b>Watershed</b>		<b>\$ 390,000</b>	<b>\$ 50,000</b>	<b>\$ -</b>

## Capital Project Detail - 2020

<b>Project Title:</b>	Water Quality Equipment	<b>Project #</b>	Pending
<b>G/L Account(s):</b>	Pending	<b>Asset Class</b>	Capital Equipment
<b>Priority Classification:</b>	Asset Integrity – Proactive Replacement	<b>Division</b>	Watershed
<b>Priority Ranking:</b>	3	<b>Project Status</b>	Draft
<b>Site/Location:</b>	Welland River @ O'Reilly's Bridge, Pelham/Welland	<b>Grouping</b>	B-4
<b>Project Lead:</b>	Steve Miller	<b>Project Start Date</b>	May-20
<b>Funding Source:</b>	Special Levy - Niagara	<b>Project Completion</b>	May-20
<b>Partner (if applicable):</b>		<b>Municipality</b>	Niagara

## PROJECT DESCRIPTION, RATIONALE, BACKGROUND, LINKAGES AND IMPLICATIONS

*Provide a detailed description of the project, why the project needs to be done now and consequences of deferring the project. Include historical cost and typical asset life cycle. Indicate if the project is linked to any other current or future project (capital or operating) and any impact to related project(s) if this project is approved or deferred.*

Water quality has 3 Sontek sensors currently: 1 needs replacement (aging infrastructure). Replaced 2 of the 3 in the last 2 years.

Replacement site -Welland River @ O'Reilly's Bridge, Pelham/Welland

Replaced in 2018 and 2019:

Welland River @ Church Street - West Lincoln

Twelve Mile Creek @ Decew- St. Catharines

Equipment required:

1. Water Quality Parameters: Temperature, Dissolved Oxygen, Conductivity, pH and Turbidity
2. Data loggers

## NEEDS ANALYSIS &amp; BENEFITS

*Indicate project benefits, i.e. improving health and safety, customer service, increased ROI, heritage, educational, etc.*

Supports water quality monitoring program - equipment required to support ongoing operations (subsidized by the Region)

Region uses as background water quality data for various projects (i.e. Niagara Falls new waste water treatment plant) and to assist with some reporting obligations pursuant to MECP regs (Certificates of Approval for water treatment and waste water plants).

## Capital Project Detail - 2020

Project Title: Water Quality Equipment

Project #

Pending

## RISKS &amp; MITIGATION STRATEGY

Indicate project risks and proposed mitigation; include risk assessments if the project is deferred (low/medium/high) and any risks during or post implementation. Include direct costs of not proceeding (if known) as well as any performance or service related risks.

Equipment failure (aging infrastructure) will lead to gaps in data set - which is the core deliverable of this Region-funded program.

## PROJECT COST &amp; FORECAST

Description	Prior Year(s)	2020	2021	2022	2023	2024+
Planning						
Design						
Pre-Construction						
Construction						
Internal salaries & benefits						
Internal resources - non-salary						
Warranty						
Facilities						
Equipment		35,000				
Contingency						
Other						
<b>TOTAL</b>	-	<b>35,000</b>	-	-	-	-

## PROJECT MILESTONES

Percent Complete	25%	50%	75%	100%
Projected Date (month/year) milestone met				May-20

## CASH FLOW PROJECTION

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Projected cash flow requirements - current year		35,000		

## Capital Project Detail - 2020

Project Title: Water Quality Equipment

Project #

Pending

OTHER

Asset useful life: 5 years

Projected impact on operations annually: \$ -

Return on investment (ROI)

gain from investment:

cost of investment: 35,000

ROI:

Payback Period

Year

Investment

Annual Savings/Revenues

Cumulative Cost (savings)

0

1

2

## NOTES

YSI-EXO-  
Brochure.pdf

Product specs



Quotation

Quotation

Name and Title

Signature

Date



NIAGARA PENINSULA  
CONSERVATION  
AUTHORITY

## REQUEST FOR QUOTATION

**NPCA-2019-017**

REFER TO THIS NUMBER  
IN CORRESPONDANCE

**Niagara Peninsula  
Conservation  
Authority**  
250 Thorold Road West,  
3rd Floor  
Welland, Ontario,  
L3C 3W2  
phone: (905) 788-3135

DATE: July 16/19  
COMPANY: Haskin Scientific  
ATTN: Natalia Lecki

THIS IS NOT AN ORDER

PLEASE QUOTE ON THE FOLLOWING AND RETURN BY FAX OR EMAIL ON OR BEFORE: August 1<sup>st</sup> 2019 @ 2:00PM

ATTN: Eric Gervais | Procurement Specialist |  
egervais@npca.ca | T 905 788-3135 x223 | F 905 788 1121

ITEM	QTY	DESCRIPTION	AVAILABILITY	UNIT PRICE	TOTAL
		<b>EX02 Water Quality Sonde</b> Must include the following sensors:			
1	1	1) Sondes shall be equipped with a Central Wiper; 2) Sondes shall include a Conductivity (wiped) sensor; 3) Sondes shall include a Temperature sensor; 4) Sondes shall include a Dissolved Oxygen sensor; 5) Sondes shall include a pH sensor; 6) Sondes shall include a Turbidity sensor.	3 weeks	\$20,484	\$20,484
		<b>EX03 Water Quality Sonde</b> Must include the following sensors:			
2	1	1) Sondes shall be equipped with a Central Wiper; 2) Sondes shall include a Conductivity (wiped) sensor; 3) Sondes shall include a Temperature sensor; 4) Sondes shall include a Dissolved Oxygen sensor; 5) Sondes shall include a pH sensor; 6) Sondes shall include a Turbidity sensor.	3 weeks	\$18,925	\$18,925
		<b>Less Trade In Value of 2 YSI 6600 Sondes (optional)</b>		\$8568	\$8568
10	1	<b>Shipping to NPCA (if any)</b>			\$ 60
HST NOT TO BE INCLUDED IN PRICING		DUTY INCLUDED <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	TERMS <u>30 /net</u> F.O.B. <u>Oakville</u>	SHIPPING <input type="checkbox"/> Prepaid <input checked="" type="checkbox"/> Prepaid & Charge <input checked="" type="checkbox"/> Collect	AVAILABILITY <u>30,901.00</u> <b>CAD\$</b>

DATE  
NAME

July 16/19  
Natalia Lecki



# EXO Sondes

BEST-IN-CLASS PLATFORM FOR THE HIGHEST-QUALITY DATA



a xylem brand



YSI.com/EXO

### When only the best will do.

EXO is the premium water quality monitoring platform in the world.

The unmatched benefits of **EXO** include:



**Highest Data Quality**  
Onboard monitoring systems verify sensor operation



**Industry-leading Anti-fouling**  
Best-in-class anti-fouling wiper technology



**Smart QC™**  
SmartQC checks for errors and ensures proper calibrations



**Titanium Components**  
The toughest grade parts guarantee operation well into the future



**Digital Smart Sensors**  
Auto-recognition of any sensor in any port



**A Smart, Field-Ready  
Water Monitoring Platform**

# Best-In-Class Sonde Platform



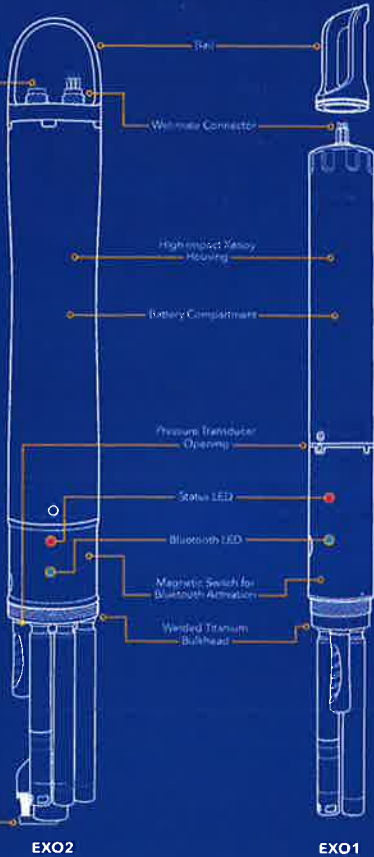
Cable connector, battery valve, and expansion port on EXO2.



Smart ports accept any sensor, for central port may be used for anti-fouling wiper.



Anti-fouling wiper cleans sensor face, minimizing resistance and maximizing length of deployment.



EXO2

EXO1



## Selection Guide

	EXO1	EXO2	EXO2 <sup>+</sup>	EXO3
Smart Ports	4	7	7	5
Battery Type	2 D-cell	4 D-cell	External Power	2 D-cell
Battery Life	90 days*	90 days*	N/A	60 days*
Dimensions	Length: 64.77 cm Diameter: 4.70 cm	Length: 71.10 cm Diameter: 7.62 cm	Length: 47.00 cm Diameter: 7.62 cm	Length: 58.47 cm Diameter: 7.62 cm
Weight (fully loaded)	1.42 kg	3.60 kg	1.10 kg	2.00 kg
SDI-12	with Adapter	with Adapter	with Adapter	Integral
Vented Level	✓	✓	✓	✓
Wiper	✓	✓	✓	✓
Auxiliary Port	✓	✓	✓	✓

\*Battery life will depend on the type of sensors and measurement frequency. Specifications indicate typical performance and are subject to change. Please check EXOwater.com for up-to-date information.

## Sonde Specifications

Sondes	
Operating Temperature	-5 to 50°C
Storage Temperature	-20 to 80°C (may differ for sensors)
Depth Rating	0 to 250 m
Communications	Computer Interface: Bluetooth wireless technology, RS-485, USB Output Options: USB with signal output adapter (SOA); RS-232 & SDI-12 with DCP-SOA; Modbus & RS-485 with Modbus-SOA
Sample Rate	Up to 4 Hz
Data Memory	512 MB total memory; >1,000,000 logged readings
Warranty	2 years

EXO Sondes are perfect for long-term deployments. Deploy multiple sondes for measurements at various depths.



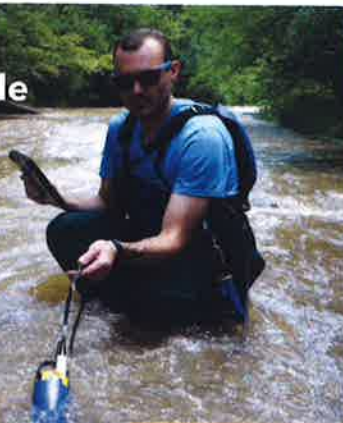
## Monitoring Made Mobile



### EXO GO

EXO GO uses Bluetooth to connect any Windows OS device to a submerged EXO Sonde.

Pair with a tablet or laptop and leverage the full power of KorEXO Software for your monitoring applications.



### EXO Handheld

The EXO Handheld offers a dedicated, streamlined interface to EXO Sondes.

Convenient monitoring is achieved with a backlit color display, ergonomic design, and simple operation.

Choose **EXO GO** for the flexibility of monitoring with any Windows OS device and access to the full features of KorEXO Software. EXO GO cuts out the middleman and delivers data directly to your PC!

EXO GO




**KorEXO Software**  
Bring the full power of KorEXO to your site with any Windows OS portable device

**Bluetooth Communication**  
Keep your sonde in the water while you view data in real time, download files, or adjust deployment settings on the GO

Common Feature



**GPS Tagging**  
Georeference data sets using GPS

	EXO GO	EXO Handheld
USB Connectivity	✓	✓
Bluetooth Connectivity	✓	✓
IP-67 Rating	✓	✓
Display		✓
Onboard Memory		✓
Operating Temperature	-5 to 50°C	0 to 50°C
Storage Temperature	0 to 45°C	0 to 45°C
Dimensions	17.4 x 5.2 x 3.5 cm	8.3 x 21.6 x 5.6 cm
Weight	240 g	567 g
Warranty	1 year	3 year meter, 1 year battery

Common Features	
GPS	Accuracy: 2.5 m CEP (dependent on site conditions)
Barometer	Range: 375 to 825 mmHg Accuracy: +/- 1.5 mmHg Resolution 0.1 mmHg
Battery	Operating Time: >15 hours Charging Time: 9 hours

Choose the **EXO Handheld** for an easy-to-use, purpose-built interface with a tactile keypad and full color display. Keep it simple and collect data in the most challenging environments with the EXO Handheld!



#### Simplified Interface

Lower the learning curve of collecting high-quality data with a simplified user interface and integrated help screens



#### Transfer Data

Quickly transfer collected data sets and calibration records to a USB flash drive with the push of a button



#### Lithium-Ion Battery

Collect more samples with the long-lasting, rechargeable battery

EXO Handheld

Common Feature

## Smart Sensor Suite

A dynamic range of sensors for multiparameter applications



CENTRAL WIPER

DO

TAL-PC

C/T (WIPED)

pH/ORP

fDOM

TURBIDITY

DEPTH



EXO sondes feature universal smart ports for sensor installation

### Sensors Not Shown

- CONDUCTIVITY / TEMPERATURE (NON-WIPED)
- TOTAL ALGAE #/L
- AMMONIUM (ISE)
- CHLORIDE (ISE)
- NITRATE (ISE)
- pH

## Sensor Specifications

Sensor	Range	Resolution <sup>1</sup>	Accuracy <sup>2</sup>
Conductivity (Non-Wiped)	0 to 200 mS/cm	0.0001 to 0.01 mS/cm	±0.5% of reading or 0.001 mS/cm, w.i.g. (0-100 mS/cm) ±1% of reading (100-200 mS/cm)
Temperature	-5 to 50°C	0.001°C	±0.01°C (-5 to 35°C) ±0.05°C (35 to 50°C)
Conductivity (Wiped)	0 to 100 mS/cm	0.0001 to 0.01 mS/cm	±1% of reading or 2 µS/cm, w.i.g.
Temperature	-5 to 50°C	0.001°C	±0.2°C
Depth or Vented Level	0 to 10, 100 or 250 m	0.001 m	±0.04% Full Scale
	0 to 10 m	0.001 m	±0.03% Full Scale
Dissolved Oxygen	0 to 500% air sat.	0.1% air sat.	±1% of reading or 1% sat., w.i.g., (0 to 200%) ±5% of reading (200 to 500%)
	0 to 50 mg/L	0.01 mg/L	±1% of reading or 0.1 mg/L, w.i.g., (0 to 20 mg/L) ±5% of reading (20 to 50 mg/L)
fDOM	0 to 300 ppb OSE	0.01 ppb OSE	Linearity: $r^2 \geq 0.999$ for 0 to 300 ppb OSE, MDL of 0.016 ppb OSE
pH	0-14 pH units	0.01 pH unit	±0.1 within ±10°C of cal temp ±0.2 for all other temps
ORP	-999 to 999 mV	0.1 mV	±20 mV
TAL-Chlorophyll	0 to 100 RFU or 0 to 400 µg/L chl	0.01 RFU or 0.01 µg/L of pigment	Linearity: $r^2 \geq 0.999$ for Rhodamine WT across full range
TAL-Phycocyanin or TAL-Phycocerythrin	0 to 100 RFU or 0 to 100 µg/L PC		
	0 to 100 RFU or 0 to 280 µg/L PE		
Turbidity	0 to 4000 FNU	0.01 FNU to 0.1 FNU	0.3 FNU or ±3% of reading, (0 to 999 FNU) ±5% of reading (1000 to 4000 FNU)

<sup>1</sup>Range dependent.

<sup>2</sup>Specifications indicate typical performance and are subject to change. Please check EXOwater.com for up to date information.

### EXO Smart Sensor Anatomy



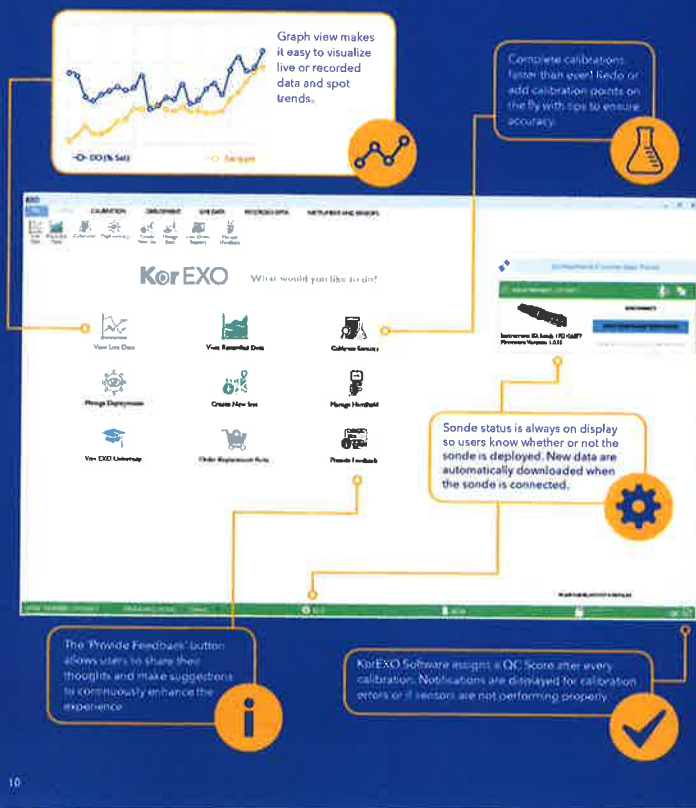
### Calculated Parameters

The following parameters are calculated from one or more sensors listed above. More information about the methods and calculations may be found in the EXO User Manual.

- Absolute Pressure
- Ammonia
- DO% Local
- DO% LocalB
- Gauge Pressure
- nLF Conductivity
- Relativity
- Salinity
- Specific Conductivity
- Total Algae cells/mL
- Total Dissolved Solids
- Total Suspended Solids
- Vertical Position
- Water Density

## KorEXO Software

KorEXO is an accessible, feature-rich software platform for managing EXO instrumentation and water quality data. The software allows you to calibrate sensors, setup long-term deployments, and ensure equipment is operating at peak performance. Designed to run on Windows OS computers and tablets, the interface is optimized for touchscreens and streamlined for operation in the field, lab, or office.



## Support and Protection for Your Peace of Mind

### Protect your investment with the EXO Factory Service Plan\*

With an EXO Factory Service Plan, you can minimize down-time and unexpected maintenance costs by keeping your equipment in top working order.

#### What does the Service Plan include?

Plans cover standard replacement parts, firmware updates, seal restoration, cleaning, comprehensive evaluation, testing, and calibration of all sensors.

#### What equipment is covered?

Each plan covers a single EXO sonde, field cable, handheld, and sensors purchased with the sonde.

#### How long does coverage last?

Plans are available for coverage up to 3 years from the time the EXO Sonde is purchased.

\*Currently available in North America. Check with your regional technical support for service options.

### Industry-Leading Technical Support

Our expert **Technical Support Team** is available to provide assistance and answer any questions that may come up in the field or lab.



Call +1 (937) 767-2762 to speak with our knowledgeable staff



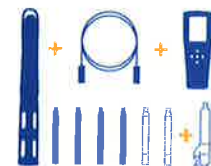
Email [info@ysi.com](mailto:info@ysi.com) for questions regarding your EXO equipment



Live Chat at [YSI.com](https://ysi.com) for immediate response from technical experts



Factory Service Center located in Yellow Springs, Ohio



Technicians are available for in-house or on-site training events



Xylem |'zīləm|

- 1) The tissue in plants that brings water upward from the roots;
- 2) a leading global water technology company.

We're a global team unified in a common purpose: creating advanced technology solutions to the world's water challenges. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. Our products and services move, treat, analyze, monitor and return water to the environment, in public utility, industrial, residential and commercial building services settings. Xylem also provides a leading portfolio of smart metering, network technologies and advanced analytics solutions for water, electric and gas utilities. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise with a strong focus on developing comprehensive, sustainable solutions.

For more information on how Xylem can help you, go to [www.xyleminc.com](http://www.xyleminc.com).

# xylem

Let's Solve Water

*"I'm very proud of the great work our customers do using our best-in-class sonde platform."*



**Dr. Stephanie A. Smith**  
EXO Product Manager



**YSI Incorporated**  
1725 Brannum Lane  
Yellow Springs, OH 45387

1.800.897.4151  
[info@ysi.com](mailto:info@ysi.com)  
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Who's  
Minding  
the Planet?



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## Capital Project Detail - 2020

<b>Project Title:</b>	Virgil Dam Safety Study	<b>Project #</b>	Pending
<b>G/L Account(s):</b>	Pending	<b>Asset Class</b>	Capital Works
<b>Priority Classification:</b>	Code Compliance and Legislation	<b>Division</b>	Watershed
<b>Priority Ranking:</b>	4	<b>Project Status</b>	Draft
<b>Site/Location:</b>	Niagara-on-the-Lake	<b>Grouping</b>	I-1
<b>Project Lead:</b>	Steve Miller	<b>Project Start Date</b>	Jan-20
<b>Funding Source:</b>	Special Levy - Niagara	<b>Project Completion</b>	Oct-20
<b>Partner (if applicable) :</b>		<b>Municipality</b>	Niagara

## PROJECT DESCRIPTION, RATIONALE, BACKGROUND, LINKAGES AND IMPLICATIONS

*Provide a detailed description of the project, why the project needs to be done now and consequences of deferring the project. Include historical cost and typical asset life cycle. Indicate if the project is linked to any other current or future project (capital or operating) and any impact to related project(s) if this project is approved or deferred.*

Virgil dam - currently classified as a low hazard dam, with irrigation as it's initial primary purpose. Legislation requires a safety study/review every 10 years.  
The last study was conducted in 2006; 3 years overdue.  
Cost estimates are based on an RFP dating back to 2017, with a provision for CPI.

## NEEDS ANALYSIS &amp; BENEFITS

*Indicate project benefits, i.e. improving health and safety, customer service, increased ROI, heritage, educational, etc.*

The (legislated) safety study serves to support capital improvements and remedial action. Integrity of this water control structure is unknown.  
It is the expectation that the study will lead to capital improvements of this structure, extending useful life.

## Capital Project Detail - 2020

Project Title: Virgil Dam Safety Study

Project #

Pending

## RISKS &amp; MITIGATION STRATEGY

Indicate project risks and proposed mitigation; include risk assessments if the project is deferred (low/medium/high) and any risks during or post implementation. Include direct costs of not proceeding (if known) as well as any performance or service related risks.

Deferral contravenes legislation. Deferral also serves to drive up the cost of remedial measures and capital improvement as the structure continues to deteriorate without remediation.

Health and safety - wooden structure needs replacing

## PROJECT COST &amp; FORECAST

Description	Prior Year(s)	2020	2021	2022	2023	2024+
Planning						
Design						
Pre-Construction						
Construction						
Internal salaries & benefits						
Internal resources - non-salary						
Warranty						
Facilities						
Equipment						
Contingency						
Other		60,000				
<b>TOTAL</b>	-	<b>60,000</b>	-	-	-	-

## PROJECT MILESTONES

Percent Complete	25%	50%	75%	100%
Projected Date (month/year) milestone met				Nov-20

## CASH FLOW PROJECTION

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Projected cash flow requirements - current year				60,000

## Capital Project Detail - 2020

Project Title: Virgil Dam Safety Study

Project #

Pending

## OTHER

Asset useful life: 5 years

Projected impact on operations annually: \$ -

Return on investment (ROI)

gain from investment:

cost of investment: 60,000

ROI:

Payback Period

Year

Investment

Annual Savings/Revenues

Cumulative Cost (savings)

0

1

2

## NOTES



2018 Virgil Dam  
Safety Review  
Update REP.pdf

Name and Title

Signature

Date



**NIAGARA PENINSULA  
CONSERVATION**  
A U T H O R I T Y



## **VIRGIL DAM SAFETY REVIEW UPDATE**

### **REQUEST FOR PROPOSAL**

**January 3, 2018**

## **1.0 INTRODUCTION**

### **1.1 General**

The Virgil Dams and Reservoirs were constructed in 1968. Owned and operated by the Niagara Peninsula Conservation Authority, these structures are located on Four Mile Creek in the Town of Niagara-on-the-Lake. The facility is comprised of the Upper Dam (located upstream of Line 3), and the Lower Dam (located upstream of Line 2). The drainage area upstream of the reservoirs is approximately 22.6 square kilometres (8.7 square miles). The primary purpose of the reservoirs is to provide water for the irrigation of farm crops. The reservoirs also provide an area for passive recreation and wildlife conservation.

A Dam Safety Review was undertaken for this facility in 2006 by Hatch Acres which concluded that both dams are categorized as 'Low Risk' and were in good condition. As the applicable Province of Ontario *'Dam Safety Reviews Best Management Practices'* (OMNR, 2011) have since been updated, the NPCA is seeking proposals to update the 2006 Upper and Lower Virgil Dams Safety Review.

### **1.2 Watershed Characteristics**

Four Mile Creek drains an area of approximately 40 square kilometres (15.5 square miles) comprised for the most part of gentle sloping topography. The soils are primarily clay of the Lincoln series, clay loams of the Chinguacousy and Jeddo series, and fine silty loam of the Vineland Series; all of which are underlain by Palaeozoic sedimentary rocks.

Four Mile Creek originates in the steeply rising Niagara Escarpment near the village of St. David's, flows north through the village of Virgil, and outlets into Lake Ontario. The geologic feature known as the St. David's Buried Gorge is comprised of an ancient buried valley which cuts through the escarpment and provides some degree of groundwater baseflow into the headwaters of Four Mile Creek. During the growing season the Town pumps water from the Adam Beck hydro reservoir into the headwater of Four Mile Creek in order to augment summer flows.

Agriculture is the main land use, dominated by orchards and vineyards. The original watercourse channel has been straightened and deepened in many areas on order to improve drainage in the surrounding land.

Between the village of Virgil and Lake Ontario, the creek valley becomes more pronounced and vegetated. Orchards and vineyards are still predominant, however Four Mile Creek tends to be buffered from these activities by the forested valley. The main watercourse has an approximate length of 16.2 kilometers (10.1 miles) with a vertical fall of approximately 120m (400 feet).

### **1.3 Site Access**

The Upper Dam is constructed just south of Township Line 3 and west of Regional Road 100 (Creek Road). Line 3 may be accessed from either Creek Road or Concession 6 Road.

The Lower Dam is constructed between Regional Road 55 (Niagara Stone Road) and Township Line 2, and west of Regional Road 100 (Creek Road). The Lower Dam can only be accessed from Creek Road as Line 2 is unopened west of the Dam.



This map is for illustrative purposes only. Information contained herein is not intended to constitute advice, is not a substitute for professional review or a site survey, and is subject to change without notice. The NPCA does not assume any responsibility for, nor guarantee, the accuracy of the information contained on this map. Any interpretations or conclusions drawn from this map are the sole responsibility of the user. THIS IS NOT A 30% SURVEY.

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### Legend

- Corporate Watershed Divide N  
Ontario Road Network  
Major Highways  
Arterial Roads  
Local Roads
- MEMBER MUNICIPALITY Lab  
Member Municipal Boundary L  
10K Hydrography - HydroEdge  
10K Waterbodies (30K-300K)  
SWOOP\_2015  
Red: Band\_1  
Green: Band\_2  
Blue: Band\_3

## Notes

## Capital Project Detail - 2020

<b>Project Title:</b>	Shriner's Creek Modifications	<b>Project #</b>	Pending
<b>G/L Account(s):</b>	Pending	<b>Asset Class</b>	Capital Works
<b>Priority Classification:</b>	Operational Efficiency	<b>Division</b>	Watershed
<b>Priority Ranking:</b>	3	<b>Project Status</b>	Draft
<b>Site/Location:</b>	Niagara Falls	<b>Grouping</b>	I-1
<b>Project Lead:</b>	Steve Miller	<b>Project Start Date</b>	Jan-20
<b>Funding Source:</b>	Special Levy - Niagara	<b>Project Completion</b>	Dec-20
<b>Partner (if applicable):</b>		<b>Municipality</b>	Niagara

## PROJECT DESCRIPTION, RATIONALE, BACKGROUND, LINKAGES AND IMPLICATIONS

Provide a detailed description of the project, why the project needs to be done now and consequences of deferring the project. Include historical cost and typical asset life cycle. Indicate if the project is linked to any other current or future project (capital or operating) and any impact to related project(s) if this project is approved or deferred.

3 dams - A, B & C - earthen dikes - 4' diameter corrugated steel pipe outlets

Constructed in the 1980's to mitigate the hazards of flooding as a result of the urbanization of Niagara Falls

Aquatic mammals have become problematic and impact efficiency of dam structures (erosion) - increased capital cost to remediate.

Dams B only, A and C not problematic at this point.

Modifications to the structure are proposed to mitigate and/or prevent reoccurring impact from aquatic mammals

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## NEEDS ANALYSIS &amp; BENEFITS


Indicate project benefits, i.e. improving health and safety, customer service, increased ROI, heritage, educational, etc.

Restore functionality of the water control structure.

## Capital Project Detail - 2020

Project Title: Shriner's Creek Modifications		RISKS & MITIGATION STRATEGY					Project #	Pending
Indicate project risks and proposed mitigation; include risk assessments if the project is deferred (low/medium/high) and any risks during or post implementation. Include direct costs of not proceeding (if known) as well as any performance or service related risks.								
Structure could fail, leading to increased flood risk for downstream lands.								
If deferred, increased capital costs to replace the entire structure, vs modification/remediation.								
PROJECT COST & FORECAST								
Description	Prior Year(s)	2020	2021	2022	2023	2024+		
Planning								
Design								
Pre-Construction								
Construction		80,000						
Internal salaries & benefits								
Internal resources - non-salary								
Warrior County								
Facilities								
Equipment								
Contingency								
Other								
TOTAL	-	80,000	-	-	-	-		-
PROJECT MILESTONES								
Percent Complete			25%	50%	75%	100%		
Projected Date (month/year) milestone met						Dec-20		
CASH FLOW PROJECTION								
			Quarter 1	Quarter 2	Quarter 3	Quarter 4		
Projected cash flow requirements - current year						80,000		

## Capital Project Detail - 2020

Project Title: Shriner's Creek Modifications		Project #		Pending
<b>OTHER</b>				
Asset useful life:		30 years		
Projected impact on operations annually:		\$ -		
Return on investment (ROI)		80,000		
ROI:				
Payback Period	Year	Investment	Annual Savings/Revenues	Cumulative Cost (savings)
	0			
	1			
	2			
NOTES				
				
Name and Title			Signature	
			Date	

## Capital Project Detail - 2020

<b>Project Title:</b> Stream Gauge Equipment	<b>Project #</b>	<b>Pending</b>
<b>G/L Account(s):</b> Pending	<b>Asset Class</b>	<b>Capital Equipment</b>
<b>Priority Classification:</b> Operational Efficiency	<b>Division</b>	<b>Watershed</b>
<b>Priority Ranking:</b> 3	<b>Project Status</b>	<b>Draft</b>
<b>Site/Location:</b> Various	<b>Grouping</b>	<b>B-4</b>
<b>Project Lead:</b> Steve Miller	<b>Project Start Date</b>	<b>Apr-20</b>
<b>Funding Source:</b> Special Levy - ALL	<b>Project Completion</b>	<b>Nov-20</b>
<b>Partner (if applicable):</b>	<b>Municipality</b>	<b>ALL</b>

## PROJECT DESCRIPTION, RATIONALE, BACKGROUND, LINKAGES AND IMPLICATIONS

*Provide a detailed description of the project, why the project needs to be done now and consequences of deferring the project. Include historical cost and typical asset life cycle. Indicate if the project is linked to any other current or future project (capital or operating) and any impact to related project(s) if this project is approved or deferred.*

Equipment required to support the Flood Forecasting and Warning program, which is a core mandate of the NPCA - protection from natural hazards. Investment in equipment: telemetry and sensors to upgrade NPCA flood forecasting network. This investment will allow NPCA to take advantage of new technologies to improve reliability and robustness of current equipment.

Upgraded equipment is required to measure stream flow, water levels, amount of rainfall/snowfall.

Telemetry stores and transmits data from remote gauge stations.

## NEEDS ANALYSIS &amp; BENEFITS

*Indicate project benefits, i.e. improving health and safety, customer service, increased ROI, heritage, educational, etc.*

Municipalities in the watershed rely heavily on data from stream gauge equipment, which informs the flood forecasting and warning program (core mandate).

Municipal operations staff uses this info to prepare for and respond to severe weather events.

NPCA planning and regulations staff utilize data in the delivery of programs and to support discussions with clients.

Municipalities have a requirement to declare severe weather events to support road operations. Data from gauge stations help to inform decision at the municipal level.

## Capital Project Detail - 2020

Project Title: Stream Gauge Equipment		RISKS & MITIGATION STRATEGY					Project #	Pending
Indicate project risks and proposed mitigation; Include risk assessments if the project is deferred (low/medium/high) and any risks during or post implementation. Include direct costs of not proceeding (if known) as well as any performance or service related risks.								
Power supply to the equipment during weather events is a risk, mitigated by improving service using alternative power source – from hydro to battery to solar power. Lack of power to telemetry - when gauge is not functional, NPCA loses the ability to visually see what is occurring during the weather event. Redundancy and resiliency of power supply is critical.								
PROJECT COST & FORECAST								
Description	Prior Year(s)	2020	2021	2022	2023	2024+		
Planning								
Design								
Pre-Construction								
Construction								
Internal salaries & benefits								
Internal resources - non-salary								
Warehouse								
Facilities								
Equipment		20,000						
Contingency								
Other								
TOTAL	-	20,000	-	-	-	-		
PROJECT MILESTONES								
Percent Complete			25%	50%	75%	100%		
Projected Date (month/year) milestone met				Apr-20		Nov-20		
CASH FLOW PROJECTION								
			Quarter 1	Quarter 2	Quarter 3	Quarter 4		
Projected cash flow requirements - current year						20,000		

## Capital Project Detail - 2020

Project Title: Stream Gauge Equipment		Project #		Pending
<b>OTHER</b>				
Asset useful life:		5 years		
Projected impact on operations annually: \$				
Return on investment (ROI)				
gain from investment:				
cost of investment:		20,000		
<b>ROI:</b>				
Payback Period	Year	Investment	Annual Savings/Revenues	Cumulative Cost (savings)
	0			
	1			
	2			
<b>NOTES</b>				



Name and Title

Signature

Date

## Capital Project Detail - 2020

<b>Project Title:</b>	<b>Floodplain Mapping - Beaver Creek</b>	<b>Project #</b>	Pending
<b>G/L Account(s):</b>	Pending	<b>Asset Class</b>	Capital Equipment
<b>Priority Classification:</b>	Code Compliance and Legislation	<b>Division</b>	Watershed
<b>Priority Ranking:</b>	4	<b>Project Status</b>	Draft
<b>Site/Location:</b>	West Lincoln	<b>Grouping</b>	B-4
<b>Project Lead:</b>	Steve Miller	<b>Project Start Date</b>	Jan-20
<b>Funding Source:</b>	Special Levy - Niagara	<b>Project Completion</b>	Jun-21
<b>Partner (if applicable) :</b>		<b>Municipality</b>	Niagara

## PROJECT DESCRIPTION, RATIONALE, BACKGROUND, LINKAGES AND IMPLICATIONS

*Provide a detailed description of the project, why the project needs to be done now and consequences of deferring the project. Include historical cost and typical asset life cycle. Indicate if the project is linked to any other current or future project (capital or operating) and any impact to related project(s) if this project is approved or deferred.*

Mapping process that determines the extent of flooding during 100 year regulatory storm. Mapping is used by internal staff in the delivery of NPCA's core mandate to mitigate impact of natural hazards. Mapping is used by external stakeholders such as municipalities, development community, private citizens, etc.

Beaver Creek - major tributary of the Welland River; flows into the Welland River at Wellandport.

Wellandport is a known flood damage centre; approximately 75 structures are at risk from flooding (either from the Welland River or Beaver Creek) - highest priority of proposed Floodplain Mapping Workplan.

## NEEDS ANALYSIS &amp; BENEFITS

*Indicate project benefits, i.e. improving health and safety, customer service, increased ROI, heritage, educational, etc.*

Fulfilment of NPCA's core mandate, supported by Auditor General Recommendation #7 and #8

Wellandport is a known flood damage centre; approximately 75 structures are at risk from flooding (either from the Welland River or Beaver Creek)

Floodplain mapping benefits include:

1. Informs municipal decisions re public infrastructure
2. Provides mission critical data for internal departments - Planning and Regulations. Updated data significantly reduces administrative burden on staff.
3. Informs development decisions
4. Identifies constraints for citizens and developers; helps to identify and quantify development/project ROI
5. Reduces costs of damage for development in flood prone areas.
6. Information, mapping, studies from floodplain mapping exercise is posted publicly, and can be used by private citizens and developers in the development and submission of permits/applications.
7. Updated regulatory mapping - decisions on regulation and policy is based on updated mapping.

## Capital Project Detail - 2020

Project Title: Floodplain Mapping - Beaver Creek

Project #

Pending

## RISKS &amp; MITIGATION STRATEGY

Indicate project risks and proposed mitigation; include risk assessments if the project is deferred (low/medium/high) and any risks during or post implementation. Include direct costs of not proceeding (if known) as well as any performance or service related risks.

Known flood prone area with significant number of potentially vulnerable structures in anticipated floodplain area.

Objective of floodplain mapping is to quantify risk.

## PROJECT COST &amp; FORECAST

Description	Prior Year(s)	2020	2021	2022	2023	2024+
Planning						
Design						
Pre-Construction						
Construction						
Internal salaries & benefits						
Internal resources - non-salary						
Warranty						
Facilities						
Equipment		150,000	50,000			
Contingency						
Other						
<b>TOTAL</b>	-	<b>150,000</b>	<b>50,000</b>	-	-	-

## PROJECT MILESTONES

Percent Complete	25%	50%	75%	100%
Projected Date (month/year) milestone met	May-20	Sep-20	Dec. 2020	Jun-21

## CASH FLOW PROJECTION

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Projected cash flow requirements - current year		50,000	50,000	50,000

## Capital Project Detail - 2020

Project Title: Floodplain Mapping - Beaver Creek

Project #

Pending

## OTHER

Asset useful life: 20 years

Projected impact on operations annually: \$

## Return on investment (ROI)

gain from investment:

cost of investment: 200,000

ROI:

## Payback Period

Year

Investment

Annual Savings/Revenues

Cumulative Cost (savings)

0

1

2

## NOTES

Auditor General Report:

Current status of floodplain mapping inventory:



Name and Title

Signature

Date

NPCA FLOODPLAIN MAPPING STATUS - JULY 2019									
Watercourse	Watershed	Municipality	Project Date	Date of Original Study	Update / New Mapping Required	Status	Total Drainage Area (sq.km)	Total Length of Watercourse with Floodplain Mapping (km)	Project Comments
Bartlett Creek	Lake Ontario	Lincoln	1998	None Previous	Yes	Presently Being Updated	13.3	3.8	Floodplain Mapping Update in the Towns of Grimsby and Lincoln (2019)
Bayers Creek	Niagara River	Niagara Falls / Fort Erie	2009	1976	No		12.1	6.8	NPCA Floodplain Mapping, Bayers Creek. May 2009.
Beamer Creek	Lake Ontario	St. Catharines	1987	None Previous	Yes	Presently Being Updated	8.9	1.7	Floodplain Mapping Update in the City of St. Catharines (2019)
Beamsville Creek	Lake Ontario	Lincoln	1989	None Previous	Yes	Presently Being Updated	8.0	7.3	Floodplain Mapping Update in the Towns of Grimsby and Lincoln (2019)
Beaverdams Creek	Welland Canal	Niagara Falls / Thorold	1982	None Previous	Yes	Outdated	15.5	5.6	Shriner's, Beaverdams Creek and Tributary (Kilbom, 1982)
Beaver Creek	Welland River	West Lincoln	1988	None Previous	Yes	Outdated	73.3	3.5	Watershed Flood Damage Assessment Study, CCL 1988
Big Forks Creek	Welland River	Wainfleet	1985	None Previous	Yes	Outdated	64.5	13.3	Flood Plain Mapping of the Big Fork Creek (Dillon, 1985)
Black/Beaver Creek	Niagara River	Fort Erie	2008	1988	No		106.6	43.3	Fort Erie Creeks Watershed Plan, Philips 2008
Carter Creek							3.1		
	Lake Ontario	St. Catharines	1995	None Previous	No			3.2	Flood and Erosion Control Study for Juliana, Secord, Carter, Rosdale, Dick's, and Francis Creeks. Aquafor Beech, 1995.
Coyle Creek	Welland River	Welland / Pelham	1994	None Previous	Yes	Development Pressures	40.6	13.7	NPCA Coyle Creek Floodplain Mapping Study, 1994
Dicks Creek							16.8		
	Lake Ontario	St. Catharines	1995	None Previous	No			7.8	Flood and Erosion Control Study for Juliana, Secord, Carter, Rosdale, Dick's, and Francis Creeks. Aquafor Beech, 1995.
Drapers Creek	Welland River	Welland	1988	None Previous	Yes	Damage Center	8.9	7.1	Draper's Creek Floodplain Mapping Study, Kilbom 1988
Eagle Marsh Drain	Lake Erie	Port Colborne / Wainfleet	2010	1988	No		10.8	4.5	NPCA Floodplain Mapping - Eagle Marsh Drain Port Colborne 2010
Eight Mile Creek	Lake Ontario	Niagara-on-the-Lake	2007	1978	No		13.3	11.1	Niagara-on-the-lake Watershed Study. Aquafor Beech, 2007
Forty Mile Creek	Lake Ontario	Hamilton / Grimsby	1999	None Previous	No		64.8	23.7	Floodline and Fill Line Map Forty Mile Creek (Philips, 1999)
Four Mile Creek	Lake Ontario	Niagara-on-the-Lake	2007	1995	No		46.1	34.2	Niagara-on-the-lake Watershed Study. Aquafor Beech, 2007
Frenchmans Creek	Lake Ontario	Fort Erie	2004	None Previous	No		17.5	7.7	NPCA Frenchmans Creek Floodplain Mapping, 2004
Hunters Drain	Niagara River	Niagara Falls	2008	1975	No		3.1	3.8	NPCA Floodplain Mapping - Hunters Drain, 2008.
Juliana Creek							4.1		
	Lake Ontario	St. Catharines	1995	None Previous	No			2.5	Flood and Erosion Control Study for Juliana, Secord, Carter, Rosdale, Dick's, and Francis Creeks. Aquafor Beech, 1995.
Lyons Creek	Welland River	Welland / Niagara Falls	2011	1994	No		45.1	40.1	NPCA Floodplain Mapping - Lyons Creek Including Tee Creek, 2011.
One Mile Creek / Epps Drain	Lake Ontario	Niagara-on-the-Lake	2004	1988	No		2.8	4.7	NPCA Floodplain Mapping - One Mile Creek and Epps Drain, 2004.
Oswego Creek	Welland River	Haldimand	1988	None Previous	Yes	Outdated	188.7	16.1	Flood Plain Mapping of Oswego Creek (Kilbom Engineering Ltd. 1976)
Prudhommes Creek	Lake Ontario	Lincoln	1989	None Previous	Yes	Presently Being Updated	9.0	4.4	Floodplain Mapping Update in the Towns of Grimsby and Lincoln (2019)
Richardsons and Francis Creeks	Lake Ontario	St. Catharines	2004	1988	No		19.0	25.3	NPCA - Francis and Richardson Creeks Floodplain Mapping, 2004.
Rosedale Creek							3.2		
	Lake Ontario	St. Catharines	1995	1988	No			1.7	Flood and Erosion Control Study for Juliana, Secord, Carter, Rosdale, Dick's, and Francis Creeks. Aquafor Beech, 1995.
Secord Creek							2.8		
	Lake Ontario	St. Catharines	1995	None Previous	No			1.7	Flood and Erosion Control Study for Juliana, Secord, Carter, Rosdale, Dick's, and Francis Creeks. Aquafor Beech, 1995.
Shriners Creek	Welland Canal	Niagara Falls	1982	None Previous	Yes	Outdated	15.2	5.7	Shriner's, Beaverdams Creek and Tributary (Kilbom Ltd. 1982)
Spring Garden Creek	Lake Ontario	St. Catharines	2008	1987	No		3.8	1.9	NPCA - Spring Garden Creek Floodplain Mapping, 2008.
Ten Mile Creek	Welland Canal	Niagara Falls	2002	1985	No		6.5	3.4	Niagara Falls: Ten Mile Creek Flood Plain Mapping (Earthtech 2002)
Thirty Mile Creek	Lake Ontario	Lincoln	1998	None Previous	No		9.2	6.8	Thirty Mile Creek Floodplain Mapping (Weibe, 1998)
Thompson Creek									
	Welland River	Niagara Falls	1998	None Previous	No		14.6	9.2	Flood Plain Mapping Study - Thompson Creek & Unnamed Creek (Proctor & Redfern Ltd. 1998)
Two Mile Creek	Lake Ontario	Niagara-on-the-Lake	2007	1995	No		23.8	14.2	Niagara-on-the-lake Watershed Study. Aquafor Beech, 2007
Twenty Mile Creek	Lake Ontario	Hamilton/ Linc./W. Lincoln	2007	2005 / 1988	No		302.9	137.6	NPCA Twenty Mile Creek Floodplain Mapping, 2007
Upper Twelve Mile Creek	Lake Ontario	Pelham / Thorold	2005	None Previous	No		50.5	19.7	Upper Twelve Mile Creek Floodplain Mapping (NPCA 2005)
Usshers Creek	Niagara River	Niagara Falls	2009	1992	No		19.4	11.4	NPCA Floodplain Mapping - Usshers Creek, 2009.
Walkers Creek	Lake Ontario	St. Catharines	1987	None Previous	Yes	Presently Being Updated	6.4	4.6	Floodplain Mapping Update in the City of St. Catharines (2019)
Warren Creek	Chippawa Power Canal	Niagara Falls	2000	None Previous	No		5.9	3.3	Niagara Falls: Watershed Plan Philips Engineering, 2000
Welland River - Upstream of Binbrook Dam	Chippawa Power Canal	Hamilton	1999	1985	No		204.0	37.5	Welland River Floodplain Mapping Study, Philips, 1999

Watercourse	Watershed	Municipality	Project Date	Date of Original Study	Update / New Mapping Required	Status	Total Drainage Area (sq.km)	Total Length of Watercourse with Floodplain Mapping (km)	Project Comments
Welland River - Downstream of Binbrook Dam	Chippawa Power Canal	Ham. / W. Lincoln / Welland / Wainfleet / Pelham / Thorold / Nia. Falls	1985	None Previous	Yes	Presently Being Updated	705.5	135.4	Welland River Floodplain Mapping Update Study, WSP 2018
Wignell Drain	Lake Erie	Port Colborne	2011	1986	No		11.1	8.2	NPCA Floodplain Mapping Wignell Drain, August 2011
Lake Erie Shoreline		Haldimand / Wainfleet / Port Colborne / Fort Erie	2010	1992	No			75 km of shoreline	Lake Erie Shoreline Management Plan, Shoreplan Engineering, 2010
Lake Ontario Shoreline		Grimsby / Lincoln / St. Catharines / Niagara-on-the-Lake	2009	1992	No			50 km of shoreline	Lake Ontario Shoreline Management Plan, Baird, 2009.
Spring Creek	Twenty Mile Creek	Grimsby	2006	None Previous	No		43.7	22.3	NPCA Spring Creek Floodplain Mapping, 2006.
North Creek	Twenty Mile Creek	West Lincoln	2006	None Previous	No		37.6	17.7	NPCA North Creek Floodplain Mapping, 2006.
Gavara Ditch	Twenty Mile Creek	Lincoln	2006	None Previous	No		17.1	10.7	NPCA Gavara Ditch Floodplain Mapping, 2006.
Sinkhole Creek	Twenty Mile Creek	Hamilton	2006	None Previous	No		18.4	8.4	NPCA Sinkhole Creek Floodplain Mapping, 2006.
Eighteen Mile Creek	Lake Ontario	Lincoln	2005	None Previous	No		17.6	12.5	NPCA Eighteen Mile Creek Floodplain Mapping, 2005.
Fifteen Mile Creek	Lake Ontario	W. Lincoln / Lincoln / St. Catharines	2006	None Previous	No		62.7	34.5	NPCA Fifteen Mile Creek Floodplain Mapping, 2006.
Sixteen Mile Creek	Lake Ontario	West Lincoln / Lincoln	2006	None Previous	No		42.7	24.3	NPCA Sixteen Mile Creek Floodplain Mapping, 2006.
Beaver Dam Drain	Lake Erie	Port Colborne	2011	None Previous	No		12.5	7.7	NPCA Floodplain Mapping Beaver Dam Drain, February 2011
Bearss Drain	Lake Erie	Port Colborne	2010	None Previous	No		10.9	4.3	NPCA Floodplain Mapping Bearss Drain, Port Colborne 2010
Miller Creek	Niagara River	Fort Erie	2008	None Previous	No		9.0	7.3	Fort Erie Creeks Watershed Plan, Philips 2008
Six Mile Creek Fort Erie	Lake Erie	Fort Erie	2008	None Previous	No		18.1	10.9	Fort Erie Creeks Watershed Plan, Philips 2008
Baker Creek	Niagara River	Fort Erie	2008	None Previous	No		4.3	2.1	Fort Erie Creeks Watershed Plan, Philips 2008
Kraft Drain	Lake Erie	Fort Erie	2008	None Previous	No		5.6	1.8	Fort Erie Creeks Watershed Plan, Philips 2008
Singers Drain	Welland Canal	Thorold	2011	None Previous	No		15.7	8.5	Singers Drain Floodplain Update Report, Amec, 2011.
<b>RURAL WATERCOURSES WITH NO CURRENT FLOODPLAIN MAPPING</b>									
Buckhorn Creek	Welland River	Hamilton / Haldimand		None Previous	Yes		24.3		
Elsie Creek	Welland River	Haldimand		None Previous	Yes		25.6		
Little Forks Creek	Welland River	Wainfleet		None Previous	Yes		13.4		
Little Wolf Creek	Welland River	Hamilton / West Lincoln		None Previous	Yes		10.2		
Mill Creek	Welland River	West Lincoln		None Previous	Yes		33.3		
Mill Race Creek	Welland River	Wainfleet		None Previous	Yes		76.5		
Moore's Creek	Welland River	West Lincoln		None Previous	Yes		13.2		
West Wolf Creek	Welland River	Hamilton / Haldimand		None Previous	Yes		13.9		
Wolf Creek	Welland River	Hamilton / Haldimand		None Previous	Yes		23.6		

## Capital Project Detail - 2020

<b>Project Title:</b>	Floodplain Mapping - St. Catharines	<b>Project #</b>	Pending
<b>G/L Account(s):</b>	Pending	<b>Asset Class</b>	Capital Equipment
<b>Priority Classification:</b>	Code Compliance and Legislation	<b>Division</b>	Watershed
<b>Priority Ranking:</b>	4	<b>Project Status</b>	Draft
<b>Site/Location:</b>	St. Catharines	<b>Grouping</b>	B-4
<b>Project Lead:</b>	Steve Miller	<b>Project Start Date</b>	Jan-20
<b>Funding Source:</b>	Special Levy - Niagara	<b>Project Completion</b>	Mar-20
<b>Partner (if applicable):</b>	Federal - Public Safety Canada	<b>Municipality</b>	Niagara

## PROJECT DESCRIPTION, RATIONALE, BACKGROUND, LINKAGES AND IMPLICATIONS

*Provide a detailed description of the project, why the project needs to be done now and consequences of deferring the project. Include historical cost and typical asset life cycle. Indicate if the project is linked to any other current or future project (capital or operating) and any impact to related project(s) if this project is approved or deferred.*

Mapping process that determines the extent of flooding during 100 year regulatory storm. Mapping is used by internal staff in the delivery of NPCA's core mandate to mitigate impact of natural hazards. Mapping is used by external stakeholders such as municipalities, development community, private citizens, etc.

Floodplain mapping for St. Catharines began in 2018, originally scheduled for completion in March 2019. Matched funding by the Federal Government (Public Safety Canada)

2 watercourses - Beamer Creek and Walkers Creek

Initiative stalled; currently 95% complete - balance of 5% required to satisfy funding partner.

## NEEDS ANALYSIS &amp; BENEFITS

*Indicate project benefits, i.e. improving health and safety, customer service, increased ROI, heritage, educational, etc.*

Fulfilment of NPCA's core mandate, supported by Auditor General Recommendation #7 and #8

Floodplain mapping benefits include:

1. Informs municipal decisions re public infrastructure
2. Provides mission critical data for internal departments - Planning and Regulations. Updated data significantly reduces administrative burden on staff.
3. Informs development decisions
4. Identifies constraints for citizens and developers; helps to identify and quantify development/project ROI
5. Reduces costs of damage for development in flood prone areas.
6. Information, mapping, studies from floodplain mapping exercise is posted publicly, and can be used by private citizens and developers in the development and submission of permits/applications.
7. Updated regulatory mapping - decisions on regulation and policy is based on updated mapping.

## Capital Project Detail - 2020

Project Title: Floodplain Mapping - St. Catharines

Project #

Pending

## RISKS &amp; MITIGATION STRATEGY

Indicate project risks and proposed mitigation; include risk assessments if the project is deferred (low/medium/high) and any risks during or post implementation. Include direct costs of not proceeding (if known) as well as any performance or service related risks.

If project is not done, historical investment in floodplain mapping is negated - \$100K.

Funding partner (Federal) may claw back historical funding if project is not completed (matched funding).

Objective of floodplain mapping is to quantify risk.

## PROJECT COST &amp; FORECAST

Description	Prior Year(s)	2020	2021	2022	2023	2024+
Planning						
Design						
Pre-Construction						
Construction						
Internal salaries & benefits						
Internal resources - non-salary						
Warranty						
Facilities						
Equipment		25,000				
Contingency						
Other						
<b>TOTAL</b>	-	<b>25,000</b>	-	-	-	-

## PROJECT MILESTONES

Percent Complete	25%	50%	75%	100%
Projected Date (month/year) milestone met				Mar-20

## CASH FLOW PROJECTION

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Projected cash flow requirements - current year	25,000			

## Capital Project Detail - 2020

Project Title: Floodplain Mapping - St. Catharines

Project #

Pending

## OTHER

Asset useful life: 20 years

Projected impact on operations annually: \$ -

## Return on investment (ROI)

gain from investment:

cost of investment: 25,000

ROI:

## Payback Period

Year

Investment

Annual Savings/Revenues

Cumulative Cost (savings)

0

1

2

## NOTES

Auditor General Report:

Current status of floodplain mapping inventory:



Name and Title

Signature

Date

NPCA FLOODPLAIN MAPPING STATUS - JULY 2019									
Watercourse	Watershed	Municipality	Project Date	Date of Original Study	Update / New Mapping Required	Status	Total Drainage Area (sq.km)	Total Length of Watercourse with Floodplain Mapping (km)	Project Comments
Bartlett Creek	Lake Ontario	Lincoln	1998	None Previous	Yes	Presently Being Updated	13.3	3.8	Floodplain Mapping Update in the Towns of Grimsby and Lincoln (2019)
Bayers Creek	Niagara River	Niagara Falls / Fort Erie	2009	1976	No		12.1	6.8	NPCA Floodplain Mapping, Bayers Creek, May 2009.
Beamer Creek	Lake Ontario	St. Catharines	1987	None Previous	Yes	Presently Being Updated	8.9	1.7	Floodplain Mapping Update in the City of St. Catharines (2019)
Beamsville Creek	Lake Ontario	Lincoln	1989	None Previous	Yes	Presently Being Updated	8.0	7.3	Floodplain Mapping Update in the Towns of Grimsby and Lincoln (2019)
Beaverdams Creek	Welland Canal	Niagara Falls / Thorold	1982	None Previous	Yes	Outdated	15.5	5.6	Shriner's, Beaverdams Creek and Tributary (Kilborn, 1982)
Beaver Creek	Welland River	West Lincoln	1988	None Previous	Yes	Outdated	73.3	3.5	Watershed Flood Damage Assessment Study, CCL 1988
Big Forks Creek	Welland River	Wainfleet	1985	None Previous	Yes	Outdated	64.5	13.3	Flood Plain Mapping of the Big Fork Creek (Dillon, 1985)
Black/Beaver Creek	Niagara River	Fort Erie	2008	1988	No		106.6	43.3	Fort Erie Creeks Watershed Plan, Philips 2008
Carter Creek	Lake Ontario	St. Catharines	1995	None Previous	No		3.1	3.2	Flood and Erosion Control Study for Juliana, Secord, Carter, Rosdale, Dick's, and Francis Creeks. Aquafor Beech, 1995.
Coyle Creek	Welland River	Welland / Pelham	1994	None Previous	Yes	Development Pressures	40.6	13.7	NPCA Coyle Creek Floodplain Mapping Study, 1994
Dicks Creek	Lake Ontario	St. Catharines	1995	None Previous	No		16.8	7.8	Flood and Erosion Control Study for Juliana, Secord, Carter, Rosdale, Dick's, and Francis Creeks. Aquafor Beech, 1995.
Drapers Creek	Welland River	Welland	1988	None Previous	Yes	Damage Center	8.9	7.1	Draper's Creek Floodplain Mapping Study, Kilborn 1988
Eagle Marsh Drain	Lake Erie	Port Colborne / Wainfleet	2010	1988	No		10.8	4.5	NPCA Floodplain Mapping - Eagle Marsh Drain Port Colborne 2010
Eight Mile Creek	Lake Ontario	Niagara-on-the-Lake	2007	1978	No		13.3	11.1	Niagara-on-the-lake Watershed Study. Aquafor Beech, 2007
Forty Mile Creek	Lake Ontario	Hamilton / Grimsby	1999	None Previous	No		64.8	23.7	Floodline and Fill Line Map Forty Mile Creek (Philips, 1999)
Four Mile Creek	Lake Ontario	Niagara-on-the-Lake	2007	1995	No		46.1	34.2	Niagara-on-the-lake Watershed Study. Aquafor Beech, 2007
Frenchmans Creek	Lake Ontario	Fort Erie	2004	None Previous	No		17.5	7.7	NPCA Frenchmans Creek Floodplain Mapping, 2004
Hunters Drain	Niagara River	Niagara Falls	2008	1975	No		3.1	3.8	NPCA Floodplain Mapping - Hunters Drain, 2008.
Juliana Creek	Lake Ontario	St. Catharines	1995	None Previous	No		4.1	2.5	Flood and Erosion Control Study for Juliana, Secord, Carter, Rosdale, Dick's, and Francis Creeks. Aquafor Beech, 1995.
Lyons Creek	Welland River	Welland / Niagara Falls	2011	1994	No		45.1	40.1	NPCA Floodplain Mapping - Lyons Creek Including Tee Creek, 2011.
One Mile Creek / Epps Drain	Lake Ontario	Niagara-on-the-Lake	2004	1988	No		2.8	4.7	NPCA Floodplain Mapping - One Mile Creek and Epps Drain, 2004.
Oswego Creek	Welland River	Haldimand	1988	None Previous	Yes	Outdated	188.7	16.1	Flood Plain Mapping of Oswego Creek (Kilborn Engineering Ltd. 1976)
Prudhommes Creek	Lake Ontario	Lincoln	1989	None Previous	Yes	Presently Being Updated	9.0	4.4	Floodplain Mapping Update in the Towns of Grimsby and Lincoln (2019)
Richardsons and Francis Creeks	Lake Ontario	St. Catharines	2004	1988	No		19.0	25.3	NPCA - Francis and Richardson Creeks Floodplain Mapping, 2004.
Rosedale Creek	Lake Ontario	St. Catharines	1995	1988	No		3.2	1.7	Flood and Erosion Control Study for Juliana, Secord, Carter, Rosdale, Dick's, and Francis Creeks. Aquafor Beech, 1995.
Secord Creek	Lake Ontario	St. Catharines	1995	None Previous	No		2.8	1.7	Flood and Erosion Control Study for Juliana, Secord, Carter, Rosdale, Dick's, and Francis Creeks. Aquafor Beech, 1995.
Shriner's Creek	Welland Canal	Niagara Falls	1982	None Previous	Yes	Outdated	15.2	5.7	Shriner's, Beaverdams Creek and Tributary (Kilborn Ltd. 1982)
Spring Garden Creek	Lake Ontario	St. Catharines	2008	1987	No		3.8	1.9	NPCA - Spring Garden Creek Floodplain Mapping, 2008.
Ten Mile Creek	Welland Canal	Niagara Falls	2002	1985	No		6.5	3.4	Niagara Falls: Ten Mile Creek Flood Plain Mapping (Earthtech 2002)
Thirty Mile Creek	Lake Ontario	Lincoln	1998	None Previous	No		9.2	6.8	Thirty Mile Creek Floodplain Mapping (Weibe, 1998)
Thompson Creek	Welland River	Niagara Falls	1998	None Previous	No		14.6	9.2	Flood Plain Mapping Study - Thompson Creek & Unnamed Creek (Proctor & Redfern Ltd. 1998)
Two Mile Creek	Lake Ontario	Niagara-on-the-Lake	2007	1995	No		23.8	14.2	Niagara-on-the-lake Watershed Study. Aquafor Beech, 2007
Twenty Mile Creek	Lake Ontario	Hamilton/ Linc./W. Lincoln	2007	2005 / 1988	No		302.9	137.6	NPCA Twenty Mile Creek Floodplain Mapping, 2007
Upper Twelve Mile Creek	Lake Ontario	Pelham / Thorold	2005	None Previous	No		50.5	19.7	Upper Twelve Mile Creek Floodplain Mapping (NPCA 2005)
Usshers Creek	Niagara River	Niagara Falls	2009	1992	No		19.4	11.4	NPCA Floodplain Mapping - Usshers Creek, 2009.
Walkers Creek	Lake Ontario	St. Catharines	1987	None Previous	Yes	Presently Being Updated	6.4	4.6	Floodplain Mapping Update in the City of St. Catharines (2019)
Warren Creek	Chippawa Power Canal	Niagara Falls	2000	None Previous	No		5.9	3.3	Niagara Falls: Watershed Plan Philips Engineering, 2000
Welland River - Upstream of Binbrook Dam	Chippawa Power Canal	Hamilton	1999	1985	No		204.0	37.5	Welland River Floodplain Mapping Study. Philips, 1999

Watercourse	Watershed	Municipality	Project Date	Date of Original Study	Update / New Mapping Required	Status	Total Drainage Area (sq.km)	Total Length of Watercourse with Floodplain Mapping (km)	Project Comments
Welland River - Downstream of Binbrook Dam	Chippawa Power Canal	Ham. / W. Lincoln / Welland / Wainfleet / Pelham / Thorold / Nia. Falls	1985	None Previous	Yes	Presently Being Updated	705.5	135.4	Welland River Floodplain Mapping Update Study, WSP 2019
Wignell Drain	Lake Erie	Port Colborne	2011	1986	No		11.1	8.2	NPCA Floodplain Mapping Wignell Drain, August 2011
Lake Erie Shoreline		Haldimand / Wainfleet / Port Colborne / Fort Erie	2010	1992	No			75 km of shoreline	Lake Erie Shoreline Management Plan, Shoreplan Engineering, 2010
Lake Ontario Shoreline		Grimsby / Lincoln / St. Catharines / Niagara-on-the-Lake	2009	1992	No			50 km of shoreline	Lake Ontario Shoreline Management Plan, Baird, 2009
Spring Creek	Twenty Mile Creek	Grimsby	2006	None Previous	No		43.7	22.3	NPCA Spring Creek Floodplain Mapping, 2006.
North Creek	Twenty Mile Creek	West Lincoln	2006	None Previous	No		37.6	17.7	NPCA North Creek Floodplain Mapping, 2006.
Gavara Ditch	Twenty Mile Creek	Lincoln	2006	None Previous	No		17.1	10.7	NPCA Gavara Ditch Floodplain Mapping, 2006.
Sinkhole Creek	Twenty Mile Creek	Hamilton	2006	None Previous	No		18.4	8.4	NPCA Sinkhole Creek Floodplain Mapping, 2006.
Eighteen Mile Creek	Lake Ontario	Lincoln	2005	None Previous	No		17.6	12.5	NPCA Eighteen Mile Creek Floodplain Mapping, 2005.
Fifteen Mile Creek	Lake Ontario	W. Lincoln / Lincoln / St. Catharines	2006	None Previous	No		62.7	34.5	NPCA Fifteen Mile Creek Floodplain Mapping, 2006.
Sixteen Mile Creek	Lake Ontario	West Lincoln / Lincoln	2006	None Previous	No		42.7	24.3	NPCA Sixteen Mile Creek Floodplain Mapping, 2006.
Beaver Dam Drain	Lake Erie	Port Colborne	2011	None Previous	No		12.5	7.7	NPCA Floodplain Mapping Beaver Dam Drain, February 2011
Bearss Drain	Lake Erie	Port Colborne	2010	None Previous	No		10.9	4.3	NPCA Floodplain Mapping Bearss Drain, Port Colborne 2010
Miller Creek	Niagara River	Fort Erie	2008	None Previous	No		9.0	7.3	Fort Erie Creeks Watershed Plan, Philips 2008
Six Mile Creek Fort Erie	Lake Erie	Fort Erie	2008	None Previous	No		18.1	10.9	Fort Erie Creeks Watershed Plan, Philips 2008
Baker Creek	Niagara River	Fort Erie	2008	None Previous	No		4.3	2.1	Fort Erie Creeks Watershed Plan, Philips 2008
Kraft Drain	Lake Erie	Fort Erie	2008	None Previous	No		5.6	1.8	Fort Erie Creeks Watershed Plan, Philips 2008
Singers Drain	Welland Canal	Thorold	2011	None Previous	No		15.7	8.5	Singers Drain Floodplain Update Report, Amec, 2011.
<b>RURAL WATERCOURSES WITH NO CURRENT FLOODPLAIN MAPPING</b>									
Buckhorn Creek	Welland River	Hamilton / Haldimand		None Previous	Yes		24.3		
Elsie Creek	Welland River	Haldimand		None Previous	Yes		25.6		
Little Forks Creek	Welland River	Wainfleet		None Previous	Yes		13.4		
Little Wolf Creek	Welland River	Hamilton / West Lincoln		None Previous	Yes		10.2		
Mill Creek	Welland River	West Lincoln		None Previous	Yes		33.3		
Mill Race Creek	Welland River	Wainfleet		None Previous	Yes		76.5		
Moore's Creek	Welland River	West Lincoln		None Previous	Yes		13.2		
West Wolf Creek	Welland River	Hamilton / Haldimand		None Previous	Yes		13.9		
Wolf Creek	Welland River	Hamilton / Haldimand		None Previous	Yes		23.6		

## Capital Project Detail - 2020

<b>Project Title:</b>	Floodplain Mapping - Grimsby/Lincoln	<b>Project #</b>	Pending
<b>G/L Account(s):</b>	Pending	<b>Asset Class</b>	Capital Equipment
<b>Priority Classification:</b>	Code Compliance and Legislation	<b>Division</b>	Watershed
<b>Priority Ranking:</b>	4	<b>Project Status</b>	Draft
<b>Site/Location:</b>	Grimsby and Lincoln	<b>Grouping</b>	B-4
<b>Project Lead:</b>	Steve Miller	<b>Project Start Date</b>	Jan-20
<b>Funding Source:</b>	Special Levy - Niagara	<b>Project Completion</b>	Mar-20
<b>Partner (if applicable):</b>	Federal - Public Safety Canada	<b>Municipality</b>	Niagara

## PROJECT DESCRIPTION, RATIONALE, BACKGROUND, LINKAGES AND IMPLICATIONS

*Provide a detailed description of the project, why the project needs to be done now and consequences of deferring the project. Include historical cost and typical asset life cycle. Indicate if the project is linked to any other current or future project (capital or operating) and any impact to related project(s) if this project is approved or deferred.*

Mapping process that determines the extent of flooding during 100 year regulatory storm. Mapping is used by internal staff in the delivery of NPCA's core mandate to mitigate impact of natural hazards. Mapping is used by external stakeholders such as municipalities, development community, private citizens, etc. Floodplain mapping for Grimsby/Lincoln began in 2018, originally scheduled for completion in March 2019. Matched funding by the Federal Government (Public Safety Canada)

6 major watercourses in Grimsby and 3 in Lincoln.

Initiative stalled; currently 85% complete - balance of 15% required to satisfy funding partner.

## NEEDS ANALYSIS &amp; BENEFITS

*Indicate project benefits, i.e. improving health and safety, customer service, increased ROI, heritage, educational, etc.*

Fulfilment of NPCA's core mandate, supported by Auditor General Recommendation #7 and #8

Floodplain mapping benefits include:

1. Informs municipal decisions re public infrastructure
2. Provides mission critical data for internal departments - Planning and Regulations. Updated data significantly reduces administrative burden on staff.
3. Informs development decisions
4. Identifies constraints for citizens and developers; helps to identify and quantify development/project ROI
5. Reduces costs of damage for development in flood prone areas.
6. Information, mapping, studies from floodplain mapping exercise is posted publicly, and can be used by private citizens and developers in the development and submission of permits/applications.
7. Updated regulatory mapping - decisions on regulation and policy is based on updated mapping.

## Capital Project Detail - 2020

Project Title: Floodplain Mapping - Grimsby/Lincoln

Project #

Pending

## RISKS &amp; MITIGATION STRATEGY

Indicate project risks and proposed mitigation; include risk assessments if the project is deferred (low/medium/high) and any risks during or post implementation. Include direct costs of not proceeding (if known) as well as any performance or service related risks.

If project is not done, historical investment in floodplain mapping is negated - \$100K.

Funding partner (Federal) may claw back historical funding if project is not completed (matched funding).

Objective of floodplain mapping is to quantify risk.

## PROJECT COST &amp; FORECAST

Description	Prior Year(s)	2020	2021	2022	2023	2024+
Planning						
Design						
Pre-Construction						
Construction						
Internal salaries & benefits						
Internal resources - non-salary						
Warranty						
Facilities						
Equipment		20,000				
Contingency						
Other						
<b>TOTAL</b>	-	<b>20,000</b>	-	-	-	-

## PROJECT MILESTONES

Percent Complete	25%	50%	75%	100%
Projected Date (month/year) milestone met				Mar-20

## CASH FLOW PROJECTION

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Projected cash flow requirements - current year	20,000			

## Capital Project Detail - 2020

Project Title: Floodplain Mapping - Grimsby/Lincoln

Project #

Pending

OTHER

Asset useful life: 20 years

Projected impact on operations annually: \$ -

Return on investment (ROI)

gain from investment:

cost of investment: 20,000

ROI:

Payback Period

Year

Investment

Annual Savings/Revenues

Cumulative Cost (savings)

0

1

2

## NOTES

Auditor General Report:

Current status of floodplain mapping inventory:



AUDITOR  
GENERAL SPECIAL  
AUDIT OF THE



NPCA Floodplain  
Mapping Status -  
July 2019.xls

Name and Title

Signature

Date

NPCA FLOODPLAIN MAPPING STATUS - JULY 2019									
Watercourse	Watershed	Municipality	Project Date	Date of Original Study	Update / New Mapping Required	Status	Total Drainage Area (sq.km)	Total Length of Watercourse with Floodplain Mapping (km)	Project Comments
Bartlett Creek	Lake Ontario	Lincoln	1998	None Previous	Yes	Presently Being Updated	13.3	3.8	Floodplain Mapping Update in the Towns of Grimsby and Lincoln (2019)
Bayers Creek	Niagara River	Niagara Falls / Fort Erie	2009	1976	No		12.1	6.8	NPCA Floodplain Mapping, Bayers Creek, May 2009.
Beamer Creek	Lake Ontario	St. Catharines	1987	None Previous	Yes	Presently Being Updated	8.9	1.7	Floodplain Mapping Update in the City of St. Catharines (2019)
Beamsville Creek	Lake Ontario	Lincoln	1989	None Previous	Yes	Presently Being Updated	8.0	7.3	Floodplain Mapping Update in the Towns of Grimsby and Lincoln (2019)
Beaverdams Creek	Welland Canal	Niagara Falls / Thorold	1982	None Previous	Yes	Outdated	15.5	5.6	Shriner's, Beaverdams Creek and Tributary (Kilborn, 1982)
Beaver Creek	Welland River	West Lincoln	1988	None Previous	Yes	Outdated	73.3	3.5	Watershed Flood Damage Assessment Study, CCL 1988
Big Forks Creek	Welland River	Wainfleet	1985	None Previous	Yes	Outdated	64.5	13.3	Flood Plain Mapping of the Big Fork Creek (Dillon, 1985)
Black/Beaver Creek	Niagara River	Fort Erie	2008	1988	No		106.6	43.3	Fort Erie Creeks Watershed Plan, Philips 2008
Carter Creek	Lake Ontario	St. Catharines	1995	None Previous	No		3.1	3.2	Flood and Erosion Control Study for Juliana, Secord, Carter, Rosdale, Dick's, and Francis Creeks. Aquafor Beech, 1995.
Coyle Creek	Welland River	Welland / Pelham	1994	None Previous	Yes	Development Pressures	40.6	13.7	NPCA Coyle Creek Floodplain Mapping Study, 1994
Dicks Creek	Lake Ontario	St. Catharines	1995	None Previous	No		16.8	7.8	Flood and Erosion Control Study for Juliana, Secord, Carter, Rosdale, Dick's, and Francis Creeks. Aquafor Beech, 1995.
Drapers Creek	Welland River	Welland	1988	None Previous	Yes	Damage Center	8.9	7.1	Draper's Creek Floodplain Mapping Study, Kilborn 1988
Eagle Marsh Drain	Lake Erie	Port Colborne / Wainfleet	2010	1988	No		10.8	4.5	NPCA Floodplain Mapping - Eagle Marsh Drain Port Colborne 2010
Eight Mile Creek	Lake Ontario	Niagara-on-the-Lake	2007	1978	No		13.3	11.1	Niagara-on-the-lake Watershed Study, Aquafor Beech, 2007
Forty Mile Creek	Lake Ontario	Hamilton / Grimsby	1999	None Previous	No		64.8	23.7	Floodline and Fill Line Map Forty Mile Creek (Philips, 1999)
Four Mile Creek	Lake Ontario	Niagara-on-the-Lake	2007	1995	No		46.1	34.2	Niagara-on-the-lake Watershed Study, Aquafor Beech, 2007
Frenchmans Creek	Lake Ontario	Fort Erie	2004	None Previous	No		17.5	7.7	NPCA Frenchmans Creek Floodplain Mapping, 2004
Hunters Drain	Niagara River	Niagara Falls	2008	1975	No		3.1	3.8	NPCA Floodplain Mapping - Hunters Drain, 2008.
Juliana Creek	Lake Ontario	St. Catharines	1995	None Previous	No		4.1	2.5	Flood and Erosion Control Study for Juliana, Secord, Carter, Rosdale, Dick's, and Francis Creeks. Aquafor Beech, 1995.
Lyons Creek	Welland River	Welland / Niagara Falls	2011	1994	No		45.1	40.1	NPCA Floodplain Mapping - Lyons Creek Including Tee Creek, 2011.
One Mile Creek / Epps Drain	Lake Ontario	Niagara-on-the-Lake	2004	1988	No		2.8	4.7	NPCA Floodplain Mapping - One Mile Creek and Epps Drain, 2004.
Oswego Creek	Welland River	Haldimand	1988	None Previous	Yes	Outdated	188.7	16.1	Flood Plain Mapping of Oswego Creek (Kilborn Engineering Ltd. 1976)
Prudhommes Creek	Lake Ontario	Lincoln	1989	None Previous	Yes	Presently Being Updated	9.0	4.4	Floodplain Mapping Update in the Towns of Grimsby and Lincoln (2019)
Richardsons and Francis Creeks	Lake Ontario	St. Catharines	2004	1988	No		19.0	25.3	NPCA - Francis and Richardson Creeks Floodplain Mapping, 2004.
Rosedale Creek	Lake Ontario	St. Catharines	1995	1988	No		3.2	1.7	Flood and Erosion Control Study for Juliana, Secord, Carter, Rosdale, Dick's, and Francis Creeks. Aquafor Beech, 1995.
Secord Creek	Lake Ontario	St. Catharines	1995	None Previous	No		2.8	1.7	Flood and Erosion Control Study for Juliana, Secord, Carter, Rosdale, Dick's, and Francis Creeks. Aquafor Beech, 1995.
Shriners Creek	Welland Canal	Niagara Falls	1982	None Previous	Yes	Outdated	15.2	5.7	Shriner's, Beaverdams Creek and Tributary (Kilborn Ltd. 1982)
Spring Garden Creek	Lake Ontario	St. Catharines	2008	1987	No		3.8	1.9	NPCA - Spring Garden Creek Floodplain Mapping, 2008.
Ten Mile Creek	Welland Canal	Niagara Falls	2002	1985	No		6.5	3.4	Niagara Falls: Ten Mile Creek Flood Plain Mapping (Earthtech 2002)
Thirty Mile Creek	Lake Ontario	Lincoln	1998	None Previous	No		9.2	6.8	Thirty Mile Creek Floodplain Mapping (Weibe, 1998)
Thompson Creek	Welland River	Niagara Falls	1998	None Previous	No		14.6	9.2	Flood Plain Mapping Study - Thompson Creek & Unnamed Creek (Proctor & Redfern Ltd. 1998)
Two Mile Creek	Lake Ontario	Niagara-on-the-Lake	2007	1995	No		23.8	14.2	Niagara-on-the-lake Watershed Study, Aquafor Beech, 2007
Twenty Mile Creek	Lake Ontario	Hamilton/ Linc./W. Lincoln	2007	2005 / 1988	No		302.9	137.6	NPCA Twenty Mile Creek Floodplain Mapping, 2007
Upper Twelve Mile Creek	Lake Ontario	Pelham / Thorold	2005	None Previous	No		50.5	19.7	Upper Twelve Mile Creek Floodplain Mapping (NPCA 2005)
Usshers Creek	Niagara River	Niagara Falls	2009	1992	No		19.4	11.4	NPCA Floodplain Mapping - Usshers Creek, 2009.
Walkers Creek	Lake Ontario	St. Catharines	1987	None Previous	Yes	Presently Being Updated	6.4	4.6	Floodplain Mapping Update in the City of St. Catharines (2019)
Warren Creek	Chippawa Power Canal	Niagara Falls	2000	None Previous	No		5.9	3.3	Niagara Falls: Watershed Plan Philips Engineering, 2000
Welland River - Upstream of Binbrook Dam	Chippawa Power Canal	Hamilton	1999	1985	No		204.0	37.5	Welland River Floodplain Mapping Study, Philips, 1999

Watercourse	Watershed	Municipality	Project Date	Date of Original Study	Update / New Mapping Required	Status	Total Drainage Area (sq.km)	Total Length of Watercourse with Floodplain Mapping (km)	Project Comments
Welland River - Downstream of Binbrook Dam	Chippawa Power Canal	Ham. / W. Lincoln / Welland / Wainfleet / Pelham / Thorold / Nia. Falls	1985	None Previous	Yes	Presently Being Updated	705.5	135.4	Welland River Floodplain Mapping Update Study, WSP 2019
Wignell Drain	Lake Erie	Port Colborne	2011	1986	No		11.1	8.2	NPCA Floodplain Mapping Wignell Drain, August 2011
Lake Erie Shoreline		Haldimand / Wainfleet / Port Colborne / Fort Erie	2010	1992	No			75 km of shoreline	Lake Erie Shoreline Management Plan, Shoreplan Engineering, 2010
Lake Ontario Shoreline		Grimsby / Lincoln / St. Catharines / Niagara-on-the-Lake	2009	1992	No			50 km of shoreline	Lake Ontario Shoreline Management Plan, Baird, 2009
Spring Creek	Twenty Mile Creek	Grimsby	2006	None Previous	No		43.7	22.3	NPCA Spring Creek Floodplain Mapping, 2006.
North Creek	Twenty Mile Creek	West Lincoln	2006	None Previous	No		37.6	17.7	NPCA North Creek Floodplain Mapping, 2006.
Gavara Ditch	Twenty Mile Creek	Lincoln	2006	None Previous	No		17.1	10.7	NPCA Gavara Ditch Floodplain Mapping, 2006.
Sinkhole Creek	Twenty Mile Creek	Hamilton	2006	None Previous	No		18.4	8.4	NPCA Sinkhole Creek Floodplain Mapping, 2006.
Eighteen Mile Creek	Lake Ontario	Lincoln	2005	None Previous	No		17.6	12.5	NPCA Eighteen Mile Creek Floodplain Mapping, 2005.
Fifteen Mile Creek	Lake Ontario	W. Lincoln / Lincoln / St. Catharines	2006	None Previous	No		62.7	34.5	NPCA Fifteen Mile Creek Floodplain Mapping, 2006.
Sixteen Mile Creek	Lake Ontario	West Lincoln / Lincoln	2006	None Previous	No		42.7	24.3	NPCA Sixteen Mile Creek Floodplain Mapping, 2006.
Beaver Dam Drain	Lake Erie	Port Colborne	2011	None Previous	No		12.5	7.7	NPCA Floodplain Mapping Beaver Dam Drain, February 2011
Bearss Drain	Lake Erie	Port Colborne	2010	None Previous	No		10.9	4.3	NPCA Floodplain Mapping Bearss Drain, Port Colborne 2010
Miller Creek	Niagara River	Fort Erie	2008	None Previous	No		9.0	7.3	Fort Erie Creeks Watershed Plan, Philips 2008
Six Mile Creek Fort Erie	Lake Erie	Fort Erie	2008	None Previous	No		18.1	10.9	Fort Erie Creeks Watershed Plan, Philips 2008
Baker Creek	Niagara River	Fort Erie	2008	None Previous	No		4.3	2.1	Fort Erie Creeks Watershed Plan, Philips 2008
Kraft Drain	Lake Erie	Fort Erie	2008	None Previous	No		5.6	1.8	Fort Erie Creeks Watershed Plan, Philips 2008
Singers Drain	Welland Canal	Thorold	2011	None Previous	No		15.7	8.5	Singers Drain Floodplain Update Report, Amec, 2011.
<b>RURAL WATERCOURSES WITH NO CURRENT FLOODPLAIN MAPPING</b>									
Buckhorn Creek	Welland River	Hamilton / Haldimand		None Previous	Yes		24.3		
Eisie Creek	Welland River	Haldimand		None Previous	Yes		25.6		
Little Forks Creek	Welland River	Wainfleet		None Previous	Yes		13.4		
Little Wolf Creek	Welland River	Hamilton / West Lincoln		None Previous	Yes		10.2		
Mill Creek	Welland River	West Lincoln		None Previous	Yes		33.3		
Mill Race Creek	Welland River	Wainfleet		None Previous	Yes		76.5		
Moore's Creek	Welland River	West Lincoln		None Previous	Yes		13.2		
West Wolf Creek	Welland River	Hamilton / Haldimand		None Previous	Yes		13.9		
Wolf Creek	Welland River	Hamilton / Haldimand		None Previous	Yes		23.6		

## Niagara Peninsula Conservation Authority - 2020 CAPITAL PROJECTS

Project Name	Division	Asset Class	Proposed Budget 2020	Proposed Budget 2021	Proposed Budget 2022
Binbrook - Septic System	Land Operations	Land Improvements	\$1,500,000		
Field Centre Restoration	Land Operations	Building	\$35,000		
Tree Top Trekking - Building and Services	Land Operations	Building	\$150,000		
Water Treatment System Upgrades	Land Operations	Building	\$150,000	\$42,500	\$ 45,000
North Side Comfort Station - Long Beach	Land Operations	Building	\$110,000		
Road Upgrade & Drainage - North Side - Long Beach	Land Operations	Land Improvements	\$232,000		
Electrical and Water (Ridge) - Long Beach	Land Operations	Land Improvements	\$88,000		
Historical Building Restoration - Balls Falls	Land Operations	Building	\$100,000		
Barn - Wedding Updates	Land Operations	Works	\$90,000		
Tyneside Trail Upgrades - Binbrook	Land Operations	Land Improvements	\$10,000		
Equipment Sustainment - Land Operations	Land Operations	Equipment	\$228,280	\$105,000	
Septic Design & Scope - Chippawa Creek	Land Operations	Land Improvements	\$10,000		
Cistern - Gainsborough	Land Operations	Building	\$40,000		
Workshop Upgrades - Gainsborough	Land Operations	Building	\$100,000		
Workshop Renovations - Balls Falls	Land Operations	Building		\$200,000	
Centre for Conservation - Museum Upgrades	Land Operations	Building	\$80,000		
Pavilion - Balls Falls	Land Operations	Building		\$150,000	
Pavilion - Chippawa Creek	Land Operations	Building		\$150,000	
Speed Bumps - ALL	Land Operations	Land Improvements		\$100,000	
St. John's Historical Buildings (Design Phase)	Land Operations	Building		\$20,000	
CFC Pond Rehabilitation	Land Operations	Building		\$100,000	
CFC Renovations	Land Operations	Building		\$75,000	
Cave Springs Barn Removal	Land Operations	Building		\$30,000	
Picnic Tables	Land Operations	Equipment		\$65,000	
<b>Sub Total</b>	<b>Land Operations</b>		<b>\$ 2,923,280</b>	<b>\$ 1,037,500</b>	<b>\$ 45,000</b>

## Capital Project Detail - 2020

<b>Project Title:</b>	<b>BINBROOK - New Septic</b>	<b>Project #</b>	Pending
<b>G/L Account(s):</b>	Pending	<b>Asset Class</b>	Land Improvements
<b>Priority Classification:</b>	Critical	<b>Division</b>	Land Operations
<b>Priority Ranking:</b>	5	<b>Project Status</b>	Draft
<b>Site/Location:</b>	Binbrook Conservation Area	<b>Grouping</b>	G-1
<b>Project Lead:</b>	Adam Christie	<b>Project Start Date</b>	Mar-20
<b>Funding Source:</b>	Special Levy - Hamilton	<b>Project Completion</b>	Nov-20
<b>Partner (if applicable):</b>		<b>Municipality</b>	Hamilton

## PROJECT DESCRIPTION, RATIONALE, BACKGROUND, LINKAGES AND IMPLICATIONS

*Provide a detailed description of the project, why the project needs to be done now and consequences of deferring the project. Include historical cost and typical asset life cycle. Indicate if the project is linked to any other current or future project (capital or operating) and any impact to related project(s) if this project is approved or deferred.*

New septic system at Binbrook Conservation Area.

The property is currently comprised of day use customers and associated staffing. Associated washrooms are serviced by a combination of septic systems and a holding tank, and are supplemented with portable toilets. This project will eliminate the portable toilets and combine servicing of the current public washroom and pavilion sinks to a new centralized class 4 wastewater treatment system (WTS) located near the southern boundary at the east end of the property.

The 2014 Binbrook Master Plan discusses necessary infrastructure upgrades. In 6.1 of the master plan, updating the septic is mentioned as a major concern. It details that the current septic was at capacity in 2014. Day use visitors have doubled since 2014 and the septic has now surpassed capacity.

It is anticipated that Binbrook CA will continue to increase visitors to the park by offering more services and special events, thereby increasing revenue, as evidenced by current trends.

NPCA has had Flowspec Engineering recommend a new septic system. The recommendation was sent to the MECP for review. MECP has responded that the new proposed septic system has negligible to no impact on water resources. Therefore, a pre-application consultation process is concluded and septic treatment for nitrogen/phosphorous/pathogen removal is unnecessary. This will reduce capital costs and operational complexity.

## NEEDS ANALYSIS &amp; BENEFITS

*Indicate project benefits, i.e. improving health and safety, customer service, increased ROI, heritage, educational, etc.*

The increase in day use customers has been dramatic and significant in the last 2 years. Current septic and washroom management plan cannot keep up with day use numbers. Staff have noticed the septic bed leaking during high traffic days.

New Septic will reduce costs by not having to rent portable toilets and allow for an increase in visitors and larger special events.

## Capital Project Detail - 2020

Project Title: BINBROOK - New Septic

Project #

Pending

## RISKS &amp; MITIGATION STRATEGY

Indicate project risks and proposed mitigation; include risk assessments if the project is deferred (low/medium/high) and any risks during or post implementation. Include direct costs of not proceeding (if known) as well as any performance or service related risks.

Not replacing the septic in 2020 is a very high risk. The current septic system is well over capacity. Staff noticed seepage from the bed at high traffic times. Deferral of this project will have a significant impact on health and safety, the environment (sewage leaching to the surface) and ongoing revenue generation.

## PROJECT COST &amp; FORECAST

Description	Prior Year(s)	2020	2021	2022	2023	2024+
Planning						
Design						
Pre-Construction						
Construction						
Internal salaries & benefits						
Internal resources - non-salary						
Warranty						
Facilities						
Equipment						
Contingency						
Water / Waste Water		1,500,000				
<b>TOTAL</b>	-	<b>1,500,000</b>	-	-	-	-

## PROJECT MILESTONES

Percent Complete				
Projected Date (month/year) milestone met				

## CASH FLOW PROJECTION (Current Year Only)

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Projected cash flow requirements - current year	250,000	250,000	500,000	500,000

## Capital Project Detail - 2020

Project Title: BINBROOK - New Septic

Project #

Pending

## OTHER

Asset useful life: 30 years

Projected impact on operations annually: \$ -

## Return on investment (ROI)

gain from investment:  
cost of investment: 1,500,000

ROI:

## Payback Period

Year

Investment

Annual Savings/Revenues

Cumulative Cost (savings)

0  
1  
2

## NOTES

FlowSpec Engineering - Site Map  
Wastewater Servicing AssessmentFlowSpec Engineering - David Morlock  
Details and estimated cost

Project Map

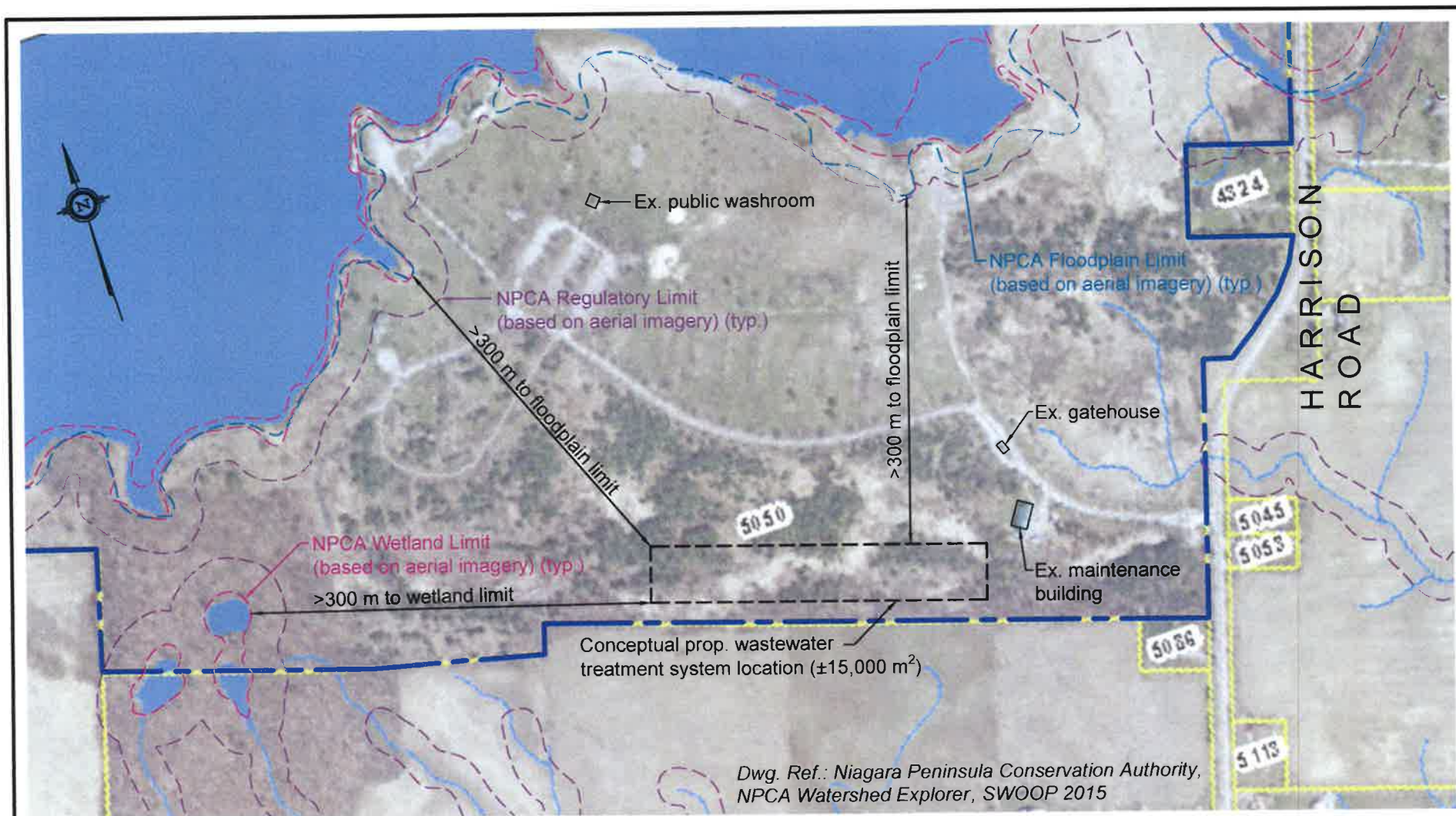


622F8850.msg

Name and Title

Signature

Date



**FlowSpec**  
ENGINEERING

FlowSpec Engineering Ltd., 31 McBrine Drive, Unit 1, Kitchener, ON N2R 1J1  
Office: 519-744-9336 Web: [www.flowspec.ca](http://www.flowspec.ca)

Client: Niagara Peninsula Conservation Authority

Project: Wastewater Servicing Assessment  
Binbrook Conservation Area

Location: 5050 Harrison Road, Glanbrook  
City of Hamilton

Drawing: Site Map

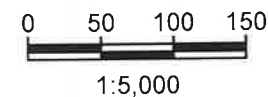
No.	Revision	Date	Checked

Drawn: DFIII

Checked: DM

Date: August 12, 2019

Scale:



File No.: 00408-1

Figure No.: 2

**From:** Dave Morlock <davem@flowspec.ca>  
**Sent:** September 27, 2019 1:18 PM  
**To:** Eric Gervais; Adam Christie  
**Cc:** andyb@flowspec.ca  
**Subject:** FW: Binbrook Conservation Area - 5050 Harrison Road, City of Hamilton  
**Attachments:** 00408-1 Figure 2.pdf

Good afternoon Eric and Adam,

Further to conclusion of the pre-application consultation process with the Ministry of the Environment, Conservation and Parks (MECP) (please refer to email chain below) and our subsequent conference call, the purpose of this email is to provide further detail and a budgetary estimate for design/construction of wastewater servicing infrastructure for Binbrook Conservation Area.

### **MECP Pre-Application Consultation**

We performed a desktop hydrogeological assessment of the site (including a field-survey of nearby water-supply wells) and concluded that a Class 4 wastewater treatment system (i.e., tanks and leaching bed) constructed in the location depicted on Figure 2 (attached) is predicted to have negligible to no impact on groundwater (used as a potable water-supply) or surface water (Lake Niapenco). The MECP specifies contaminant emission guidelines for large Class 4 systems, typically for nitrogen, phosphorous, and pathogens (in the form of effluent concentration objectives and limits). In order to meet these guidelines, specialized wastewater treatment infrastructure is typically required (along with ongoing performance monitoring/reporting). On the basis of our hydrogeological assessment, we recommended effluent criteria for nitrogen, phosphorous, and pathogens to be unnecessary. As described in the email below, the MECP concurred with our conclusions and recommendations.

### **Criteria**

The principal parameters used for design of a Class 4 system are percolation time (i.e., soil infiltration rate) and wastewater flow (theoretical peak daily flow calculated using fixed formulae from the OBC).

*Percolation Time:* As per our email below to the MECP, an exploration of the subsurface will be required for preparation of a final design. For the purpose of this email, however, our desktop assessment and experience suggest that a percolation time of greater than 50 min/cm is appropriate.

*Wastewater Flow:* As per our email below to the MECP, water-use data should be collected from this and other related conservation areas prior to design (we recommend starting this process in 2020 and recording on a daily basis), in order to establish accurate flow-rates for a final design. For the purpose of this email, however, a theoretical peak wastewater flow of about 100,000 L/day was calculated for the ultimate proposed occupancy of the property (i.e., 10-year plan) using flow-rates prescribed in OBC Table 8.2.1.3.B. and some experience-based assumptions; and with incorporation of flow equalization (storage and controlled pumping) into the system to balance weekend peaks through the lesser-occupied weekdays, a wastewater flow of about 75,000 L/day is appropriate.

*Treatment:* In the absence of required effluent criteria, a Class 4 system may incorporate treatment as simple as a septic tank. Based on the use of this property, however, we appreciate that there is a desire to minimize the amount of tree-clearing required for the system. If desired, the area of the leaching bed may be reduced by about 30% by incorporating a tertiary-level (i.e., treatment for removal of organics and solids) unit into the system in lieu of a septic tank. Please be advised that reduction in the size of the leaching bed necessitates performance of the unit to a set standard (to prevent

premature clogging of the bed). Therefore, you would be legally required to collect/test effluent on a monthly or quarterly basis and enter into a perpetual maintenance/servicing agreement with the manufacturer. Different proprietary technologies are available to suit this need and would be discussed in further detail as part of the final design.

### **Design/Budget**

The design would generally consist of the following key components, based on treatment with a septic tank or a tertiary-level unit:

#### *Septic Tank Alternative:*

- flow equalization pump tanks (two connected 35,000 L tanks equipped with a duplex sewage pump arrangement);
- septic tanks (total capacity of about 150,000 L);
- effluent pump tank (9,000 L tank equipped with duplex effluent pump arrangement); and
- fully raised (i.e., about 1.5-1.8 m above existing ground-surface) leaching bed comprised of absorption-trenches excavated into imported sand fill (total area of about 22,000 m<sup>2</sup>).

#### *Tertiary-Level Unit Alternative:*

- flow equalization pump tanks (two connected 35,000 L tanks equipped with a duplex sewage pump arrangement);
- customized proprietary tertiary-level unit (multiple tanks using either mechanical aeration or passively aerated trickling-filter);
- effluent pump tank (9,000 L tank equipped with duplex effluent pump arrangement); and
- fully raised (i.e., about 1.2-1.5 m above existing ground-surface) leaching bed comprised of a stone/pipe area placed on imported sand fill (total area of about 15,000 m<sup>2</sup>).

Of note, both options would require installation of collection/conveyance infrastructure (i.e., sewers, pump stations, pressurized forcemains, etc.) to move wastewater from the various occupied areas (i.e., day-use buildings, individual campsites, campsite washroom, and banquet hall) to the centralized Class 4 system.

The cost of construction (including engineering and approval, but excluding tree-clearing) will be dependent on the extent of the collection/conveyance infrastructure and Class 4 system alternative used. With this in mind, we recommend a conservative budgetary allowance of about \$1,500,000. This figure may be revisited in future, once additional design work is completed.

We trust that the information provided herein is suitable for your current requirements, and are happy to provide additional consultative services as the project unfolds. If you have any questions, please do not hesitate to ask.

Regards,

**David Morlock, P.Eng.**  
*Consulting Engineer*

FlowSpec Engineering Ltd.  
31 McBrine Drive, Unit 1, Kitchener, ON N2R 1J1  
(Office) 519-744-9336 Ext. 2 (Cell) 519-616-0024  
Email: [davem@flowspec.ca](mailto:davem@flowspec.ca)

**From:** Foo, Jessica (MECP) <Jessica.Foo@ontario.ca>  
**Sent:** Friday, September 6, 2019 4:17 PM  
**To:** Dave Morlock <davem@flowspec.ca>  
**Subject:** RE: Binbrook Conservation Area - 5050 Harrison Road, City of Hamilton

Hello Dave,

Below are the responses I've received from technical support:

- Groundwater Reviewer:

- o The site is located within the Haldimand Clay Plain. According to MECP GIS mapping and available Water Well Records, surficial soils are primarily comprised of glaciolacustrine clay and silt approximately >12 metres thick. Information obtained from water well records in the area indicates that the water supply is obtained from the bedrock aquifer. Based on the site topography and subsurface conditions it is predicted that once discharged into the subsurface, the sewage effluent will migrate through the upper weathered clay fracture network towards Lake Niapenco, the eventual point of discharge. Lake Niapenco is located several hundred metres from the proposed sewage disposal bed. There are no groundwater receptors downgradient of the proposed sewage disposal system and the potential for impact to the bedrock aquifer is low.

In their August 13, 2019 email, the consultant indicated that the site setting and topography satisfy the three criteria of Section 22.5.14 of the MECP Design Guidelines for Sewage Works (2008) for Low Permeability Environments, which stipulates that attenuation calculations may not be required where the upper subsurface unit has "...a vertical hydraulic conductivity of 10-5 cm/sec or less, is at least 10 m thick, and extends at least 100 m downgradient of the infiltration area." In this case, I concur with the consultant that the proposed disposal system will likely have negligible to no impact on either onsite or offsite groundwater. There is no need to establish the reasonable use concentration for nitrate at this site, and as such, I do not think it is necessary for TSS groundwater staff to attend a PSC meeting.

- Surface Water Reviewer:

- o I concur with the consultant that a surface water impact assessment is not necessary. The Ministry document "Design Guidelines for Sewage Works 2008" identifies that in most cases a separation distance of 300m from a sewage bed to a surface water body should be sufficient to ensure no surface water quality impacts. For this application, the proposed sewage bed location is just over 300m south of Lake Niapenco and the soil is clays/silts. Since a surface water assessment is not necessary, the Surface Water Unit does not need to participate in a pre-consultation meeting.

Based on the comments above, a pre-consultation meeting with our technical support staff is not necessary. Please let me know if you have any more questions or comments.

Regards,



Jessica Foo BSc G.I.T. | Senior Environmental Officer, Badge No. 1804  
Drinking Water and Environmental Compliance Division  
| Ministry of the Environment, Conservation and Parks | Hamilton District Office  
119 King St W, Ellen Fairclough Bldg, 9<sup>th</sup> Floor, Hamilton, ON L8P4Y7  
Tel ☎: (289)921-9341 | Email ✉: [Jessica.foo@Ontario.ca](mailto:Jessica.foo@Ontario.ca)



Please consider the environment before printing this email note.

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**From:** Dave Morlock <[davem@flowspec.ca](mailto:davem@flowspec.ca)>  
**Sent:** 29-August-2019 9:17 AM  
**To:** Foo, Jessica (MECP) <[Jessica.Foo@ontario.ca](mailto:Jessica.Foo@ontario.ca)>  
**Subject:** RE: Binbrook Conservation Area - 5050 Harrison Road, City of Hamilton

Good morning Jessica,

I'm following-up on my email below, and wondered if the TSS has had a chance to review and if you or them have any questions.

Regards,

Dave

**David Morlock, P.Eng.**  
*Consulting Engineer*

FlowSpec Engineering Ltd.  
31 McBrine Drive, Unit 1, Kitchener, ON N2R 1J1  
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---

**From:** Dave Morlock <[davem@flowspec.ca](mailto:davem@flowspec.ca)>  
**Sent:** Tuesday, August 13, 2019 2:19 PM  
**To:** 'Foo, Jessica (MECP)' <[Jessica.Foo@ontario.ca](mailto:Jessica.Foo@ontario.ca)>  
**Cc:** Adam Christie <[achristie@npca.ca](mailto:achristie@npca.ca)>; Jeff Fazekas <[jfazekas@npca.ca](mailto:jfazekas@npca.ca)>; Eric Gervais <[egervais@npca.ca](mailto:egervais@npca.ca)>; Andy Bauman <[andyb@flowspec.ca](mailto:andyb@flowspec.ca)> <[andyb@flowspec.ca](mailto:andyb@flowspec.ca)>  
**Subject:** Binbrook Conservation Area - 5050 Harrison Road, City of Hamilton

Good afternoon Jessica,

Thank you for your time earlier on the telephone.

This email is sent as a formal request for a pre-application consultation meeting related to proposed consolidation of onsite wastewater servicing and accommodation for future development at Binbrook Conservation Area, located at 5050 Harrison Road, Glanbrook, in the City of Hamilton (refer to Figure 1).

Occupancy of the property is currently comprised of day-use only (including land/water recreational facilities and picnic pavilions) and associated staffing. Associated washrooms are serviced by a combination of septic systems and a holding tank, and are supplemented with portable toilets. The owner of the property, the Niagara Peninsula Conservation Authority (NPCA), intends to eliminate the portable toilets and combine servicing of the public washroom and picnic pavilion sink to a new centralized Class 4 wastewater treatment system (WTS) located near the southern boundary at

the east end of the property (refer to Figure 2); and moreover, the NPCA proposes to expand recreational opportunities on the property, including development of a new washroom for the day-use area, campsites (with individual water, sanitary, and electrical services), and a reception hall. As a preemptive measure, the NPCA wishes to assess centralized wastewater servicing requirements both for current use and future development, and plan design/construction of infrastructure accordingly.

The purpose of this email is to provide background information for MECP technical review in advance of a pre-application consultation meeting, and consists of the following: i) address impact of a centralized Class 4 WTS (for current use and future development) on water resources, ii) present preliminary design parameters, and iii) propose effluent criteria for design.

### **Property Description**

The conservation area is located about 4 km southwest of Binbrook. Its three adjoined properties encompass Lake Niapenco, a reservoir created on the Welland River, which is dammed at the east end of the property adjacent to Harrison Road. The main vehicle access and day-use area are situated at the southeast corner of the property. Surrounding land use is generally agricultural, interspersed with occasional residential properties. Local topography is relatively flat, with the exception of a shallow valley through which the Welland River flows.

Current wastewater servicing of the conservation area is summarized as follows:

- gatehouse and shop (each with a two-piece washroom) serviced by a Waterloo Biofilter and leaching bed;
- public washroom (toilets and sinks only) for day-use visitors (splash-pad, swimming, picnicking, ice-fishing, etc.), serviced by a septic system;
- picnic pavilion (sinks only), serviced by a holding tank; and
- portable toilets to supplement the public washroom.

### **Impact on Water Resources**

MECP document, "Design Guidelines for Sewage Works 2008" (DGSW), Section 22.5, "Assessment of Impact on Water Resources", stipulates for "Large Subsurface Sewage Disposal Systems" (i.e., systems with theoretical peak daily wastewater flows which exceed 10,000 L/day) that an assessment of impact on water resources be performed, and that design of a Class 4 WTS be tailored accordingly in conformance with contaminant emission guidelines set forth by the MECP.

"Water resources" are typically comprised of the following:

- groundwater which is currently used or could reasonably be used in future as a potable water-supply (typically within 500 m of a Class 4 WTS); and
- surface water in the form of creeks, rivers, ponds, or wetlands (typically within 300 m of a Class 4 WTS).

In this case, groundwater is used as a water-supply in the area, and the Welland River traverses the conservation area. Therefore, an assessment of impact was performed by FlowSpec.

### **Groundwater**

The conservation area is situated on the Haldimand Clay Plain; and although the Welland River valley contains modern alluvial sediments, regional geology mapping indicates that the area is primarily characterized by glaciolacustrine clay and silt (refer to Figure 3). The mapped geology is reinforced by local MECP well records which depict an extensive clay deposit which reaches down to the underlying bedrock. The well records (attached) and drift thickness mapping (refer to Figure 4) indicate a local overburden thickness of approximately 12 to 15 m, overlying dolomitic limestone of the Guelph Formation.

An inventory of nearby water-supply wells was compiled within a 500 m radius of the proposed WTS location to establish local water-supply aquifers. The inventory was performed using MECP well records and a door-to-door survey. The survey was comprised of a brief interview with available property owners, during which they were requested to provide as much detail and history regarding their wells as they were able. The approximate locations of known wells within the inventory area, based on UTM coordinates provided in the MECP well records and field-surveyed locations, are illustrated on Figure 5.

According to the well records and well survey results, a groundwater aquifer is present in the bedrock beneath the clay and silt overburden. The groundwater is used for potable water-supply and is accessed exclusively by drilled wells. Due to aesthetic issues, however, most surveyed residents have installed cisterns or use bottled water for drinking water use. Of particular note, no shallow, dug wells were evident in the desktop review, nor were any encountered during the door-to-door survey. The absence of shallow wells is expected, given the relatively low permeability of the overburden soil.

The predicted impact of a Class 4 WTS on groundwater was assessed in accordance with DGSW Subsection 22.5.8, "Prediction of Contaminant Attenuation", which stipulates that nitrate is the critical contaminant to be used in the assessment.

A nitrate impact assessment is typically comprised of a theoretical prediction of attenuation in the effluent-receiving groundwater between a Class 4 WTS and performance boundary (i.e., downgradient property line). In this case, however, the prediction of nitrate attenuation was deemed unnecessary on the basis of DGSW Subsection 22.5.14, "Low Permeability Environments", which stipulates that attenuation calculations may not be required where the upper subsurface unit has, "...a vertical hydraulic conductivity of  $10^{-5}$  cm/sec or less, is at least 10 m thick, and extends at least 100 m downgradient of the infiltration area." In this case, the predominant clay and silt soil in the area satisfies all three of these criteria. Therefore, a Class 4 WTS constructed in the location depicted on Figure 2 is predicted to have negligible to no impact on either onsite or offsite groundwater which is currently used or could reasonably be used in future as a potable water-supply.

### Surface Water

The nearest surface water body to the Class 4 WTS location depicted on Figure 2 is Lake Niapenco, which is over 300 m distant. Figure 2 also illustrates water-features nearby to the south of the property, which are regulated by the NPCA. It is important to note, however, that the NPCA has characterized the water-features as, "...small intermittent water courses fed only by precipitation...". DGSW Subsection 22.5.11, "Attenuation of Phosphorous and Ammonia", stipulates that an assessment of impact on surface water is generally not required beyond a separation distance of 300 m from a leaching bed; and therefore, on the basis of the above-described scenario, an assessment was deemed unnecessary.

### Effluent Criteria

Given a Class 4 WTS in the location shown on Figure 2 is predicted to have negligible to no impact on water resources, effluent criteria for nitrogen, phosphorous, and pathogens are deemed to be unnecessary.

### Percolation Time

As part of any design efforts for a new Class 4 WTS, it is recommended that a subsurface exploration be performed to establish soil and groundwater conditions in the leaching bed location. Notwithstanding this recommendation, the consistency of soil conditions depicted on local geology mapping and well records, as well as our experience in the area, suggest that a percolation time of greater than 50 min/cm would be appropriate for design; and moreover, based on such a percolation time, it is recommended that the leaching bed be raised (which would accommodate shallow groundwater, should it be present).

## Wastewater Flow

As described earlier in this email, occupancy of the conservation area is currently limited to day-use, and comprises the following characteristics with respect to wastewater servicing:

- peak day-use of 1,500 visitors (average of 750) with washroom (but no shower) access; and
- 12 staff at the gatehouse and in maintenance.

The NPCA proposed the following future development, again with respect to wastewater servicing:

- additional public washroom (with showers) for day-use visitors (*5-year plan*);
- 50 to 100 campsites (with individual water, sanitary, and electrical services), including a dedicated washroom (with showers) (*10-year plan*); and
- reception hall for weddings, etc., with a seating capacity of about 250 (*10-year plan*).

A theoretical peak wastewater flow was calculated for the ultimate occupancy described above using flow-rates prescribed in OBC Table 8.2.1.3.B., as well as the following assumptions:

1. Although showers would be available for day-use visitors, swimming in Lake Niapenco does not require pre-showering (as would be the case with a public pool); and therefore, only a quarter of visitors are assumed to use showers.
2. A wedding event would include both a ceremony and reception, which would create a duration-of-stay of up to nine hours; and therefore, although the OBC prescribes a wastewater flow-rate of 36 L/day/seat for an “assembly hall with food service provided”, flow is assumed to be 52 L/day/seat to account for the extended duration-of-stay.

The calculation is summarized in the following table:

Occupancy Classification	Occupancy Data and Flow-Rate	Theoretical Peak Flow (L/day)
Staff (no showers)	12 employees x 75 L/day/employee	900
Day-Use Visitors (“public park”)	75% x 1,500 visitors x 20 L/day/visitor	22,500
	25% x 1,500 visitors x 50 L/day/visitor	18,750
Campsites	100 sites x 425 L/day/site	42,500
Reception Hall	250 seats x 52 L/day/seat	13,000
<b>Total</b>		<b>97,650</b>

*Please be advised that the calculation presented above is intended to provide a preliminary reference for pre-application consultation only.* Based on the conservatism of some OBC flow-rates, it is recommended that water-use data be collected from this and other related conservation areas prior to design, in order to establish more accurate flow-rates for this scenario. Also, flow equalization is recommended to balance weekend peaks through the lesser-occupied weekdays, thereby reducing servicing costs. By employing flow equalization, it is estimated that the wastewater flow used for design may be reduced by approximately 25-30%.

## Design

Although still in the conceptual stages, a leaching bed area of approximately 15,000 m<sup>2</sup> is assumed for the purpose of this assessment, based on the following assumptions:

- percolation time of greater than 50 min/cm;
- equalized design wastewater flow of approximately 75,000 L/day (25% reduction from peak flow of about 98,000 L/day);
- incorporation of advanced treatment into the WTS (as opposed to conventional septic tank treatment), in order to allow a higher hydraulic loading rate (approximately 5 L/day/m<sup>2</sup>) on the leaching bed (and therefore a lesser area); and
- incorporation of a raised Type A or shallow buried trench leaching bed.

### **Meeting**

We respectfully request circulation of this email to your colleagues from the Technical Support Section, and scheduling of a pre-application consultation meeting (preferably in August 2019) in order that we may discuss wastewater servicing of the conservation area in further detail and establish effluent criteria for design. Could you please provide some options for meeting dates?

We appreciate your consideration of this matter. If you have any questions, please do not hesitate to ask.

Regards,

**David Morlock, P.Eng.**

*Consulting Engineer*

FlowSpec Engineering Ltd.

31 McBrine Drive, Unit 1, Kitchener, ON N2R 1J1

(Office) 519-744-9336 Ext. 2 (Cell) 519-616-0024

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## Capital Project Detail - 2020

<b>Project Title:</b>	Treetop Trekking Office Building	<b>Project #</b>	Pending
<b>G/L Account(s):</b>	Pending	<b>Asset Class</b>	Building
<b>Priority Classification:</b>	Strategic Initiative	<b>Division</b>	Land Operations
<b>Priority Ranking:</b>	5	<b>Project Status</b>	Draft
<b>Site/Location:</b>	Binbrook Conservation Area	<b>Grouping</b>	C-3
<b>Project Lead:</b>	Adam Christie	<b>Project Start Date</b>	Mar-20
<b>Funding Source:</b>	Special Levy - Hamilton	<b>Project Completion</b>	Apr-20
<b>Partner (if applicable):</b>	Treetop Trekking	<b>Municipality</b>	Hamilton

## PROJECT DESCRIPTION, RATIONALE, BACKGROUND, LINKAGES AND IMPLICATIONS

*Provide a detailed description of the project, why the project needs to be done now and consequences of deferring the project. Include historical cost and typical asset life cycle. Indicate if the project is linked to any other current or future project (capital or operating) and any impact to related project(s) if this project is approved or deferred.*

## New Office Building (Pavilion) for Treetop Trekking

NPCA and Treetop Trekking signed an 11 year lease agreement on October 10, 2018. In the lease, the NPCA agreed to construction of an office building for Treetop Trekking's exclusive use. The NPCA is required to at its sole cost and expense, supply all required materials and labour to erect, finish and service the office building with heat, water, electricity, telephone and fax lines.

As a capital project in 2019, the NPCA committed to \$150,000 to pay for permits for the new building, a temporary office building, service the temporary and new office building with heat, electricity, water and telephone.

In the lease agreement, Treetop Trekking committed to \$50,000 to the NPCA for the new office building. The \$50,000 will be paid in \$5,000 installments over 10 years.



## NEEDS ANALYSIS &amp; BENEFITS

*Indicate project benefits, i.e. improving health and safety, customer service, increased ROI, heritage, educational, etc.*

The NPCA is contractually obligated to proceed with this project, in order to comply with the provisions of the lease agreement.

## Capital Project Detail - 2020

Project Title: Treetop Trekking Office Building

Project #

Pending

## RISKS &amp; MITIGATION STRATEGY

Indicate project risks and proposed mitigation; include risk assessments if the project is deferred (low/medium/high) and any risks during or post implementation. Include direct costs of not proceeding (if known) as well as any performance or service related risks.

NPCA would be in breach of the lease agreement if this project is not undertaken.

## PROJECT COST &amp; FORECAST

Description	Prior Year(s)	2020	2021	2022	2023	2024+
Planning						
Design						
Pre-Construction						
Construction						
Internal salaries & benefits						
Internal resources - non-salary						
Warranty						
Facilities		150,000				
Equipment						
Contingency						
Other						
<b>TOTAL</b>	-	<b>150,000</b>	-	-	-	-

## PROJECT MILESTONES

Percent Complete				
Projected Date (month/year) milestone met				

## CASH FLOW PROJECTION (Current Year Only)

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Projected cash flow requirements - current year	150,000			

## Capital Project Detail - 2020

Project Title: Treetop Trekking Office Building

Project #

Pending

## OTHER

Asset useful life: 40 years

Projected impact on operations annually: \$ -

## Return on investment (ROI)

gain from investment:

cost of investment: 150,000

ROI:

## Payback Period

Year

Investment

Annual Savings/Revenues

Cumulative Cost (savings)

0

1

2

## NOTES

Treetop Trekking Rent

Year 1 and 2 = \$10,000 per year

Year 3 and 4 = \$15,000 per year

Year 5 and every year after = \$40,000

Treetop Trekking Percentage of Gross Sales

Year 1, 2 and 3 = 3%

Year 4 and 5 = 5%

Every year after = 7%

Name and Title

Signature

Date

**NIAGARA PENINSULA CONSERVATION AUTHORITY**

**and**

**TREETOP TREKKING HAMILTON INC.**

**LEASE AGREEMENT**

A handwritten signature or set of initials, possibly 'WV', in black ink.

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THIS LEASE MADE AS OF THE 1<sup>st</sup> <sup>4✓</sup> OCTOBER DAY OF ~~MARCH~~, 2018

IN PURSUANCE OF THE SHORT FORMS OF LEASES ACT.

BETWEEN:

NIAGARA PENINSULA CONSERVATION AUTHORITY

(hereinafter called the "LANDLORD")

- and -

TREETOP TREKKING HAMILTON INC.

(hereinafter called the "TENANT")

**WHEREAS** the Landlord owns the lands in the Town of Binbrook, Regional Municipality of Hamilton, known as Binbrook Conservation Area, municipally known as 5050 Harrison Road, hereinafter referred to as the "**Lands**", which lands include the area outlined and shown on the attached Schedule "A", as the Leased Premises, the said area hereinafter referred to as the "**Leased Premises**".

**AND WHEREAS** the Tenant intends to erect or come to be erected, operate and maintain on the Leased Premises, an aerial tree top adventure park comprised of zip lines, trails, 50-80 various high-ropes tree top apparatus, obstacles, a treewalk village and other related uses, hereinafter referred to as the "**Operation**".

#### 1.00 DEFINITIONS

Except as otherwise provided for in this Lease, the following terms when used in this lease shall have the meanings set below:

- (a) "**Base Rent**" has the meaning pursuant to section 4.00 hereof.
- (b) "**Business Day**" means a day other than a Saturday, Sunday or statutory holiday in Ontario.
- (c) "**Commencement Date**" shall mean and refer to the first day of the Term.
- (d) "**Common Areas**" shall mean the area outlined and shown in **Schedule A** to this Lease Agreement as the Common Areas.

- (e) **"Gross Sales"** means the aggregate of the total amount of the actual selling price, excluding applicable taxes, returns and rebates, of all goods sold and services performed on, at, or from or in relation to or connected with the Leased Premises by Tenant and all Tenants concessionaires, whether or not such sales are made at the Leased Premises or elsewhere, in the same manner and with the same effect as if such sales had been made at or performed on the Leased Premises.
- (f) **"Leased Premises"** has the meaning set out in the first recital of this lease and as shown and outlined as the Leased Premises on Schedule A to this Agreement.
- (g) **"Leasehold Improvements"** shall mean and refer to all items generally considered as leasehold improvements, including without limitation all buildings fixtures including Tenant fixtures, improvements, installations, alterations and additions from time to time made, erected or installed by or on behalf of the Tenant, subtenants, licensees or other occupants in or on the Leased Premises.
- (h) **"Percentage Rent"** has the meaning pursuant to section 5.00 hereof.
- (i) **"Rent"** means Base Rent, Percentage Rent and any other amounts due to Landlord herein.
- (j) **"Similar Facilities"** shall mean and refer to seated or harnessed zip lines, aerial climbing, tree top adventure facilities, tree top courses, challenge courses, suspension bridges and any other type of high ropes course or tree house play space.
- (k) **"Term"** shall mean the term of the Lease as granted in this Lease pursuant to section 3.00 hereof, as extended from time to time as a result of renewal, unless sooner terminated under the provisions of this Lease.
- (l) **"TSSA"** shall mean the Technical Standards and Safety Authority.
- (m) **"Utility Charges"** shall mean the costs of all electric current, water, and all other public utilities or services ordinarily supplied or charged at any time to any part of the Leased Premises.

## 2.00 LEASED PREMISES

In consideration of the Rent, covenants, conditions and agreements contained in this Lease on the part of the Tenant to be paid, observed and performed, the Landlord demises and leases to the Tenant the Leased Premises described in Schedule A to this Lease Agreement for the uses as set out in section 8.03 hereof.

In addition, Tenant shall have a right and license during the Term and any renewal to place and maintain zip lines over portions of Lake Niapenco as shown in red on Schedule A, such portions being referred to as the Licensed Area, for the use and enjoyment of Tenant's customers.

Landlord hereby gives to the Tenant access to shared parking for 150 cars for the use by its employees, agents, contractors, visitors, customers and invitees together with vehicles and equipment over, on and upon the Common Areas, together with a right-of-way over the Common Areas, not reserved for parking, all as shown and outlined in Schedule A as Common Areas during the Term of and any extension thereof and otherwise on the terms provided herein. The Tenant, its agents, representatives, management, customers, visitors and employees shall not be required to

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pay for access to the Lands, the Leased Premises or parking in the Common Areas during the term of this Lease.

### **3.00 TERM**

Subject to the Tenant obtaining all necessary approvals and permits to construct the tree top adventure park as proposed, TO HAVE AND TO HOLD the LEASED Premises for the duration of this Agreement beginning on the day that the Tenant has notified Landlord it has received all necessary approvals and permits to construct the tree top adventure park as.

The Agreement shall have an initial term eleven (11) years (the "Term"), to start the first day the Tenant enters the property after signing the lease.

The Tenant shall also have an option to renew this Lease for two further five (5) year terms, as set out in section 24.00 of this Lease (each a "**Renewal Term**").

The Tenant shall have an option to terminate this Lease with six (6) months written notice to the Landlord at any time during the Term of this Lease if the Tenant determines that it is not economically feasible to continue the Operation. If the Tenant executes its option to terminate the Lease within the initial Term, the Tenant hereby covenants and agrees to pay the Landlord a lump sum equivalent to \$25,000 for each of the remaining year to the initial term.

The parties hereto acknowledge and agree that enforcement of the rights and obligations set out in the terms of the within lease is conditional upon the successful rezoning of the leased premises to allow active recreation and recreation uses on or before the 1<sup>st</sup> day of October 2018, failing which the within lease will be null and void.

If the landlord is not successful in obtaining the above referred to rezoning it shall within the time limited deliver written notice to that effect to the tenant in the form and manner set out in Section 27.00 of within lease and the lease will be terminated and the parties will execute mutual releases in respect to the said lease.

### **4.00 BASE RENT**

- (a) The Tenant shall pay to the Landlord Rent in manner and upon the conditions and at the times herein set forth without set-off or deduction.
- (b) The Base Rent of \$10,000 for the first twelve (12) month period, (the first "**Fiscal Year**"), \$10,000 for the second Fiscal Year, \$15,000 in the third Fiscal Year, \$25,000 for the fourth Fiscal Year, and \$40,000 for the fifth and each subsequent Fiscal Year, during the Term or any Renewal Term, payable on a pro rata basis per month, shall be paid by the Tenant to the Landlord. The first Fiscal Year shall commence on the first day of the calendar month following the calendar month the Tenant opens for business to the general public. Base Rent shall be payable by the Tenant to the Landlord, at the office of the Landlord or at such place as the Landlord designates, or by post-dated cheques or an automatic withdrawal plan, as stipulated by Landlord, on the fifteenth day (provided such day falls on a Business Day and if not on the next business day thereafter) of each month.
- (c) The Tenant shall pay to the Landlord all Harmonized Sales Tax payable in respect of Rent pursuant to this Lease. Such payments shall be made at the same time and

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manner as and in connection with and related to payment of Base Rent and Percentage Rent.

- (d) All overdue Rent, and other amounts which may, at any time, be due by the Tenant to the Landlord under this Lease shall bear interest at the rate of three percent (3%) above the prime rate of interest charged by the Landlord's bank to its most credit-worthy customers.

## 5.00 PERCENTAGE RENT

In addition to the Base Rent rate set out in section 4.00, Tenant agrees:

- (a) Within ten (10) Business Days following the end of each calendar month of a Fiscal Year the Tenant shall deliver to the Landlord a written sales report ("**Statement of Gross Sales**") in a form and content acceptable to Landlord, acting reasonably setting out and verifying Gross Sales including the following:
  - (i) amount received for entrance into the treetop adventure park;
  - (ii) amount received for entrance into the zip line;
  - (iii) amount received for entrance into Treewalk Village;
  - (iv) All other Gross Sales as defined in section 1.00(e) of this lease agreement
  - (v) such other information as the Landlord may request, acting reasonably, with respect to the Operation.
- (b) To pay Landlord three percent (3%) of Gross Sales generated in the first, second and third Fiscal Years, five percent (5%) of Gross Sales generated in the fourth and fifth Fiscal Years, and seven percent (7%) of Gross Sales in any subsequent Fiscal Year of the Term or a Renewal Term.
- (c) Percentage Rent payments for each month as set out above shall be payable at the office of the Landlord or at such other place as the Landlord designates, on the fifteenth day of the month following the end of the month to which the payment applies (provided such day falls on a Business Day and if not on the next Business Day thereafter) without set-off or deduction.
- (d) Landlord shall have the right to audit Tenant's Statement of Gross Sales and Tenants record, books and accounts for any month ("**the Audit**") within thirty (30) days of Landlord's written notice to the Tenant hereof, given within twelve (12) months of the end of any calendar year of the relevant month, and Landlord shall provide Tenant with the results of such audit. Tenant shall maintain its records, books and accounts in accordance with generally accepted accounting principles in Canada.
- (e) If the Audit reveals that Tenant's Percentage Rent paid for any month is less than the amount required, then Tenant shall have the right to dispute the Audit results by sending Landlord written notice, within ten (10) days after Tenant's receipt of the Audit results. If Tenant fails to send the Notice within said ten (10) day period, then the Audit results shall be deemed to have been approved and accepted by Tenant as correct.

- (f) If Tenant disputes the Audit results, then Landlord and Tenant jointly shall elect an independent arbitrator in accordance with the ARBITRATION ACT of ONTARIO to determine the actual Gross Sales for the relevant period. The costs of the ARBITRATION shall be borne by the non-prevailing party.
- (g) If the Audit results reveal that Tenant's Percentage Rent's paid is less than the amount required (minimum of 5%), the Tenant shall be required to pay the Landlord within thirty (30) days of the final determination of the Audit, the correct Percentage Rent as indicated in the Audit results and Landlord's cost of the Audit.

## 6.00 PROJECT

- (a) Subject to section 6.00(b) below, the Tenant shall cause to be constructed on the Leased Premises the facilities required for the Operation (excluding the office building) and for the purposes and uses as set out on section 8.03 and be open for business in accordance with the provisions of this Lease including the provisions relating to Work hereafter referred to and in accordance with the Approved Plans no later than ten (10) months following the execution of this Lease by both parties ("the Project"), failing which either party may by notice to the other terminate this Lease and each party shall be relieved of all obligation herein to the other save and except the provisions herein for and with respect to termination shall apply.
- (b) Tenant agrees to submit plans for the Project to the Landlord for its approval and to furnish such further information and particulars as the Landlord may reasonably request relating thereto. In order to obtain the agreement in principle of the Landlord or to obtain the agreement in principle to any contemplated design, the Tenant shall also be entitled from time to time prior to submission of plans to submit for the Landlord's approval any preliminary sketches or design proposals. The approval of the Landlord to the plans of the Tenant will not be unreasonably withheld or unduly delayed if in accordance with the preliminary sketches or designs. The plans and schedule of construction and completion when approved by the Landlord in writing shall constitute the Approved Plans and construction shall not commence until there are Approved Plans.
- (c) The Approved Plans will include a work schedule of construction and completion dates for the facilities and a description of the facilities. The construction will be funded and carried out by the Tenant or its construction contractor.
- (d) The Landlord warrants that no rezoning, variance, plan amendment, bylaw amendment or similar is necessary to allow the construction or Operation of the Project, and no development charges, lot levies or similar are or will become payable as a result of the Project. The Landlord agrees to provide to the Tenant upon execution of this Lease any details of construction or operational restrictions or limitations necessary to preserve the environmental or ecological state of the Leased Premises, including but not limited to identification of any at-risk species, shoreline restrictions and/or off-limit areas. Notwithstanding Article 3 above, the Tenant shall have an option to terminate this Lease with one (1) month written notice to the Landlord at any time during the Term of this Lease if the Tenant determines that the Leased Premises are subject to any restrictions that do not allow for the construction or operation of the Project.

- (e) The Tenant shall obtain, at its sole expense, any necessary building permits relating to the Project, but excluding the permits and approvals required for the construction of the office building for the Tenant's use.
- (f) The Tenant, at its sole expense, shall perform and comply with the following covenants and requirements in connection with the construction of the Project (hereinafter sometimes referred to as the "**Work**");
  - o The Work shall be done substantially in accordance with the Approved Plans which will include a work schedule with such detail as may be required by the Landlord, except insofar as any requirements of the Approved Plan shall have been waived or varied by the Landlord in writing or as required to be amended by any municipal or other governmental authority, regulation or ordinance;
  - o The Work shall be conducted expeditiously and in a good workmanlike manner and otherwise in accordance with the provisions of this Lease and the Approved Plans;
  - o The Tenant will supervise and be responsible for the Work during all phases of construction including site security and safety during construction;
  - o The Landlord and its agents shall at all reasonable times have the right to inspect the Work, and to make objection to the Tenant as to any reasonable default or non-compliance with any construction contract or this Lease and the Tenant shall cause such objection to be promptly dealt with and any such default or non-compliance be promptly remedied;
  - o The Tenant shall provide certified safety inspection reports of the course (as prepared by a certified zip line mechanic subject to the requirements of the TSSA) to the Landlord prior to opening and once per year, prior to commencing operations in each season; and
  - o The Tenant shall provide a copy a valid license with TSSA as Amusement Device Operators prior to opening and once per year prior to commencing operations in each season.
- (g) The Tenant shall promptly pay all proper accounts for work done or materials furnished under all contracts which it has entered into relating to the Work.
- (h) If any portion of the Work, Project or facilities requires or is subject to change, repair, renovation or relocation which will result in a substantial modification, the consent of the Landlord to such change, repair, renovation or relocation shall be required prior to commencement of change all other terms of this Lease shall apply to such change, repair, renovation or relocation; such consent shall not be unreasonably withheld or delayed.
- (i) In order for the Tenant to complete the Work in an efficient and effective manner, the Landlord shall provide the following support to the Tenant during the Work period:
  - o An indoor work space of a size and in a location to be agreed by the parties hereto;

- Access to Binbrook CA for up to fifteen (15) members of the Tenant's construction crew or construction contractors;
  - Allow placement of A garbage dumpster provided by the Tenant;
  - Washroom facilities and/or a portable washroom unit at the Work site;
  - Allow placement of one 40' storage container delivered to the Work site; and
  - Provision of, assistance and support relating to the use and operation of the Landlord's equipment and machinery when appropriate as determined by the Landlord;
- (j) The Landlord and the Tenant agree that, in addition to the Work detailed herein, the parties may equally share the cost of a combination zip-line tour / lookout tower if a design can be achieved that allows the tower to be used as a lookout tower by the Landlord's visitors and a zip-line launch point by the Tenant's customers, and the cost of said tower is acceptable to each party.

## **7.00 CONSTRUCTION LIENS**

The Tenant shall not suffer or permit any lien under the Construction Lien Act or any like statute to be filed or registered against the Leased Premises, by reason of work, labour, services or materials supplied or claimed to have been supplied to the Tenant or anyone holding any interest in any part of the Leased Premises thereof through or under the Tenant. If any such lien shall at any time be filed or registered the Tenant shall procure registration of its discharge within twenty (20) days after the lien has come to the notice or knowledge of the Tenant. The Tenant shall, however, have the right to contest in good faith the amount or validity of any lien action, and to post security satisfactory to the Court for such lien claim all within the aforesaid twenty (20) day period provided always that neither the Leased Premises nor the Lands nor the facilities nor any part thereof shall become liable for forfeiture or sale and the lien is discharged within the said twenty (20) day period. The Landlord may, but shall not be obliged to, discharge any lien filed or registered at any time if in the Landlord's judgment the Leased Premises, Lands or Facilities or any part thereof or the Tenant's interest herein becomes liable for any forfeiture or sale or is otherwise in jeopardy and any amount paid by the Landlord in so doing, together with all reasonable costs and expenses shall be repaid to the Landlord by the Tenant on demand together with interest at the rate of 3% above prime interest charged by the Landlord's bank to its most credit-worthy customers, from the date incurred until paid, and may be recovered as Rent in arrears. Nothing herein shall authorize the Tenant, or imply any consent or agreement on the part of the Landlord to subject the Landlord's interest in the Leased Premises or Lands and facilities to any lien.

## **8.00 TENANT'S COVENANTS**

8.01 The Tenant covenants and agrees with the Landlord as follows:

- (a) To ensure that the environmental health of the Leased Premises is preserved and protected against harm from the Operation and that the Operation will not negatively impact erosion or conservation of the lands being occupied. Conservation of the Leased Premises by the Tenant shall be consistent with the Landlord's policy concerning same.
- (b) To pay Rent and its monthly telephone/fax/high-speed internet usage fees

- (c) The Tenant, at its sole cost and expense in accordance with Approved Plans, shall construct, operate and maintain an aerial tree top adventure park and zip line which shall comprise a series of trails and approximately 50-80 various apparatus and obstacles initially, and potentially up to 200 apparatus and obstacles, as more particularly described in section 8.03 hereof.
- (d) Subject to section 12.00 herein, at all times during the Term, the Tenant has the right to carry out at its own expense repairs and maintenance of the Leased Premises, including: i) all equipment and facilities; ii) the cutting and disposal of dangerous trees and tree branches; iii) the collection and disposal of refuse and garbage. The Tenant shall have the right to cut, remove and dispose of trees and branches required to be removed for the Operation without the prior approval of the Landlord.
- (e) To promptly comply, at its own expense, with all requirements of every applicable statute, law and ordinance and with every applicable lawful regulation and order, with respect to the construction, maintenance, use or occupation of the Leased Premises and comply with any application, regulation, or order of the *Insurer's Advisory Organization of Canada*, or any successor or any body having similar function, or of any liability or fire insurance company by which the Landlord or Tenant may be insured, and to comply with applicable building and zoning by-laws. Provided the foregoing obligations of the Tenant shall be subject to the Tenant being entitled to contest in good faith and in an expeditious and diligent manner, any such law, ordinance, regulation, order or other requirements as aforesaid. If the Landlord determines that there is a non-observance by the Tenant of the foregoing, the Landlord shall advise the Tenant in writing and the Tenant shall have twenty (20) days to rectify the non-observance or respond accordingly.
- (f) In the event of any substantial damage to the Leased Premises by any cause, to give notice in writing of such damage to the Landlord forthwith upon becoming aware of it.
- (g) Upon the expiration of the Term or any termination of the Lease by the effluxion of time or otherwise, or any extended term, to quit the Leased Premises and deliver them up to the Landlord and to leave them safe and in good repair, save and except for damage by fire, lightning, tempests, any additional perils from to time defined and covered in the standard fire insurance broad-extended-coverage contract in use during the Term of the Lease, acts of God, and reasonable wear and tear. The Landlord hereby acknowledges and agrees that due to the nature of the Tenant's Operation (e.g. the removal of trees and tree branches and the establishment of paths and trails) it does and will not require the Tenant to return the Leased Premises to the Landlord in the same condition as it was in at the Commencement Date, provided the Leasehold Improvements have been made in accordance with the terms of this Lease.
- (h) The Tenant shall be responsible to ensure all visitors to the site have left the Leased Premises prior to the Tenant's staff leaving for the day and prior to the closing of the Leased Premises each day to the public and customers of the Tenant.
- (i) The Tenant is responsible that the Leased Premises are left in a secure and safe manner at the end of each operating day and at the close of each season.

- (j) Tenant shall comply with all of its obligations and covenants herein.

8.02 Assignment and Subletting:

- (a) The Tenant will not: (i) assign this Lease; (ii) sublet, share or part with possession of all or any part of the Leased Premises; nor (iii) mortgage or encumber this Lease, its leasehold improvements and fixtures, or the Leased Premises (collectively, a "Transfer"), by or in favour of any Person (a "Transferee") without the prior written consent of the Landlord which consent will not be unreasonably withheld except with respect to (i) or (ii) may be unreasonably withheld prior to the second anniversary of the Commencement Date. However, notwithstanding any statutory provisions to the contrary, the Landlord will be deemed to be reasonable if it bases its decision whether or not to consent on any or all of the following factors:
- (i) whether in the Landlord's opinion the financial background, business history, experience, and capability of the Transferee is satisfactory;
  - (ii) The consent by the Landlord to any Transfer will not constitute a waiver of the necessity for consent to any subsequent Transfer.
- (b) If the Tenant intends to effect a Transfer, then the Tenant will give prior written notice to the Landlord of such intent, specifying the proposed Transferee and providing additional information including, without limitation, a copy of a bona fide written offer with respect to the proposed Transfer which the Tenant is prepared to accept subject to compliance with the provisions of this Lease and which must disclose any and all monetary payments or other considerations made or to be made by the proposed Transferee as consideration for such Transfer and any other information concerning the financial expertise or business status of the Transferee that the Landlord requires. The Landlord will, within thirty (30) days after having received notice and all necessary information, notify the Tenant in writing either that (i) it consents or does not consent to the Transfer, or (ii) it elects to cancel this Lease in preference to giving consent. If the Landlord elects to cancel this Lease it will not be considered to be an unreasonable withholding of consent pursuant to this Lease or at law. If the Landlord elects to cancel this Lease, the Tenant will notify the Landlord in writing within fifteen (15) days thereafter of the Tenant's intention either to refrain from the Transfer or to accept the cancellation of this Lease. If the Tenant fails to deliver its notice within the fifteen (15) day period, this Lease will be terminated upon the date stipulated by the Landlord in its notice of cancellation. If the Tenant advises the Landlord it intends to refrain from the Transfer, then the Landlord's election to cancel this Lease will be void.
- (c) If there is a Transfer, the Landlord may collect Rent from the Transferee, and apply the net amount collected to the Rent required to be paid pursuant to this Lease, but no acceptance by the Landlord of any payments by a Transferee will be a waiver of the requirement for the Landlord's consent to such Transfer, or the acceptance of the Transferee as the Tenant, or a release of the Tenant from the further performance by the Tenant of its covenants or obligations. Any documents evidencing the Transfer will be prepared by the Tenant and subject to review and approval by the Landlord. All legal costs incurred by the Landlord will be paid by the Tenant to the Landlord or its solicitors as Additional Rent. Notwithstanding a Transfer, the Tenant will be jointly and severally liable with the Transferee on this Lease and will not be released from performing any of its obligations.

- (d) If the Tenant receives consent under this section 8.02, it will be subject to the following conditions that:
- (i) any money or other value (including, without limitation, any amount payable by the Transferee to the Tenant in excess of the Basic Rent for the month in which the Transfer occurs and the last month of the Term, which is paid by any Transferee to the Tenant in connection with a Transfer, not including the reasonable amounts, as determined by Landlord, allocated for the sale of other assets at the time of the Transfer shall be paid by the Tenant to the Landlord as Additional Rent;
  - (ii) at the Landlord's option, the Transferee shall enter into a written agreement directly with the Landlord to be bound by all of the terms contained in this Lease.
- (e) The Tenant acknowledges and agrees that the Landlord will not be liable for any claims, actions, damages, liabilities or expenses of the Tenant or any proposed Transferee arising out of the Landlord unreasonably withholding its consent to any Transfer and the Tenant's only recourse will be to bring an application for a declaration that the Landlord must grant its consent to the Transfer.

**8.03 Use of Premises:**

- (a) The Tenant is hereby permitted to use and occupy the Leased Premises only for the purpose of constructing, operating and maintaining a tree top adventure park and zip line, together with a zip line over the Licensed Area, which will be comprised of approximately 50-80 installations and games (at heights of approximately 5 to 60 feet), and the Tenant having an option to expand the park within the Leased Premises to include a total of 200 installations, which installations and games shall include Tarzan vines, zip lines, bridges, nets for crossing, climbing walls, ladders and treehouses in the Leased Premises in accordance with Approved Plans. Further development of the site will only be allowed as agreed in writing by the parties. In addition, the Tenant is hereby permitted to use and occupy the Leased Premises for other outdoor activities as agreed to in advance by Landlord in writing, equipment rental, a gift shop (i.e. for the sale of T-shirts, hats, other items of apparel, food and other merchandise), subject to compliance with all applicable municipal bylaws by the Tenant.
- (b) All Binbrook Conservation Area visitors will be required to pay entrance to the Common Area unless the customer provides proof of a pre-booked reservation to participate in the Tenant's Treetop Trekking course or if the customer holds a valid membership pass to Treetop Trekking.
- (c) Should the facilities not be actively under construction or used by customers of the Tenant for any period of time in excess of ten (10) consecutive months following the Commencement Date, (other than as a result of repairs, restoration, changes or renovations and the Tenant is proceeding expeditiously and diligently with same), then Landlord may terminate this Lease and retain any Rent paid and Tenant shall pay Rent to the date of Termination. Upon termination of this Lease by the Landlord, all leasehold improvements, fixtures and the facilities shall be removed by the Tenant at the Tenant's expense. Should the Tenant not remove all leasehold

improvements, fixtures and the facilities, they shall be removed for them at the Tenant's expense.

- (d) In conducting its activities on the Leased Premises, the Tenant shall operate, manage and maintain the facilities, as would a prudent owner, in accordance with all applicable laws, regulations and licensing requirements and subject to the provisions of this Lease. Tenant will provide Landlord with a copy of all major incidents as reported to the TSSA per the applicable rules and regulations.
- (e) The Tenant shall have the right to contest in good faith and by appropriate means, the application of any statute, rule, regulation, ordinance or the like, which may be construed to limit or restrict the use and occupancy of the Leased Premises by the Tenant or the operations of the facilities as permitted herein so long as during such contest the Tenant complies with all such statutes rules, regulations or the like.

## **9.00 LANDLORD'S COVENANTS**

The Landlord, at its sole cost and expense, covenants and agrees with the Tenant as follows:

- (a) For the duration of the initial construction, the Landlord shall make available, at no cost, a portion of its maintenance workshop for use by the Tenant's construction team. The Landlord will also allow Tenant to have a few trailers/containers on site for the duration of the construction.
- (b) The Landlord, subject to the payment of Rent and the fulfillment of all of Tenant's obligations herein, covenants with the Tenant for quiet enjoyment, and that the Landlord shall perform and observe all of its covenants in this Lease required to be performed and observed by it.
- (c) Landlord is permitted to enter the Leased Premises on 24 hours written notice to the Tenant and/or no notice in the case of an emergency.
- (d) To keep in a good and substantial state of repair to the current standards the Common Areas including the parking lot and the paths and walkways leading to the Leased Premises and to keep those areas free from debris, snow and ice, during the Primary Operating Season (as hereinafter defined) and on mutually agreeable dates and times during the Secondary Operating Season (as hereinafter defined). Roads will be maintained on mutually agreeable dates and times during the offseason by the landlord.
- (e) The Landlord shall construct for the Tenant's exclusive use an office, administration and operations building suitable for the Operation whose size, specifications and location is to be agreed by the parties. This building shall form part of the Leased premises. The Landlord, at its sole cost and expense, covenants to supply all required materials and labour so as to erect, finish and service this building with heat, water, electricity, telephone and fax lines and high-speed internet. The Tenant shall pay to the Landlord the sum of \$50,000 to be applied towards the cost of this office building. Payment shall be made in ten annual payment of \$5,000. The first draw shall be paid upon approval by the Tenant of the plans for the office building as presented by the Landlord. The Landlord covenants that the Landlord's work as set out in this section shall comply with the requirements of all governmental authorities (including, without limitation federal,

provincial and municipal legislative enactments, by-laws and other regulations). In performing its covenants hereunder the Landlord shall, throughout the Term, at its expense, promptly comply with all laws, by-laws, ordinances, orders, rules, codes and regulations of all county, municipal, provincial or federal government or governmental authority having jurisdiction over the Leased Premises in force during the Term. If the Tenant executes its option to terminate the Lease within the contract period, the Tenant hereby covenants and agrees to pay the Landlord the remaining balance of the \$50,000 in full. During the construction of an office, administration and operations building, the Landlord will make an existing Pavilion (pavilion 1) available for the Tenant's use for a maximum of two operating seasons.

- (f) The Landlord shall provide the Tenant, its agents, employees and customers with washroom facilities on the Lands which shall be capable of servicing the Tenant's staff and projected number of customers.
- (g) The Landlord shall provide the Tenant with garbage and recycling containers for the Operation and the Tenant's customers. and shall be responsible for garbage and recycling pick-up disposal pursuant to a schedule to be agreed upon by the parties.
- (h) The Landlord shall cause to be erected or assist the Tenant with erecting advertising and directional signage on the Lands for the Operations, as desired by the Tenant. The Landlord shall include the Tenant in any signage program now existing on the Lands or established in the future.
- (i) The Landlord shall assist the Tenant in its marketing efforts in a manner consistent with a marketing plan to be drafted and agreed upon by the parties.
- (j) The Landlord will not be held responsible for any promises, compensation or obligations made with outside parties on its behalf by the Tenant, except as set out in contracts duly signed by the Landlord.

## **10.00 TENANT'S INSURANCE**

The Tenant shall obtain and supply copies of the policies or certificates as required by Landlord prior to the Commencement Date and thereafter from time to time during the Term, and keep in full force and effect commencing prior to the start of construction of the Project and during the remainder of the Term and during any renewal thereof, the following insurance coverage, at its sole expense: Public liability and property damage insurance including personal injury liability, fire and extended perils on all buildings and leasehold improvements of Tenant, contractual liability, non-owned automobile liability and owners' and contractors' protective insurance coverage with respect to the Leased Premises and the Tenant's use of it which coverage shall include the activities and Operation conducted by the Tenant and any other person (other than the Landlord, its agents, contractors, licensees, employees, concessionaires, customers and invitees) on the Leased Premises and Business Interruption Insurance for a minimum 3 month period. Such policy shall be written on a comprehensive basis with limits of not less than Five Million Dollars (\$5,000,000) for each occurrence involving bodily injury to anyone or more persons, or property damage.

The policy required pursuant to this clause shall be consistent with the provisions of this Article 10.00 and shall name the Landlord as additional insured. All property damage and public liability insurance shall contain a provision for cross-liability and severability of interests as between the Landlord and the Tenant and be for the full replacement cost of Tenant's improvements. Such

policy shall contain an endorsement requiring the insurers under such policies to notify the Landlord in writing by registered mail with return receipt requested at least thirty (30) days prior to any material change, alteration, cancellation detrimental to the Landlord or non-renewal of such policies and a waiver in favour of the Landlord of any breach of warranty clause such that the insurance policies in question shall not be invalidated in respect of the interest of the Landlord by reason of any breach or violation of any warranties, representations, declarations or conditions contained in such policies. The Tenant shall furnish the Landlord with certificates of insurance. The cost of premiums for all required insurance policies relating to the Leased Premises shall be paid by the Tenant. The Tenant shall not cancel any policy or insurance during the Term without the prior written consent of the Landlord. Each policy shall provide that no cancellation shall be effective prior to thirty (30) days after the giving of notice by the insurer to the Landlord.

All policies of insurance shall be written by companies reasonably satisfactory to the Landlord and authorized to do business in the Province of Ontario, and shall be written in such form and content and shall be distributed among such companies as shall be reasonably acceptable to the Landlord.

#### **11.00 WSIB COVERAGE**

Tenant agrees to provide proof of WSIB coverage prior to commencement of construction.

#### **12.00 DESTRUCTION OR DAMAGE BY FIRE, ETC.**

If during the Term the Leased Premises or any part of the Leased Premises shall be destroyed or damaged by fire, lightning, tempest, impact of aircraft, acts of God, or government enemies, riots, insurrections, or explosion the following provisions shall have effect:

- (a) Subject to subsection 12.00(b) below, if the Leased Premises are rendered partially or wholly unfit for the conduct of the Tenant's business, Base Rent shall be reduced in each calendar month in the same proportion as the Tenant's Leasehold Improvements are destroyed or damaged, as determined by a qualified engineer selected by Landlord on the Leased Premises until the Leased Premises have been rebuilt, repaired or restored (to the extent of the insurance proceeds actually received by the Tenant and Landlord by their insurers) and the Tenant's business is restored to substantial operational status, but such reduction in Base Rent shall not exceed five (5) calendar months. Tenant, if it undertakes to rebuild or repair, shall do so as expeditiously as reasonably possibly; any changes from the Approved Plans shall require prior written approval of Landlord. If the Tenant and/or the Landlord receive insurance proceeds due to damage or destruction to the Leased Premises the Tenant and/or Landlord, as the case may be shall be obliged to use the said insurance proceeds for the rebuilding, repair or restoration of the Leased Premises. If insurance proceeds are insufficient to rebuild, or Tenant does not complete the building or repair within ninety (90) days of the damage or destruction, either party may terminate this lease on thirty (30) days notice.
- (b) Notwithstanding the provisions of subsection 12.00(a) immediately preceding, if for any reason the Tenant decides it is not economically feasible to rebuild the tree top adventure park, zip line, or both, the Tenant shall have the option to terminate this Lease on thirty (30) days' notice given within thirty (30) days of the happening of the event causing the Leased Premises to be unfit, or if the improvement cannot be repaired within ninety (90) days of the damage or destruction, as determined by a reputable engineer retained by Landlord, either party may terminate at any time

by notice given within thirty (30) days of the receipt of the engineer's report on 30 days' notice to the other party.

### **13.00 SIGNS**

Subject to section 9.00(h) above, the Tenant shall have the right to erect and maintain upon the Leased Premises and upon the Lands any signs and notices that would indicate the existence of and the location and direction to the Tenant's treetop adventure park and treewalk village. Such signs and notices shall be of reasonable dimensions and reasonably placed in conspicuous areas. The Landlord will not remove or obscure any such sign or notice or permit it to be removed or obscured.

### **14.00 ADVERTISING AND MARKETING**

Each party hereto agrees to refer to the other party in their respective print and broadcast marketing and advertising whenever suitable as determined by the party marketing and advertising. Each party hereby agrees that reference to the other party in said marketing and advertising media will be subject to the other party's written consent with respect to content and style. The Landlord hereby acknowledges and agrees that the Tenant shall have all right, title and interest in the trademarks and trade names "Treetop Trekking", "Treetop Adventures" and "Treewalk Village" and any trademarks and trade names derived there from.

### **15.00 RECIPROCAL AGREEMENT**

The Tenant hereto agrees to provide reduced prices to the Landlord's employees.

The Landlord hereto agrees to provide the Tenant's employees with access and free passes to all Binbrook facilities and public use programs.

### **16.00 EXCLUSIVITY (NON-COMPETITION) AND RIGHT OF FIRST REFUSAL**

During the Term of the Lease or any extension thereof, and so long as there is no default by Tenant, the Landlord and any of its affiliates (as that term is defined in the *Canada Business Corporations Act*, R.S. 1985, c. C-44) covenant and agrees not to lease any land that it owns and operates within a 150 km radius of any established Treetop Trekking course and Treewalk Village to any entity for the same uses as the Tenant's uses on the Leased Premises, and shall not itself or through a related party operate any Similar Facilities on the Lands or within 150 km of the Leased Premises.

In the event that the Landlord desires to establish a Treetop Trekking course, zip-line, or Treewalk Village, or any other Similar Facilities, on any lands owned or controlled by it, the Landlord agrees that it must first offer such opportunity to the Tenant on substantially the same terms and conditions as contained in this Lease.

### **17.00 SECURITY**

The Landlord agrees to provide regular security to the Common Areas and Leased Premises in the peak season of June, July and August, in accordance with its current practices. The Tenant agrees to secure the tree top course and zip lines using ladder locks and other security measures.

### **18.00 PARKING AND COMMON AREAS**

Without charge, and so long as Tenant is not in default of the terms of this Lease, the Tenant's

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employees and customers shall have the non-exclusive use of the Landlord's Common Areas and washroom facilities on the Lands as otherwise provided herein and exclusive use of designated parking for 150 vehicles.

#### **19.00 OPERATING SEASON AND HOURS OF OPERATION**

- (a) The Primary Operating Season for the treetop adventure park and zip line will be from March 1<sup>st</sup> to October 31<sup>st</sup> annually, with the exception of the first operating season, and the Secondary Operating Season between November 1<sup>st</sup> and February 28<sup>th</sup> on a customer pre-booking basis;
- (b) In the Secondary Operating Season between November 1<sup>st</sup> and February 28<sup>th</sup>, 48 hours' notice must be given to the Landlord on all pre-bookings of the Tenant;
- (c) Any extension of the Primary Operating Season will occur only if mutually agreed upon in writing by the parties;
- (d) The Tenant shall be permitted to be open for business on a daily basis anytime between the hours of 7:30 a.m. and 11:00 p.m
- (e) Notwithstanding the above schedule, the Tenant's maintenance staff, administrative personnel, Directors and Officers shall have access to the Leased Premises 24 hours a day, 365 days a year.

#### **20.00 LEASEHOLD IMPROVEMENTS, FIXTURES, ETC.**

All Leasehold Improvements (including, but not limited to all installations and games such as the aforementioned Tarzan vines, zip lines, bridges, nets for crossing, climbing walls, ladders, etc. installed by or on behalf of the Tenant), shall remain the sole property of the Tenant. For greater certainty, the Tenant shall be entitled to remove any installations, games, chattels, equipment and fixtures or other Leasehold Improvements during or at the expiry or termination of the Lease. The Landlord expressly acknowledges that said installations, games, fixtures or other Leasehold Improvements have been provided by the Tenant, or may be added from time to time by the Tenant, and the Landlord agrees that the Tenant may at any time remove them, provided that any damage resulting from such installation or removal shall be minimized and the Leased Premises repaired in a reasonable manner by the Tenant to a standard that is acceptable to the Landlord acting reasonably. The Landlord hereby acknowledges and agrees that due to the nature of the Operation (e.g. the removal of trees and tree branches and the establishment of paths and trails as previously approved in writing by Landlord) it does and will not require the Tenant to return the Leased Premises to the Landlord in the same condition as it was at the Commencement Date, but as otherwise required by this Lease. Notwithstanding the foregoing, the Tenant hereby agrees to return the Leased Premises to the Landlord free from any contamination or damage to the environment. Anything not removed, which the Landlord deems, the Tenant is to remove shall at Landlord's option be removed at Tenant's cost or retained by Landlord without any further right, title or interest by Tenant.

#### **21.00 HOLDING OVER**

Should the Tenant remain in occupation of the Leased Premises after the determination of the Term with the consent of the Landlord and without other special agreement, it shall be as a monthly tenant at a monthly rental rate equal to the Rent hereunder, which Rent shall be payable in the same manner and upon the same terms and conditions as set out in this Lease. The Landlord shall be

entitled to terminate such monthly tenancy upon thirty (30) days prior written notice given at anytime, after which the tenancy shall terminate.

## **22.00 EVENT OF DEFAULT**

An "**Event of Default**" will be considered to have occurred when any one or more of the following happens:

- (a) The Tenant fails to pay any Rent when it is due, whether demanded or not, and the failure continues for thirty (30) consecutive days;
- (b) The Tenant breaches any term, covenant, condition or agreement contained in this Lease that it is responsible to perform other than the payment of Rent and the provision of insurance, and the breach continues for thirty (30) days after written notice from the Landlord to the Tenant specifying the breach, unless the Tenant commences rectifying and proceeds continuously and expeditiously and cures the breach within thirty (30) days after written notice thereof from the Landlord as in the case of a breach that requires more than thirty (30) days to rectify, the Tenant proceeds expeditiously and continuously to Landlord's reasonable satisfaction to cure same;
- (c) The Tenant makes an assignment for the benefit of creditors or commits any act of bankruptcy as defined in the *Bankruptcy Act of Canada* or any successor of it, or becomes bankrupt or insolvent or takes the benefit of any Act now or hereafter in force for bankrupt or insolvent debtors;
- (d) An order is made for the winding up or liquidation of the Tenant or the Tenant voluntarily commences winding-up procedures or liquidation;
- (e) An order or appointment is made for a receiver or a receiver and manager of the Tenant's assets or any part of them; or

## **23.00 RIGHTS OF THE LANDLORD**

Upon the occurrence of any Event of Default the following provisions, which shall be cumulative and not exclusive of any other provision or remedy, apply, without prejudice to any other rights the Landlord may have against the Tenant and property of the Tenant:

- (a) The Landlord will be entitled to re-enter the Leased Premises and remove all property from the Leased Premises and the property may be sold or disposed of by the Landlord as it considers advisable or may be stored in a public warehouse or elsewhere at the cost and for the account of the Tenant, all without service of notice, or resorting to legal process and without the Landlord being guilty of trespass or being liable for any loss or damage which may be occasioned; and
- (b) The Landlord may without notice re-enter and take possession of the Leased Premises as though the Tenant or any occupant or occupants of the Leased Premises was or were holding over after the expiration of the Term without any right whatever, and this Lease and the Term will be terminated;
- (c) The Landlord may terminate this lease; and

(d) The Landlord may sue and claim for damages, and unpaid Rent and future Rent.

## **24.00 OPTION TO RENEW**

Notwithstanding anything contained in this Lease, it is agreed that the Tenant may, provided that this Lease is in full force and effect and the Tenant is not in default pursuant to this Lease at the time of giving notice, in accordance with the following sentence, of its desire to renew, at its option, renew the Term of this Lease, for an additional five (5) year period on the same terms and conditions and at the same Rent contained in this Lease except for the provisions of this section granting the option to renew.

For each renewal year, the Base Rent for that year, shall be indexed based on the previous years' average Consumer Price Index (CPI) for Canada.

In the event that the Tenant elects to exercise its option to renew, notice of such exercise shall be given in writing to the Landlord at least six (6) months prior to the expiry of the original Term.

## **25.00 EXPROPRIATION**

The Landlord and the Tenant will co-operate with each other in respect of any expropriation of any part of the Leased Premises so that each receives the maximum award for which they are respectively entitled.

If part of the Leased Premises is expropriated, or if the intended use of, or reasonable access to, the Leased Premises are materially and adversely affected by the expropriation then the Tenant or Landlord may terminate this Lease as of the date the expropriated interest vests in the expropriating authority and the Tenant will have no claim against the Landlord for the value of any unexpired Term or for damages or otherwise. If the Tenant or Landlord does not terminate this Lease as provided above, and if any part of the Leased Premises is expropriated and the area of the Leased Premises is reduced, there will be a reduction or abatement of Base Rent by the same percentage the area of the Leased Premises is reduced.

If the Tenant or Landlord does not terminate this Lease as provided above, and if any part of the Leased Premises is expropriated and the area of the Leased Premises is reduced, there will be no reduction or abatement of Percentage Rent to adjust for that reduced area.

## **26.00 REGISTRATION**

The Tenant shall not register this Lease or any notice of it against title to the Leased Premises, except in a form which shall be acceptable to the Landlord and the solicitors for the Landlord, acting reasonably, and which form shall be executed by both the Landlord and the Tenant prior to the registration. The Tenant shall bear the cost of any survey required to effect a registration of the Lease or notice against the Leased Premises if such a registration is requested by the Tenant.

## **27.00 NOTICES**

Any notice from one party to the other hereunder shall be in writing and shall be deemed duly delivered, if mailed by registered or certified mail or if sent by facsimile as follows:

In the case of the Landlord to:



Niagara Peninsula Conservation Authority  
250 Thorold Road West, 3<sup>rd</sup> Floor  
Welland, Ontario L3C 2W2  
Phone: (905) 788-3135  
Fax: (905) 788-1121  
Attention: Chief Executive Officer

In the case of the Tenant to:

Treetop Trekking Hamilton Inc.  
1101 Horseshoe Valley Road West,  
Barrie, Ontario,  
Canada L4M 4Y8  
Attention: Stephane Vachon

With a copy to:

Aux Deux Moulins Développement Inc.  
7385 Avenue Papineau  
Montréal, Quebec  
Canada H2E 2G7  
Attention: Stephane Vachon

Any notice shall be deemed to have been given at the time of delivery or, if mailed, three (3) days after the date of mailing thereof or if made or given by facsimile, on the next Business Day following the transmittal thereof, as evidenced by confirmation of receipt. Either party shall have the right to designate by notice, in the manner above set forth, a different address to which notices are to be mailed. No notice given by e-mail or by other similar electronic means will be considered to have been given in writing.

## **28.00 MISCELLANEOUS**

### **QUIET ENJOYMENT**

- 28.01 Provided the Tenant pays the Rent hereby reserved and performs the covenants in this Lease contained and on its part to be observed and performed, the Tenant shall be entitled to have quiet enjoyment of the Leased Premises, subject to the other provisions herein.

### **COMPLIANCE WITH THE PLANNING ACT**

- 28.02 It is an expressed condition of this Lease, and the Landlord and the Tenant so agree and declare, that the provisions of section 50 of the *Planning Act*, R.S.O., 1990, c.P.13 and amendments thereto, be complied with if applicable

### **ESTOPPEL CERTIFICATE**

- 28.03 The Tenant at the request of the Landlord shall execute and deliver within 10 Business Days of such request, a statement in writing (the form of which shall be provided to the Tenant by the Landlord at the Landlord's sole cost and expense), certifying that this Lease is unmodified in full force and effect (or if modified, stating the modifications and that the same is in full force and effect as modified) the dates to which any amount provided in this Lease is to be paid by the Tenant to the Landlord has been paid and stating whether or not there is any existing default under this Lease on the part of the Landlord of which the Tenant has notice.

### **NO PARTNERSHIP**

- 28.04 Nothing contained in this Lease nor the conduct of the parties pursuant to the Lease shall be deemed to create any relationship between the parties other than the relationship of Landlord and Tenant.

#### **TIME OF THE ESSENCE**

- 28.05 Time shall be of the essence of this Lease.

#### **SEVERABILITY**

- 28.06 If any provision in this Lease shall to any extent be invalid or unenforceable, the remainder of this Lease or the application of such provision other than that which is held to be invalid or unenforceable, shall not be affected thereby and each provision in this Lease shall be separately valid and enforceable to the fullest extent permitted.

#### **CAPTIONS AND SECTION NUMBERS**

- 28.07 The captions appearing in the margin and the headings of Articles are for reference only and in no way define, limit or enlarge the scope or meaning of this Lease or any provision hereof.

#### **INTERPRETATION**

- 28.08 Words importing the singular number only shall include the plural, and vice versa, and words importing the masculine gender shall include the feminine gender and words importing persons shall include firms and corporations and vice versa.

#### **ASSIGNMENT OR TRANSFER BY LANDLORD**

- 28.09 In the event of the sale by the Landlord of the Lands or the assignment by the Landlord of this Lease or any interest of the Landlord hereunder and to the extent that such purchaser or assignee has assumed in writing the covenants and obligations of the Landlord hereunder, the Landlord shall, without further written agreement, be freed and relieved of liability upon such covenants and obligations.

#### **FORCE MAJEURE**

- 28.10 It is understood and agreed that whenever and to the extent that the Landlord or the Tenant shall be unable to fulfill or shall be delayed or restricted in the fulfillment of any obligation, other than financial obligations, in respect of the supply or provision of any service or utility or the doing of any work or the making of any repairs required by this Lease by reason of being unable to obtain the materials, goods, equipment, service, or labour required to enable it to fulfill such obligation or by reason of any statute, law or order-in-council or any regulation or order passed or made pursuant to any law or by reason of the order or direction of any administrator, controller, board, governmental departments or officer or other authority, or by reason of not being able to obtain any permission or authority required by any of the foregoing, or by reason of any other cause beyond its control other than financial considerations or reasons, whether of the foregoing character or not, so long as such impediment exists the Landlord or the Tenant as the case may be shall be relieved from the fulfillment of such obligation and shall be granted a reasonable

IN WITNESS WHEREOF the parties have executed this indenture

**NIAGARA PENINSULA  
CONSERVATION AUTHORITY**

Per: 

Name:

MARK BRICKELL

Title:

CAO Sec Treasurer.

I have authority to bind the Authority

**TREETOP TREKKING HAMILTON INC.**

Per: 

Name: Stephane Vachon

Title: President

I have authority to bind the Corporation



## Capital Project Detail - 2020

<b>Project Title:</b>	Field Centre Restoration	<b>Project #</b>	Pending
<b>G/L Account(s):</b>	Pending	<b>Asset Class</b>	Building
<b>Priority Classification:</b>	Critical	<b>Division</b>	Land Operations
<b>Priority Ranking:</b>	5	<b>Project Status</b>	Draft
<b>Site/Location:</b>	Ball's Falls	<b>Grouping</b>	C-3
<b>Project Lead:</b>	Jeff Fazekas	<b>Project Start Date</b>	Mar-20
<b>Funding Source:</b>	Special Levy - Niagara	<b>Project Completion</b>	Oct-20
<b>Partner (if applicable) :</b>		<b>Municipality</b>	Niagara

## PROJECT DESCRIPTION, RATIONALE, BACKGROUND, LINKAGES AND IMPLICATIONS

*Provide a detailed description of the project, why the project needs to be done now and consequences of deferring the project. Include historical cost and typical asset life cycle. Indicate if the project is linked to any other current or future project (capital or operating) and any impact to related project(s) if this project is approved or deferred.*

**Project Description:** The restoration of the Field Centre building foundation at Ball's Falls CA. This will include constructing a water pit for the ground water to gather. A transfer pump located within the pit will transfer the ground water to the nearest drainage ditch.

**Rationale:** This is a 3 stage project over 3 years. First year involves repairing the foundation, second year involves the exterior restoration and third includes the restoration of the interior. The field centre is an original historic building on the site. It is used currently as a bridal suite, office space and storage space for artifacts. Attached is a full scoping of the field centre project.

Scoping of the Field Centre was a 2019 capital project. This project is the result of that exercise.

See embedded file for specific details and costing



Building Condition  
Assessment &  
Budget Field Centre

## NEEDS ANALYSIS &amp; BENEFITS

*Indicate project benefits, i.e. improving health and safety, customer service, increased ROI, heritage, educational, etc.*

The benefit to this project is the restoration of a original building at Ball's Falls CA. It also generates revenue from renting out the bridal suite to wedding guests, and improvements as a result of the restoration project is expected to drive incremental revenues. Current annual rental income: \$20,000.

## Capital Project Detail - 2020

Project Title: Field Centre Restoration

Project #

Pending

## RISKS &amp; MITIGATION STRATEGY

Indicate project risks and proposed mitigation; include risk assessments if the project is deferred (low/medium/high) and any risks during or post implementation. Include direct costs of not proceeding (if known) as well as any performance or service related risks.

High risk if deferred: deferring this project may result in an historical building being demolished due to the condition and deterioration of the foundation and exterior.

## PROJECT COST &amp; FORECAST

Description	Prior Year(s)	2020	2021	2022	2023	2024+
Planning	3,600	35,000	42,500	45,000		
Design						
Pre-Construction						
Construction						
Internal salaries & benefits						
Internal resources - non-salary						
Warranty						
Facilities						
Equipment						
Contingency						
Other						
<b>TOTAL</b>	<b>3,600</b>	<b>35,000</b>	<b>42,500</b>	<b>45,000</b>	<b>-</b>	<b>-</b>

## PROJECT MILESTONES

Percent Complete	25%	50%	75%	100%
Projected Date (month/year) milestone met				Dec-22

## CASH FLOW PROJECTION (Current Year Only)

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Projected cash flow requirements - current year			35,000	

## Capital Project Detail - 2020

Project Title: Field Centre Restoration

Project #

Pending

## OTHER

Asset useful life: 40 years

Projected impact on operations annually: \$ -

Return on investment (ROI)

gain from investment:

cost of investment:

126,100

ROI:

Payback Period

Year

Investment

Annual Savings/Revenues

Cumulative Cost (savings)

0

1

2

## NOTES

Name and Title

Signature

Date

The Field Centre  
Building Condition Assessment  
Balls Falls Conservation Area



May 2019

Prepared by  
Mark Shoalts, P.Eng., CAHP

**SHOALTS**  
ENGINEERING

P.O. Box 218, Fenwick, Ontario L0S 1C0  
905-892-2110 e-mail: [mark@shoalts.ca](mailto:mark@shoalts.ca)

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2.3 APPENDIX A: BUDGET COSTS	18

## 1.1 Terms of Reference



Balls Falls aerial photo 2018 with Field Centre indicated

### Engagement

Jeff Fazekas of the Niagara Peninsula Conservation Authority engaged Mark Shoalts to perform a full review of the condition of the Field Centre, also known as the White House, at Ball's Falls Conservation Area to prepare a building condition assessment and to develop a scope, specifications, and budget for any necessary maintenance and restoration work.

The inspection was visual only, with no intrusive or destructive testing other than probing with a hand-held awl. Access was limited to foot level; all higher sections of the building was inspected with the aid of a zoom camera and photographs.

### Conventions

References to directions assume that Sixth Avenue runs east-west and the main axis of the Field Centre is north-south.

The name "Field Centre" is in general use by NPCA staff but the building is also referred to as the "White House" in some of the previous reports and documents produced by various parties. "White" refers to the colour of the building, not a family name. In this report the name "Field Centre" will be used for consistency with current nomenclature.

Previous reports and studies provided to the author for background and reference include:

Report on Ball House, Peter John Stokes, September 1975  
Specifications for Grist Mill Pit Renovations, R.V. Anderson Associates, September 1977  
Heritage Designation Resource Information, Chris Hayward, NPCA, January 1992  
Ball's Falls Enhancement Plan, NPCA staff, November 1995  
Investigation of the Ball House, J.K. Jouppien, April 2001  
Ball's Falls Heritage Conservation Master Plan, Andre Scheinman et al, September 2001  
Treatise on Roof Coverings for the Historic Complex at Ball's Falls, J.K. Jouppien, July 2003  
Assessment of Select Heritage Resources at Ball's Falls, J.K. Jouppien, March 2004  
Report on The Lime Kilns at Ball's Falls, Archeological Services Inc., September 2005

The previous reports present a wide range of opinions and viewpoints on every aspect of the park and its built heritage and are indicative of the evolution of the park physically, the NPCA's stewardship, and the public's use of the park. The reports also present differing opinions with respect to the value of the heritage structures presently in the park; both the original Ball structures and the buildings relocated into the park at various times for various reasons.

This report deals only with the Field Centre. The primary focus is on the condition of the building and its restoration and maintenance, and reference to its historic, current, and future uses is only in this context, not with respect to other long-range planning by the NPCA.

For the purpose of this report, additional reference should be made to The Standards and Guidelines for The Conservation of Historic Places in Canada (second edition), published by Parks Canada and available at:  
<http://www.historicplaces.ca/en/pages/standards-normes.aspx>

## 1.2 Background and Building History

Balls Falls Conservation Area occupies a small portion of 1200 acres of property first acquired by brothers John and George Ball in 1807. By 1809 the Balls had built a water-powered flour and grist mill on Twenty Mile Creek, followed by numerous other industrial enterprises and eventually a thriving village. The coming of railroads and other technological advances led to the decline of the community and the industries, culminating in the sale of the remaining 110 acres of Ball property including the mill, two houses, and a large barn, to the Niagara Peninsula Conservation Authority in 1963. In 1967, the last of the Balls left the property that the family had occupied for 160 years.

The Ball Home (1845-46) is of prime importance to Ball's Falls Conservation Area, second in significance only to the Ball Grist Mill (1807-09). It was built for George P. M. Ball during a period of prosperity for the Ball family and the village of Glen Elgin; it housed the village store as well as the Ball family. The Balls occupied the house for more than a century, changing its layout and function to suit their changing needs.

In approximately 1850, not long after the completion of the Ball Home, the Balls built the Field Centre to house their extended family. It is a two-storey timber-framed structure clad in wood clapboard siding. Mirroring the Greek Revival or Neoclassical styling of the Ball Home in more economical materials and very restrained detailing, the gable end faces the street with the typical off-centre entrance door. By 1850, this style was becoming somewhat old-fashioned but probably felt familiar, respectable, and appropriately conservative to the established, prosperous Ball family. Eventually the house was rented to other residents of Glen Elgin, possibly millers who were hired to run the Ball operations<sup>1</sup>.

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<sup>1</sup> Ball's Falls Heritage Conservation Master Plan, Andre Scheinman et al, September 2001

### 1.3 EXECUTIVE SUMMARY & RECOMMENDATIONS

Despite the lack of a formal maintenance programme, the Field Centre is in relatively good condition but there are areas requiring attention in the near future, and the interior would benefit greatly from the removal of insensitive and inappropriate renovations done at various times in the past 40 years. The stairs have been partitioned off from the main floor space and a partition was removed from the ground floor. The second floor bedroom walls have been covered with inexpensive 1970s panelling and the ceilings have been strapped and tiled with 12x12 wood fibre tiles. This may have felt appropriate when the space was converted to use as offices and artifact storage but it was not particularly effective even when first done and currently presents a tired and less than inspiring workspace for NPCA staff. The ground floor of the main house was redecorated more recently to provide meeting space and a facility for bridal parties during weddings on the site. While neat and in good condition, the renovated main floor is not indicative of the original tasteful styling of the home. The kitchen wing was converted to male and female washrooms many years ago. Restoration of the interior to the original appearance is recommended, with the exceptions of replacing the removed partitions and restoration of the kitchen wing.

The exterior of the building has been almost completely refinished, with all of the original siding removed and new wood siding installed. Unfortunately, there was sheathing installed under the new siding which moved the siding out on the window trims and sills, reducing the effectiveness of their water-shedding abilities. This has led to some deterioration and requires some repairs; and the complete exterior needs cleaning and painting. The basement has serious water ingress issues that must be addressed, preferably from the exterior with dampproofing and drainage work.

Deterioration of buildings accelerates when it is not addressed, and there are some issues that require remediation within the next year to prevent them progressing beyond the point of reasonable recovery. A modest investment now will provide a definite payback for years to come.

## 2.1 BUILDING CONDITION

### Exterior

The roof of the Field Centre is painted agricultural profile metal cladding in good condition. Generally the roof does not need any repair, only monitoring and regular maintenance if any issues become apparent. The eavestroughs have a number of issues as is to be expected with aluminum troughs, metal roofing, and no snowguards. The troughs are bent down and/or pulled away in some locations and the trough is completely missing from the east side of the kitchen wing. The downspouts also require repairs and some extensions at the bottom to direct water away from the building. There are some overgrown trees and shrubs around the building that should be trimmed or removed, particularly a cedar on the west side of the kitchen.



Metal roofing and aluminum troughs, cedar tree requiring removal



Downspout requiring repair



Eavestrough requiring repair

The exterior woodwork generally is in adequate condition although some specific areas require repairs. The complete exterior requires cleaning, scraping, and repainting. The rear door on the kitchen wing is a modern replacement 3-panel wood door with upper light. It is not stylistically appropriate for the house but it is in good condition and because it is the rear entrance and not very prominent, replacement with a door replicating the original style is not a high priority. There is a vertical trim piece near the west corner of the south end of the kitchen, the reason for which is unclear. The wood siding on each side of it is of different exposure widths and the boards do not line up, however the trim stops at an arbitrary location and the siding above it is continuous across the elevation.



Replacement door and mystery vertical trim

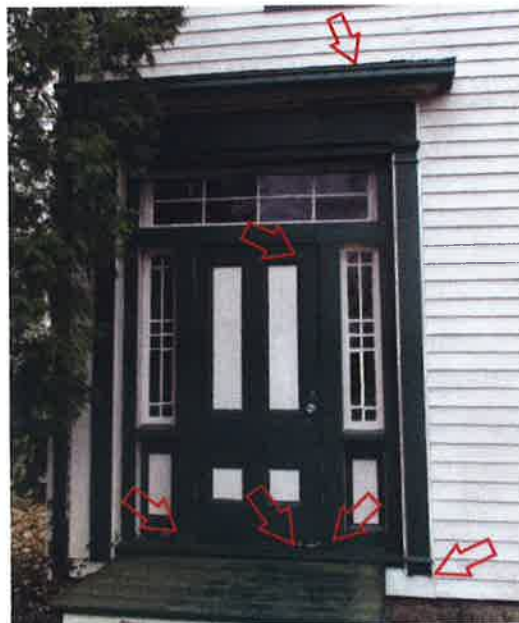
The window in the west side of the kitchen wing has been altered in size and function to suit the current interior use of the space as a washroom. This work was done at the same time as the replacement of the exterior siding; there is no patching in evident below the window. One glass pane is broken and requires replacement. Wooden drip caps were installed on all of the window heads at that time; they would not have been present originally and are not appropriate to the age of the building, but they do function and it would require considerable disruptive work to remove them to restore the original appearance.

Several window sills require repairs to rotten sections and consideration should be given to extending the sills to create a proper profile and to allow water to drip clear of the siding.



Rotted sill, no projection, south window, west wall (with air conditioner bracket)

The front entrance has the original door, surround, and sidelights and transom sash and is in fairly good condition. There has been a previous repair to the sill which requires repair again, and repairs are needed to the door and some of the trim elements. The hardware is modern and is inappropriate to the door and the period.



Front entrance repairs required

Most of the window sash in the building are original, or at least very old, and are in very good condition. There are minor repairs of woodwork and putty required, as well as scraping and repainting. Most of the windows have wood storm windows in place. The wood storms are generally in fair condition, but they require more repairs than the prime windows as well as scraping and painting. There are a few new storms required.

The original stairs to the basement are in a small enclosure on the east side of the house. A later interior stair to the basement has been added below the stairs to the second floor. The house retains the original complete stone foundation with a crawlspace under the kitchen wing and the front (north) half of the main house, and a basement in the centre under the south half of the main house. The exterior stair enclosure has several issues that must be addressed. The stone foundation requires some minor repairs and repointing. The troughs and downspouts on both sides of the enclosure require repairs and their should be extensions to get the water away from the foundation. Two sump pump discharge lines some out through the walls, both of which are unsightly and both of which discharge water into the wrong place. The site is graded to the west to Twenty Mile Creek, but these lines are on the east side of the building. During the site review in April 2019, the main sump pump was running essentially constantly, pumping water into a pool on the east side. Much of this water ended up draining back into the basement rather than across the site to Twenty Mile Creek as it should. In the basement, water was running through the stone walls and across the floor, as well as visible welling up through holes in the concrete floor. The extent of flow is concerning for several reasons. If the sump pump quits for whatever reason, water would very quickly begin to fill the basement, where there is electrical and heating equipment. The high volume and speed of flow through the walls and from under the floor make it very likely that soil is washing away from beside and below the foundation and floor, giving rise to concerns about stability and settlement. At present the foundation does not appear to have suffered unduly but the water needs to be dealt with sooner rather than later.



Sump pump lines and downspout discharging water on the east side



Sump discharge pooling uphill from the house

The stone foundation requires some repointing where visible above grade but there is no evidence of any existing parging, dampproofing, or drainage work below grade. The north and south walls of the basement are under the building and are not accessible, but the east and west walls should be excavated, cleaned, parged, and dampproofed. Weepers should be installed to drain to a sump which should be discharge to the west to drain properly to Twenty Mile Creek. A large exterior sump constructed more like a shallow well should be installed on the west side of the building to collect the weeper discharge and some of the ground water that is draining out of the higher land to the east and exerting undue pressure on the basement. Archeological investigations should be carried out prior to any excavation at this site.

Immediately south of the kitchen wing there appear to be two concrete cisterns, although neither one was opened during the review. One rectangular tank with a concrete lid also serves as the rear entrance step. The author could not lift the lid by hand and did not have a bar of sufficient size to open it. The concrete slab over this tank is badly cracked, with one repair on the east end. The tank is not in use, so it should be filled with crushed stone and the complete slab should be replaced. The new slab should be ramped and incorporated with the sidewalk to make the rear entrance to the house barrier-free. Another round cistern is immediately adjacent to this, it has a new concrete riser and plastic filler cap on it.



Concrete cisterns

There are two brick chimneys on the house, neither of which is original although the kitchen chimney has been rebuilt from the roof up on the original one below. An exterior chimney has been built on the west side of the house to exhaust older heating equipment; it is neither historically significant nor appropriate. It is obsolete with the installation of new heating equipment and should be removed. The kitchen chimney needs some repair and repointing to the top section and should have a metal cap installed to prevent further deterioration.



Modern chimney on west wall



Kitchen chimney requires repairs and a cap

## Interior

Approximately the centre third of the house, which is the south half of the main section, has a basement about five feet deep. As stated in the exterior description, there was a tremendous amount of water flowing into the basement during the site review, and it must be dealt with as soon as possible.



Water flowing across the basement floor

The walls are the original stone, parged on the interior, and the floor and sump pit are concrete of 20<sup>th</sup> century vintage. Remedial work for the foundation was described in the exterior section. The floor framing is good, there has been a steel post installed under one beam in the basement and no other work is necessary.

There appears to have been a fireplace and chimney in the centre of the house, long since removed and the floor filled in. The framing of the ground floor shows the location as does the roof framing.



Ground floor framing at former fireplace location



Roof infill at former chimney location

The ground floor of the kitchen wing of the house has been converted to men's and women's washrooms and a small anteroom. An original door and partition remains in the southwest corner, formerly for a rear stairway to the second floor but now for a storage closet, with the stairs removed and the upper floor filled in. The interior stairs to the basement are accessed through a door in the northeast corner of this anteroom; they are not original but have been in existence for a long time. Because the finishes in this area are reasonably good, the washrooms are well-used, and little remains of the original kitchen, it is recommended that the area be maintained as it is. One change that could be made would be to remove the modern door closer, lock, and panic hardware on the door to the front room of the house. The hardware is inappropriate to the door and appears to have been installed because of a misunderstanding of what is required or recommended in a location such as this. In any case, a lock and panic set are incompatible on the same door, and no panic hardware is required in this building.

The bulk of the ground floor has been converted into one room, used as a meeting space and as a facility for bridal parties during on-site weddings. The decorating is fairly innocuous but not period-appropriate to the house. The removal of two partitions and the fireplace created a large room, which was then reduced by constructing a front vestibule and closing in the stairs to the second floor. Panic hardware was installed on the vestibule door and on the original front door in the same misguided effort as on the door to the rear anteroom. The original room in the south part of the main house had wainscoting, likely because it was a kitchen area. Similar wainscoting was added to the rest of the space, but it interferes with the original window trim and panels and consideration should be given to removing it. The ceiling has 12x12 acoustic tiles and surface-mounted wiring for six schoolhouse fixtures. All of this should be removed, concealed wiring installed, the plaster ceiling restored, and appropriate lighting installed. The partitions enclosing the stairs and creating the vestibule should be removed. A combination exit/emergency light has been installed on the vestibule door, it is neither required nor warranted although discreet emergency lighting could be installed.



Main room with inappropriate lighting and decorating

The second storey of the main house is generally in good condition with most original elements intact but covered by wood panelling, some floors have plywood underlay and vinyl composition tiles, and the ceilings have 12x12 wood fibre acoustic tiles. There is inappropriate lighting in some rooms, and the door hardware has been changed on some doors. Removal of all of the modern finishes and restoration of the original finishes is a relatively simple and straightforward project that would greatly enhance the space. Rewiring for office use could be done at the same time, providing enhanced service that does not detract from the building.



Second floor space showing panelling, tile floor, and door hardware

The stair railings leading to the second floor and along the landing are a fine example of period railing, are original to the house and are in good condition. They do require some tightening and reinforcing, but nothing else.



Original railing

A modern stair to the attic has been installed in the small room south of the stairs. It is well-made and appropriate to the house, but the door to the attic should be better insulated and weather-stripped.

The room above the kitchen wing retains its original finishes, but there are repairs required on much of the plaster. Some modern plumbing is exposed on the walls. If the room is to be used regularly it could be restored, however a good case can be made for stabilizing it as is, and using it to show the construction methods and the original finishes of the building.



Upper room, kitchen wing

## Conclusions

The Field Centre is an original and valuable part of the heritage building grouping and cultural landscape of Balls Falls. It has seen various uses over the years, but has survived relatively intact. A moderate investment in it will restore it to much of its original appearance while maintaining its utility for the current purposes of the park. Enhancing this space is appropriate for both the present use and for the preservation of the building for future use and interpretations of the Balls Falls site.



Mark Shoalts, P.Eng., CAHP  
May 30, 2019

## APPENDIX A

### BUDGET COSTS

Work Item	2020	2021	2022
<b>Exterior</b>			
Archaeology	\$ 10,000.00		
Excavation, parging, weepers, & drainage	\$ 10,000.00		
Chimney removal & masonry repairs		\$ 10,000.00	
Install exterior sump and pump, replace south slab	\$ 15,000.00		
Exterior windows & woodwork repair and repaint		\$ 25,000.00	
Subtotal by year	\$ 35,000.00	\$ 35,000.00	\$ -
<b>Interior</b>			
Air conditioning		\$ 7,500.00	
<b>First floor</b>			
Remove partitions & ceiling tile			\$ 5,000.00
Rewire and install lighting			\$ 5,000.00
Restore doors & hardware, repair plaster, repaint			\$ 10,000.00
Subtotal by year	\$ -	\$ 7,500.00	\$ 20,000.00
<b>Second floor</b>			
Remove panelling, ceiling tile, floor tile			\$ 5,000.00
Rewire and install lighting			\$ 5,000.00
Restore doors & hardware, repair plaster, repaint			\$ 15,000.00
Subtotal by year	\$ -	\$ -	\$ 25,000.00
<b>Totals</b>	\$ 35,000.00	\$ 42,500.00	\$ 45,000.00

## Capital Project Detail - 2020

<b>Project Title:</b>	Water Treatment System Upgrades - Binbrook	<b>Project #</b>	Pending
<b>G/L Account(s):</b>	Pending	<b>Asset Class</b>	Building
<b>Priority Classification:</b>	Strategic Initiative	<b>Division</b>	Land Operations
<b>Priority Ranking:</b>	4	<b>Project Status</b>	Draft
<b>Site/Location:</b>	Binbrook Conservation Area	<b>Grouping</b>	H-1
<b>Project Lead:</b>	Adam Christie	<b>Project Start Date</b>	Jan-20
<b>Funding Source:</b>	Special Levy - Hamilton	<b>Project Completion</b>	Dec-20
<b>Partner (if applicable) :</b>		<b>Municipality</b>	Hamilton

## PROJECT DESCRIPTION, RATIONALE, BACKGROUND, LINKAGES AND IMPLICATIONS

*Provide a detailed description of the project, why the project needs to be done now and consequences of deferring the project. Include historical cost and typical asset life cycle. Indicate if the project is linked to any other current or future project (capital or operating) and any impact to related project(s) if this project is approved or deferred.*

## Water Treatment System Upgrades

In 2014, a 10-year Master Plan was developed in consultation with numerous stakeholders. One of the top priorities identified in the plan was to upgrade the on site water treatment system in an effort to improve water quality and meet customer needs, both current and future.

The area has historically dealt with two significant water quality issues as a result of being on a drilled well system. While the well water has been consistent over the years, it has a couple of inherent limiting factors including high dissolved iron solids and a well-recovery rate of only 12 gal/minute. Increasing water demand by the public and increasing maintenance costs to remove sufficient iron from the well water have resulted in increasing and ongoing expenditures.

In addition,

This project will address these issues in the following ways;

- 1) It will double the water retention capacity to that of 10,000 gallons
- 2) It will introduce more effective methods of iron removal including contact time and filtration
- 3) It will increase the size of the building space to facilitate additional treatment methods.



## NEEDS ANALYSIS &amp; BENEFITS

*Indicate project benefits, i.e. improving health and safety, customer service, increased ROI, heritage, educational, etc.*

Improved water quality, improved level of customer service and reduction in ongoing maintenance costs.

## Capital Project Detail - 2020

Project Title: Water Treatment System Upgrades - Binbrook

Project #

Pending

## RISKS &amp; MITIGATION STRATEGY

Indicate project risks and proposed mitigation; include risk assessments if the project is deferred (low/medium/high) and any risks during or post implementation. Include direct costs of not proceeding (if known) as well as any performance or service related risks.

If this project is (further) delayed the area will continue to experience increasing water shortages during peak periods and increasing maintenance costs.

## PROJECT COST &amp; FORECAST

Description	Prior Year(s)	2020	2021	2022	2023	2024+
Planning						
Design						
Pre-Construction						
Construction						
Internal salaries & benefits						
Internal resources - non-salary						
Warranty						
Facilities		150,000				
Equipment						
Contingency						
Other						
<b>TOTAL</b>	-	<b>150,000</b>	-	-	-	-

## PROJECT MILESTONES

Percent Complete				
Projected Date (month/year) milestone met				

## CASH FLOW PROJECTION (Current Year Only)

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Projected cash flow requirements - current year	150,000			

## Capital Project Detail - 2020

Project Title: Water Treatment System Upgrades - Binbrook

Project #

Pending

## OTHER

Asset useful life: 15 years

Projected impact on operations annually: \$ 5,000.00

## Return on investment (ROI)

gain from investment:

cost of investment: 150,000

ROI:

## Payback Period

Year

Investment

Annual Savings/Revenues

Cumulative Cost (savings)

0

1

2

## NOTES

Name and Title

Signature

Date

# Binbrook Conservation Area Master Plan

Final Report  
May 2014

Prepared For:



Prepared By:



+ Sierra Planning and Management  
advice • strategy • implementation

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*Lake Niapenco at East End*

## 1.0 Introduction

### 1.1 Background

The Niagara Peninsula Conservation Authority (NPCA) purchased the Binbrook Conservation Area in 1968 with financial assistance from the Ministry of Natural Resources. It is the second largest conservation area owned by the NPCA.

Today, the Conservation Area includes the largest inland lake in the Niagara Watershed that is a local hot spot for fishing, the Lake Niapenco reservoir. The reservoir, once a narrow and winding watercourse, was created in 1971 with the damming of the Welland River and features fish and waterfowl not commonly seen in urban areas, including Osprey, Bald Eagles and ducks. Binbrook CA also boasts a swimming beach, spray pad, play area, hiking trails, boat rentals, observation platforms, and picnic facilities.

### 1.2 Purpose + Objectives

Since the late 1990s the NPCA has been operating Binbrook CA during the summer months with maintained picnic facilities, washroom building and picnic pavilion. In seeking to develop a long-term plan for the Conservation Area to guide its development and operation, NPCA has engaged EDA Collaborative Inc. / Sierra Planning and Management team to prepare a new Master Plan that respects the natural heritage of the site, provides recreational opportunities, and protects the natural resources of Lake Niapenco, while working towards becoming a self-sustaining conservation area.

Key objectives of this study include:

- *Determine the future direction for the development and operation of the Conservation Area and provide a five-year implementation plan and ten-year development plan for the operation of the site*
- *Outline appropriate phases to be implemented to achieve optimum development*
- *Outline operational and capital cost estimates to implement the 5 and 10 year plan*
- *Identify funding sources*

### 1.3 Master Plan Process

The project is scheduled to be undertaken in three (3) phases as described below.

#### PHASE 1: INVENTORY / SITE ANALYSIS / ENGAGEMENT FORMULATION

The first phase consisted of a complete and comprehensive review of background materials and detailed analysis of local existing and surrounding conditions that provided the Project Team with a sound understanding of the project requirements. A user survey was conducted and a public engagement opportunity was held at the end of this phase.



#### PHASE 2: DEVELOPMENT ALTERNATIVES

The second phase of the work program focused on developing potential development options for Binbrook CA and identifying the strengths and weaknesses of each alternative. A Public Open House was held at the end of Phase 2 to present the concept options and receive feedback and further inputs to carry the design into Phase 3. A preferred concept will be identified.



#### PHASE 3: MASTER PLAN

The third phase focused on developing the master plan document for Binbrook Conservation Area. The concept was finalized, and an implementation plan and development costs were identified. A final Public Open House was held to validate the Master Plan and obtain any final feedback.

## 2.0 Context + Existing Conditions

### 2.1 Local Context

The Binbrook Conservation Area is located at the headwaters of the Welland River, adjacent to one of the fastest growing populations in the City of Hamilton.

A number of communities are located within 20 kilometres of the Conservation Area, providing a broad local market. Populations within the City of Hamilton, Halidmand County and the Region of Niagara are all located within the 20 kilometre radius.

### 2.2 Conservation Areas Context

The Binbrook Conservation Area is the largest natural area in East Hamilton. However, there are a number of revenue generating conservation areas located within a 50 kilometre radius of Binbrook CA, many of which are owned by the NPCA.

Binbrook's key assets are the fishing and boating opportunities offered by Lake Niapenco, and its wide range of family-friendly activities including a swimming beach, splash pad, and canoe / kayak rentals. Lake Niapenco is significantly calmer than the waters of Lake Ontario and Lake Erie. Other conservation areas in proximity to Binbrook that offer similar facilities are Valens, Christie Lake, and Fifty Point Conservation Areas operated by the Hamilton Conservation Authority (HCA). Some of these conservation areas also offer camping which gives them a competitive edge over Binbrook.



Figure 2.1: Context Map

## 2.0 Context + Existing Conditions

### 2.3 Planning Context

#### Greenbelt Plan (2005)

The Greenbelt Plan builds on other elements of the Province's policy-led planning system, specifically the Provincial Policy Statements, Oak Ridges Moraine Conservation Plan and Niagara Escarpment Plan. This plan is the cornerstone in a strategy that defines where growth should be accommodated in the Greater Golden Horseshoe (GGH), and what should be protected for current and future generations.

The Greenbelt is a band of permanently protected land stretching from Niagara Peninsula to Bruce Peninsula and Lake Simcoe in the north and Northumberland County in the east. The natural heritage and water resources systems integral to the community will be protected and enhanced, as they sustain ecological and human health.

While the Greenbelt provides permanent agricultural and environmental protection, it also includes important natural resources and supports recreational and tourism uses and opportunities, such as the Binbrook Conservation Area, defined as a Greenbelt Natural Heritage Area, part of the Natural System and consisting of key natural heritage as well as key hydrologic features. A number of policies exist related to new development and site alterations in relation to these features, and will be incorporated into the development alternatives and ultimately the preferred concept for the Binbrook Conservation Area, such as vegetation protection zone widths.

Policies related to new development and site alterations (i.e. vegetation protection zones) will be integrated into the concept.

#### City of Hamilton Rural Official Plan (Approved 2012)

This plan defines the long term vision for physical development of the City over the next 30 years specifically related to the rural areas.

Within the Plan, lands designated as Natural Open Space are generally part of a park or conservation area, such as Binbrook Conservation Area. These have environmental features and are intended to be preserved in their natural state. Where appropriate, limited recreational activities / uses may be permitted including trails, picnic areas, forest management, and conservation management.

The plan also identifies that parks and natural areas shall be linked in a continuous public Open Space and Parks System, including those lands identified in the Niagara Escarpment Parks and Open Space System, among others, wherever possible.

#### City of Hamilton Recreational Trails Master Plan (2007)

The Recreational Trails Master Plan for the City of Hamilton identifies a comprehensive multi-purpose off-road recreational trail system connecting natural areas, cultural features and major land use destinations within the City limits. Linked with an on-road commuter system within the City and the regional and provincial network, these trails contribute to a fully integrated trail network.

In order to ensure a cohesive trail network within the City of Hamilton, the Plan identifies that hydro corridors are proposed to be used for recreational trails to create looped systems linking with the Binbrook Conservation Area.

## 2.0 Context + Existing Conditions

### 2.3 Planning Context (Cont'd)

#### City of Hamilton Outdoor Recreation Facilities Plan (2011)

This Plan outlines a sustainable strategy for managing the City's outdoor sports fields and other community-use recreational infrastructure.

Based on demographic and population projections, a number of recommendations were developed for the City. While none relate to the Binbrook Conservation Area specifically, there are a number of recommendations for outdoor facilities to be implemented in the village of Binbrook. These include one basketball / multi-use court, one spray pad, and a neighbourhood level skate park. The plan also notes that a significant barrier-free playground is under development (at the time of the report) at Marydale Park, which is in proximity to the Binbrook Conservation Area.

It should be noted that the demographic trends that were identified in this report have developed in a different direction than predicted. It is not predominantly seniors, as predicted, but young families that are most prevalent in the Binbrook community and surrounding areas.

While it is important to understand the current and future needs of recreation facilities in the surrounding community, it is also important to ensure that Binbrook does not duplicate what is available at the existing and future municipal parks close-by. This information will be important when developing the programming for the Conservation Area.

#### Binbrook Conservation Area Master Plan (1991)

The previous development plan recommended that Binbrook CA be restricted to low intensity day use activities. A number of key recommendations identified, including:

- Beach improvements for swimmers and windsurfers
- Centralized washroom facility in existing beach / parking lot area
- Centralized picnic facility and play area adjacent to washrooms
- Development of nature trails and isolated picnic areas
- Improvements to the boat launch area
- Road access upgrading and parking lot improvements
- Structured multi-year reforestation and wildlife planting program
- Construction of a centralized maintenance workshop
- Multi-year land acquisition program

This document also identified that funding come from financial contributions from the municipalities included in a 20 km radius of the Conservation Area, as these municipalities are presumably benefitting from it.

## 2.0 Context + Existing Conditions

### 2.4 Existing Conditions of Study Area

The Binbrook Conservation Area occupies 396 hectares of land including a 174 hectare reservoir, Lake Niapenco. It is observed that the majority of site development occurs in the southeast corner, while the remaining lands are highly undeveloped.

#### LEGEND

- |   |                         |   |                        |
|---|-------------------------|---|------------------------|
| 1 | Children's Splash Pad   | 5 | Beach                  |
| 2 | Canoe Rental Facilities | 6 | Boat Launch            |
| 3 | Fishing Platform        | 7 | Gate House             |
| 4 | Picnic Pavilion         | 8 | Area of Naturalization |



Figure 2.4: Existing Site Conditions + Amenities

## 3.0 Site Analysis

### 3.1 Natural Site Analysis

The natural analysis of the site indicates that a majority of the site is occupied by Lake Niapenco, the key feature of the Conservation Area while the remaining site is maintained natural. There are a number of forested areas surrounding the Lake, providing habitat for wildlife.

The shoreline around the entire Lake is identified as a sensitive ecological wetland area, providing fish spawning grounds and habitat for aquatic life. The Conservation Authority continues to aid in the creation of additional spawning areas (focused in the bays) and expanded ideal habitat areas for aquatic life.

### 3.2 Physical Site Analysis

It is apparent through the physical analysis of the site that existing and proposed trails are located within and close to the southeast portion of the site. A number of waterfowl hunting blinds are located throughout the site, with the opportunity for more to be added, if required. The estimated view-shed boundary is defined on the map below, highlighting the area that is visible from the Lake, which ideally should be maintain as natural lands.

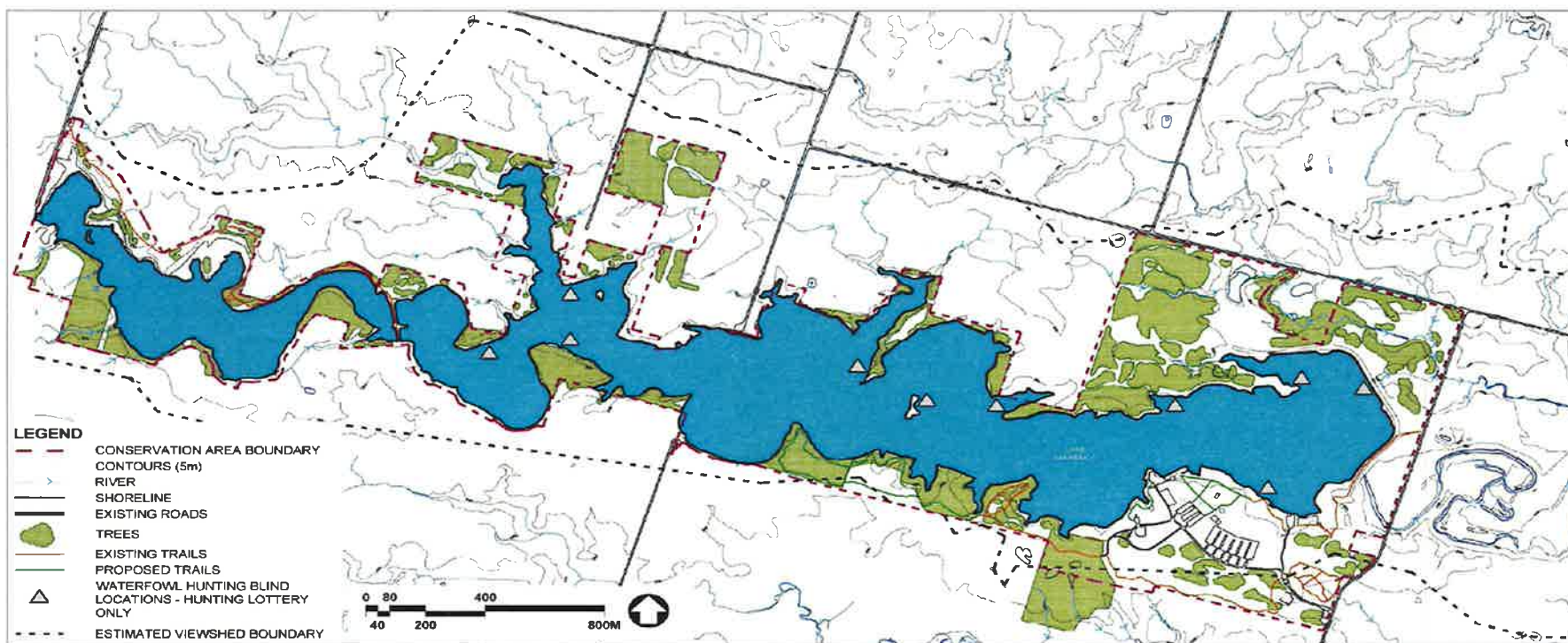


Figure 3.1: Existing Site Conditions

## 3.0 Site Analysis

### 3.2 Physical Site Analysis (Cont'd)

As previously mentioned, the southeast portion of the Conservation Area, approximately 10% of the total site area, is where most of the development occurs. Within this area there are a number of proposed and existing trails, parking areas, passive reflection areas, picnic areas, and pavilions. The beach, wakeboard facility, boat launches, splash pad, fishing platform and washrooms are also located here. Existing parking areas and washroom facilities require renovation and upgrade to meet the increasing usage and demand by users.

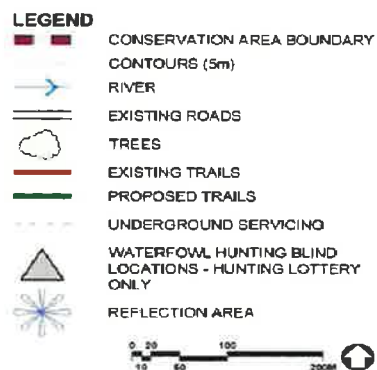


Figure 3.2: Existing Site Conditions (Southeast portion of site)

## 3.0 Site Analysis

### 3.3 Visitation and Parking Capacity

#### Average Visitation

The approximate monthly visitation numbers are provided below for each month during the open season:

May: 2,700 visitors

June: 5,800 visitors

July: 9,700 visitors

August: 12,500 visitors

September: 750 visitors

While data is not available for individual days at this point, it should be noted that the peak times are the weeks of the July and August long weekends where there are up to 2,000 visit per week.

#### Parking Capacity

The adjacent parking capacity diagram indicates that there are currently 542 permanent parking spaces, and a lot of overflow parking spaces – an additional 403 spaces. Looking at these numbers, it would appear that there is adequate parking at the present time, however it is important to consider the implications of increasing visitation, and ensuring that the parking and overflow spaces that are currently present are not taken over by other uses without being replaced elsewhere.

A key issue that was brought up during the stakeholder interviews was that during weekends (not just long weekends) in the summer there is a need for staff members to direct cars to parking facilities away from the beach; because of this, traffic gets badly backed up as people look around for a parking spot. Better parking signs in the park could help with this potentially as there is currently a lack of signage directing drivers towards parking areas.

While the park's central hub is not uniformly busy each and every day as weekday/weekend and peak versus shoulder season fluctuations ensure that, qualitative and anecdotal information suggests that there is already a peak demand carrying capacity problem if not in terms of the use of the existing amenities at least in terms of access, egress and ambience which can materially effect enjoyment. Accordingly any and all of the additions contemplated in the plan should only occur with physical, signage and staff changes necessary to ameliorate capacity issues. This issue should be addressed on a project by project basis in addition to the physical enhancements already contemplated in this plan.

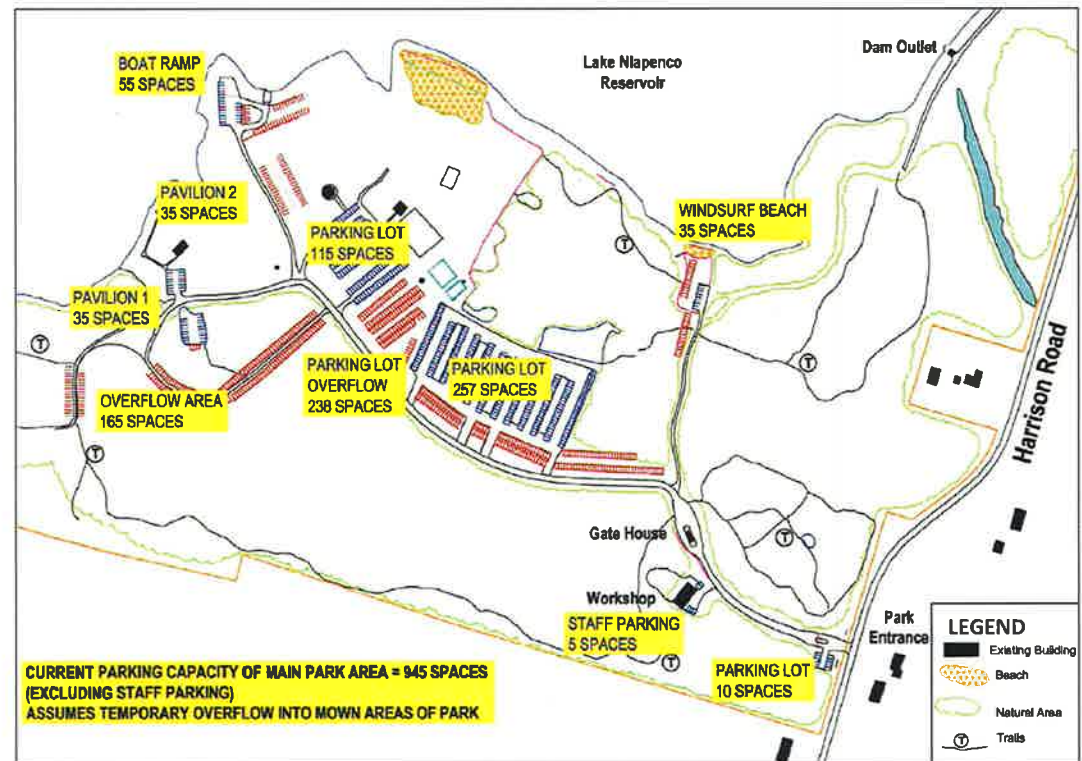


Figure 3.3: Existing Parking Capacity

## 4.0 Consultation Summary

### 4.1 Process Overview

From the initial start up meeting on July 30<sup>th</sup>, 2013, members of the Consulting Team worked collaboratively with NPCA staff to design an effective engagement process at the community level. The initial phase of the engagement strategy is one that combined a number of critical component pieces including:

- *Stakeholder Survey*
- *Community Information Booth*
- *Community Open House*
- *Questionnaires / Feedback Forms*

The stakeholder survey was posted online on August 16<sup>th</sup>, 2013. The survey was advertised on the Binbrook page of the NPCA website, on Facebook, through fliers at the gate of the Conservation Area, and via email to seasons pass holders. This survey was used to gather feedback regarding existing use of the Conservation Area and potential new amenities that may be developed. 123 people responded to the survey.

A community information booth was held at the Binbrook Fall Fair on Friday September 13<sup>th</sup>, 2013. A questionnaire was developed for this event to find out what people liked about Binbrook and what should change or be added to make it better. The consulting team spoke with 18 groups of people at this event.

A public open house was held at the Binbrook Agricultural Hall on Wednesday December 4<sup>th</sup>, 2013 with 22 members of the public in attendance. Three concept options were developed (refer to Phase 2 report) and presented where participants were asked to provide comments about what they liked and would change about each of the concepts. Completed feedback forms were received from 8 participants.

### 4.2 Identified Strengths

The following is a summary of the survey and community information booth. This summary provides an overview of the current strengths and ideas for the future identified throughout the engagement process.

What do you like about Binbrook Conservation Area?

- *The Beach*
- *Splash Pad*
- *Swimming*
- *Cleanliness*
- *Fishing*
- *Trails*
- *Proximity to Home*
- *Quiet/Tranquility*
- *Family Friendly*
- *Events*

### 4.3 Vision and Priorities

Based on the strengths, issues, and opportunities, visions and priorities have been distilled and are summarized as follows:

Updated playground Improved washroom facilities Leash free dog park Longer opening hours More events Interpretive plaques More fishing docks/extend onto lake Canoe / kayak storage More trails/longer trails Camping Concessions More canoe/kayak rentals Interpretive centre More marketing and promotion needed Guided Walks Expanded trail system Preserve the natural beauty Education and interpretation opportunities

## 5.0 Final Site Development Plan

### 5.1 Recommendations

#### Key Recommendations

The final Site Development Plan was created in response to comments received on the conceptual development options (see Section 7.0), with input from the public and stakeholder consultation process, as well as through discussions with the NPCA Board and the Binbrook Master Plan Committee. The following are key recommendations for the Binbrook Conservation Area that provide the framework for the Master Plan:

- Focus on recreation activities that support the function of the site as a conservation area and provide for environmental, social and economic sustainability.
- Upgrade current infrastructure (septic system, water well, and electrical services) to a sufficient level that will ensure that future development within the park and an increase in visitors is well within the servicing capacity.
- Upgrade or expand existing washroom facility.
- Add and update facilities that support the current conservation area uses and expand visitor and revenue generation opportunities.
- Develop a multi-use building that can accommodate existing and expanded park uses and allow for partnerships with various organizations and events.
- Maintain and enhance existing picnicking, fishing, lake-oriented and nature-based activities as a core focus of the Conservation Area.
- Continue to implement the recommendations identified in the Forest Management Plan, Fisheries Management / Water Quality Improvements Plan, and Wetland and Wildlife Habitat Management and Improvements to further enhance the environmental sustainability of the Conservation Area.
- Incorporate design standards that promote ecological objectives, such as LEED® and Sustainable Sites Initiative (ASLA), including low impact development (LID) measures, stormwater management / water recycling, use of recycled materials, among others.
- Ensure any new or upgraded facilities and amenities are compliant with the Accessibility for Ontarians with Disabilities Act (AODA), as appropriate.

#### Additional Recommendations

In addition to the key recommendations and the Master Plan elements identified, a number of additional recommendations are provided for consideration by the NPCA related to the Binbrook Conservation Area. These include:

#### Programming, Marketing and Communications

- Undertake a well integrated public awareness campaign and marketing and communications strategy for Binbrook Conservation Area.
- Better utilize social media (Facebook, Twitter, etc.) to promote Binbrook Conservation Area activities, events and facilities.
- Continue to host the existing events and programs that have proven successful in the past, including the children's education / day camps.
- Investigate the opportunity to add new programs, such as a fall fishing derby, geocaching, guided nature walks (staff and / or volunteer led), movie or concert series, etc.
- Promote Binbrook for weddings, wedding photos, corporate special events, etc.
- Continue canoe, boat, kayak rentals through the Conservation Authority.
- Investigate the feasibility of implementing a children's overnight summer camp, related to interest, liabilities and legalities.

#### Management, Maintenance and Operations

- Commence dialogue with Camp Marydale. A formal agreement between the two parties may be required.
- Undertake a Maintenance and Operations Management Plan for Binbrook Conservation Area.
- Ensure that any new or upgraded facilities and amenities are compliant with the Accessibility for Ontarians with Disabilities Act (AODA), as appropriate.
- Undertake an annual assessment of the master plan progress to review projects completed to date, next steps, and future directions.

#### Other

- Investigate developing a bike lane from the village of Binbrook to the Conservation Area along Highway 56, Kirk Road and Harrison Road to promote active transportation. This will require municipal involvement and coordination.

## 5.0 Final Site Development Plan

### 5.2 The Master Plan

As Binbrook Conservation Area serves as an important land and water resource in the City of Hamilton and has become one of few remaining large tracts of publicly owned lands within the City. It is therefore important to ensure that the plan balances the environmental, social, and economic sustainability of the site.

The master plan focuses on the areas of the site that support recreational uses. Areas for continued environmental management and improvement initiatives for the overall Conservation Area have been identified on the Plan. The key elements of the Master Plan are further described on the following pages.

The master plan is based on Concept Option #3 with some modifications. The plan includes the following elements:

- Multi-Purpose Building
- Upgrade / Expand Existing Washroom Facility
- Additional Washroom Facility at Pavilion #1
- Glamping Area w/ servicing and vehicular access
- Comfort Station at Glamping Area (washrooms, showers)
- Gazebo at West Reflection Area
- Observation Tower
- “Wind Curtain” at Pavilion #2
- Expanded Gatehouse Facility
- New Pavilion
- Outdoor Event Venue Upgrades
- Personal Canoe / Kayak Storage Structure
- Fishing Platforms
- Expanded / Renovated Splash Pad
- Electronic Control System at Main Entrance
- Existing Trail Upgrades
- Children’s Trail
- Expanded Trail Network
- Continuous Accessible Trail around Lake (may be elevated Boardwalk in some areas)
- Interpretive Signage / Kiosks
- Ongoing Forest Management
- Ongoing Fisheries Management / Water Quality Improvements
- Upgraded Parking Areas
- Launch Ramp Upgrades

## 5.0 Final Site Development Plan

The Master Plan – Overall Plan

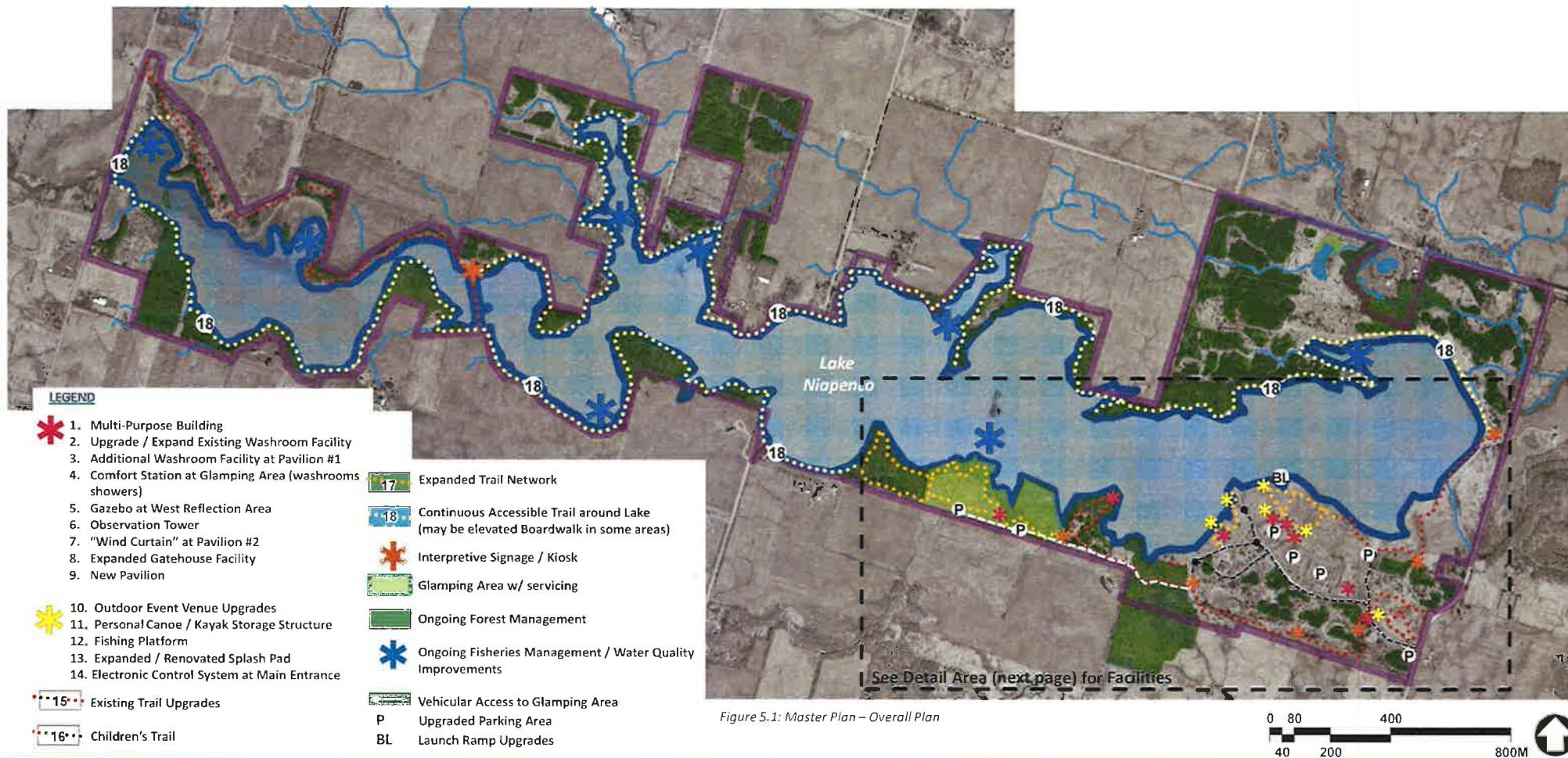
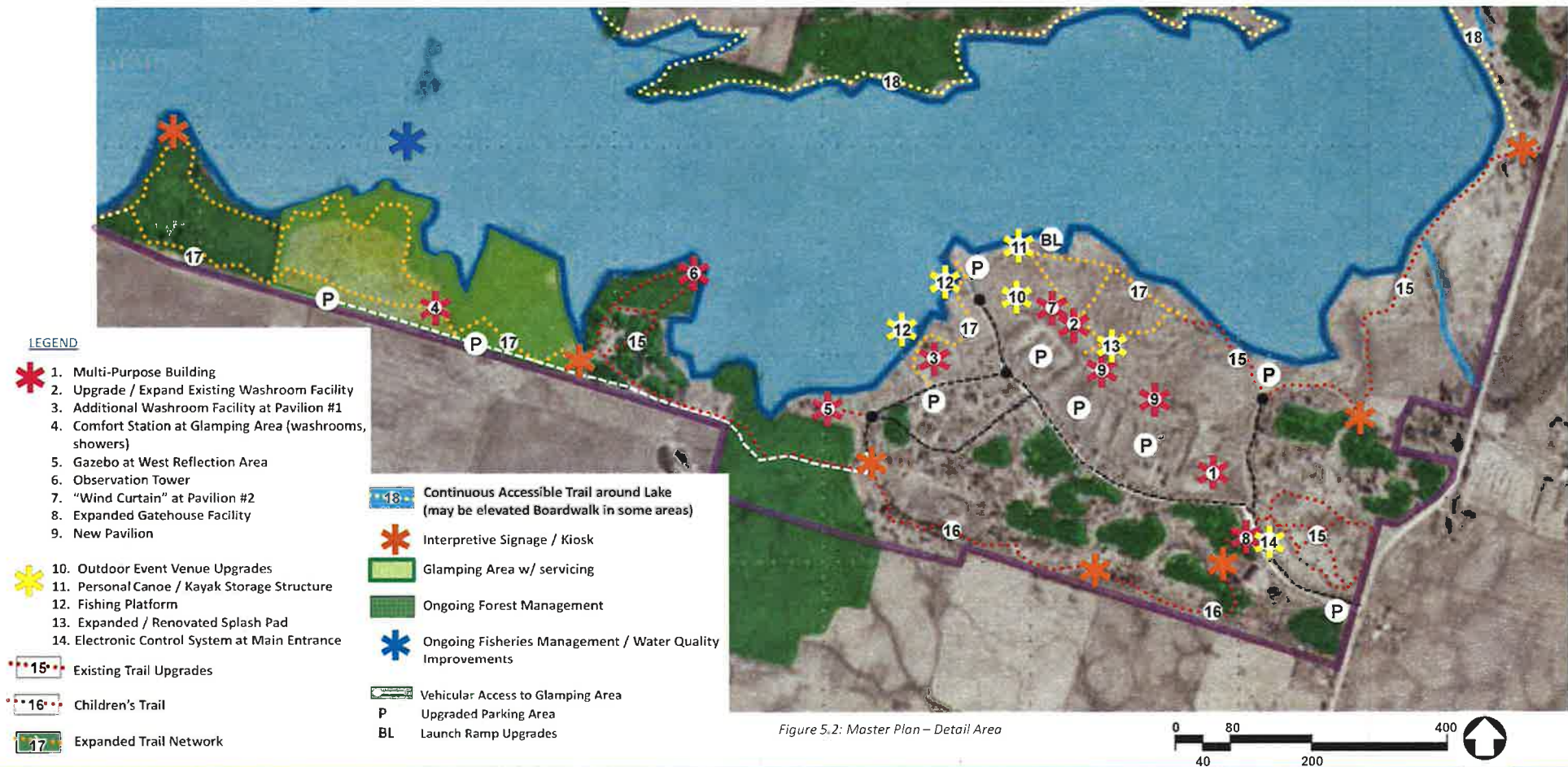


Figure 5.1: Master Plan – Overall Plan

## 5.0 Final Site Development Plan

### The Master Plan – Detail Area



## 5.0 Final Site Development Plan

### 5.3 Master Plan Elements

#### Central Activity Area

The Central Activity Area of Binbrook is where the beach, existing washroom facility and a majority of the parking is located. This area is where much of the recreational activity takes place. Proposed improvements to this central activity area include:

#### Infrastructure Upgrades

Overall upgrades to the park infrastructure, including the septic system, water wells and electrical services, is necessary if there are any improvements to be made to the park at all, as the infrastructure is currently at full capacity.

**Septic System** - The septic system could be upgraded in two ways: (a) upgrade the existing two septic beds to increase capacity, or (b) create a centralized system with waste water in a forced main system to a constructed wetland / solar aquatic system. This facility could become a feature and educational opportunity within the Conservation Area, promoting green technologies and environmental awareness.

**Water Well** - An additional water well is required for Binbrook, with an associated treatment system as required, before the Conservation Area is developed further.

**Electrical Services** – An assessment of future needs is necessary to determine the future electrical servicing requirements.

#### Existing Washroom Facility

The existing washroom facility is currently being utilized above its capacity, and is in need of upgrading. The facility could be upgraded in two ways: (a) upgrade the existing building to comply with Accessibility for Ontarians with Disabilities Act (AODA), or (b) expand the facility, increasing the size and capacity with additional stalls, sinks and changing areas. Either way, the design shall comply with AODA standards to ensure that the facility is accessible for people of all ages and abilities.



Detail Area Key Plan



Christina Lake Solar Aquatic System, British Columbia



Existing Washroom Facility Requires Upgrades and/ or Expansion

## 5.0 Final Site Development Plan

### 5.3 Master Plan Elements (Cont'd)

#### Central Activity Area (Cont'd)

##### Pavilion #2 Upgrades

Pavilion #2 is a popular pavilion for family picnic rentals or large group gatherings. It is sited on top of the hill, making it susceptible to wind and weather conditions. It is recommended that Pavilion #2 be upgraded with a "wind curtain" to help protect the users from the elements. The curtain could be drawn closed or be left open depending on the conditions.

##### Expand / Renovate Splash Pad

The existing splash pad is recommended to be improved in either of two ways: (a) expand the size of the splash pad in its current state to incorporate more water play elements, or (b) renovate the splash pad to become a nature themed water play feature and a major attractor for the Conservation Area.

##### New Picnic Pavilions

There is currently a high demand for pavilion rentals for picnics during the summer months. The development of two (2) new picnic pavilions, to the east of the existing washroom facility, will provide more covered rental space for group gatherings as well as increase revenue potential for the Conservation Area.

##### Outdoor Event Venue Upgrades

Currently, outdoor events are held in the area to the northwest of Pavilion #2 sloping towards the Lake. This provides great viewing vantage points for all attendees. It is recommended to provide upgraded grading for this area, increasing the usability and comfort of the space. This would allow for an expanded roster of performances and events (i.e., a series of performances, concerts or movie nights could be held throughout the summer months).



Detail Area Key Plan



Themed Water Play, Storybook Gardens, London, Ontario



Potential Outdoor Event Venue Upgrades

## 5.0 Final Site Development Plan

### 5.3 Master Plan Elements (Cont'd)

#### Pavilion #1 / Fishing Area

This area is located along the southeast shore of the Lake, west of the Central Activity Area. Proposed improvements to this area include:

##### New Fishing Platforms

The existing fishing platform is currently a popular destination within the Conservation Area. It is recommended that new fishing platforms be built on the shoreline to the south of the existing platform in order to accommodate future visitors. The platforms should be designed to ensure universal accessibility.

##### Gazebo at West Reflection Area

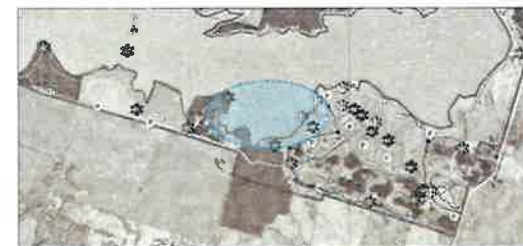
It became clear through the consultation process that the west reflection area was a popular location to hold wedding ceremonies. This reflection area is situated on a high point offering nice views to the lake. A gazebo is recommended here to provide a more formal location for these events as well as a place for photographs to be taken. The gazebo can provide shelter, weather protection and a small picnic area for other visitors when it is not being rented.

##### Pavilion #1 Washroom Addition

Pavilion #1 is currently equipped with a kitchenette for family and group picnic rental. It is recommended that a washroom facility be added to Pavilion #1 in order to provide additional washroom facilities for visitors to the park. This washroom could potentially service the west reflection area, the fishing platforms, and trail users.

##### Observation Tower

It is recommended to develop an observation tower at the northern point of the old campground area. This would provide views to the entire Lake and beyond. A deck, or similar structure, at the base of the tower could provide an area for rest, picnicking, and interpretive signage.



Detail Area Key Plan



Observation Tower, Promenade Samuel-De Champlain



Accessible Fishing Platform, Bing's Landing, Alaska



Proposed Gazebo at West Reflection Area

## 5.0 Final Site Development Plan

### 5.3 Master Plan Elements (Cont'd)

#### Glamping Area

There is a high demand among families, couples and groups of friends for quality turnkey camping solutions. This can be accommodated at Binbrook with “glamping”, defined as glamorous camping offering the comforts of home while enjoying the wilderness. It can also provide the opportunity for new campers to spend time outdoors without having to purchase the equipment that is associated with traditional camping. The glamping area is proposed to include:

#### Glamping Sites

The area to the west of the old campgrounds is recommended to be developed as an area for glamping, comprising approximately 30,000m<sup>2</sup>. 20 secluded glamping sites are being proposed. Many of the glamping sites are proposed to be accessible only by foot or bicycle from the new parking areas.

Each site will have a canvas tent built onto a raised wooden deck, with potential amenities to include electrical servicing, two-burner stove outdoors under an awning, a small refrigerator, dishes, all pots, pans and utensils needed to prepare meals, and a picnic table with four chairs. The visitors would be required to bring bed linens (sheets, blankets and pillowcases), bath towels and dish cloths, soap and shampoo, food and a cooler, etc.

#### Comfort Station

A centralized comfort station shall be developed in the glamping area to provide the required amenities within proximity of the individual glamping sites. The comfort station should include washrooms, showers, and sinks for dish washing.



Detail Area Key Plan



Ready-to-Camp Sites at Parcs Quebec Properties

## 5.0 Final Site Development Plan

### 5.3 Master Plan Elements (Cont'd)

#### Boat Launch and Rental Area

The boat launch and rental area, located to the west of the beach area, provides visitors with access to the Lake for non-motorized water craft. Pavilion #3, located adjacent to the boat launch, provides concession items (i.e. cold drinks, confectionary items) as well as canoe and kayak rentals, and also has a covered picnic area. Canoe and kayak rentals are recommended to be continued under operation by the Conservation Authority.

Proposed improvements to this area include:

#### Canoe / Kayak Storage Rental

A storage structure for rental to canoe / kayak owners to store non-motorized watercraft is recommended. This structure should be located adjacent to Pavilion #3, by the boat launch, and renters shall have access whenever the park is open. The Conservation Area should provide the outdoor racks, while the renters are to provide the cable and lock to securely lock up their boat.

#### Boat Launch Improvements

The boat launch is currently in working order, however, with a potential increase in users and over time, improvements to the main boat launch will be required. This may include increasing the length of the launch ramp, implementing improved ramp materials for durability and ensuring the ramp is designed for accessibility.



Detail Area Key Plan



Non-Motorized Accessible Boat Launch



Canoe / Kayak Storage Rental Space, Toronto Harbourfront

## 5.0 Final Site Development Plan

### 5.3 Master Plan Elements (Cont'd)

#### Harrison Road Entrance Area

The existing entrance off of Harrison Road is the primary entrance point to the Conservation Area, and the only access point for vehicles to enter the park. During peak summer weekends and special event, the line-up of vehicles waiting to enter the park often ends up on Harrison Road affecting traffic in the local area. Proposed improvements to this area include:

#### Automatic Entrance Control System

In addition to the manual collection of entrance fees at the gatehouse by park staff, it is recommended that an automatic entrance control system be implemented for self payment options. This will require an additional entrance lane to be constructed adjacent to the existing lane. Credit card and / or membership pass options for payment should be investigated.

#### Enhanced Gatehouse

An addition to the gatehouse facility is recommended in order to provide a heated indoor space for winter users of the park. This addition is proposed to include washroom facilities, fireplace and rest area, and information kiosk.

#### Multi-Use Building

Located near the main entrance to Binbrook, the proposed multi-use building combines a main venue rental space (for weddings, meetings, conferences, corporate events, etc.), with educational classroom space to be used for school groups and summer camps. Washrooms within this building are recommended to be accessible from the exterior of the building as well as the interior, ensuring the washroom facilities are available to visitors even when the building itself is not in use.

The multi-purpose building (6,000 sq. ft.) should be designed in an architectural style that complements the natural setting using natural materials (e.g., wood, stone, glass), and shall incorporate sustainable building design standards (i.e., LEED®) that are appropriate for a seasonal park building.



Detail Area Key Plan



Lake Superior Provincial Park Multi-Use Building



## 5.0 Final Site Development Plan

### 5.3 Master Plan Elements (Cont'd)

#### Trails

Within the Conservation Area there are a number of existing trails. Trails are focused around two areas, the main recreation area (at the south east end of the Lake) and Tyneside (at the west end of the Lake). Proposed improvements to the trails include:

#### Expanded Trail Network and Improvements

The existing trail network is recommended to be upgraded. This will be carried out through ongoing maintenance on an as-needed basis. Expanding the trail network, in particular along the south east side of the Lake, is recommended to be undertaken as development within the Conservation Area occurs. Connecting the south side of the lake with the Tyneside trail across the weir would create a more comprehensive trail network within the Conservation Area.

#### Interpretive / Educational Signage

The existing and expanded trail network is recommended to include interpretive and educational signage, highlighting the natural and cultural heritage of the Conservation Area. This should be strategically placed along trails, and at significant points of interest.

#### Children's Discovery Trail

The trail currently identified as the Gatehouse Trail, is recommended to be transformed into a Children's Discovery Trail. This trail should include interpretive and educational signage, sensory gardens, as well as explorative play elements geared towards primary school aged children.

#### Continuous Trail Around Lake

Ultimately, developing a continuous trail around the entire lake is desired. This trail should follow the water's edge where possible, and may need to be constructed as an elevated boardwalk in some areas. This trail would create a comprehensive trail system within the Conservation Area, providing users with a variety of areas to explore.



Overall Key Plan



Interpretive / Educational Signage



Proposed Trail Around Lake



Children's Discovery Trail Elements

## 5.0 Final Site Development Plan

### 5.3 Master Plan Elements (Cont'd)

#### Parking Areas and Roads

##### Parking Area Upgrades

The existing parking areas are recommended to be upgraded as required, as part of the ongoing maintenance program. Grading, drainage, and accessibility are important factors to consider when evaluating the parking areas for upgrading. The use of a permeable surface, such as limestone screening, permeable pavers or permeable asphalt, allows for infiltration of surface water to reduce runoff. An accommodation for accessible parking spaces is recommended.

As the Conservation Area develops, the capacity of the parking areas may need to be expanded. Delineating the parking spaces with line painting (on permeable pavers or asphalt) or installing parking bumpers (on limestone screening) can increase the capacity of a parking area without increasing the size.

##### Road Upgrades

In addition to the parking areas, the road network within the Conservation Area is recommended to be upgraded as required, ideally constructed with a permeable surface.

Improved directional signage along the roads is recommended to guide visitors towards attractions, trails, pavilions and parking areas within the site.



*Detail Area Key Plan*



*Accessible, Permeable and Organized Parking Area, Grand Bend, Ontario*

## 6.0 Implementation Strategy

### 6.1 Priorities and Phasing Plan

The Master Plan for Binbrook Conservation Area proposes a wide variety of projects for implementation. Some of these projects must be completed in the short term in order to ensure the park continues to provide a high level of service to visitors, while other projects are long term visions that would be completed some time in the future. The overall priorities for implementation of the Master Plan are provided below, followed by the Phasing Plan, identifying individual project priorities.

#### Priorities

##### Necessary Infrastructure Upgrades

The immediate priority with respect to investment in the Binbrook Conservation Area is to undertake the necessary infrastructure upgrades that will ensure the park remains open to the public with a high level of service. Of specific concern is upgrading the existing septic system which is currently at capacity. Consultation with Conservation Authority staff and visitors to the park indicated that existing washroom facilities have limited capacity in comparison to the demand placed on them, and are also in need of renovation. The Plan identifies two options with regard to improving the septic system: upgrading the existing septic bed, or investing in a centralized system with waste water in forced main system to a constructed wetland or solar aquatic system. The preferred option should take into consideration the expected increase in visitation to the Conservation Area as new attractions and infrastructure are invested in. In addition to investment in the septic system, we recommend that the existing washroom facility is either upgraded to comply with AODA, or preferably increased in size with additional stalls, sinks, changing rooms etc., to accommodate growth in visitation.

##### Improve Visitor Experience

A second priority with respect to investment in the Binbrook Conservation Area should be to improve the visitor experience through upgrading existing attractions and infrastructure. Shorter-term priorities in this regard that the Plan identifies includes transforming the Gatehouse Trail into a Children's Discovery Trail, installing a 'curtain' at Pavilion #2 to protect from the wind and improve its desirability, installing a gazebo at the West Reflection Area to improve its utility, and developing self-storage facilities for canoe and kayaks. Of particular note to improve visitor experience are upgrades to the main entrance. A common complaint from both Conservation Authority staff and visitors to the park is the long line-ups to get in and out during busy weekends. The Master Plan recommends investment in one additional entrance lane at the main entrance with electronic control for entrance with membership pass, prepaid token and/or credit card.



Figure 6.1: Overall Priorities Diagram

## 6.0 Implementation Strategy

### 6.1 Priorities and Phasing Plan (Cont'd)

#### Priorities (Cont'd)

##### Focus on Marketing and Branding

Investment in necessary infrastructure upgrades and improvements to the visitor experience should be followed by an improved focus on marketing to improve awareness of the Binbrook Conservation Area, and the amenities offered on-site. Public consultation indicated a large number of the local community was unaware of the Conservation Area, and many more unfamiliar with the amenities the park offers. Greater investment of resources in marketing the Conservation Area, in partnership with necessary infrastructure upgrades and improvements to the visitor experience, has the potential to increase visitation. Specific marketing recommendations are identified in Section 8.1.

##### Invest in New Attractions

The Master Plan identifies a variety of new attractions with potential to increase visitation and revenue generation in the Binbrook Conservation Area. Specifically these include a glamping area, a multi-purpose building, and two new picnic pavilions. Development of these new attractions will be dependent on available capital funding, and should not place undue burden on the operating expenses of the Conservation Area. The multi-purpose building should be effectively programmed which will likely require additional staff resources to achieve. It should be noted that a detained business plan would be required in advance of any potential investment in the glamping area or multi-purpose building. The feasibility of these investments needs further consideration, and their development will be dependent on further business planning exercises, and the availability of funding. The primary priority for the Conservation Area should be to promote its existing attractions.

As build-out of the Master Plan begins, it will be important to assess longer-term infrastructure requirements. As an example, it is recommended that a multi-purpose building be considered as a shorter-term project (within the next five years). Should this be developed, the need for an expanded gatehouse with washrooms would require reassessment given that the multi-purpose building will house washroom facilities. In addition, the proposed two new pavilions east of the existing washroom facilities should be reassessed in the longer-term to determine demand for these new facilities relative to other proposed investments.

#### Phasing Plan

The Phasing Plan for the Binbrook Conservation Area identifies three periods for implementation, short term (years 1-5), medium term (years 6-10), and long term (years 11+). As identified in the previous section, some projects require attention in Years 1 through 3 to ensure that the park continues providing a high level of service.

PHASE	YEAR	PROJECTS
SHORT TERM	1	<ul style="list-style-type: none"> <li>Infrastructure Upgrades (Includes septic system upgrades / new system, additional water well, and electrical servicing upgrades)</li> <li>Existing Washroom Facility Upgrades / Expansion</li> <li>Accessible Children's Trail</li> <li>Continuous Trail Upgrades</li> <li>Kayak / Canoe Storage Racks</li> <li>Pavilion #2 Wind Curtain</li> </ul>
	2	<ul style="list-style-type: none"> <li>Electronic Control System at Main Entrance</li> <li>Expanded Heated Gatehouse</li> <li>Gazebo at West Reflection Area</li> <li>Outdoor Event Venue Upgrades</li> </ul>
	3	<ul style="list-style-type: none"> <li>Pavilion #1 Expansion</li> <li>New Picnic Pavilions (2)</li> <li>Roads and Parking Upgrades</li> </ul>
	4-5	<ul style="list-style-type: none"> <li>Multi-Purpose Building</li> </ul>
MEDIUM TERM	6-10	<ul style="list-style-type: none"> <li>Observation Tower</li> <li>New Fishing Platforms</li> <li>Main Boat Launch Upgrades</li> <li>Glamping Area</li> </ul>
LONG TERM	11+	<ul style="list-style-type: none"> <li>South Side Trail</li> <li>Continuous Accessible Trail Around Lake Niapenco</li> <li>Splash Pad Upgrades / Renovation</li> </ul>

Table 6.1: Phasing Plan

## 6.0 Implementation Strategy

### 6.2 Site Development Costs

Order of magnitude development cost estimates for the master plan elements have been developed. These are presented below. The total development cost for all elements in the master plan is in the range of \$8.255 - \$9.025 million. It should be noted that these costs do not include design fees or H.S.T.

Years 1-5	
Item	Estimated Cost
<b>Septic System</b>	
Option A - Upgrade Existing 2 Septic Beds	\$400,000
Option B - Centralized System (w/ waste water in forced main system to constructed wetland)	\$800,000
<b>Additional Water Well (w/ treatment facility)</b>	\$150,000
<b>Electrical Services Upgrades</b>	\$200,000
<b>Existing Washroom Facility</b>	
Option A - Upgrade existing to comply with AODA	\$30,000
Option B - Expand Facility (add sinks, stalls, change area, etc.)	\$100,000
<b>Electronic Control System at Main Entrance</b>	\$20,000
<b>Expanded Gatehouse</b>	\$100,000
<b>Accessible Children's Trail</b>	
Limestone Screening (2m wide x 800m long)	\$50,000
Educational / explorative elements (ages 4-8)	\$20,000
<b>Trail Upgrades (continuous)</b>	
Limestone Screening (2m wide)	\$200,000
Interpretive / Educational Signage (20 signs)	\$50,000
<b>Pavillion #2 Wind Curtain</b>	\$5,000
<b>Pavillion #1 Expansion (incl. washrooms)</b>	\$100,000
<b>New Picnic Pavilions (2)</b>	\$150,000
<b>Gazebo at West Reflection Area</b>	\$35,000
<b>Kayak / Canoe Storage Racks (50 spaces)</b>	\$25,000
<b>Glamping Area (incl. road access, septic system, water, electricity, 20 sites)</b>	\$820,000
<b>Upgrade Roads and Parking</b>	
Roads (1600m x 6m)	\$500,000
Expand Parking Areas (5000 sq. m)	\$250,000
<b>Outdoor Event Venue (incl. new site grading)</b>	\$150,000
<b>Mult-Purpose Building (6,000 sq. ft., w/ washrooms)</b>	\$2,000,000
<b>Year 1-5 TOTAL (low / high)</b>	<b>\$5,255,000 / \$5,725,000</b>

Years 6-10	
Item	Estimated Cost
<b>Observation Tower</b>	\$200,000
<b>Fishing Platforms</b>	\$300,000
<b>Main Boat Launch Upgrades</b>	\$150,000
<b>Year 6-10 TOTAL</b>	<b>\$650,000</b>
Years 11+	
Item	Estimated Cost
<b>South Side Trail</b>	
Limestone Screening (2m wide, 1800m long)	\$150,000
<b>Continuous Accessible Trail Around Lake (limestone screening + boardwalk)</b>	\$2,000,000
<b>Splash Pad</b>	
Option A - Enlarge Existing Splash Pad	\$200,000
Option B - Themed Water Play Area (to be major attractor)	\$500,000
<b>Year 11+ TOTAL (low / high)</b>	<b>\$2,350,000 / \$2,650,000</b>
<b>TOTAL for All Phases (low / high)</b>	<b>\$8,255,000 / \$9,025,000</b>

Table 6.2: Development Costs

A sepia-toned photograph of a park scene. In the foreground, there is a large, light-colored rock formation or low wall. Behind it, a picnic table is visible with two people sitting at it. The background is filled with dense trees and foliage. The overall tone is warm and historical.

# Appendices

**Appendix 1: Market Conditions**

**Appendix 2: Financial Review**

**Appendix 3: Revenue Potential**

**Appendix 4: Potential Funding Sources**

## Appendix 1: Market Conditions

### Primary and Secondary Market Identification

Data from the Niagara Peninsula Conservation Authority (NPCA) indicates that most visitors to the Binbrook Conservation Area live locally. Approximately 80% of visitors during the 2012 season came from either Hamilton, Stoney Creek, or Binbrook (see Figure A1.1). The remaining visitors came from Haldimand County, Burlington and Niagara, and a small proportion from a variety of other communities in the Greater Toronto and Hamilton Area (GTHA). These findings are similar to previous user studies conducted by the NPCA, and to the results of our online survey. Based on this data, the primary market for the Binbrook Conservation Area can be defined as the City of Hamilton (including the communities of Binbrook, Stoney Creek, and Mount Hope). The secondary market is defined as Haldimand County.

Note: 'Other' includes: St. Catharines, Mount Hope, Burlington, Brant County, Elora and Niagara

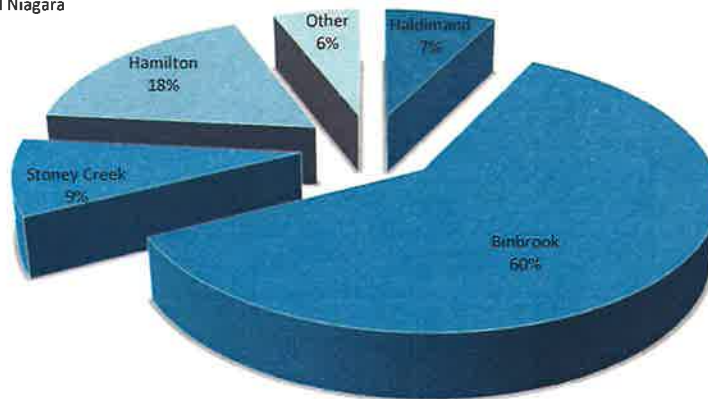


Figure A1.1: Visitation to Binbrook CA by Place of Origin in 2012 (Data: Niagara Peninsula Conservation Authority)

According to Statistics Canada, the 2011 population for the City of Hamilton (primary market) and Haldimand County (secondary market) was 519,950 and 44,875 respectively. The primary market experienced population growth (3.1%) over the 2006 to 2011 period, while the secondary market experienced a decline (-0.7%). Population growth throughout the Province over the same period (5.7%) outpaced the primary and secondary market. Hamilton has a younger population than Haldimand, where in 2011 approximately 48% of the secondary market's population was aged 45 and older (compared to 44% in the primary market).

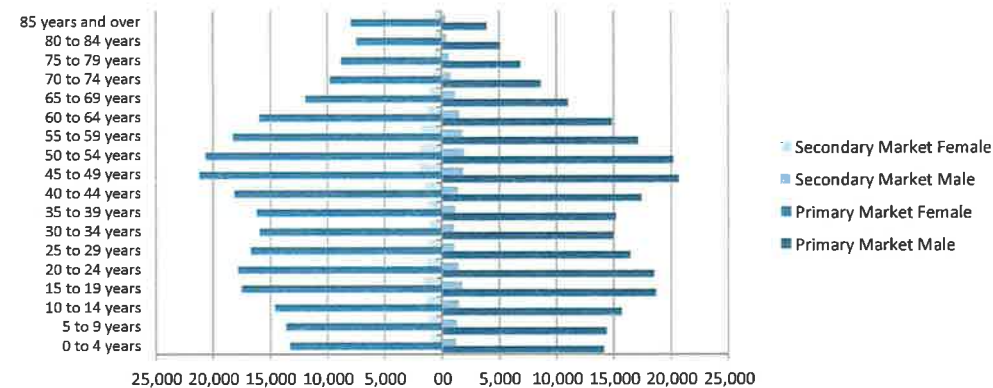


Figure A1.2: Primary and Secondary Market Population Pyramid (Data: Sierra Planning and Management based on Statistics Canada 2011 Census data)

## Appendix 1: Market Conditions

### Primary and Secondary Market Identification (Cont'd)

The age structure of the primary and markets have experienced change over the 2006 to 2011 period as follows:

- Both markets are representative of an aging population, where the secondary market exhibited more significant aging as represented by the nearing retirement (ages 45 to 64) and senior population (ages 65 and older);
- Both markets experienced a decline in the relative proportion of children (ages 0-14);
- Both markets experienced very slight growth in the relative proportion of the youth population (ages 15-24);
- Both markets experienced a relative decline in the proportion of the prime working group of the population (ages 25-44).

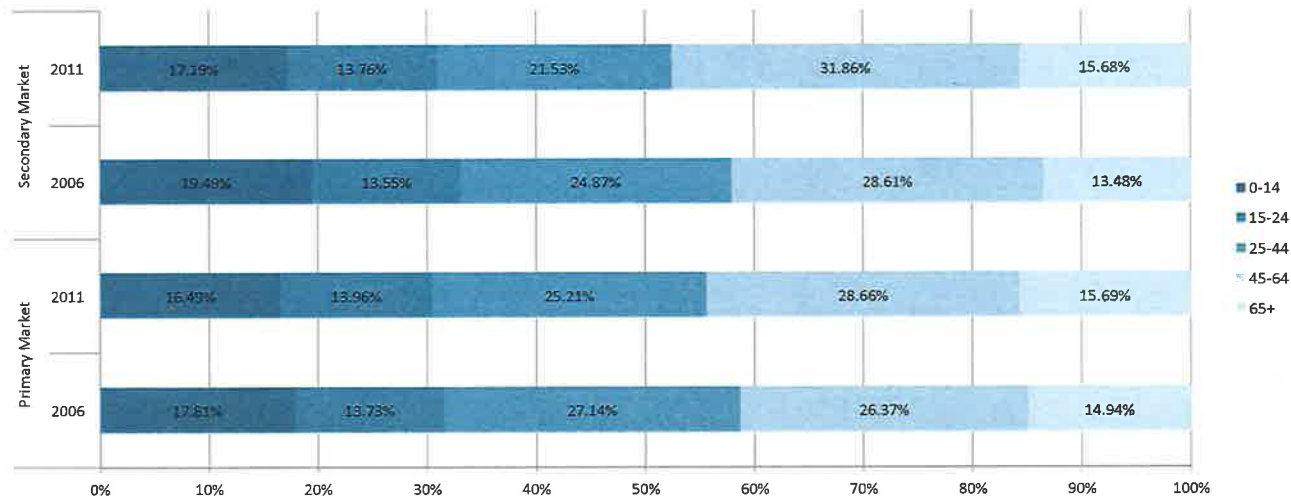


Figure A1.3: Age Comparison of Primary and Secondary Market (Sierra Planning and Management based on Statistics Canada 2006 and 2011 Census data)

## Appendix 1: Market Conditions

### Income Profile and Expenditure Potential

In 2010 both the primary and secondary markets represented lower household income profiles than the Provincial average: the average household income (\$76,742 in the primary market and \$79,352 in the secondary market) was lower than the Provincial average (\$85,772) (Source: Statistics Canada, National Household Survey 2011). Figure A1.4 highlights this trend: Both the primary (Hamilton) and secondary market (Haldimand County) exceed the provincial average in lower income brackets, and fall lower in the highest income category.

According to FP Markets, the secondary market represented a slightly higher spending profile than the primary market, as the estimated 2012 discretionary income (\$22,521) was larger than the primary market (\$22,280). However in comparison to the Province, both markets' spending profile is estimated to be lower.

Note: In national accounts definitions, personal income minus personal current taxes equals disposable income; also called after-tax income. Discretionary income equals after-tax income minus all typical expenses (i.e. food, clothing, shelter).

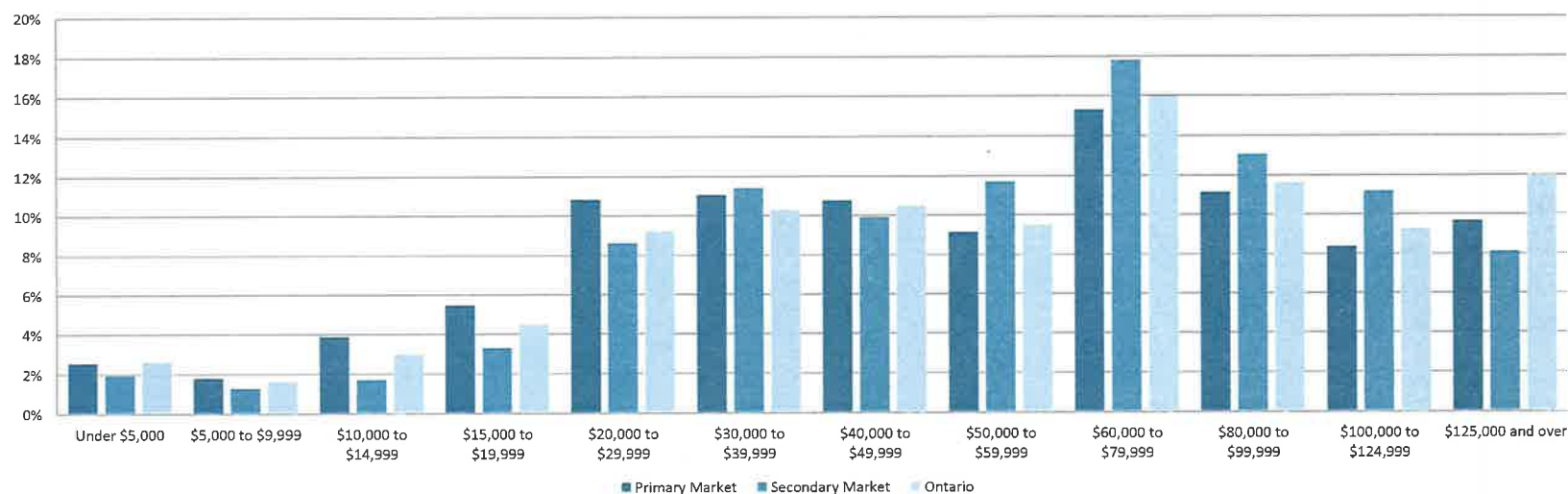


Figure A1.4: 2010 Household After-Tax Income Distribution (Sierra Planning and Management based on Statistics Canada 2011 National Household Survey)

## Appendix 1: Market Conditions

### Projected Growth

Hamilton is projected to grow relatively by 26% over the next two decades (2011 to 2031). Neighbouring Haldimand (secondary market) is expected to grow at a slightly slower rate over the same period (18%). This growth amounts to an additional 147,947 residents in the primary and secondary markets by 2031. As a significantly larger community, population growth in Hamilton will comprise the majority of this increase (almost 90%).

As indicated in Figure A1.5, like most communities across Ontario, the population of Hamilton and Haldimand County is expected to age over the next two decades. Seniors aged 60 and older will be the quickest growing age category in both markets. Other age groups are expected to grow relatively slowly (in Hamilton 0-14 and 30-44), or begin to decline. This change in demographic structure will impact the relative demand for different facilities at the Binbrook Conservation Area. While the provision of family-friendly activities will continue to be important, the Conservation Area will need to focus its attention on providing infrastructure that attracts older age groups.

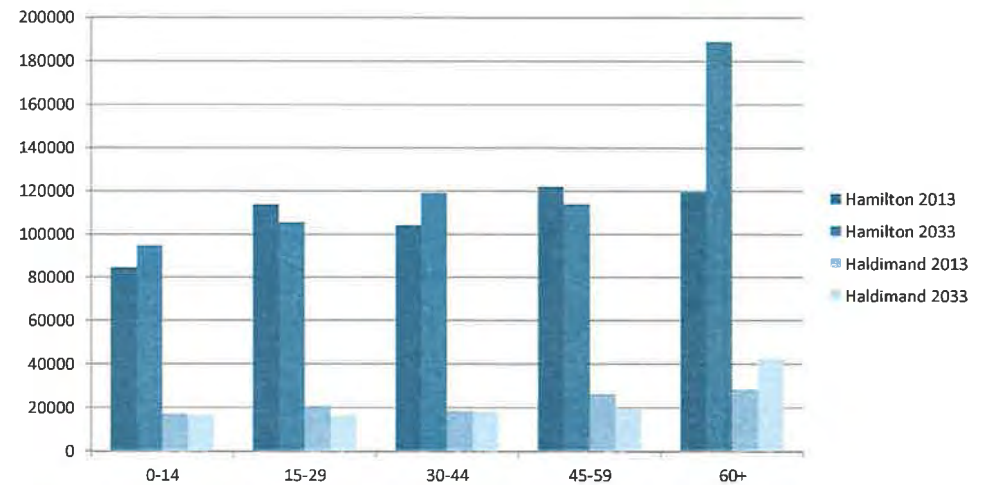


Figure A1.5: Population Growth Projections for Primary and Secondary Market (Sierra Planning and Management based on Ontario Ministry of Finance, Population Projections Update Spring 2013)

## Appendix 1: Market Conditions

### Trends in Visitation

Visitation to the Binbrook Conservation Area grew by approximately 10,000 visitors between 2008 and 2012. With the exception of 2010, visitation has increased annually indicating the growing popularity of the Conservation Area. Poor weather and the splash pad being out of commission reduced admission levels in 2010.

Most visitors (between 80%-90% annually) purchase day passes to visit the Conservation Area rather than purchasing membership passes (see Figure A1.7). Through consultation with users of the Conservation Area, most indicated that their decision not to purchase a season pass was primarily influenced by making insufficient visits to make it worthwhile. Several indicated that they felt the season passes were too expensive, which is perhaps a reflection of the NPCA's current marketing strategy: The value of season passes is promoted through discounts on amenities in the Conservation Areas including hiking, camping, barbecuing, festivals, workshops and cultural heritage sites. It may be beneficial to promote the season passes as equivalent to five trips to any of the NPCA's conservation areas and camp sites for a family of four.

Through consultation with park users it was evident that most visitors use the Binbrook Conservation Area during the core operating season (May to Thanksgiving). A high proportion of respondents indicated that they visit the Conservation Area predominantly with their family, many with younger children who enjoy the splash pad, open air picnics, swimming beach, and play area. Other popular activities include hiking, canoeing and kayaking, boating and fishing. Visitation in the off-season is significantly lower, and limited for the most part to waterfowl hunting (numbers restricted through a lottery system), and ice fishing.

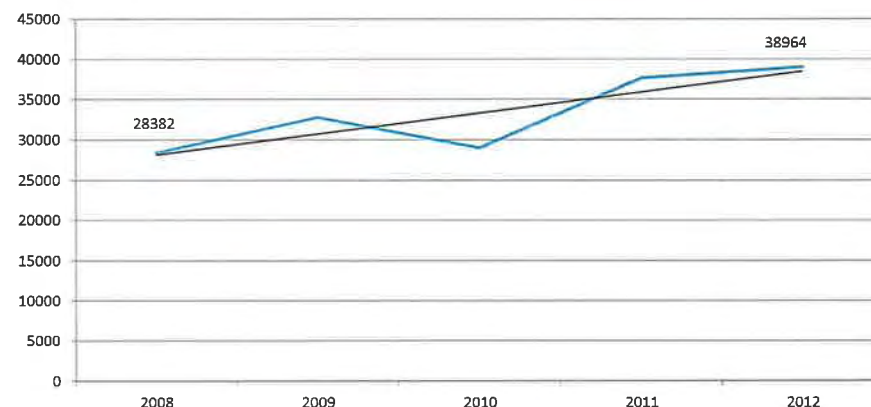


Figure A1.6: Visitation to Binbrook CA 2008-2012 (Sierra Planning and Management, adapted from NPCA)

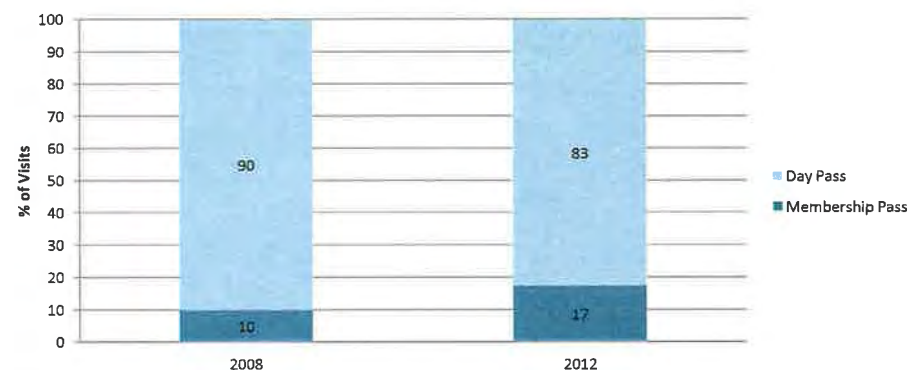


Figure A1.7: Visitation to Binbrook CA by Ticket Type 2008-2012 (Sierra Planning and Management, adapted from NPCA)

## Appendix 1: Market Conditions

### Tourism Potential

The Binbrook Conservation Area is located within Hamilton Census Division. In 2011 data from the Ontario Ministry of Tourism, Culture and Sport the area received 4.4 million visitors, most of which came from Ontario: 96% of visitors to Hamilton were Ontario residents, many of which arrived from the Greater Toronto and Hamilton Area. Given the relatively short distance travelled by most visitors, the majority of visits (79%) were same-day in nature. Approximately two-thirds of visitors indicated they travelled to the region to visit friends and relatives.

Data collected through project consultations and collected by the NPCA indicates that visitation to the Binbrook Conservation Area is predominantly local in origin: Most visitors arrive from either Hamilton and its respective communities or Haldimand County (approximately 90%). While the proportion of visitors arriving from outside the Conservation Area's primary and secondary markets is relatively small (10%) compared to local visitation, this does not diminish the importance of this visitation: Out-of-town visitors often spend more than local visitors as they often engage in a broader range of activities during their trip. Data compiled by the Ontario Ministry of Tourism, Culture and Sport indicated that the average same-day visitor to Hamilton spends \$58 on their trip. Of this total, visitors to the area spend an average of \$7.32 on recreation activities. In 2012 the average visitor to the Binbrook Conservation Area spent \$5.21 per person including admission and other purchases while in the Conservation Area. This indicates that there is potential for the Conservation Area to increase its share of recreation spending in the area.

The Binbrook Conservation Area is well placed to increase both its local and out-of-town visitation: Its reputation as an excellent fishing location for a wide range of species has the potential to increase visitation. Approximately 10% of visitors to Hamilton reported that they visited to participate in outdoor and sporting activities: Boating was the most popular activity (20% of respondents engaging in outdoor activities), with fishing also reported as a prominent pursuit.



*Fishing Derby Participants at Binbrook Conservation Area*

## Appendix 2: Financial Review

### Revenue and Expenses Summary

Analysis of the Binbrook Conservation Area's accounts indicate that the facility historically operates with an annual deficit. Between 2009 and 2012, the annual operating deficit has increased from approximately \$55,000 to \$100,000. This growing deficit can be attributed to stagnating revenues from 2010 onwards and growing expenses. Expenses have increased considerably between 2009 and 2012; this is primarily a function of a rising wage bill. The total cost of wages and benefits grew by approximately \$50,000 over the four years: This increase is split between growth in the hourly and casual wage bill, and the expense of gatekeepers. Growth in the wage bill accounts for roughly two-thirds of the overall increase in expenses between 2009 and 2012. Wages and benefits comprise between 70-80% of the Conservation Area's expenses annually.

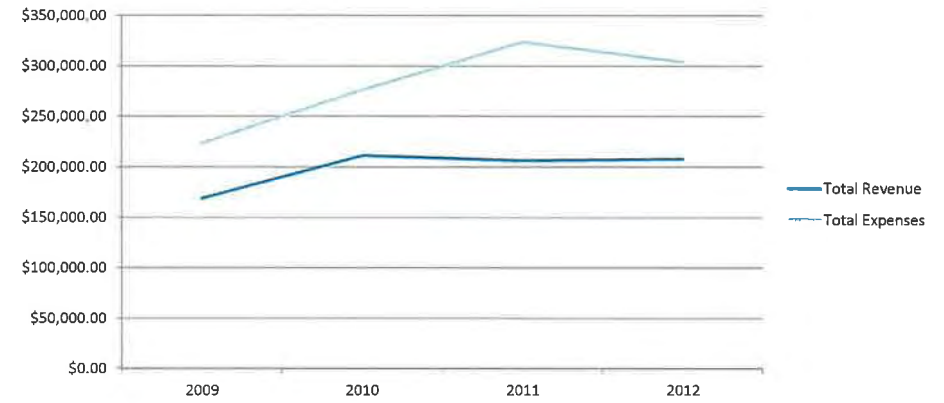


Figure A2.1: Revenue and Expenses Summary for Binbrook CA, 2009-2012

	Net Operating Income (NOI)
2009	-\$54,529.65
2010	-\$64,892.89
2011	-\$117,322.07
2012	-\$95,704.26

## Appendix 2: Financial Review

### Revenue

Revenue has remained relatively stagnant since 2010. Increases since 2009 are primarily attributable to growth in admission revenue that result from increased visitation. Visitation to the Conservation Area increased by approximately 6,000 visitors a year between 2009 and 2012. Day pass sales remain the primary source of revenue for the Conservation Area, accounting for approximately two-thirds of all income. Revenue from season passes has increased by approximately \$10,000 over this period; however it remains a much smaller earner for the Conservation Area than day passes.

Revenue generated through special events has declined annually since 2009, with this accounting for approximately \$5,000 in proceeds in 2012. Special events refer to any unforeseen event that occurs in the conservation area, such as a commercial shoot. The NPCA does not actively pursue these opportunities, they typically present themselves and therefore their contribution to annual revenue fluctuates considerably. Moving forward the NPCA may wish to pursue this revenue stream more actively.

Retail sales currently contribute around \$15,000 annually to the Conservation Area. These sales include concessions, equipment rental (canoes and boats), and bait sales. This revenue stream has significant growth potential through expansion of existing facilities (e.g. more canoe rentals, larger concession area), and/or development of new commercial ventures.

'Unspecified' income for the Binbrook Conservation Area is a growing source of revenue that consists of a broad range of sources. Most significantly this category includes pavilion rentals. Pavilion rentals by volume have declined since 2008, however they continue to contribute between \$10,000-\$15,000 annually for the Conservation Area. Additional revenue in this category includes income from events like the fishing derby and movie night in the park.

A new addition to the Binbrook Conservation Area for the 2013 season is the Boarder Pass wakeboarding facility. This has the potential to increase the revenue stream for the Conservation Area – gains that are not reflected in 2012 financial data. The facility pays a fixed rental sum of \$3,000 that includes facilities. The current rental rate is expected to increase over time as the facility becomes more established in the Conservation Area.

Moving forward, the Niagara Peninsula Conservation Authority should consider development options that will increase admission revenue by encouraging more frequent visitation, and create additional revenue streams through in-park purchases.

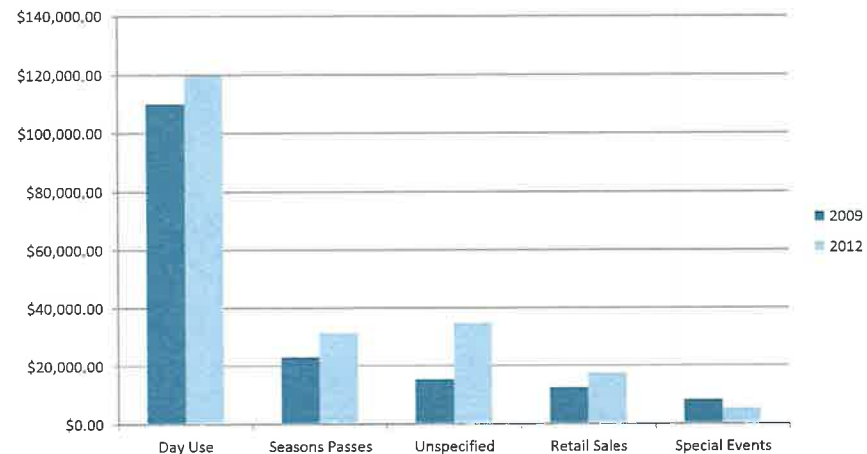


Figure A2.2: Revenue by Category for Binbrook CA, 2009 and 2012

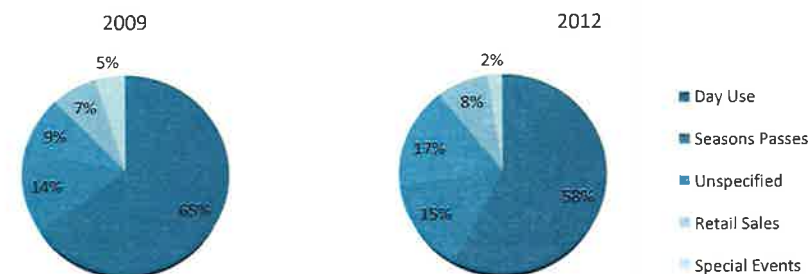


Figure A2.3: Revenue by Source, 2009 and 2012

## Appendix 2: Financial Review

### Expenses

Other expenses outside of those mentioned previously, that have contributed to the growing deficit are maintenance costs, advertising, and materials and supplies. The cost of both maintenance, and materials and supplies, doubled from approximately \$10,000 annually to \$20,000 in 2012. Advertising costs have risen exponentially from approximately \$1,000 in 2009 to \$4,000 in 2012. Other costs have remained relatively unchanged.

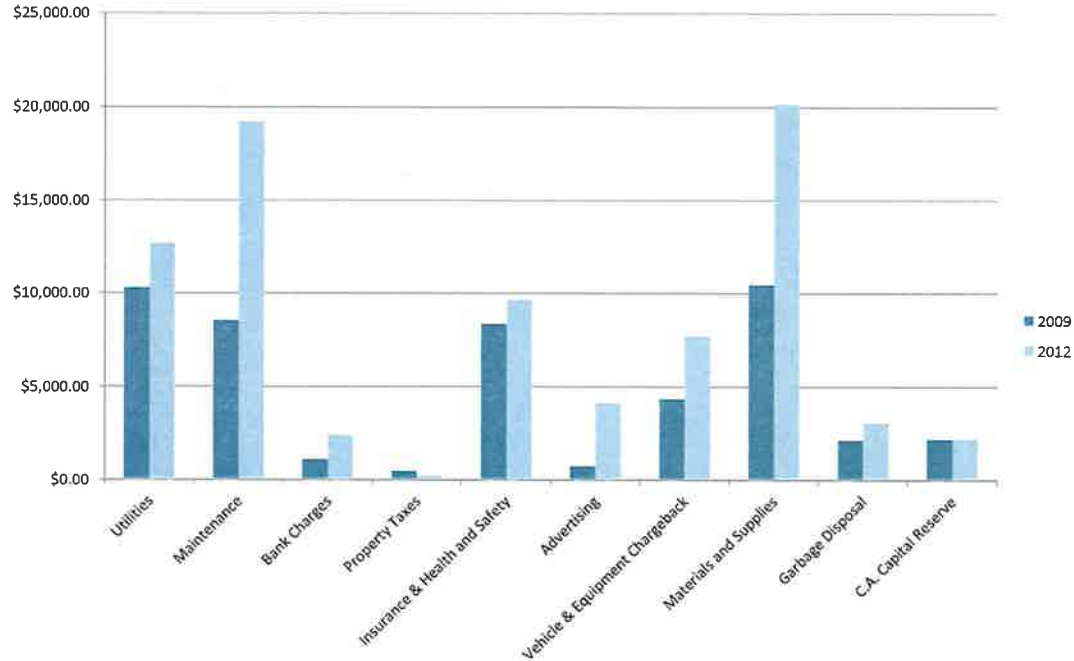


Figure A2.4: Expenses by Category (excluding wages and benefits) for Binbrook CA, 2009 and 2012

## Appendix 3: Revenue Potential

### Current Position

The current financial position of the Binbrook Conservation Area is reviewed in Section 5.0 Financial Review. This section briefly outlines the current financial position of the Conservation Area as it pertains to potential changes in revenue and expenses moving forward based on the central attributes of this Master Plan. It should be noted that this review is based on budget data for each financial year.

Between 2009 and 2012, the Binbrook Conservation Area's Net Operating Income (NOI) decreased by approximately \$40,000 from a deficit of approximately \$55,000 in 2009, to one of \$95,000 in 2012. During this period revenues jumped considerably between 2009 and 2010, and have since stabilized to what is for the purposes of this illustrative exercise assumed to be a normalized operating position of approximately \$210,000 annually (see Figure A3.1). This represents a broad baseline of revenues based on the amenities, programming and marketing of the conservation area at present. The intent of the plan is, as one of several key principles established during the consultation process, to improve the net operating position of the asset through the accretion of higher revenues on a sustainable basis.

The plan also targets the appropriate balance between revenue growth, stabilized and diversified sources of revenue and maintaining cost control over operations. Above all, the conservation, environmental, recreational and educational mandate of the Park must be assured as the NPCA considers the range of potential revenue streams which can be phased in over time.

The financial targets outlined here as an intended output of implementing the Master Plan are generally tied to improvements in visitor amenity, range of activities and overall experience. The creation of a highly desirable recreational asset primarily catering to the local population in the growing communities surrounding the conservation area is at the heart of our recommendations. Both the physical planning and the evolution of services should enable the retention of "clients for life": the idea that Binbrook helps serve the recreational and leisure needs of all of its visitors; that attractions and services exist and cater to each generation from children to youths, families, active adults and seniors, all of whom are important sectors of the community.

Accordingly, the revenue targets attached to individual capital projects in this section have the capacity to create synergy and enhance overall visitation. Indeed the reputation of a park, conservation area or any tourist hub is a critical factor in sustaining growth in visitation over time. At the same time, as this Master Plan emphasizes, the development of key service improvements are essential to promote additional visitation and spending. Some of these actions include the following:

- effective and convenient access to and within the park;
- a pedestrian friendly environment throughout the staging areas of the park;
- scaling development, or modifying existing development, to ensure the carrying capacity of different locations within the park is not exceeded; and,
- deepening the opportunities for semi-private enjoyment of the park (trails, picnic shelters, overnight accommodation and development of a multi-purpose building).

The potential changes do not constitute a new business model and the Master Plan does not consider the relative merits of private sector concessions versus operations by the Parks for certain key capital facilities such as the proposed "glamping" operation, or the multi-use building. However, the detailed planning for these individual opportunities should weigh the appropriateness of different methods of delivery (capital funding and operational responsibility) as well as the impacts of such partnerships on the rights and obligations of the conservation authority as the owner of the lands.

## Appendix 3: Revenue Potential

### Current Position (Cont'd)

Given the increase in revenue between 2009 and 2012, the growing operating deficit throughout this period is attributable to rising operational expenditure. To this point, between 2009 and 2012, operating expenses increased by approximately 35% from roughly \$223,000 to \$303,000. Payroll and benefits have risen by approximately \$47,000 over this period – primarily attributable to increases in hourly, casual, and gatekeeper salaries rather than growth in salary positions. Figure A3.2 provides a visual overview of the growth in expense categories – the most significant of which are maintenance, and materials and supplies. The gradual creep of these and other expense categories over time, in addition to growth in the wage bill, has pushed up total operating expenses between 2009 and 2012.

The variation in day use and unspecified revenues is illustrative of a range of factors including weather related impacts, but are comparatively stable as is the revenue associated with seasons passes. Retail sales for example show considerable variation and demonstrate how, for example, a new model of retail sales via a concession or other mechanism can stabilize and maximize these ancillary business lines in the conservation areas.

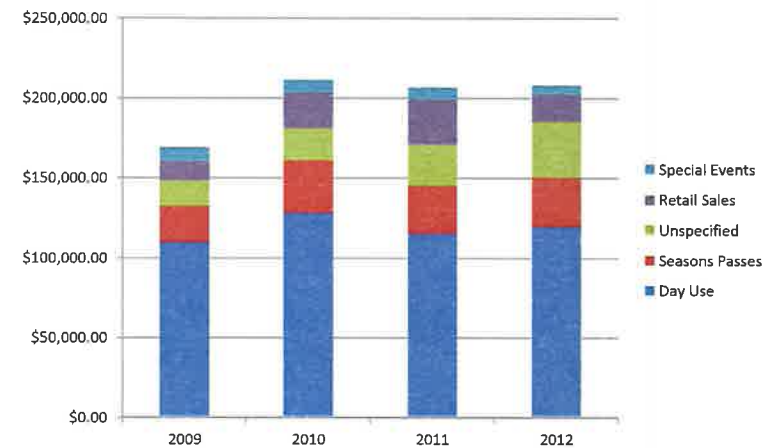


Figure A3.1: Annual Revenue by Category 2009-2012 - Binbrook Conservation Area

## Appendix 3: Revenue Potential

### Current Position (Cont'd)

A detailed review of operating expenses is not the purpose of this plan, rather the opportunities for sustainable financial planning around the capital investment which are proposed, all of which should be supported by a marketing plan to maximise the impact of these new amenities while maintaining the integrity of the mandate for public enjoyment.

Our focus in this Master Plan is on the role of revenue generation to move towards revenue neutrality. An evaluation of operating expenses would be subject to an operational review. Clearly however, revenue generation often comes with an impact on operating costs. Accordingly, our estimates of revenue represent net operating revenue (gross revenues less normal operating expenses). All such estimates are illustrations of potential based on broad assumptions of how each capital project might collectively impact visitation and on-site rentals and other expenditure.

The capital costs associated with this plan are estimated in Section 6.2. The sources for these capital funding requirements can be expected to feature as the ongoing implementation exercise surrounding the plan. Our operating analysis generally assumes that debt financing will not be supported by NPCA operations and hence all capital items are funded from grant, donation, transfer from operations or other sources including the NPCA, City of Hamilton, private sector, and applicable provincial and other grant agencies.

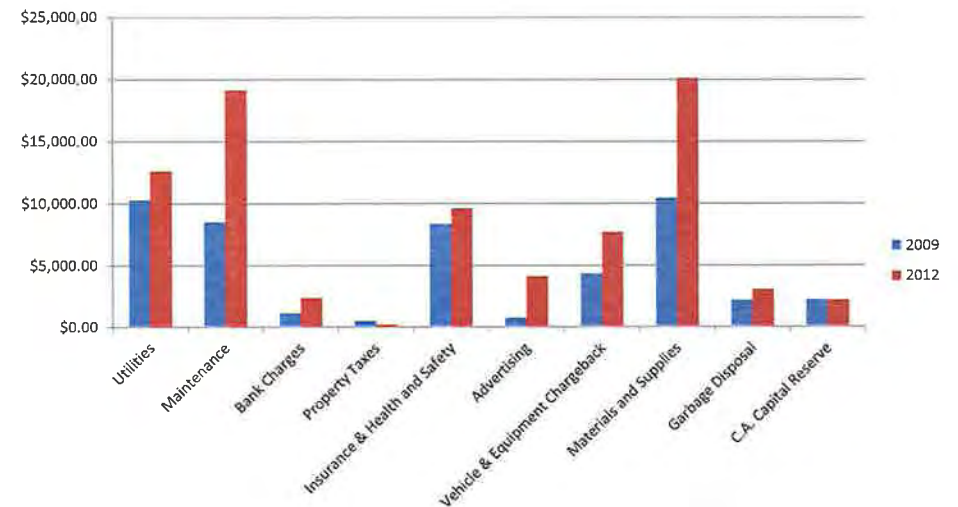


Figure A3.2: Operating Expenses (minus payroll) 2009 and 2012 - Binbrook Conservation Area

## Appendix 3: Revenue Potential

### Potential Changes to Revenue Streams Arising from the Master Plan

Potential changes in revenue associated with this Master Plan are speculative in nature and will be contingent on a variety of factors including but not limited to market demand for developed infrastructure and attractions, the availability of capital funding, successful improvements to the NPCA and Conservation Authority's marketing plan for the Binbrook Conservation Area, and the timing of development. As such, the potential incremental changes to net park revenue based on the Master Plan development priorities are outlined below.

#### Improved Access, Upgraded Washroom, and Amenity Improvement

Given that the majority of admissions occur between July and August (approx. 60%), with most others in May & June (35%) – it is assumed this is the period which will see significant growth in admission as a result of this investment. Moreover, the peak season of July and August (particularly long weekends), is when sub-par or less desirable amenities and overcrowding is most likely to deter potential visitors to the conservation area. Our projected 5-20% growth in visitation will depend on both market conditions and the effectiveness of marketing campaigns to improve awareness of the conservation area and available amenities.

#### Pavilions

The Binbrook Conservation Area currently houses three pavilions. The Master Plan proposes exploring the possibility of providing two additional pavilions in the longer-term. Access to private space within the Conservation Area is in demand primarily during weekends when the park is busy. It is assumed that the new pavilions will be rented at the present daily rate, and occupancy levels as existing pavilions, with a potential net additional to revenue of \$8,000 - \$10,000 annually.

Item	Net Incremental Revenue Growth			Commencement
<b>Improved Access, Upgraded Washroom, and Amenity Improvement</b> <ul style="list-style-type: none"> <li>Infrastructure Upgrades</li> <li>Upgraded Washroom Facility</li> <li>Electronic Control System at Main Entrance</li> <li>Children's Trail</li> <li>Trail Upgrades</li> <li>Gazebo at Reflection Area</li> <li>Upgraded Outdoor Event Venue</li> </ul>	Year 1: 5% growth in day use visitor receipts (\$6,000 <sup>1</sup> )	Year 2: 15% growth in day use receipts (\$17,500 <sup>2</sup> )	Year 3: 20% growth in day use receipts (\$22,800 <sup>3</sup> )	Year 1 assuming capital works commenced including trail upgrades and other major works by year 3.  Note: achieving a 20% growth in visitation in day users is predicated on achieving the items as listed. To be conservative, no change to seasons pass holders or other on-site revenue such as retail is assumed.
<b>Kayak/Canoes/Paddle Board/Dingy Storage</b>	Year 1: Storage-only (\$4,500)	Year 3: Lake Charge and storage (\$6,750)	Year 4: Programming (\$5,000 - \$10,000) and Camps (\$10,000 - \$15,000)	Year 1
<b>Pavilions</b>	\$8,000 - \$10,000			Year 3
<b>Multi-Purpose Building</b>	Low Estimate: \$6,800 High Estimate: \$24,800			Year 4-5
<b>'Glamping'</b>	\$30,000			Year 6

Table A3.1: Potential Changes to Revenue Stream Arising from the Master Plan

<sup>1</sup>: These estimates are based on 5% growth in visitation on peak weekends only

<sup>2</sup>: These estimates are based on 15% growth in visitation on peak weekends only

<sup>3</sup>: These estimates are based on 20% growth in visitation on peak weekends only

## Appendix 3: Revenue Potential

### Potential Changes to Revenue Streams Arising from the Master Plan (Cont'd)

#### Kayak/Canoes/Paddle Board/Dinghy Storage

The conservation area currently offers kayak rentals, however these are relatively limited in number and public consultation indicated that demand exists for both an expanded rental program (more kayaks available), and for self-storage of personal kayaks. Our recommendation in this Master Plan is to keep the rental program in its current form (i.e. relatively limited), as it uses staff time and resources to manage, and generates relatively little revenue. Instead, it is recommended that the Conservation Authority focuses on kayak storage which could also be used for canoes, paddle boards, and dinghies. By way of example, the Toronto Waterfront, as do a number of urban centres, offers this for approximately \$350 a year (including free winter storage). Given that this is a new service in the Binbrook Conservation Area, and uncertain market conditions, a price point of \$150 for this service at its commencement has been assumed. It is suggested that if the market is receptive to this service, the Conservation Authority could increase the price in Year 3 to include a Lake Charge of \$75 that will contribute towards the maintenance of the water amenity and if stabilized, further consideration can be given to enabling a concession for water sports in the later years of the plan. This would increase revenues to the NPCA from a concessionaire contract with an approved operator.

It is suggested that Lake Niapenco could be used by a professional water sports operator for kayak, canoe, or paddle board programming – a venture that the NPCA may wish to investigate if the storage program is successful in encouraging greater interest in these water sports in the Conservation Area. The demand for such programming, from both the perspective of finding an interested operator, and interested clientele, is an open book and not possible to predict at this time. As such potential revenue has not been assigned to this opportunity. However, it is suggested that this opportunity be assessed if the kayak storage project is successful. An additional recommendation under this umbrella is that there may be an opportunity for a private day camp operator to use the Conservation Area during the summer school vacation. Running two camp options (one land-based, one water-based) for 25 children, over 8 of the 10 summer weeks, has the potential to generate a moderate to significant gross revenue to the operator. So much depends on the capacity of the NPCA to actively and effectively market the asset as a summer destination for safe water sports and other multi-sport, adventure, educational or other camp options, marketed to the local community and beyond. It is assumed that this opportunity will be gradual in nature but if built up to include a permanent camp base, anchored out of a multi-purpose building weekdays, this well placed asset in the growing residential base of East Hamilton could be an base for new revenues to the NPCA.

Should this opportunity be supported by the market, it is estimated that the NPCA could charge a 10% + fee to the camp operator for use of the park. It is not recommended that the NPCA adopt responsibility for running the summer camp itself, however the NPCA may wish to investigate partnerships with nearby Camp Marydale. Based on a full camp schedule and both a land and water-based camp, the NPCA could yield \$10,000 - \$15,000 per summer in addition to possible rental fees associated with offices in the multi-use building. For purposes of this assessment additional rental fees to the NPCA from the camp operators have not been included. Of course a greater involvement in the camps themselves by the NPCA would yield higher financial performance but this is not considered a core service of the NPCA.

#### Multi-Purpose Building

A multi-purpose building in the conservation area has potential to accommodate a variety of uses including private rentals, school board activities, weddings, and indoor camp activities. The extent to which a potential multi-purpose building generates revenue for the conservation area will rely on the extent to which it is actively marketed and programmed when it is not being rented by private users. The willingness of the NPCA to meet its corporate obligations to its partners in the City as well as the school boards, and the overall approach to rental fee rates to community and other groups, will determine the amount of revenue which can be achieved, particularly in the non-peak week days periods of the shoulder seasons (May – June and September-October). A rental rate of \$1,000/day or \$500/half day for the multi-purpose building, and \$2,000 for weddings has been assumed.

A low estimate of revenue potential assumes that the building is used exclusively by private renters –once a week in the off-peak summer season (May, June, September and October to Thanksgiving weekend), and twice per week during the peak summer season (July and August). This will require that the facility is actively marketed as a venue by the NPCA and conservation area staff. The mechanism through which reservations are made should be front and centre on the NPCA website. This is a highly conservative assessment.

A high estimate of revenue potential assumes that in addition to private rentals, the building is rented for weddings twice a month throughout the summer (both peak and non-peak months). Should the NPCA pursue providing access to the park to a private camp operator, it can be assumed that the building will likely be used during the week by this activity at no extra charge. It is likely however, to make the conservation area more attractive to a potential camp operator. In future years, rents from camp operators for office and storage space is achievable.

## Appendix 3: Revenue Potential

### Potential Changes to Revenue Streams Arising from the Master Plan (Cont'd)

#### Multi-Purpose Building (Cont'd)

A multi-purpose building will incur additional operating expenses including utilities, insurance, and repairs and maintenance that will impact the net revenues associated with its operation. As an asset with fixed costs, the building will need to be actively programmed and marketed to contribute to growth in net revenues for the conservation area.

The estimates shown in Table A3.1 represent net revenues (revenues net of direct and indirect operating expenses but excludes any provision for debt financing). It is assumed that this building will only be constructed capital funding can be secured. The capital cost estimates of our Master Plan suggest a 6,000 sq. ft. building with a construction cost of \$2 million. In reality, there is no defined scale that will create the most advantageous blend of uses and the overall range of uses will need to be assessed in more detail. For example, a smaller building if dedicated to rental hall use with associated kitchen facilities, a bar, deck for gathering and potentially several break-out rooms, the potential to secure the corporate market for rentals could inject significant revenue which might justify a building of 3,000 – 4,000 sq. ft. These would exceed our estimates above. An example of a facility of a similar configuration is the Shediac Multipurpose Centre in New Brunswick which features two classrooms/meeting rooms, four large rooms, a hall, and a bar and canteen off a central corridor. The building is actively used by members of the local community, government agencies, and the private sector.



Shediac Multi-Purpose Centre, New Brunswick

#### Glamping

*Glamping* (a fusion of glamour and camping), is a growing travel and recreation phenomenon that combines camping with the luxury and amenities of a hotel or private home. The practice originated in the early 1900s from European and American travellers camping in Africa. Like the glampers of today, these wealthy travellers did not want to give up the comforts they were accustomed to and so designed their campsites accordingly with beds, linens, furniture, and silverware. Today's glamping sites span a broad spectrum of luxury and price points, ranging from as little as \$50 per night, to thousands of dollars per night, depending on the level of luxury. Sites offer amenities such as fresh bed linens, en suite washrooms, food service, and private verandas. All glamping sites (glampsites) offer direct access to the great outdoors without the hassle of finding camp space, carrying, erecting, and taking down your own tent. Glampsites offer structures such as yurts, tipis, pods, bell tents, safari tents, tent cabins, and tree houses in which to sleep. The concept has been developed to potentially introduce glamping in the Binbrook Conservation Area is drawn from successful models from the St. Lawrence Parks Commission, and SEPAQ which offer safari-style tents on raised platforms at a density at industry standard of four per acre. Based on this density, it is assumed that the glamping initiative would be developed at, or near the former campgrounds on site, and comprise of 20 units each sleeping a maximum of 6 (4 adults and 2 children).

Like SEPAQ's 'Huttopia' glamping initiative, it is assumed that the NPCA would provide electrical outlets at each of the tents, and basic amenities including a fridge, camping stove, mini fridge, a table, and cooking and serving implements. It is also assume that the configuration will include one central comfort station with washrooms that will be accessible by all tent sites.

Table A3.2 on page 43 provides an overview of current rental rates for comparable camping facilities. In terms of form, the St. Lawrence Parks Commission's 'Instant Camping' and SEPAQ's 'Tente Huttopia' are most comparable to our proposed concept in the Binbrook Conservation Area. The St. Lawrence Parks Commission does not provide electrical outlets, hence their significantly lower price point than SEPAQ. Moreover, SEPAQ is likely able to charge their relatively higher rates on account of the particularly scenic locations of their glamping sites (such as Mont Tremblant, Oka, and Gaspésie). Accordingly, it is assumed that the NPCA could charge a peak rate of \$65/night, and an off-peak rate of \$50/night. These price points assume a cautious approach to positioning the glamping initiative, and acknowledge that there may be room to increase these price points if the amenity proves to be successful after several years.

## Appendix 3: Revenue Potential

### Potential Changes to Revenue Streams Arising from the Master Plan (Cont'd)

#### Glamping (Cont'd)

The NPCA should be advised that the market for glamping is less than certain at this time without a well-targeted concept branding. Comparable glamping initiatives have typically been introduced slowly in provincial parks where successful camping businesses are already established, with existing infrastructure and additional revenues to minimize upfront capital costs and operational risk. The camp operator typically chooses to convert a small number of camp sites into glamping sites. As such, it is recommended that should the NPCA choose to pursue this opportunity, it does so with caution and takes further steps to assess market demand for this initiative.

It is estimated that the annual net profit (EBITDA – Earnings before Interest, Tax, Depreciation and Amortization) to the NPCA from pursuing the glamping initiative is reasonably bracketed around \$30,000 annually and may potentially increase in later years. This does assume that the take-up of camping is immediate and subsequent growth is based on higher rates and quality of experience as the NPCA as operator becomes more experienced in the market place. This takes into consideration all anticipated operating costs associated with the facility such as housekeeping / daily maintenance and an additional gatekeeper, as well as utilities and repair and maintenance. The NPCA should be advised however that there will likely be additional operating costs associated with the facility that cannot be absorbed by existing staffing levels, including grounds keeping, marketing and promotion, and customer service. Should the NPCA choose to pursue this opportunity, the facility will require significant marketing and promotion. There is an option for the NPCA to pursue a private operator to run the glamping facility, which will significantly decrease the net incremental revenue gain to the NPCA but would eliminate the conservation authority's responsibility for operating costs and logistics associated with glamping. However, a sustainable private operation is highly unlikely unless the operator is granted a concession of occupancy of the lands for a sufficient period of time to enable full amortization of investment and return on investment, as well as conditions of performance which are not unduly onerous.

Developing the glamping facility will also represent a significant capital investment on the part of the NPCA (see Section 9.2). As such the timing of this development, should the NPCA choose to pursue it, will be dependent on the availability of capital funding. It is suggested that it is unlikely that a private operator would be interested in providing the capital funding for the development of the facility inside the Conservation Area.

Provider	Description	Daily Rental Rate
St. Lawrence Parks Commission	4 person tent on a 12" by 24" raised platform with fire ring	\$47.91
Ontario Parks	Yurts	\$97.18
	Electric Camp Site (SW & Central Parks)	\$45.20
SEPAQ	Tente Huttopia: Safari tent on raised platform with electric outlet, fridge, and basic furniture.	\$118 (peak), \$99 (off-peak)

Table A3.2: Rental Rates for Comparable Camping Facilities

#### 'Glamping' Case Study: Tente Huttopia: SÉPAQ

Beginning in 2008, SÉPAQ (Société des établissements de Plein Air du Québec) - the provincial agency that manages parks and wildlife reserves in Quebec - introduced 'ready-to-camp' sites in a number of provincial parks across Quebec. The idea behind the initiative was to provide simple, 'turn-key' structures that would reduce the required investment in equipment, and set-up, for potential campers. Early trials with the initiative were well received and as such SÉPAQ now offers Tente Huttopia in 16 out of 24 national parks in Quebec.

The sites are set up with one safari tent that sleeps up to six (four adults), anchored on a wooden platform with a rigid door. Each tent has two bedrooms separated by a canvas curtain, a fridge, work surface, and dining table and chairs. The tent is heated, lit, and has electrical outlets. Visitors are provided with two elements outside under an awning, a small refrigerator, dishes – everything needed to prepare meals. Outside, each site has a picnic table with four chairs. Huttopia sites have access to a shared comfort station.

The Huttopia sites have been positively received by campers., particularly by families looking to experience the outdoors without the stress of having to set up tents and other on-site equipment. SÉPAQ charges \$118/night in high season for Tente Huttopia sites, and \$99/night in the low-season. For images of Tente Huttopia on page 19.

## Appendix 3: Revenue Potential

### Revenue Potential Summary

If the NPCA were to pursue each of the revenue generating opportunities identified above and they were received positively by the market, the NPCA could net an additional potential \$112,600 in annual revenue. Based on the 2012 operating deficit of approximately \$95,000, these changes have the potential to bring the Binbrook Conservation Area back to a break-even level.

It should be noted, however, that a general increase in activity at the Conservation Area may lead to a generic increase in certain variable operating cost categories which cannot be easily predicted – utilities, maintenance, materials and supply, contractor services, equipment and other items. It would be appropriate to raise operating costs by a factor of 10% as a possible rise in costs associated with a 20% plus rise in visitation as well as the addition of greater activity on site. Based on 2012 numbers, this amounts to \$30,000.

The purpose of these considerations is not to project with overly simplistic assumptions how break-even can be achieved quickly, but to demonstrate targets which are reasonable and modest and within the reach of the existing organizational structure governing the day to day operations of the conservation area. Depending on market circumstances and the degree of implementation of the master plan, these illustrative targets will require revision annually. All individual capital projects should include a more detailed assessment of revenue and operating cost impacts.

Should the implementation of the plan only consider the initial upgrades for example, it is still possible that effective marketing of the conservation area can yield higher revenues without significant operating cost impacts. This alone may help reverse the recent trend of increasing deficits. Additional efforts to effectively secure rentals associated with use of the conservation area assets such as summer day camps, rental permits including film location fees, and promoting the location for events and festivals can increase revenues. Notwithstanding, significant improvement in revenue potential is linked to several of the key development projects, the funding for which has yet to be secured.

The financial plan represents targets in balance with the core mandate of the Conservation Area. If the gradual expansion of the boardwalk and other non-revenue generating infrastructure and amenities occurs per the phasing outlined in this plan, the combined effect is likely to give rise to sustained growth in patronage and opportunities for further investment in activities, concessions and other services.

## Appendix 4: Potential Funding Sources

There is a range of funding programs available, both continually and during specific periods of time, that the NPCA should assess the eligibility of the planned improvements at Binbrook Conservation Area for funding, as part of the implementation mandate for this project. These programs are described further below.

### Niagara Peninsula Conservation Foundation

The Niagara Peninsula Conservation Foundation is a registered charity dedicated to raising funds for NPCA projects. While the Foundation's website facilitates local fundraising for the conservation authority's work, as a registered charity there is potential to apply for various federal and provincial grants for various elements of the Master Plan through the Foundation. The NPCA is encouraged to explore the utility of the Foundation for both local fundraising efforts for Master Plan build-out, and as a vehicle through which to apply for capital funding grants at the provincial and federal levels.

### Ontario Trillium Foundation (OTF)

Trillium provides funding for operating and infrastructure costs through its Community Program and Province-Wide Program. Community Program grants are smaller in scope, providing up to \$375,000 over five years; whereas the Province-Wide Program provides grants of up to \$1.25 million over five years. Community Program grants are intended for projects that will have a primarily local impact. Given the predominantly local scale of existing visitation to the Binbrook Conservation Area, funding would likely be pursued through Trillium's Community Program.

The OTF does not accept funding applications from municipalities with populations over 20,000, or agencies of provincial or federal governments. However, if these organizations submit their application in collaboration with at least one eligible organization, their proposal will be considered. Given the involvement of the Glanbrook Conservation Committee (GCC) in conservation activities in the Conservation Area, the NPCA could consider a joint application with the GCC particularly for projects that this group has an interest in supporting. It should be noted that the OTF will not fund the construction of new buildings, or the purchase of land or buildings.

Funding proposals to the OTF are assessed and prioritized based on their alignment with the program's stated priorities. At the Community Program level, funding priorities are identified for 16 catchment or granting areas. The Binbrook Conservation Area would fall within the Hamilton catchment area, which prioritizes (among others) initiatives that remove barriers to accessing environmental resources in Hamilton.

### Friends of the Greenbelt Foundation

The Friends of the Greenbelt Foundation has three key goals:

- Work to ensure a successful 2015 Review that leads to a richer, greener and more robust Greenbelt;
- Strengthen the viability of farming in the Greenbelt;
- Broaden and deepen public understanding of, and support for, the Greenbelt.

To achieve their first goal, the Foundation provides grants for projects that advance knowledge and understanding of the value of Ontario's Greenbelt; increase natural heritage connections / corridors in the region; and undertake visionary land management plans to protect water resources, natural features, agriculture, or create new parks and open spaces for residents. As such, the Foundation could potentially be pursued as a funding opportunity for work related to the Conservation Area's Forest Management Plan, Fisheries Management / Water Quality Improvements Plan, and Wetland and Wildlife Habitat Management. It could also be pursued to develop educational programming in collaboration with the multi-purpose building proposed by the Master Plan.

## Appendix 4: Potential Funding Sources

### **Great Lakes Guardian Community Fund (GLGCF)**

The GLGCF provides funding for a broad range of projects that can demonstrate a direct environmental benefit – those that result in measurable environmental improvements, and those that contribute to at least one of the following goals:

- Protecting water quality for human and ecological health
- Improving wetlands, beaches and coastal areas
- Protecting habitats and species

As such, the NPCA should explore the applicability of this fund to supporting continued work associated with the Binbrook Conservation Area's Forest Management, Fisheries Management/Water Quality Improvements, and Wetland and Wildlife Habitat Management Plans. The fund encourages projects that involve the community in the management of natural resources, such as engaging youth in planting trees to restore stream banks. In this context, the GLGCF has potential to serve both the Conservation Authority's continued commitment to environmental conservation and management, and engaging the local community in conservation work and education.

### **Mountain Equipment Co-op (MEC) Land Acquisition Grant**

The MEC Land Acquisition Grant provides funding between \$10,000 and \$100,000 to organizations dedicated to conserving ecologically and / or recreationally significant landscapes both near cities, and farther into the wilderness. The grant application process requires that the applicant demonstrate the urgency of the land acquisition in question.

A long-term initiative (11+ years) that the Master Plan proposes for consideration is the development of a continuous trail around Lake Niapenco. Feedback garnered during the consultation events indicated a demand for such a trail for both hiking and cycling in the Conservation Area. In this context, the MEC Land Acquisition Grant could be considered as a financial resource to evaluate for this development project.

## Capital Project Detail - 2020

<b>Project Title:</b>	North Side Comfort Station - Long Beach	<b>Project #</b>	Pending
<b>G/L Account(s):</b>	Pending	<b>Asset Class</b>	Building
<b>Priority Classification:</b>	Strategic Initiative	<b>Division</b>	Land Operations
<b>Priority Ranking:</b>	4	<b>Project Status</b>	Draft
<b>Site/Location:</b>	Long Beach	<b>Grouping</b>	C-3
<b>Project Lead:</b>	Jeff Fazekas	<b>Project Start Date</b>	Mar-20
<b>Funding Source:</b>	Special Levy - Niagara	<b>Project Completion</b>	May-20
<b>Partner (if applicable) :</b>		<b>Municipality</b>	Niagara

## PROJECT DESCRIPTION, RATIONALE, BACKGROUND, LINKAGES AND IMPLICATIONS

*Provide a detailed description of the project, why the project needs to be done now and consequences of deferring the project. Include historical cost and typical asset life cycle. Indicate if the project is linked to any other current or future project (capital or operating) and any impact to related project(s) if this project is approved or deferred.*

Project Description: demolition of existing North side comfort station and build new north side comfort station

In 2018, in an effort to increase camping revenues, 26 campsites were upgraded to 30 amp electrical. Historically, these sites were seldom rented due to the lack of electrical service. The current comfort station was built over 30 years ago - existing facilities include 1 shower and 2 toilets in each of the men and women's bathrooms. These amenities are not sufficient to support the additional 26 campsites.

Renovations to the North side comfort station were approved for a 2019 capital project for \$75,000. This provision was intended to support an addition to the existing structure and/or erecting a second structure to increase capacity. The estimate should have been refined to include analysis and feasibility for each of these alternatives (i.e. providing electrical service would be significantly more costly than originally thought, existing building is not structurally suited to an addition, etc.) Further to a detailed review and analysis, it was determined that the best course of action was to proceed with demolition of the existing structure, and build a new station. As a result of this review, staff updated the projection to \$250,000 in July 2019 when capital budgets were reviewed and updated. This provision will be carried forward to 2020.

Staff proceeded with formal drawings for the project, which require an additional \$110,000 to complete.

1,800 sq. ft x \$200 per square foot = \$360,000

New facility will provide 4 showers + 1 accessible shower in each of the men's and women's bathroom. Men's facilities will include 3 toilets and 2 urinals, women's washroom will have 5 toilets. Additionally, the building will include 2 fully accessible, fully contained units (shower, toilet).

## NEEDS ANALYSIS &amp; BENEFITS

*Indicate project benefits, i.e. improving health and safety, customer service, increased ROI, heritage, educational, etc.*

In order to continue and maximize revenue generation for North side campsites, comfort station amenities (shower, toilets) are required.

## Capital Project Detail - 2020

Project Title: North Side Comfort Station - Long Beach

Project #

Pending

## RISKS &amp; MITIGATION STRATEGY

Indicate project risks and proposed mitigation; include risk assessments if the project is deferred (low/medium/high) and any risks during or post implementation. Include direct costs of not proceeding (if known) as well as any performance or service related risks.

Existing conditions have led to extensive complaints, and will result in significant revenue loss if not rectified. Investment in upgrading sites to 30 amp service will be sub-optimal, generating marginal ROI to NPCA.

## PROJECT COST &amp; FORECAST

Description	Prior Year(s)	2020	2021	2022	2023	2024+
Planning						
Design						
Pre-Construction						
Construction						
Internal salaries & benefits						
Internal resources - non-salary						
Warranty						
Facilities	250,000	110,000				
Equipment						
Contingency						
Other						
<b>TOTAL</b>	<b>250,000</b>	<b>110,000</b>	-	-	-	-

## PROJECT MILESTONES

Percent Complete	25%	50%	75%	100%
Projected Date (month/year) milestone met				

## CASH FLOW PROJECTION (Current Year Only)

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Projected cash flow requirements - current year		360,000		

## Capital Project Detail - 2020

Project Title: North Side Comfort Station - Long Beach

Project #

Pending

## OTHER

Asset useful life: 30 years

Projected impact on operations annually: \$ -

Return on investment (ROI)

gain from investment:

cost of investment:

360,000

ROI:

Payback Period

Year

Investment

Annual Savings/Revenues

Cumulative Cost (savings)

0

1

2

## NOTES

Name and Title

Signature

Date



North Side  
Comfort Station  
Long Beach.  
4

## Capital Project Detail - 2020

<b>Project Title:</b>	Road Upgrade and Drainage North Side - Long Beach	<b>Project #</b>	Pending
<b>G/L Account(s):</b>	Pending	<b>Asset Class</b>	Land Improvements
<b>Priority Classification:</b>	Asset Integrity – Proactive Replacement	<b>Division</b>	Land Operations
<b>Priority Ranking:</b>	4	<b>Project Status</b>	Draft
<b>Site/Location:</b>	Long Beach Conservation Area	<b>Grouping</b>	C-3
<b>Project Lead:</b>	Jeff Fazekas	<b>Project Start Date</b>	Jan-20
<b>Funding Source:</b>	Special Levy - Niagara	<b>Project Completion</b>	Apr-20
<b>Partner (if applicable) :</b>		<b>Municipality</b>	Niagara

## PROJECT DESCRIPTION, RATIONALE, BACKGROUND, LINKAGES AND IMPLICATIONS

*Provide a detailed description of the project, why the project needs to be done now and consequences of deferring the project. Include historical cost and typical asset life cycle. Indicate if the project is linked to any other current or future project (capital or operating) and any impact to related project(s) if this project is approved or deferred.*

Long Beach Conservation Area's North Side contains 69 campsites, a comfort station and associated ring road that has significantly deteriorated and requires immediate replacement. The North Side campground is situated on generally flat topography over poorly drained lacustrine heavy clay. Due the flat nature of these sites and the heavy clay soils, the recent wet spring and lack of comprehensive drainage system has served to cause many of the sites to be unavailable for use. In addition, the asphalt ring road that services these sites has deteriorated to the point where it must be removed.

## NEEDS ANALYSIS &amp; BENEFITS

*Indicate project benefits, i.e. improving health and safety, customer service, increased ROI, heritage, educational, etc.*

Replacing the existing road with a granular road and adding a French drain system throughout the North Side will alleviate flooding in many of the seasonal sites and open additional sites up for use. This will also improve our campers experience, safety and decrease the NPCA potential liability for damaged property that can occur (vehicles, trailers etc.)

## Capital Project Detail - 2020

Project Title: Road Upgrade and Drainage North Side - Long Beach

Project #

Pending

## RISKS &amp; MITIGATION STRATEGY

Indicate project risks and proposed mitigation; include risk assessments if the project is deferred (low/medium/high) and any risks during or post implementation. Include direct costs of not proceeding (if known) as well as any performance or service related risks.

Continuous repairs to the current road throughout the season has resulted in pressure on staff to ensure the road and seasonal sites are adequately safe for users. Current seasonal clients have indicated they will not return if the drainage issues are not addressed, reducing revenues. Camp sites that are regularly affected by drainage issues are closed for up to 85% of the season, further exacerbating the negative revenue impact. Further, NPCA is exposed to additional risk &/or liability for damaged property resulting from deteriorating roadways and flooding.

## PROJECT COST &amp; FORECAST

Description	Prior Year(s)	2020	2021	2022	2023	2024+
Planning						
Design						
Pre-Construction						
Construction		232,000				
Internal salaries & benefits						
Internal resources - non-salary						
Warranty						
Facilities						
Equipment						
Contingency						
Other						
<b>TOTAL</b>	-	<b>232,000</b>	-	-	-	-

## PROJECT MILESTONES

Percent Complete	25%	50%	75%	100%
Projected Date (month/year) milestone met	Jan	April		

## CASH FLOW PROJECTION

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Projected cash flow requirements - current year	116,000	116,000		

## Capital Project Detail - 2020

Project Title: Road Upgrade and Drainage North Side - Long Beach

Project #

Pending

## OTHER

Asset useful life: 30 years

Projected impact on operations annually: \$ -

## Return on investment (ROI)

gain from investment:

cost of investment: 232,000

ROI:

## Payback Period

Year

Investment

Annual Savings/Revenues

Cumulative Cost (savings)

0

1

2

## NOTES

Photos - road and drainage:

Long Beach -  
Road\_Drainage  
Upgrades.pdf

RFP/Quote:

Long Beach -  
Road\_Drainage  
RFP Quote.pdf

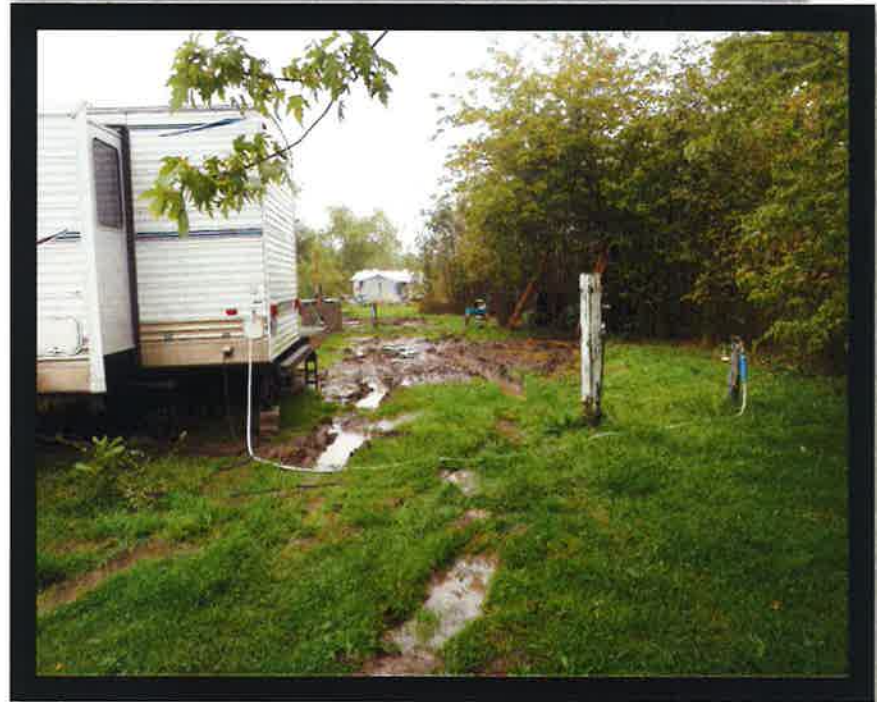
Name and Title

Signature

Date



















## Table of Contents

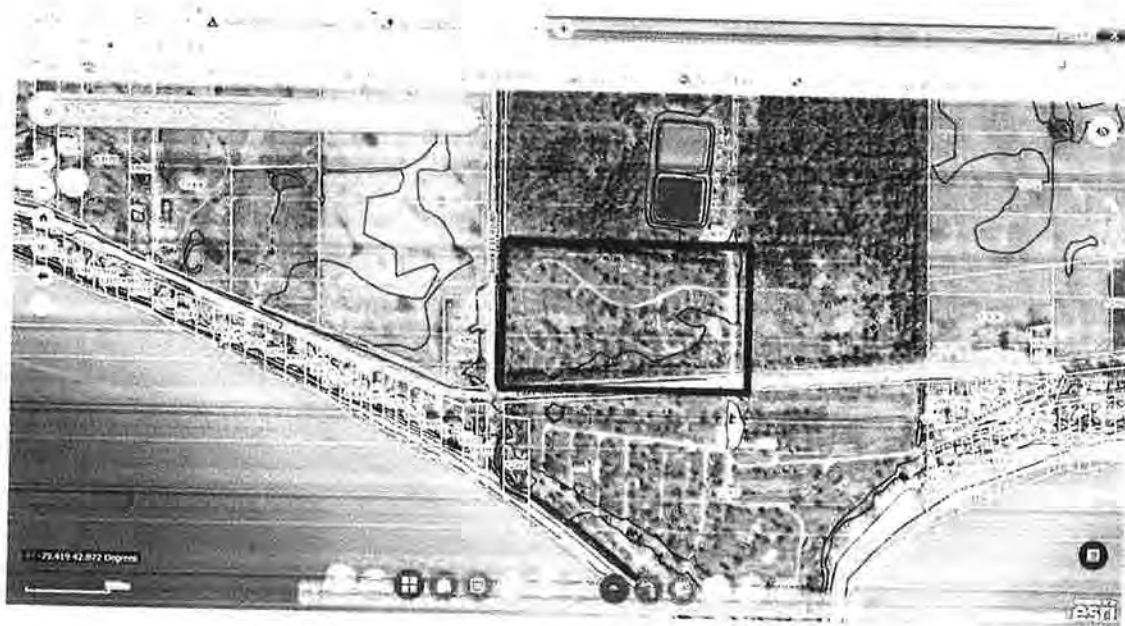
**COPY**

### Envelope 1:

1. Appendix B – Submission Form
2. Appendix D – RFQ Particulars
3. Appendix E – Evaluation
4. Appendix F – Reference Form
5. Addendum #1
6. Addendum #2
7. Work Plan Schedule

### Envelope 2:

1. Appendix C – Pricing



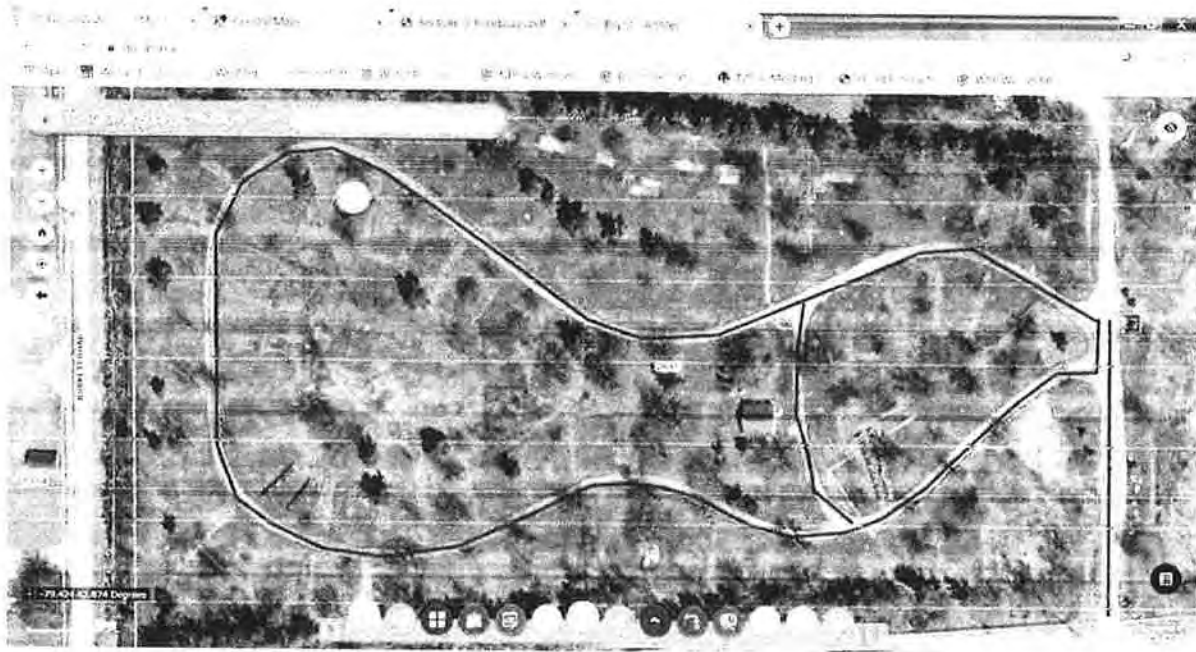
## Location Plan

Due to the flat nature of the site and the heavy clay soils, the recent wet spring and lack of a comprehensive drainage system has served to cause many of the sites to be unavailable for use. In addition, the asphalt ring road that services this site has deteriorated to the point where it is required to be removed and is proposed to be replaced with a granular road in the same location.

## 2. Scope of Work

As such, the NPCA is soliciting a proposal from qualified contractors to:

- a) Obtain all necessary permits and approvals as required.
- b) Obtain all utility locates within the project area. Note the NPCA will provide the location of all the NPCA's private services.
- c) Ensure all requirements of the Occupational Health and Safety Act are followed.
- d) Completely remove all existing asphalt and granular base on the 750m long (approx.) and 4.0m wide existing campground ring road (as indicated by the red lines on the air photo below) and dispose offsite.



- e) Provide all lines, levels, and measurements as required.
- f) Excavate as required to a depth of at least 450mm below grade.
- g) Proof roll native subgrade prior to the installation of new granular road.
- h) Supply and install 150mm diameter Big 'O' HDPE perforated drainage pipe complete with filter sock within a 300mm square clear granular trench surrounded by non-woven geotextile on both sides of the reconstructed road below the level to receive the Granular 'B' base. Install drainage pipe with positive drainage toward appropriate outlet.
- i) Supply and install a 20m long (min.) French Drain through each of the 69 campsites ensuring that all low points are provided with drainage. The French Drain shall be comprised of a 100mm diameter Big 'O' HDPE perforated drainage pipe complete with filter sock installed in a 250mm square clear granular trench surrounded by non-woven geotextile. The French Drain shall outlet into the reconstructed road's 150mm diameter Big 'O' drainage pipe (or other appropriate outlet as approved by the NPCA).
- j) Supply and install a 300mm deep layer of Granular 'B' base along the reconstructed road. Proof roll the Granular 'B' at each 150mm thick interval.
- k) Supply and install a 150mm deep layer of Granular 'A' overtop the Granular 'B' base. Proof roll. Grade the Granular 'A' to match existing adjacent grades as required.
- l) Remove all surplus material and debris from the site upon completion of work;
- m) Complete all work prior to November 30, 2019.

## Work Plan Schedule – Long Beach North Road Reconstruction and Drainage

Line Locates: When notified of successful bid

November 4<sup>th</sup> – 8<sup>th</sup> – Layout, Site Meeting and Mobilization

November 11<sup>th</sup> – 29<sup>th</sup> – Install drainage in roadway and campgrounds

December 2 – 16<sup>th</sup> – Excavate roadways to grade and ready for stone

December 17<sup>th</sup> – 31<sup>st</sup> – Placement of Granular B and A on roadway

January 1<sup>st</sup> – 10<sup>th</sup> – Final grading and clean-up

\*If inclement weather the roadwork would be done in March

March 2<sup>nd</sup> – 16<sup>th</sup> – Excavate roadway to grade and ready for stone

March 17<sup>th</sup> – 31<sup>st</sup> – Placement of Granular B and A on roadway

April 1<sup>st</sup> – 9<sup>th</sup> – Final grading and clean-up

## Appendix C – Pricing

COPY

RFQ No: NPCA-2019-025

RFQ Name: Long Beach Road Reconstruction and Drainage

Company: Geo Barnes & Sons Limited

Address: 1593 North Shore Drive Lowbanks ON N0A 1K0

Having examined the Deliverables & Specifications as listed in Appendix "D" to this bid, and Addenda No. 1 to No. 2 inclusive, all as issued by Niagara Peninsula Conservation Authority.

Dollars\* (\$ 226 640.52) in CAD

\*Rates must be provided in Canadian funds, inclusive of all applicable duties and taxes except for HST.

James Barnes  
Signature of Dealer/Company Representative

September 25 2019  
Date

EJ  
GM

## Capital Project Detail - 2020

<b>Project Title:</b>	Electrical & Water (Ridge) - Long Beach	<b>Project #</b>	Pending
<b>G/L Account(s):</b>	Pending	<b>Asset Class</b>	Land Improvements
<b>Priority Classification:</b>	Strategic Initiative	<b>Division</b>	Land Operations
<b>Priority Ranking:</b>	4	<b>Project Status</b>	Draft
<b>Site/Location:</b>	Long Beach	<b>Grouping</b>	C-3
<b>Project Lead:</b>	Jeff Fazekas	<b>Project Start Date</b>	Mar-20
<b>Funding Source:</b>	Special Levy - Niagara	<b>Project Completion</b>	May-20
<b>Partner (if applicable):</b>		<b>Municipality</b>	Niagara

## PROJECT DESCRIPTION, RATIONALE, BACKGROUND, LINKAGES AND IMPLICATIONS

*Provide a detailed description of the project, why the project needs to be done now and consequences of deferring the project. Include historical cost and typical asset life cycle. Indicate if the project is linked to any other current or future project (capital or operating) and any impact to related project(s) if this project is approved or deferred.*

Install electrical and water services on ridge.

Provide water and electrical services to campsites on the ridge near the lake. Continue to upgrade all existing campsites from 15 amp to 30 amp

Electrical- upgrade 15 amp services to 30 amp on 13 sites on the ridge \$60,500

Water - water taps need to be relocated beside electrical to prevent hose cords from running across customer campsites. \$27,500



## NEEDS ANALYSIS &amp; BENEFITS

*Indicate project benefits, i.e. improving health and safety, customer service, increased ROI, heritage, educational, etc.*

Project benefits: By adding services to campsites it generates additional revenue and customer satisfaction.

## Capital Project Detail - 2020

Project Title: Electrical &amp; Water (Ridge) - Long Beach

Project #

Pending

## RISKS &amp; MITIGATION STRATEGY

Indicate project risks and proposed mitigation; include risk assessments if the project is deferred (low/medium/high) and any risks during or post implementation. Include direct costs of not proceeding (if known) as well as any performance or service related risks.

## PROJECT COST &amp; FORECAST

Description	Prior Year(s)	2020	2021	2022	2023	2024+
Planning						
Design						
Pre-Construction						
Construction						
Internal salaries & benefits						
Internal resources - non-salary						
Warranty						
Facilities		88,000				
Equipment						
Contingency						
Other						
<b>TOTAL</b>	-	<b>88,000</b>	-	-	-	-

## PROJECT MILESTONES

Percent Complete	25%	50%	75%	100%
Projected Date (month/year) milestone met				Jun-20

## CASH FLOW PROJECTION (Current Year Only)

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Projected cash flow requirements - current year		88,000		

## Capital Project Detail - 2020

Project Title: Electrical &amp; Water (Ridge) - Long Beach

Project #

Pending

## OTHER

Asset useful life: 20 years

Projected impact on operations annually: \$ -

## Return on investment (ROI)

gain from investment:

cost of investment: 88,000

ROI:

## Payback Period

Year

Investment

Annual Savings/Revenues

Cumulative Cost (savings)

0

1

2

## NOTES

Photo:



Name and Title

Signature

Date

# Long Beach - electrical/water - Ridge





67 Rosedale Ave.  
Port Colborne, ON, L3K6A5  
Phone: 905-835-2211  
[syeinfo@samyoungelectric.com](mailto:syeinfo@samyoungelectric.com)  
[www.samyoungelectric.com](http://www.samyoungelectric.com)  
ECRA/ESA#7000707

September 13, 2017

We are pleased to submit our quotation for Phase 1 of the electrical upgrades at Long Beach Campground.

Phase 1 will include all electrical work required in the Main electrical building and the Southwest Comfort Station to allow for Phase 2 and Phase 3 electrical site upgrades.

Included in this quotation is:

- In the Main electrical building we will install a new 200AMP fusible disconnect switch which will be fed from the existing 600volt splitter for a new 200AMP, 600volt feed to the Southwest Comfort Station.
- We will have a new 3" conduit directional bored from the Main Electrical Building to the Southwest Comfort Station and then install new conductors as specified on the drawings provided. The customer must agree to the directional boring contractors conditions stated below.

It is the property owner's responsibility to advise of any/all buried utilities on private property. A failure to do so may result in damage to customer owned property and the financial burden associated with any necessary repairs and/or restoration.

☒ Grades and layout provided by others.

☒ Rock removal, if encountered, to be performed on a time and material basis.

☒ Quotation based on no frost conditions. If required, additional charges as follows:

- o Frost removal 0.0m to 0.2m deep - No Charge
- o Frost removal 0.2m to 0.4m deep - \$5.00/m
- o Frost removal 0.4m to 0.6m deep - \$10.00/m
- o Frost removal 0.6m to 0.8m deep - \$15.00/m
- o Frost removal 0.8m to 1.0m deep - \$20.00/m
- o Frost removal over 1.0m deep - \$25.00/m

- In the Southwest Comfort Station we will install a new 150kVA transformer, 600AMP splitter and 200AMP disconnects as shown on the layout drawings provided. From the 3 200AMP disconnects at the new splitter we will install conduits to a location where they will transition to new underground feeds for the future Phase 2 and Phase 3 electrical panels.
- This quotation includes all Electrical Safety Authority permits and fees.
- All work will be carried out by qualified electricians and apprentices.

**Our price for Phase 1 is \$39,425.99 taxes not included in price.**



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[syeinfo@samyoungelectric.com](mailto:syeinfo@samyoungelectric.com)  
[www.samyoungelectric.com](http://www.samyoungelectric.com)  
ECRA/ESA#7000707

September 13, 2017

We are pleased to submit our quotation for Phase 2 of the electrical upgrades at Long Beach Campground.

Phase 2 will include all electrical work required from the Southwest Comfort Station to the power pedestals in the Phase 2 area.

Included in this quotation is:

- Replace the existing panel A1 with a new 200AMP panel and remove the existing conductors from the existing underground conduit and replace with new larger conductors.
- Replace the existing panel A2 with a new 200AMP panel and install a new underground conduit and conductors back to the Southwest Comfort Station.
- Install new power posts with either 30AMP or 50AMP receptacles as shown on drawings provided and install new underground teck cable feeds from the new panels to the power posts. Plan to pour concrete piers to fasten new power posts to. Power posts will be fabricated from square tubing and painted black to match the existing posts.
- Included is all trenching and backfill with native soil.
- This quotation includes all Electrical Safety Authority permits and fees.
- This work will be carried out by qualified electricians and apprentices.

**Our price for Phase 2 is \$40,588.37 taxes not included in price.**

**If topsoil and seed is required please add \$1100.00.**

**If it is required to dump excess ground from trenching off site it will be billed at \$90/hr for equipment and \$50/hr for labour.**



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[www.samyoungelectric.com](http://www.samyoungelectric.com)  
ECRA/ESA#7000707

September 13, 2017

We are pleased to submit our quotation for Phase 3 of the electrical upgrades at Long Beach Campground.

Phase 3 will include all electrical work required from the Southwest Comfort Station to the power pedestals in the Phase 3 area.

Included in this quotation is:

- Replace the existing panels A3 and A4 with a new 200AMP panels and install a new underground conduit and conductors back to the Southwest Comfort Station.
- Install new power posts with either 30AMP or 50AMP receptacles as shown on drawings provided and install new underground teck cable feeds from the new panels to the power posts. Plan to pour concrete piers to fasten new power posts to. Power posts will be fabricated from square tubing and painted black to match the existing posts.
- Included is all trenching and backfill with native soil.
- This quotation includes all Electrical Safety Authority permits and fees.
- This work will be carried out by qualified electricians and apprentices.

**Our price for Phase 3 is \$49,302.90 taxes not included in price.**

**If topsoil and seed is required please add \$2200.00.**

**If it is required to dump excess ground from trenching off site it will be billed at \$90/hr for equipment and \$50/hr for labour.**

## Capital Project Detail - 2020

<b>Project Title:</b>	Historical Building Restoration - Balls Falls	<b>Project #</b>	Pending
<b>G/L Account(s):</b>	Pending	<b>Asset Class</b>	Building
<b>Priority Classification:</b>	Strategic Initiative	<b>Division</b>	Land Operations
<b>Priority Ranking:</b>	4	<b>Project Status</b>	Draft
<b>Site/Location:</b>	Ball's Falls	<b>Grouping</b>	C-3
<b>Project Lead:</b>	Jeff Fazekas	<b>Project Start Date</b>	Mar-20
<b>Funding Source:</b>	Special Levy - Niagara	<b>Project Completion</b>	Oct-20
<b>Partner (if applicable) :</b>		<b>Municipality</b>	Niagara

## PROJECT DESCRIPTION, RATIONALE, BACKGROUND, LINKAGES AND IMPLICATIONS

*Provide a detailed description of the project, why the project needs to be done now and consequences of deferring the project. Include historical cost and typical asset life cycle. Indicate if the project is linked to any other current or future project (capital or operating) and any impact to related project(s) if this project is approved or deferred.*

Historical building improvements in the Field Centre: bathrooms, barn display lighting, Ball Home window sill, central air for the bridal suite and church. The Field Centre bathrooms are primarily, and frequently used for weddings (including the bridal suite) and special events. The bathrooms are outdated and mainly constructed from plywood and used fixtures. The barn display lighting is track lighting that is outdated and is significantly beyond it's useful life. The Ball Home second story window sills will need to be restored and painted (lower level was completed in 2019). Installation of central air in the bridal suite and church would help promote facility rental (revenue generation) and building maintenance.

## NEEDS ANALYSIS &amp; BENEFITS

*Indicate project benefits, i.e. improving health and safety, customer service, increased ROI, heritage, educational, etc.*

Primary benefit for this project is that of enhanced revenue generation. Additionally, having a regulated, consistent temperature in the buildings will assist with the preservation of these historic buildings.

## Capital Project Detail - 2020

Project Title: Historical Building Restoration - Balls Falls

Project #

Pending

## RISKS &amp; MITIGATION STRATEGY

Indicate project risks and proposed mitigation; include risk assessments if the project is deferred (low/medium/high) and any risks during or post implementation. Include direct costs of not proceeding (if known) as well as any performance or service related risks.

## PROJECT COST &amp; FORECAST

Description	Prior Year(s)	2020	2021	2022	2023	2024+
Planning						
Design						
Pre-Construction						
Construction		100,000				
Internal salaries & benefits						
Internal resources - non-salary						
Warranty						
Facilities						
Equipment						
Contingency						
Other						
<b>TOTAL</b>	-	100,000	-	-	-	-

## PROJECT MILESTONES

Percent Complete	25%	50%	75%	100%
Projected Date (month/year) milestone met				Sep-20

## CASH FLOW PROJECTION (Current Year Only)

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Projected cash flow requirements - current year				100,000

## Capital Project Detail - 2020

Project Title: Historical Building Restoration - Balls Falls

Project #

Pending

## OTHER

Asset useful life: 30 years

Projected impact on operations annually: \$ -

Return on investment (ROI)

gain from investment:

cost of investment: 100,000

ROI:

Payback Period

Year

Investment

Annual Savings/Revenues

Cumulative Cost (savings)

0

1

2

## NOTES

Name and Title

Signature

Date

## Capital Project Detail - 2020

<b>Project Title:</b>	Barn Wedding Upgrades	<b>Project #</b>	Pending
<b>G/L Account(s):</b>	Pending	<b>Asset Class</b>	Building
<b>Priority Classification:</b>	Strategic Initiative	<b>Division</b>	Land Operations
<b>Priority Ranking:</b>	4	<b>Project Status</b>	Draft
<b>Site/Location:</b>	Ball's Falls	<b>Grouping</b>	C-3
<b>Project Lead:</b>	Jeff Fazekas	<b>Project Start Date</b>	Jan-20
<b>Funding Source:</b>	Special Levy - Niagara	<b>Project Completion</b>	Apr-20
<b>Partner (if applicable):</b>		<b>Municipality</b>	Niagara

## PROJECT DESCRIPTION, RATIONALE, BACKGROUND, LINKAGES AND IMPLICATIONS

*Provide a detailed description of the project, why the project needs to be done now and consequences of deferring the project. Include historical cost and typical asset life cycle. Indicate if the project is linked to any other current or future project (capital or operating) and any impact to related project(s) if this project is approved or deferred.*

Project description: Update the barn for weddings and events. Purchase new tables, benches and chairs. Construct a new storage area on the side of the barn to store tables, benches, chairs and maintenance equipment. Install a new kitchen area (new countertop, fridges, sink and prep area). Purchase a new floor machine to assist with the overnight clean of the facility (current floor machine is 10+ years old and is at the end of its life cycle). Replace outdated lighting with LED Lighting and replace driveway, sidewalk, caterer's prep pad and install new pad for storage area with concrete.

Rationale: Replace outdated accessories and furnishings and to provide the best service possible to maintain and support growth of revenue generation. Constructing a new storage area will assist in equipment maintenance (storage of floor machine and cleaning supplies), storage of unused furnishings such as tables, chairs and ladders (as of now this equipment and furnishings are left outdoors). The tables and benches rented out are 25+ years. The kitchen area is not functional for these type of events.

Capital Project will support incremental revenues and allow response to competitive pressures.

Tables (30) - \$30,000

Floor Machine - \$10,000

Concrete - \$15,000

Commercial Appliances - \$20,000

Shed - \$10,000

Lighting - \$5,000

## NEEDS ANALYSIS &amp; BENEFITS

*Indicate project benefits, i.e. improving health and safety, customer service, increased ROI, heritage, educational, etc.*

Project Benefits: Improve special events by updating the furniture and functionality of the barn's interior and exterior while increasing customer service.

Improving health and safety by updating the kitchen area and floor machine for cleanliness and improved lighting.

## Capital Project Detail - 2020

Project Title: Barn Wedding Upgrades

Project #

Pending

## RISKS &amp; MITIGATION STRATEGY

Indicate project risks and proposed mitigation; include risk assessments if the project is deferred (low/medium/high) and any risks during or post implementation. Include direct costs of not proceeding (if known) as well as any performance or service related risks.

## PROJECT COST &amp; FORECAST

Description	Prior Year(s)	2020	2021	2022	2023	2024+
Planning						
Design						
Pre-Construction						
Construction						
Internal salaries & benefits						
Internal resources - non-salary						
Warranty						
Facilities		20,000				
Equipment		70,000				
Contingency						
Other						
<b>TOTAL</b>	-	<b>90,000</b>	-	-	-	-

## PROJECT MILESTONES

Percent Complete	25%	50%	75%	100%
Projected Date (month/year) milestone met				Apr-20

## CASH FLOW PROJECTION (Current Year Only)

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Projected cash flow requirements - current year		90,000		

## Capital Project Detail - 2020

Project Title: Barn Wedding Upgrades

Project #

Pending

## OTHER

Asset useful life: 10 years

Projected impact on operations annually: \$ -

Return on investment (ROI)

gain from investment:

cost of investment: 90,000

ROI:

Payback Period

Year

Investment

Annual Savings/Revenues

Cumulative Cost (savings)

0

1

2

## NOTES

Name and Title

Signature

Date

## Capital Project Detail - 2020

<b>Project Title:</b>	Tyneside Trail Upgrades - Binbrook	<b>Project #</b>	Pending
<b>G/L Account(s):</b>	Pending	<b>Asset Class</b>	Land Improvements
<b>Priority Classification:</b>	Strategic Initiative	<b>Division</b>	Land Operations
<b>Priority Ranking:</b>	3	<b>Project Status</b>	Draft
<b>Site/Location:</b>	Binbrook Conservation Area	<b>Grouping</b>	F-1
<b>Project Lead:</b>	Adam Christie	<b>Project Start Date</b>	May-20
<b>Funding Source:</b>	Special Levy - Hamilton	<b>Project Completion</b>	Oct-20
<b>Partner (if applicable):</b>	Glanbrook Conservation Club	<b>Municipality</b>	Hamilton

## PROJECT DESCRIPTION, RATIONALE, BACKGROUND, LINKAGES AND IMPLICATIONS

*Provide a detailed description of the project, why the project needs to be done now and consequences of deferring the project. Include historical cost and typical asset life cycle. Indicate if the project is linked to any other current or future project (capital or operating) and any impact to related project(s) if this project is approved or deferred.*

Tyneside Trail upgrades is comprised of two parts.

1. Spreading of stone screenings over 84M (275ft) of the "Nebo Flats" with spot spreading in other areas on the Tyneside Trail.
2. Construction and installation of two new sections of boardwalk; one 9.14M (30 feet) in length and one 12.19M (40 feet) in length to replace existing boardwalk built in 1997, both on the Tyneside Trail.

The stone screenings are being spread over a long section along the Nebo marsh and parallel to Camp Marydale. This section of the Tyneside Trail has never received a top dressing of screenings like other sections of the trail. Consequently this section can become quite muddy and difficult for hikers to cross. Extra stone will be used to top dress other trail areas as needed.

The original boardwalk was built 1.06M (42") wide in 1997. This width is adequate for hikers but is not wide enough to accommodate equipment used for trail maintenance such as JD gators and ATV's pulling wagons. The new boardwalk will be built 1.82M (72") wide to accommodate these vehicles. In addition, the existing boardwalk has started to deteriorate enough that rehabilitation is required.

## NEEDS ANALYSIS &amp; BENEFITS

*Indicate project benefits, i.e. improving health and safety, customer service, increased ROI, heritage, educational, etc.*

The Tyneside Trail is used by hikers, naturalists, bird watchers and dog walkers year round. In recent years with the building of CYO Camp Marydale, there has been a significant increase in trail usage, especially on the eastern half of the Tyneside Trail. Camp Marydale uses the trail for nature walks for summer campers as well as school classes for their outdoor education program. Upgrading the trail will improve the hiking experience for all users.

## Capital Project Detail - 2020

Project Title: Tyneside Trail Upgrades - Binbrook

Project #

Pending

## RISKS &amp; MITIGATION STRATEGY

Indicate project risks and proposed mitigation; include risk assessments if the project is deferred (low/medium/high) and any risks during or post implementation. Include direct costs of not proceeding (if known) as well as any performance or service related risks.

Medium Risk

Currently the Tyneside trail is not up to NPCA standards and has risk of liability with the current condition of the trail.

## PROJECT COST &amp; FORECAST

Description	Prior Year(s)	2020	2021	2022	2023	2024+
Planning						
Design						
Pre-Construction						
Construction						
Internal salaries & benefits						
Internal resources - non-salary						
Warranty						
Facilities		10,000				
Equipment						
Contingency						
Other						
<b>TOTAL</b>	-	<b>10,000</b>	-	-	-	-

## PROJECT MILESTONES

Percent Complete				
Projected Date (month/year) milestone met				

## CASH FLOW PROJECTION (Current Year Only)

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Projected cash flow requirements - current year		5,000	5,000	

## Capital Project Detail - 2020

Project Title: Tyneside Trail Upgrades - Binbrook

Project #

Pending

## OTHER

Asset useful life: 10 years

Projected impact on operations annually: \$ -

Return on investment (ROI)

gain from investment:

cost of investment:

10,000

ROI:

Payback Period

Year

Investment

Annual Savings/Revenues

Cumulative Cost (savings)

0

1

2

## NOTES

Since its inception, the Glanbrook Conservation Committee has run projects efficiently by purchasing material and relying on volunteers to provide labour to complete projects. As needed they have the full support of the Niagara Peninsula Conservation Authority staff.

The Tyneside Trail has been a unique volunteer project. With the permission of the NPCA, the Glanbrook Conservation Committee has built and maintained the trail since first opening it August 1997. Thousands of hikers have come over the years to enjoy the peace and tranquility as they walk along the shores of Lake Niapenco.

Name and Title

Signature

Date

## Capital Project Detail - 2020

<b>Project Title:</b>	Equipment Sustainment - Land Operations	<b>Project #</b>	Pending
<b>G/L Account(s):</b>	Pending	<b>Asset Class</b>	Equipment
<b>Priority Classification:</b>	Asset Integrity – Proactive Replacement	<b>Division</b>	Land Operations
<b>Priority Ranking:</b>	4	<b>Project Status</b>	Draft
<b>Site/Location:</b>	Ball's Falls/ Binbrook/ Chippawa/ Long Beach/ Central	<b>Grouping</b>	B-4
<b>Project Lead:</b>	Jeff Fazekas	<b>Project Start Date</b>	Jan-20
<b>Funding Source:</b>	Special Levy - ALL	<b>Project Completion</b>	Dec-20
<b>Partner (if applicable) :</b>		<b>Municipality</b>	ALL

## PROJECT DESCRIPTION, RATIONALE, BACKGROUND, LINKAGES AND IMPLICATIONS

*Provide a detailed description of the project, why the project needs to be done now and consequences of deferring the project. Include historical cost and typical asset life cycle. Indicate if the project is linked to any other current or future project (capital or operating) and any impact to related project(s) if this project is approved or deferred.*

Please see embedded Equipment Sustainment Schedule - LAND OPERATIONS for all details.

Purchase of 5 new lawn mowers for various sites. (3 zero turn mowers and 2 riding mowers)

Lawn mowers have a useful life cycle of 4 years. Historically, each site was equipped with a single lawn mower and has relied on Gainsborough to assist with lawn cutting. Recently, each site was equipped with two mowers to facilitate each site's self sufficiency to maintain and keep up with day to day operations. This has dramatically facilitated the maintenance of each CA site.

Purchase of a new Skid Steer similar to the existing T770 Bobcat with a high flow hydraulic output to accommodate multiple attachments.

NPCA uses the current skid steer daily for multiple projects such as trail maintenance, Festival setup, park operations (spreading stone, moving structures, post hole auger, etc.). NPCA currently rents the T770 Bobcat for tree stumping, brush mulching and tree trunk removal, spending an estimated \$12,000 annually on rentals. With the amount of hours on the current (owned) skid steer, maintenance cost are increasing and will continue to do so exponentially with age.

Current Skid Steer is 15+ years old

Purchase of a new single and double float trailer

Addition of another maintenance crew to support operational pressures (park maintenance, trail maintenance, comfort stations, garbage clean up)

Sky Jack for Centre for Conservation

Assist with maintenance and custodial work at the Centre for Conservation. Will be able to access ceiling areas, high windows and lighting for maintenance and servicing.

Tractor - Ball's Falls

Tractors have a useful life of 10 years. The tractor at Ball's Falls is used to help with day to day operations (towing, gravel work, bush hog) and is approximately 15 years old.

All of the equipment is Kubota and attachments are interchangeable (post hole auger, tree stumper, snow blower, forks, bush hog)

Current fleet has a total of 4 tractors

## Capital Project Detail - 2020

Project Title: Equipment Sustainment - Land Operations

Project #

Pending

## NEEDS ANALYSIS &amp; BENEFITS

Indicate project benefits, i.e. improving health and safety, customer service, increased ROI, heritage, educational, etc.

**Mowers:** needed to maintain conservation areas for excellent customer service

**Skid Steer** will be utilized at all CA sites and can accommodate multiple attachments. Currently we rent this equipment

**Float Trailer:** Improved site maintenance with increased staff and equipment

**Sky Jack:** Assist with maintenance and custodial work at Centre for Conservation. Reduce rental of sky jacks equipment. Increased capacity for repairs and maintenance.

## RISKS &amp; MITIGATION STRATEGY

Indicate project risks and proposed mitigation; include risk assessments if the project is deferred (low/medium/high) and any risks during or post implementation. Include direct costs of not proceeding (if known) as well as any performance or service related risks.

Aging equipment incurs exponentially increasing repairs and maintenance costs. Green alternatives will be investigated for all proposed acquisitions.

**Tractor:** mechanical liability if not replaced, high maintenance cost is occurring due to excessive usage. Current tractor will be traded in to mitigate cost.

Efficiency of new equipment will result in reduced repairs and maintenance costs, including fuel.

## PROJECT COST &amp; FORECAST

Description	Prior Year(s)	2020	2021	2022	2023	2024+
Planning						
Design						
Construction						
Internal salaries & benefits						
Internal resources - non-salary						
Warranty						
Facilities						
Equipment		228,280	105,000			
Contingency						
Other						
<b>TOTAL</b>	-	<b>228,280</b>	<b>105,000</b>	-	-	-

## PROJECT MILESTONES

Percent Complete	25%	50%	75%	100%
Projected Date (month/year) milestone met				Dec-20

## CASH FLOW PROJECTION (Current Year Only)

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Projected cash flow requirements - current year	57,070	57,070	57,070	57,070

## Capital Project Detail - 2020

Project Title: Equipment Sustainment - Land Operations

Project #

Pending

## OTHER

Asset useful life: Various years

Projected impact on operations annually: \$ -

## Return on investment (ROI)

gain from investment:

cost of investment: 343,280

ROI:

Payback Period	Year	Investment	Annual Savings/Revenues	Cumulative Cost (savings)
	0			
	1			
	2			

## NOTES

Equipment Sustainment Schedule - LAND OPERATIONS



Name and Title

Signature

Date

## Capitalized Equipment Sustainment Schedule - 2020 to 2035 - LAND OPERATIONS

Capitalized Equipment Sustainment Schedule - 2020 to 2033 - LAND OPERATIONS												
Equipment	Serial #	Location	Unit		Notes / Comments	Replacement		Munic	Useful Life (Years)	2020	2021	2022
			Year	Hours		Value	Value Date					
Mowing Equipment												
3990 Kubota mower		Long Beach			existing mower - needs replacing	trade-in		Niagara		(15,000)		
3990 Kubota mower		Central			existing mower - needs replacing	trade-in		Various		(15,000)		
3990 Kubota mower	New	Long Beach	New		Discussion with vendor regarding re-gen	32,000	New	Niagara	4	32,000		
Kubota ZD1500 Zero-Turn Mower	New	Long Beach	New			27,256	New	Niagara	4	27,256		
Kubota ZD1500 Zero-Turn Mower	New	Balls Falls	New			27,256	New	Niagara	4	27,256		
Kubota ZD1500 Zero-Turn Mower	New	Binbrook	New			27,256	New	hamilton	4	27,256		
Kubota ZD1500 Zero-Turn Mower	New	Central	New			27,256	New	Various	4	27,256		
Kubota ZD1500 Zero-Turn Mower	New	Central	New			27,256	New	Various	4	27,256		
Ferris 5100 - Zero-Turn Mower		Balls Falls				trade-in value for ZD1500			Niagara		(15,000)	
Sub Total										123,280	-	-
Utility Vehicles												
Skid-steer		Central			End of useful life - trade-in for new equipment	trade-in				(10,000)		
Bobcat T770 Skid Steer	New	Central	New			125,000	New	Various	10	115,000		
Sub Total										105,000	-	-
Other												
Float Trailer / Double Length Float	New	Central			Existing tractor - needs replacing	20,000	New	Niagara	10		20,000	
Skyjack	New	Balls Falls				25,000	New	Niagara	10		25,000	
Tractor		Balls Falls				trade-in		Niagara			(10,000)	
Tractor	New	Balls Falls				70,000	New	Niagara	10		70,000	
Sub Total										-	105,000	-
TOTAL										228,280	105,000	-

## Capital Project Detail - 2020

<b>Project Title:</b>	Black Walnut Septic - Chippawa Creek	<b>Project #</b>	Pending
<b>G/L Account(s):</b>	Pending	<b>Asset Class</b>	Land Improvements
<b>Priority Classification:</b>	Code Compliance and Legislation	<b>Division</b>	Land Operations
<b>Priority Ranking:</b>	3	<b>Project Status</b>	Draft
<b>Site/Location:</b>	Chippawa Creek	<b>Grouping</b>	G-1
<b>Project Lead:</b>	Jeff Fazekas	<b>Project Start Date</b>	May-20
<b>Funding Source:</b>	Special Levy - Niagara	<b>Project Completion</b>	Jul-20
<b>Partner (if applicable):</b>		<b>Municipality</b>	Niagara

## PROJECT DESCRIPTION, RATIONALE, BACKGROUND, LINKAGES AND IMPLICATIONS

*Provide a detailed description of the project, why the project needs to be done now and consequences of deferring the project. Include historical cost and typical asset life cycle. Indicate if the project is linked to any other current or future project (capital or operating) and any impact to related project(s) if this project is approved or deferred.*

Design and scope of septic - Black Walnut comfort station

The existing pipe is currently in a Y shape causing septic backflow. A straight pipe will eliminate any malfunctions from the existing design, therefore eliminating staff maintenance.

Project execution: 2021

## NEEDS ANALYSIS &amp; BENEFITS

*Indicate project benefits, i.e. improving health and safety, customer service, increased ROI, heritage, educational, etc.*

Improve health and safety by eliminating septic backflow into day use washrooms.

## Capital Project Detail - 2020

Project Title: Black Walnut Septic - Chippawa Creek

Project #

Pending

## RISKS &amp; MITIGATION STRATEGY

Indicate project risks and proposed mitigation; include risk assessments if the project is deferred (low/medium/high) and any risks during or post implementation. Include direct costs of not proceeding (if known) as well as any performance or service related risks.

When backflow occurs during heavy usage, the washrooms are shut down.

## PROJECT COST &amp; FORECAST

Description	Prior Year(s)	2020	2021	2022	2023	2024+
Planning						
Design		10,000				
Pre-Construction						
Construction						
Internal salaries & benefits						
Internal resources - non-salary						
Warranty						
Facilities						
Equipment						
Contingency						
Other						
<b>TOTAL</b>	-	10,000	-	-	-	-

## PROJECT MILESTONES

Percent Complete	25%	50%	75%	100%
Projected Date (month/year) milestone met				Mar-20

## CASH FLOW PROJECTION (Current Year Only)

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Projected cash flow requirements - current year	10,000			

## Capital Project Detail - 2020

<b>Project Title:</b>	<b>Black Walnut Septic - Chippawa Creek</b>	<b>Project #</b>	<b>Pending</b>
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## OTHER

<b>Asset useful life:</b>	pending	years
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<b>Projected impact on operations annually:</b>	\$	-
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<b>Return on investment (ROI)</b>	gain from investment:		
	cost of investment:	10,000	

<b>ROI:</b>	
-------------	--

<b>Payback Period</b>	<b>Year</b>	<b>Investment</b>	<b>Annual Savings/Revenues</b>	<b>Cumulative Cost (savings)</b>
	0			
	1			
	2			

## NOTES

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Name and Title

Signature

Date

## Capital Project Detail - 2020

<b>Project Title:</b>	Gainsborough Workshop Cistern	<b>Project #</b>	Pending
<b>G/L Account(s):</b>	Pending	<b>Asset Class</b>	Building
<b>Priority Classification:</b>	Operational Efficiency	<b>Division</b>	Land Operations
<b>Priority Ranking:</b>	4	<b>Project Status</b>	Draft
<b>Site/Location:</b>	Gainsborough CA	<b>Grouping</b>	C-3
<b>Project Lead:</b>	Jeff Fazekas	<b>Project Start Date</b>	Apr-20
<b>Funding Source:</b>	Special Levy - Niagara	<b>Project Completion</b>	Sep-20
<b>Partner (if applicable) :</b>		<b>Municipality</b>	Niagara

## PROJECT DESCRIPTION, RATIONALE, BACKGROUND, LINKAGES AND IMPLICATIONS

*Provide a detailed description of the project, why the project needs to be done now and consequences of deferring the project. Include historical cost and typical asset life cycle. Indicate if the project is linked to any other current or future project (capital or operating) and any impact to related project(s) if this project is approved or deferred.*

Installation of a potable water cistern at Gainsborough CA

Currently, Gainborough workshop water source is a well located on the property. Due to the well being natural, it is hard water with a sulfur smell. Staff are unable to drink the water and the smell of sulfur is pervasive. Additionally, minerals from the hard water is problematic on the pump system, resulting in calcium coatings on the pipes. A water softener and UV unit will need to be installed also.

## NEEDS ANALYSIS &amp; BENEFITS

*Indicate project benefits, i.e. improving health and safety, customer service, increased ROI, heritage, educational, etc.*

Installing a cistern will create better working conditions and improve health and safety of the staff

## Capital Project Detail - 2020

Project Title: Gainsborough Workshop Cistern

Project #

Pending

## RISKS &amp; MITIGATION STRATEGY

Indicate project risks and proposed mitigation; include risk assessments if the project is deferred (low/medium/high) and any risks during or post implementation. Include direct costs of not proceeding (if known) as well as any performance or service related risks.

Failure to install a new cistern will result in the continuation of very poor working conditions for the staff.

## PROJECT COST &amp; FORECAST

Description	Prior Year(s)	2020	2021	2022	2023	2024+
Planning						
Design						
Pre-Construction						
Construction						
Internal salaries & benefits						
Internal resources - non-salary						
Warranty						
Facilities		40,000				
Equipment						
Contingency						
Other						
<b>TOTAL</b>	-	<b>40,000</b>	-	-	-	-

## PROJECT MILESTONES

Percent Complete	25%	50%	75%	100%
Projected Date (month/year) milestone met			Sep-20	

## CASH FLOW PROJECTION (Current Year Only)

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Projected cash flow requirements - current year			40,000	

## Capital Project Detail - 2020

<b>Project Title:</b> Gainsborough Workshop Cistern		<b>Project #</b>		Pending
<b>OTHER</b>				
<b>Asset useful life:</b>		30 years		
<b>Projected impact on operations annually:</b>		\$ -		
<b>Return on investment (ROI)</b>		gain from investment:		
		cost of investment: 40,000		
<b>ROI:</b>				
<b>Payback Period</b>	<b>Year</b>	<b>Investment</b>	<b>Annual Savings/Revenues</b>	<b>Cumulative Cost (savings)</b>
	0			
	1			
	2			
<b>NOTES</b>				
Name and Title		Signature		Date

## Capital Project Detail - 2020

<b>Project Title:</b>	Gainsborough Workshop Upgrades	<b>Project #</b>	Pending
<b>G/L Account(s):</b>	Pending	<b>Asset Class</b>	Building
<b>Priority Classification:</b>	Asset Integrity – Proactive Replacement	<b>Division</b>	Land Operations
<b>Priority Ranking:</b>	4	<b>Project Status</b>	Draft
<b>Site/Location:</b>	Gainsborough CA	<b>Grouping</b>	C-3
<b>Project Lead:</b>	Jeff Fazekas	<b>Project Start Date</b>	Jan-20
<b>Funding Source:</b>	Special Levy - Niagara	<b>Project Completion</b>	Dec-20
<b>Partner (if applicable):</b>		<b>Municipality</b>	Niagara

## PROJECT DESCRIPTION, RATIONALE, BACKGROUND, LINKAGES AND IMPLICATIONS

*Provide a detailed description of the project, why the project needs to be done now and consequences of deferring the project. Include historical cost and typical asset life cycle. Indicate if the project is linked to any other current or future project (capital or operating) and any impact to related project(s) if this project is approved or deferred.*

Gainsborough workshop interior and exterior upgrades and renovations

Workshop has not been updated for 35+ years.

Exterior - security system, siding, doors, gate system

Interior - lightning, ceiling, complete renovation of upper level, windows, interior doors, central air

## NEEDS ANALYSIS &amp; BENEFITS

*Indicate project benefits, i.e. improving health and safety, customer service, increased ROI, heritage, educational, etc.*

Improve employee work conditions

Improve health and safety

## Capital Project Detail - 2020

Project Title: Gainsborough Workshop Upgrades

Project #

Pending

## RISKS &amp; MITIGATION STRATEGY

Indicate project risks and proposed mitigation; include risk assessments if the project is deferred (low/medium/high) and any risks during or post implementation. Include direct costs of not proceeding (if known) as well as any performance or service related risks.

Failure to perform these needed repairs can lead to continued deterioration of the facility.

## PROJECT COST &amp; FORECAST

Description	Prior Year(s)	2020	2021	2022	2023	2024+
Planning						
Design						
Pre-Construction						
Construction						
Internal salaries & benefits						
Internal resources - non-salary						
Warranty						
Facilities		100,000				
Equipment						
Contingency						
Other						
<b>TOTAL</b>	-	100,000	-	-	-	-

## PROJECT MILESTONES

Percent Complete	25%	50%	75%	100%
Projected Date (month/year) milestone met				

## CASH FLOW PROJECTION (Current Year Only)

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Projected cash flow requirements - current year	25,000	25,000	25,000	25,000

## Capital Project Detail - 2020

Project Title: Gainsborough Workshop Upgrades

Project #

Pending

## OTHER

Asset useful life: 40 years

Projected impact on operations annually: \$

Return on investment (ROI)

gain from investment:

cost of investment:

100,000

ROI:

Payback Period

Year

Investment

Annual Savings/Revenues

Cumulative Cost (savings)

0

1

2

## NOTES

Name and Title

Signature

Date

## Capital Project Detail - 2020

<b>Project Title:</b>	Centre For Conservation Museum Upgrades	<b>Project #</b>	Pending
<b>G/L Account(s):</b>	Pending	<b>Asset Class</b>	Building
<b>Priority Classification:</b>	Strategic Initiative	<b>Division</b>	Land Operations
<b>Priority Ranking:</b>	3	<b>Project Status</b>	Draft
<b>Site/Location:</b>	Ball's Falls Conservation Area	<b>Grouping</b>	H-1
<b>Project Lead:</b>	Alicia Powell	<b>Project Start Date</b>	
<b>Funding Source:</b>	Special Levy - Niagara	<b>Project Completion</b>	
<b>Partner (if applicable) :</b>		<b>Municipality</b>	Niagara

## PROJECT DESCRIPTION, RATIONALE, BACKGROUND, LINKAGES AND IMPLICATIONS

*Provide a detailed description of the project, why the project needs to be done now and consequences of deferring the project. Include historical cost and typical asset life cycle. Indicate if the project is linked to any other current or future project (capital or operating) and any impact to related project(s) if this project is approved or deferred.*

Updates to the Gallery and exhibit space in the Centre for Conservation at Ball's Falls.

As a capital project in 2019, the NPCA committed to \$80,000 towards updating the current exhibit and gallery within the Centre for Conservation. The project will include: new lighting, new passive exhibits and informational signage, interactive children's activities in heritage and ecology, and interactive activities for guests. As a result of staffing changes this project and approved funding of \$80,000 will be carried forward and disbursed in 2020.

Updates to the Gallery have not taken place during the existence of the CFC and are required to continue to deliver on value-for-money in day use fees, and to continue to honour the natural and cultural heritage of the site. If this project is deferred, the Gallery space will remain outdated and minimally used. The intended upgrades and additional interactives are intended to have a life cycle of 10-15 years at minimum, and should continue to be updated.

The total project cost is \$160,000



## NEEDS ANALYSIS &amp; BENEFITS

*Indicate project benefits, i.e. improving health and safety, customer service, increased ROI, heritage, educational, etc.*

The Gallery in the Centre for Conservation at Ball's Falls has not been updated in 11 years of operation. Exhibits are dated, inaccurate since new research has been released, or no longer operational. Further, the Gallery is nearly entirely passive, and does not involve interactive activities for a range of ages and abilities. With an update to the Gallery and exhibit space in the CFC., the NPCA would be able to provide interactive, educational information and activities that would address guests from across the life course and those of diverse abilities. This update would considerably improve the guest experience of Ball's Falls Conservation Area, providing an Updates to the Gallery would improve for educational opportunities as well as expand and deliver on more of the existing social, cultural, natural and geological history of the site.

## Capital Project Detail - 2020

Project Title: Centre For Conservation Museum Upgrades

Project #

Pending

## RISKS &amp; MITIGATION STRATEGY

Indicate project risks and proposed mitigation; include risk assessments if the project is deferred (low/medium/high) and any risks during or post implementation. Include direct costs of not proceeding (if known) as well as any performance or service related risks.

## PROJECT COST &amp; FORECAST

Description	Prior Year(s)	2020	2021	2022	2023	2024+
Planning	10,000					
Design						
Pre-Construction						
Construction						
Internal salaries & benefits						
Internal resources - non-salary	70,000	80,000				
Warranty						
Facilities						
Equipment						
Contingency						
Other						
<b>TOTAL</b>	<b>80,000</b>	<b>80,000</b>	-	-	-	-

## PROJECT MILESTONES

Percent Complete				
Projected Date (month/year) milestone met				

## CASH FLOW PROJECTION (Current Year Only)

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Projected cash flow requirements - current year				

## Capital Project Detail - 2020

Project Title: Centre For Conservation Museum Upgrades

Project #

Pending

## OTHER

Asset useful life: 30 years

Projected impact on operations annually: \$ -

Return on investment (ROI)

gain from investment:

cost of investment:

160,000

ROI:

Payback Period	Year	Investment	Annual Savings/Revenues	Cumulative Cost (savings)
	0			
	1			
	2			

## NOTES



Name and Title

Signature

Date

## APENDIX E- RFP PARTICULARS

### A. THE DELIVERABLES

The Niagara Peninsula Conservation Authority invites qualified exhibit designers to submit proposals for the design, construction, and installation of a permanent gallery at Ball's Falls Conservation Area. The design work should consider flow, accessibility, lighting, and interactivity. The successful candidate will also be responsible for writing the initial drafts of the text for the exhibit, to be edited by the Manager of Strategic Initiatives.

The space is approximately 820 sq. feet non-rectangular space. The items to be on display will come from the artifact collection at Ball's Falls Conservation Area.

The following themes have been identified for the project:

**A Flowing Past: the Twenty Mile Creek, how culture and the environment interact.**

- 1.0 Watershed
- 2.0 Bird ID
- 3.0 Plants and Animals Carolinian Forest Diversity
- 4.0 First Nations
- 5.0 Rise and Fall of Glen Elgin
- 6.0 Escarpment
- 7.0 NPCA/Ball's Falls today
- 8.0 Impacts and Solutions
- 9.0 Recreation

See the appendix for more detailed description of these themes.

The exhibit should be developed to be interactive and reaching to a wide range of audience. The audience will be varied from preschool aged children, to seniors, and everything in between. The goal of the project is to create a hands-on learning environment for a variety of age levels, while presenting a cohesive story of how the river, the environment, and the history of the site all connect.

This project includes all aspects of design, build, and installation of the exhibit including designer fees. Overruns and added expenses cannot be assumed in the proposals. The successful candidate will have a large body of material to work with, and NPCA staff will be available for additional information, and to assist in the development of the story. The designer will be expected to be available for the installation of the exhibit with the assistance of the CA staff.

The designer will be expected to provide the Niagara Peninsula Conservation Authority with design ready artwork for promotional materials and other collateral materials such as programming materials. The exhibit designer must grant to the Niagara Peninsula Conservation Authority usage rights and copyright to all created products and/or any portions of these determined by the Niagara Peninsula Conservation Authority in their sole discretion, throughout the world, and in any and all media or communication now or hereafter developed, in any language, in connection with the production, display, distribution, transmission, and other exploitations (commercial or otherwise) of the exhibit. The rights granted to Niagara Peninsula Conservation Authority include, without limitation, the right to cut, copy, edit, alter and otherwise deal with the created products as the Niagara Peninsula Conservation Authority in their sole discretion determines.

**B. MATERIALS DISCLOSED**

1. **What is a Watershed:** This part of the exhibit will set the overview of what is a watershed, what is the 20 Mile Creek Watershed, and how it connects into the larger Great Lakes watershed. This theme should include an interactive enviroscape that allows visitors to see how a watershed works.
2. **Bird ID:** This part of the exhibit can be incorporated into the whole gallery space, allowing visitors to identify the birds that migrate through, or call Ball's Falls home. Ball's Falls is a migratory route for many birds as they migrate north and south for the seasons. It is also home to a large variety of birds including Red Tailed Hawks, Eastern Blue Birds, Turkey Vultures, and many more. This part of the exhibit should include silhouettes of birds mounted on the ceiling that would allow visitors to identify what they are seeing outside as the birds fly over.
3. **Plants and Animals of the Carolinian Forest:** This section of the exhibit should focus on the diversity of plant and animal life at Ball's Falls. Ball's Falls Conservation Area is home to a Carolinian Forest, which makes its most northern reaches in Southern Ontario. A Carolinian Forest is a deciduous forest with a large amount of diversity of plant and animal life. Some examples of plant and animal species are white tailed deer, chickadees, southern flying squirrel, tulip tree, and sassafras tree. All these species can be found at Ball's Falls CA. This portion of the exhibit should include an interactive nurse log that would allow visitors to look under to see what makes its home under logs in the forest. As well it should include interactives on the plants and animals that are found in the Carolinian Forest. Ball's Falls does have a small amount of specimen that can be used for the exhibit and can be a source for other plant or animal specimen that would be necessary.

Sample specimen from our collection:



Southern Flying Squirrel

4. **First Nations:** The exhibit focus on culture begins with the Indigenous communities that lived, worked, and used the land in this area, specifically the Anishinaabe and Haudenosaunee. Although no permanent settlement has been discovered on Ball's Falls site, it was used as hunting grounds, as well as a road and portage area. Artifacts have been collected through archeological surveys that are available for interpretation.

Sample artifacts from our collection:



Clay pipes found on site.

5. **Rise and Fall of Glen Elgin:** This part of the exhibit can be divided into four subthemes.
- Establishment by George and John Ball- in 1807 George and John Ball purchased 1200 acres of land on what is now Ball's Falls. They set about building mills that operated using the 20 Mile Creek. This section of the exhibit should focus on the early settlement of the hamlet, and the establishment of the mills. There are limited photo artifacts that can be utilized, as well as original pieces of the mills that can be used.



Flour stencil



Bag holder

- The peak of Glen Elgin and George P.M Ball's business- by the 1850's Glen Eglin was a flourishing mill town. Housing had been built to hold the workers at the mills. Three mills and two lime kilns were operating, selling their good to Great Britain as well as the local market. Led by George P.M. Ball, the son of George Ball, Glen Elgin was a successful industrial hamlet. George P.M. Ball built his house that still stands today on site, including a general store in the front of the house. This area of the exhibit should include an interactive component of the records that are available, as well as a small reproduction of the general store that would allow visitors to role play in the gallery space.



## Handbill for Grist Work and Wool

## Transaction Records from 1843

- c. Life in a Mill Town- This area of the exhibit should focus on the life of the general labourers that worked at the mills and the trades related to the mills. Questions that should be addressed are: what a typical day would look like, how life was different for the workers vs the owners (Ball Family), and how they made a living.
  - d. The decline of Glen Elgin- With the introduction of steam engines in the industrial revolution, transportation bypassing the hamlet, and a depression in the flour industry the village of Glen Elgin began a quick decline in the late 1850's. By the 1870's all but the Grist Mill had closed, and the hamlet of Glen Elgin died away. Records and recipes are available from the decline, as well as census records can be accessed to show the decline of the hamlet.
- 6. Escarpment-** Ball's Falls Conservation Area is located on the Niagara Escarpment. Over half a billion years ago this area was covered by an ancient shallow sea. The rock layers that are visible today are sedimentary layers of the sediment from the ancient lake. The escarpment has played an important role in the ecology as well as the history of the site. This area of the exhibit should focus on the formation of the escarpment, and the fossils that can be found in the rocks. Rock samples from a drill are available as well as many fossils. An interactive component to the rocks or the fossils should be explored. A replica rock wall can be recycled from the previous exhibit.



## Fossil samples

## Rock strata samples

7. **NPCA Ball's Falls Today-** This area of the exhibit can be a small section that outlines what Ball's Falls is today. Ball's Falls is known for its hiking, historical village, wedding location, field trip destination, and Thanksgiving Festival. Photos are available from the 1960's to present of different activities that take place at the park.
8. **Impacts and Solutions-** this area of the exhibit will take a closer look at what we are doing and what we have done to the ecosystem along the river. Emphasis should be on pollution, erosion, and concluding with restoration. The NPCA monitors water quality and this data is easily available for the exhibit. As well, restoration projects have been carried out by the NPCA to cut back on erosion and pollution in the river and can be used as examples. Historically, logging was carried out on site and increased the amount of erosion along the river. An interactive logging, and what people can do at home should be included in this section of the exhibit.

**Exhibit Notes:**

All the artifacts in our collection are at the exhibit designer disposal. Our artifact collection inventory is available onsite for the exhibit designer to utilize.

In addition, specimen, ecological data, and restoration projects can be accessed through appropriate NPCA staff.

Extensive information about the history is available at Ball's Falls Conservation Area. No digital files are available currently.

**Educational Components:**

The educational components of this exhibit are to be twofold- staffed interpretative programming, and self-guided educational resources.

1. **Staff Interpretative Programming-** A part of the development of this exhibition will include the development of educational programming that includes ties to the Ontario Curriculum. These programs will be developed by NPCA staff. The programs will be geared towards students of all age levels, and many include some of the hands-on interactive material that is designed in the exhibit. While designing interactive material, a special note to Ontario Curriculum will be necessary, as well as communication with NPCA programming staff.
2. **Self-Guided Educational Resources-** For visitors of the exhibit who are not part of a formal education program resources and materials will be made available to provide a deeper understanding of the topics. This can be in the form of scavenger hunts, colouring pages, and other activities or hands on as deemed necessary. This as well will be developed by NPCA programming staff.

**Report To: Board of Directors**

**Subject: C.A.O. Recruitment Consultant - P.O. Change Order**

**Report No: FA-147-19**

**Date: October 16, 2019**

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**Recommendation:**

1. **THAT** Report No. FA-147-19 RE: C.A.O. Recruitment Consultant - P.O. Change Order **BE RECEIVED.**
2. **THAT** the Board **AUTHORIZES** the expenditure of an additional \$10,000 plus any advertising to the firm of Feldman Daxon Partners, Inc. to undertake recruitment of a C.A.O./Secretary-Treasurer.
3. **THAT** the Board now **DEEMS** Recommendation No. SC-32-1019 of the C.A.O. Selection Committee to be approved as presented for consideration at the Board meeting of September 18, 2019.

**Purpose:**

The purpose of this report is to obtain Board approval to incur an additional expense in the amount of \$10,000 for Feldman Daxon Partners, Inc. to re-initiate and complete a recruitment for the C.A.O./Secretary – Treasurer position.

**Background:**

In April of 2019, in accordance with the NPCA Request for Proposals process, the firm of Feldman Daxon Partners, Inc. was retained to undertake the recruitment of a C.A.O./Secretary-Treasurer. On June 28, after performing an extensive search, Feldman Daxon presented a list of candidates to the NPCA C.A.O. Selection Committee for consideration. At its July 17 meeting, the NPCA Board of Directors issued instruction to enter into an agreement with the interim Chief Administrative Officer to extend her tenure until December 31, 2019.

At its Board meeting of August 21, the Board then requested that the C.A.O. Selection Committee meet to restart the selection process. In September, the C.A.O. Selection Committee met with Feldman Daxon and was informed that a number of the previous candidates recommended to the Committee were not available for consideration.

On September 18, the NPCA Board was presented with Recommendation No. SC-32-2019 from the C.A.O. Selection Committee as follows:

*“THAT the C.A.O. Selection Committee recommends an additional \$10,000 be authorized for the recruitment process”.*

The Board referred the matter to staff for follow-up in accordance with the NPCA Procurement Policy and a report back to the Board.

### **Discussion:**

The Procurement Policy of the NPCA requires that a Change Order be issued to document any additional expenditures for goods or services provided by a vendor. Part of that process also requires that the vendor substantiate the request for funds by providing a summary of the additional activities to be undertaken. Feldman Daxon submitted the following document attached hereto as Appendix 1 and entitled: “Proposal for Professional Search Consultant Services – Position of CAO/Secretary – Treasurer - RFP NO. NPCA-2019-008 - Additional Scope & Deliverables”.

Staff is recommending that this request for additional funding be approved.

### **Financial Implications:**

The request for additional funds for the C.A.O/Secretary-Treasurer recruitment is an unbudgeted expense. The recruitment budget was established at \$30,000 plus advertising. Feldman Daxon has received \$20,000 to date plus advertising costs with another payment of \$10,000 pending. The requested amount of \$10,000 is in excess of the \$30,000 already committed to Feldman Daxon. Additional advertising costs will likely be incurred as well. The Corporate Services Division has advised that the additional \$10,000 funding would likely be sourced from operational savings at year end realized from the other divisional line items. Failing that, any excess amounts would need to be funded through the operating reserve.

### **Links to Policy/Strategic Plan:**

Providing capable leadership for the organization is the single greatest factor in achieving the goals and ensuring the success of the Strategic Plan.

### **Related Reports and Appendices:**

Appendix 1: Proposal for Professional Search Consultant Services – Position of CAO/Secretary – Treasurer RFP NO. NPCA-2019-008 Additional Scope & Deliverables

**Authored by:**

*Original signed by:*

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Grant Bivol,  
Executive Co-ordinator to the C.A.O./Board

**Reviewed by:**

*Original signed by:*

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Lise Gagnon  
Director, Corporate Services

**Submitted by:**

*Original signed by:*

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D. Gayle Wood, BES, CMMIII  
Chief Administrative Officer/Secretary-Treasurer



**Proposal for Professional Search Consultant Services**  
**Position of CAO/Secretary Treasurer**  
**RFP No. NPCA-2019-008**  
**Additional Scope & Deliverables**

September 27, 2019

A handwritten signature in black ink, appearing to read "Patrick Rowan".

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Patrick Rowan, BSc, MBA, Partner  
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Toronto, Ontario M4V 1K9  
E-mail: [prowan@feldmandaxon.com](mailto:prowan@feldmandaxon.com)  
Tel.: (416) 515-7600 x 254

## ADDITIONAL SCOPE & DELIVERABLES

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The Niagara Peninsula Conservation Authority (NPCA) CAO Recruitment Committee has requested our firm to re-initiate the search for additional candidates for the role of CAO Secretary Treasurer.

In order to develop a new list of candidates to present to the Committee, our firm will need to repeat the search that we executed from mid-April to mid-June 2019. This will involve our search team re-contacting the several hundred individuals that we approached before, identifying new candidates that we may not have identified and contacted in the initial search, pre-screening and presenting these new candidates, and completing the initial search process described in our initial proposal (facilitating interviews, reference checks, assessments and offer negotiation).

In consideration, we will charge **\$10,000 + HST** as an additional payment, **plus the final \$10,000 + HST** (as specified in our initial agreement).

In brief, the additional scope of work and deliverables will be as follows:

1. Kickoff Meeting to Discuss Needs, Selection Criteria, Timeline and Search Strategy
2. Confirmation/Approval of Position Briefing/Profile
3. Advertising
4. Contact and Conduct Preliminary Screening of Potential Candidates
5. Presentation of Profiled List
6. Client Interviews – Question Preparation and Scheduling of Interview/Assessment Process
7. Final Candidate Selection and Reference/Credit/Criminal Checks
8. Offer Development, Presentation and Negotiation
9. Offer Acceptance and Notifying Rejected Applicants of the Decision

### Estimated Timeline (Patrick Rowan will be on vacation December 23, 2019 – January 3, 2020)

Search Step/Deliverables	Estimated Delivery/Completion Date
Initial Discussions (Search Kickoff)	October 21, 2019
Confirmation of Position Brief	October 21, 2019
Advertising Posted	October 21, 2019
Search for candidates and pre-screening	October 21 – December 6, 2019
Presentation of shortlist of candidates	December 6, 2019
Client Interviews (first and second rounds)	December 9 - 13, 2019
Assessment	December 2 - 13, 2019
Reference checking	December 2 - 13, 2019
Offer Negotiation/Acceptance	December 16 - 20, 2019
New CAO Starts	January 2020

### FEES & INVOICING

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Our fees will be invoiced as follows:

- \$10,000 + HST will be billed upon commencement of the additional scope of work
- \$10,000 + HST will be upon completion of the search assignment.

#### Expenses, References & Background Checks

Expenses would include costs for advertising, candidate travel, psychometric assessments, offsite meeting/hotel facilities and services provided by a third-party background checking firm at your request (credit and criminal checks, education and credential verification). We can provide a low-cost DISC-based on-line assessment that will provide a snapshot of a candidate's behavioral tendencies and styles, for \$150 + HST per candidate. Our firm will conduct a full reference check on the finalist. For background (such as criminal record) checks, we work with another third party, **Inline Reference Check**, which specializes in education verification, professional designation verification, credit checks, criminal checks, social media checks and other similar services. They offer a rapid, inexpensive service. These fees are extra.

#### Guarantee

Our services come with a **12-month guarantee**. If the chosen candidate proves to be unsatisfactory and is terminated or resigns within this period, we will conduct another search for a replacement at no cost, except for any expenses as described in this proposal.

**Report To: Board of Directors**

**Subject: Policy Update - Performance Reviews**

**Report No: FA-148-19**

**Date: October 16, 2019**

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**Recommendation:**

1. **THAT** Report No. FA-148-19 RE: Policy Update - Performance Reviews **BE RECEIVED**.
2. **THAT** the current Staff Appraisal policy **BE REPEALED AND REPLACED** with the NPCA Performance Review Policy attached hereto as Appendix 1.

**Purpose:**

The purpose of this report is to seek the Board's approval of the updated NPCA Performance Review Policy to ensure the opportunity to recognize success and identify development opportunities occurs within the organization.

**Background:**

Recommendation #17 of the Auditor General of Ontario Special Audit recommends the NPCA:

- *assess staff's performance annually, as required by its policies*

Recommendation #5 of the Auditor General of Ontario Special Audit recommends the NPCA Board:

- *regularly evaluate both its collective performance and the performance of individual Board members*

Updating the Performance Review policy provides clarity around timeframes and expectations to ensure performance of both staff and board members are evaluated consistently and fairly.

**Discussion:**

The updated Performance Review Policy is outlined in Appendix 1.

**Financial Implications:**

There are no financial implications associated with this Report.

**Links to Policy/Strategic Plan:**

Although the current NPCA Strategic Plan does not address “Administrative Excellence”, it is beneficial to have approved process for evaluation.

**Related Reports and Appendices:**

Appendix 1: NPCA Performance Review Policy

**Authored by:**

*Original signed by:*

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Misti Ferrusi, CHRL  
Manager, Human Resources

**Submitted by:**

*Original signed by:*

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D. Gayle Wood, BES, CMMIII  
Chief Administrative Officer/Secretary-Treasurer

## Policy Manual

Performance Reviews			5-2
Developed by:	Human Resources		
Policy Applies To:	All Employees / Board Members		
Date Created:	Historic	Approved By:	
Version #:	2019-2	Last Review Date:	October 2019 (update)

### 1.0 **PURPOSE STATEMENT**

Niagara Peninsula Conservation Authority has adopted this policy to ensure that all staff members are provided with accurate and appropriate feedback regarding their performance within the organization. By providing annual performance reviews Niagara Peninsula Conservation Authority gains the opportunity to recognize and reward success, offer career planning information and provide staff with goals and objectives for the coming year.

All employees and management staff will be subject to annual performance reviews. Performance reviews will be benchmarked against previously determined goals and objectives for the position.

### 2.0 **PROBATIONARY PERIOD REVIEW**

Each employee shall receive a review at the end of their probationary period within a position. The probationary review will be completed by the employee's immediate supervisor and provide a high-level overview of performance to date.

### 3.0 **ANNUAL PERFORMANCE REVIEW**

#### *Full-Time Employees*

Performance reviews will be carried out annually on the employee's position service anniversary and will consist of a self-appraisal component as well as a manager review and discussion.

All performance reviews require approval of the Supervisor, Manager, Department Director and Chief Administrative Officer. Each employee will receive a copy of their performance review and a copy will be kept in the employee's personnel file.

The Board of Directors shall be responsible for the performance review of the Chief Administration Officer.

*Seasonal/Student Employees*

Performance reviews will be carried out for Student/Seasonal employees at the end of each season by the direct supervisor and will be kept in the employee's personnel file.

*Board Members*

In order to ensure that the NPCA Board of Directors has all the information they need to act as an effective Board and improve oversight and/or embark on training as required, Board members will evaluate both individual member performance and collective performance annually through assessment exercises.

#### **4.0 STEP INCREASES**

As part of the performance review process, employees will be eligible to progress to the next step on the applicable wage grid within the applicable wage grade (if not already at job rate) based on satisfactory performance.

#### **5.0 ACKNOWLEDGEMENT**

Employees are requested to sign the Performance Review to acknowledge their participation in the review process. An employee's signature does not necessarily signify agreement with the Review. Employees are entitled to and encouraged to include comments about the contents of the Performance Review.