

**FULL AUTHORITY MEETING
Wednesday, June 19, 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

1. APPROVAL OF AGENDA

Change in order of items – Motion to move Item 7. Closed Session to occur prior to Section 3. Presentations

2. DECLARATIONS OF CONFLICT OF INTEREST

3. PRESENTATIONS (and/or Delegations)

- a) Presentation by Joshua Diamond, NPCA Water Quality Specialist on Report No. FA-57-19 RE: NPCA Water Quality Monitoring Program Summary Report for the Year 2018
Page 3

4. ADMINISTRATIVE BUSINESS

Approval of the Minutes - Full Authority Meeting dated May 3, 2019 Page 5

Business Arising from Minutes – None

Correspondence - From Steve Clark, Minister of Municipal Affairs and Housing regarding Bill 108 More Homes, More Choice Act, 2019 Page 12

Chair's Comments

Chief Administrative Officer's Comments

5. BUSINESS FOR INFORMATION

- a) Minutes of the Council meeting #1/19 of Conservation Ontario dated April 1, 2019 Page 17
- b) Report No. FA-59-19 RE: Risk Based Plan Permit Compliance Page 27
- c) Report No. FA-63-19 RE: 2019 Restoration Program Workplan Page 30
- d) Report No. FA-65-19 RE: Niagara Region New Official Plan DRAFT Watershed Planning Discussion Paper Page 67
- e) Report No. FA-70-19 RE: NPCA 2018 FOI Annual Statistics Page 78
- f) Report No. FA-71-19 RE: Communications Update May-April, 2019 Page 88

- g) Report No. FA-73-19 RE: Update - Auditor General Report Recommendations
Page 101

6. BUSINESS FOR CONSIDERATION

- a) Standing Committee Report - Minutes of the Watershed Floodplain Committee meeting dated June 13, 2019 (to be tabled)
- b) Report No. FA-55-19 RE: Ontario Power Generation (OPG) Memorandum of Understanding (MOU) Update
Page 120
- c) Report No. FA-60-19 RE: NPCA Policy Housekeeping Amendments
Page 136
- d) Report No. FA-62-19 RE: NPCA Standing and Ad Hoc Committee Update
Page 143
- e) Report No. FA-64-19 RE: NPCA Drone Policy
Page 150
- f) Report No. FA-67-19 RE: NPCA Harassment Policy
Page 215
- g) Report No. FA-68-19 RE: NPCA Recruitment Policy
Page 222
- h) Report No. FA-72-19 RE: Corporate Workplan – June – December, 2019
Page 228

7. CLOSED SESSION

- a) Advice that is subject to solicitor-client privilege, including communications necessary for that purpose
- b) Litigation or potential litigation
- c) Labour relations, Human Resources or employee negotiations
- d) Personal matters and an identifiable individual(s), including NPCA employees
- e) Land Acquisition - Report No. FA-66-19 (Property in the vicinity of the Binbrook Conservation Area)

8. NOTICE OF MOTION

- a) Notice of motion by Member Smith RE: Climate Emergency and the NPCA
Page 265

9. NEW BUSINESS

10. ADJOURNMENT

Report To: Board of Directors

Subject: NPCA Water Quality Monitoring Program Summary Report for the Year 2018

Report No: FA-57-19

Date: June 19, 2019

Recommendation:

That Report No. FA-57-19 RE: NPCA Water Quality Monitoring Program Summary Report for the Year 2018 **BE RECEIVED** for information.

Purpose:

The purpose of this report is to provide the Board with a summary of the NPCA Water Quality Monitoring Program Summary Report for the Year 2018.

Background:

The NPCA Water Quality Monitoring Program was implemented in 2001 and is operated in partnership with the Ministry of Environment, Conservation and Parks (MECP), the Regional Municipality of Niagara, Haldimand County and the City of Hamilton. The NPCA collects and analyzes hundreds of water samples each year from the streams, rivers and groundwater resources within the watershed. From this information, the NPCA can identify sources of pollution, track water quality trends, and help to assess and direct NPCA environmental programs. As well, the long-term data collected serves as a baseline by which to compare the success of various water quality improvement initiatives being undertaken by different organizations throughout the watershed.

Discussion:

The NPCA Water Quality Report for the Year 2018 summarizes the results of the NPCA's surface water and groundwater monitoring program. The NPCA collects monthly surface water quality samples (during the ice-free season) at 80 monitoring stations and analyzes them using several indicator parameters including chloride, nitrate, total phosphorus, total suspended solids, copper, lead, zinc, and *E. coli*. These indicator parameters are used to calculate the Canadian Water Quality Index (WQI) which provides a descriptive water quality rating for each station.

The NPCA also monitors surface water quality using benthic invertebrates (aquatic insects and animals) as indicators of stream health. Due to their restricted mobility and habitat preferences benthic invertebrates usually remain in a localized area. As a result, they are continuously subjected to the effects of all pollutants and environmental stream conditions, and as such can provide a broad overview of water quality related problems. They are abundant in all types of aquatic systems and can be easily collected and identified.

For surface water, the biological and chemical monitoring results indicate that most of Niagara's watersheds have poor or impaired water quality. Total phosphorus, *E. coli*, suspended solids, and chlorides from non-point sources (agricultural and livestock operations, faulty septic systems, winter de-icing operations) and point sources (combined sewer overflows, urban stormwater runoff) continue to be the major causes of impairment in the NPCA watershed. Twelve Mile Creek continues to have the best water quality rating in the NPCA watershed.

Since 2003, the NPCA has also been collecting water quality data and water level data from 15 Provincial Groundwater Monitoring Network (PGMN) monitoring wells in partnership with the MECP. This data is important to assess the ambient conditions of several bedrock and overburden aquifers found in NPCA watershed. For groundwater, monitoring results indicate that water quality generally meets Ontario Drinking Water Standards. Reported groundwater quality exceedances were mainly related to naturally occurring bedrock conditions.

The NPCA Water Quality Monitoring Program continues to provide valuable information about the health of the watershed. The poor surface water quality in the NPCA watershed has been caused by decades of environmental degradation. However, water quality programs that improve how nutrients are managed, serve to increase riparian buffers, and improve forest cover can begin to address these impacts. It will likely take many years of implementing these programs before the water quality in the NPCA watershed improves to the point where it is able to meet federal and provincial water quality guidelines. As such, the Water Quality Monitoring Report reflects the importance that NPCA continue to monitor both our surface water and groundwater to ensure that there is up-to-date current water quality information available, to be able to quantify trends, and to continue to identify sources of contamination within the NPCA watershed.

A link to the NPCA Water Quality Monitoring Program Summary Report for 2018 has been placed on the NPCA website and notification of such will be distributed to the Region of Niagara, its lower tier municipalities, the City of Hamilton, Haldimand County, all associated Public Health Departments, and the local Ontario Ministry of Environment, Conservation and Parks office.

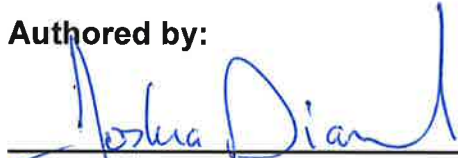
A link to this report has been provided via e-mail to Board members and a physical copy is available upon request.

Financial Implications:

The Water Quality Monitoring Program is funded as part of the general NPCA operation levy.

Related Reports and Appendices:

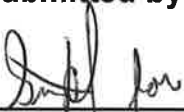
Appendix 1: Map showing Water Quality Ratings in NPCA

Authored by:

Joshua Diamond, M.Sc.
Water Quality Specialist

Reviewed by:

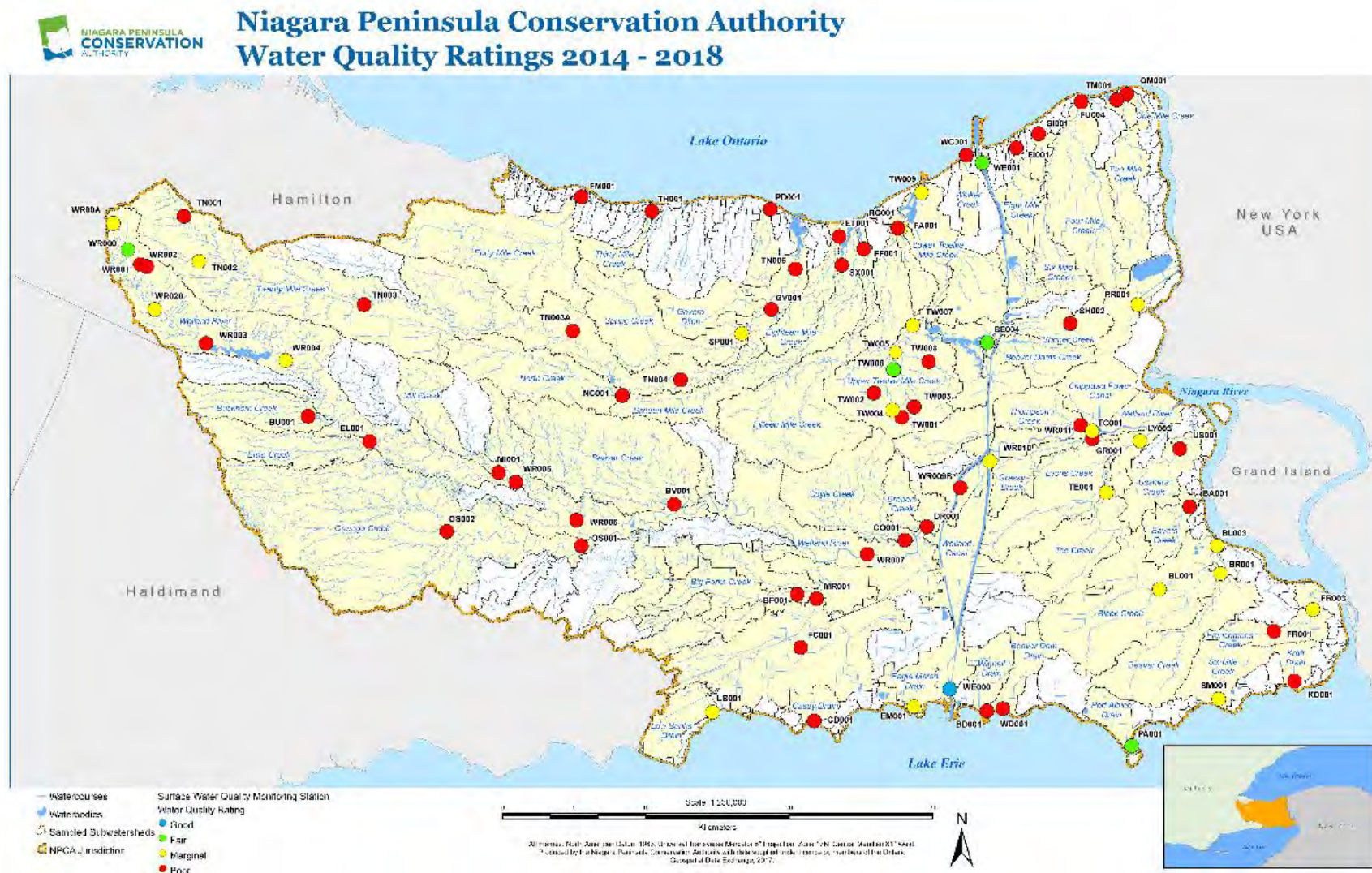
Darren MacKenzie, C.Tech., rcsi
Director, Watershed Management

Submitted by:

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

This report was prepared with the assistance of Steve Miller, P.Eng, Senior Manager, Water Resources.

Appendix 1: Map showing Water Quality Ratings in NPCA





**NIAGARA PENINSULA CONSERVATION AUTHORITY (NPCA)
FULL AUTHORITY
MEETING MINUTES**

Friday, May 3, 2019

9:30 a.m.

Meridian Community Centre

Dr. Gary and Mall Accursi Multipurpose Community Room

100 Meridian Way, Fonthill, 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
B. Clark
P. Chiocchio
R. Foster
K. Gibson
B. Greenwood
B. Heit
D. Huson
T. Insinna
B. Johnson
J. Jordan
J. Metcalfe
B. Steele
R. Shirton
T. Whalen
B. Wright
G. Zalepa

MEMBERS ABSENT:

None

OTHERS PRESENT:

B. Lysyk, Auditor General of Ontario
A. Benaroya, Senior Auditor, Office of the Auditor General of Ontario
G. Chagani, Deputy Auditor General of Ontario
A. Chan, Audit Director, Office of the Auditor General of Ontario
J. Dufour, Audit Supervisor, Office of the Auditor General of Ontario
K. Exaltacion, Audit Manager, Office of the Auditor General of Ontario
K. May, Senior Auditor, Office of the Auditor General of Ontario
C. Pedias Director, Corporate Communications and Government Advertising Review, Office of the Auditor General of Ontario

STAFF PRESENT:

G. Wood, CAO / Secretary – Treasurer
G. Bivol, Interim Clerk

R. Bisson, Community Engagement Manager
A. Christie, Acting Senior Manager, Operations and Special Projects
M. Ferrusi, Human Resources Consultant
E. Gervais, Procurement Specialist
D. MacKenzie, Director, Watershed Management
E. Navarro, Communications Specialist
S. Miller, Senior Manager, Water Resources and Restoration
K. Royer, Co-ordinator, Volunteer and Community Outreach
J. Wallace, Finance Manager
G. Verkade, Manager, Information Management and Technology Systems

The Board Chair called the meeting to order at 9:33 a.m.

1. ADOPTION OF AGENDA

1.1 Addition of Items

1.2 Change in Order of Items

1.3 Adoption of Agenda

Resolution No. FA-115-19

Moved by Board Member Beattie

Seconded by Board Member Clark

THAT the agenda for the Full Authority Meeting of the Niagara Peninsula Conservation Authority dated May 3, 2019 be adopted with the following three amendments:

1. The consideration of Report FA-50-19 entitled Response to the Special Audit of the Niagara Peninsula Conservation Authority to occur immediately after the presentation by the Auditor General.
2. The addition of a closed session with the Auditor General following deliberation of the aforementioned Report FA 50-2019; and
3. The addition of tabled Report No. FA-54-2019 regarding NPCA Watershed Floodplain Committee – Board Appointees to be addressed as the final item business under Section 6 of the agenda.

CARRIED

2. DECLARATION OF CONFLICT OF INTEREST

None declared.

3. PRESENTATIONS (and/or Delegations)

3.1 Presentations

- #### 3.1.1 Special Audit of the Niagara Peninsula Conservation Authority -
- Presentation by Bonnie Lysyk, Auditor General of Ontario – Following introductions, Ms. Lysyk provided an overview of her office and spoke at length about the findings and recommendations of her report. Members

posed questions to Ms. Lysyk and discussion ensued. With the adoption of the following motion, the Board recessed from 11:00 a.m. to 11:15 a.m.

Resolution No. FA-116-19

Moved by Board Member Chiocchio

Seconded by Board Member Beattie

THAT the PowerPoint presentation by Bonnie Lysyk, Auditor General of Ontario regarding the Special Audit of the Niagara Peninsula Conservation Authority be received.

CARRIED

Report No. FA-50-19 RE: Response to the Special Audit of the Niagara Peninsula Conservation Authority (originally Item 6.2.1 on the agenda) – Ms. Gayle Wood spoke at length on the specific measures underway and/or completed by the Niagara Peninsula Conservation Authority to address issues identified in the Auditor General's report. She also spoke of other outstanding matters. Members posed questions to Ms. Wood and staff. Ms. Wood was directed to solicit items for discussion from Board Members for the next Governance Committee meeting. Staff was also directed to include ongoing status updates on the Auditor's General's recommendations as a regular item on future Board agendas.

Resolution No. FA-117-19

Moved by Board Member Clark

Seconded by Board Member Beattie

1. **THAT** Report No. FA-50-19 respecting a Response to the Special Audit of the Niagara Peninsula Conservation Authority be received.
2. **THAT** a copy of Report No. FA-50-19 on the NPCA Response to the Auditor General's Report be circulated to the Office of the Auditor General, participating watershed municipalities, Minister of Environment, Conservation and Parks, Minister of Natural Resources and Forestry and Conservation Ontario.

CARRIED

Closed Session – Following Ms. Wood's presentation, the Board posed additional questions to the Auditor General. As a result of the ensuing dialogue and the responses received from Ms. Lysyk, the Board of Directors thereafter opted to forego the closed session. The Board called a recess from 12:00 p.m. to 12:30 p.m. Members Clark and Chiocchio were not in attendance after the meeting reconvened.

3.2 Delegations

None.

4. ADMINISTRATIVE BUSINESS

4.1 Approval of Draft Minutes

4.1.1 Full Authority Board Minutes – April 17, 2019

4.1.2. Full Authority Closed Session – April 17, 2019

Resolution No. FA-118-19

Moved by Board Member Insinna

Seconded by Board Member Greenwood

THAT the following meeting minutes be adopted:

- Full Authority meeting minutes dated March 20, 2019 with clarification as to the movers of Resolutions No. FA-111-19 and FA-112-19; and
- Full Authority Closed Session Meeting minutes dated March 20, 2019 to remain private and confidential.

CARRIED

4.2 Business Arising from Minutes

There was no business arising from the minutes.

4.3 Correspondence

4.3.1 Correspondence to Stuart Hastings, GSP Group Inc. from the City of Hamilton dated April 9, 2019 RE: Site Plan Amendment Application by GSP Group Inc. on behalf of NPCA for Lands Located at 50505 Harrison Road, Glanbrook (Ward 11)

Resolution No. FA-119-19

Moved by Board Member Insinna

Seconded by Board Member Gibson

THAT the correspondence to Stuart Hastings, GSP Group Inc. from the City of Hamilton dated April 9, 2019 RE: Site Plan Amendment Application by GSP Group Inc. on behalf of NPCA for Lands Located at 50505 Harrison Road, Glanbrook (Ward 11) be received for information.

CARRIED

4.4 Chair's Remarks

Chair Bylsma commented on some recent and upcoming events at various Conservation Areas and encouraged Board Members to attend and participate.

4.5 Chief Administrative Officer Comments

CAO Wood spoke on the upcoming retirement of the NPCA Finance Manager, John Wallace.

5. BUSINESS FOR INFORMATION

5.1 Report No. 52-19 RE: Communications Update Report- April 2019

Resolution No. FA-120-19

Moved by Board Member Johnson

Seconded by Board Member Shirton

THAT Report No. FA-52-19 regarding Communications Update Report – April 2019 be received for information.

6. BUSINESS FOR CONSIDERATION

6.1 Standing Committee Reports

6.1.1. Minutes of the CAO Selection Committee Meeting – April 12, 2019

6.1.2. Minutes of the CAO Selection Committee Closed Session Meeting – April 12, 2019

Resolution No. FA-121-19

Moved by Board Member Metcalfe

Seconded by Board Member Johnson

THAT the following Committee reports be adopted and any recommendations therein approved:

- Minutes of the CAO Selection Committee Meeting dated April 12, 2019;
- Minutes of the CAO Selection Committee Closed Session Meeting dated April 12, 2019 to be made public.

CARRIED

6.2 Reports

6.2.1 Report No. FA-50-19 RE: Response to the Special Audit of the Niagara Peninsula Conservation Authority – By way of Board resolution, this matter was deliberated in conjunction with Presentations in Section 3 of the agenda.

6.2.2 Report No. FA-51-19 RE: NPCA Advisory Committee Status Report

Resolution No. FA-122-19

Moved by Board Member Metcalfe

Seconded by Board Member Shirton

1. **THAT** Report No. FA-51-19 regarding the NPCA Public Advisory Committee (PAC) be received.
2. **THAT** the Board of Directors approve, in principle, the Terms of Reference (TOR) for the NPCA Public Advisory Committee (PAC) and forward the TOR to the PAC for their review, comment on filling vacancies, and feedback to the Board of Directors.

CARRIED

6.2.3 Report No: FA-53-19 RE: Appeal of Decision of Port Colborne Committee of Adjustment Update

Resolution No. FA-123-19

Moved by Board Member Shirton

Seconded by Board Member Steele

1. **THAT** Report No. FA-53-19 regarding the Appeal of the decision of the Port Colborne Committee of Adjustment be received for information.

2. **THAT** the Board of Directors authorize the Interim CAO/Secretary-Treasurer to execute the development agreements included as Appendix 1 and Appendix 2.
3. **THAT** staff be directed to withdraw the NPCA's appeal to the Local Planning Appeal Tribunal (LPAT) of the decision of the Committee of Adjustment for the City of Port Colborne regarding severance applications B05-19-PC and B06-19-PC once the agreements have been executed by all parties.

CARRIED

6.2.4 Report No. FA-54-2019 RE: NPCA Watershed Floodplain Committee – Board Appointees

Resolution No. FA-124-19

Moved by Board Member Steele

Seconded by Board Member Whalen

1. **THAT** Report No. FA-54-19 respecting the NPCA Watershed Floodplain Committee – Board Appointees be received.
2. **THAT** the following Board Members be appointed to the NPCA Watershed Floodplain Committee for 2019 to oversee the updated floodplain mapping for the Welland River as well as the process for engaging the public in this regard:
Regional Councillor Greenwood (Niagara Falls)
Regional Councillor Chiocchio (Welland)
Regional Councillor Tim Whalen (Thorold)
Mayor Kevin Gibson (Wainfleet)
Regional Councillor Diana Huson (Pelham)
Mayor Dave Bylsma (West Lincoln)
Mr. Stewart Beattie (Hamilton).

CARRIED

7. BUSINESS – IN CAMERA

By Board resolution, the in-camera portion of the meeting was initially re-aligned to occur in conjunction with the Auditor General's presentation and deliberation of Report No. FA-50-19. The Board subsequently opted to waive the in-camera meeting.

8. NOTICE OF MOTION

There were no notices of motion.

9. NEW BUSINESS

- 9.1 Member Heit requested that based on the contents of the Auditor General's report, a letter of apology be issued to former Member Hodgeson. Staff was directed to research the circumstances and return the matter for further deliberation at the June meeting of the Board of Directors.
- 9.2 Member Insinna requested that if additional funding became available to the NPCA from its member municipalities, a portion of it be allocated toward the administration

and programs for the NPCA Foundation. Member Insinna was requested to summarize his comments in an email to the Board. Member Foster spoke to the issue as well.

10. ADJOURNMENT

Resolution No. FA-125-19

Moved by Board Member Steele

Seconded by Board Member Metcalfe

THAT the meeting of the Board of Directors of the Niagara Peninsula Conservation Authority be hereby adjourned at 12:52 p.m.

CARRIED

Dave Bylsma
Board Chair
Niagara Peninsula Conservation Authority

Grant Bivol
Interim Clerk
Niagara Peninsula Conservation Authority



19-002867

Greetings:

Ontario's Government for the People is committed to building more housing and bringing down costs for the people of Ontario. To help fulfill this commitment, we have developed a broad-based action plan to address the barriers getting in the way of new ownership and rental housing.

More Homes, More Choice (the action plan) outlines our government's plan to tackle Ontario's housing crisis, while encouraging our partners to do their part. We are taking steps to make it faster and easier for municipalities, non-profits and private firms to build the right types of housing in the right places, to meet the needs of people in every part of Ontario.

As part of the action plan, we are proposing changes that would streamline the complex development approvals process to remove unnecessary duplication and barriers, while making costs and timelines more predictable. We are also proposing changes that would make it easier to build certain types of priority housing such as second units.

On May 2, 2019, the government introduced Bill 108 (the bill), the proposed More Homes, More Choice Act, 2019, in the Ontario Legislature. While the bill contains initiatives from various ministries, I would like to share some details regarding initiatives led by the Ministry of Municipal Affairs and Housing.

Planning Act

Schedule 12 of the bill proposes changes to the Planning Act that would help make the planning system more efficient and effective, increase housing supply in Ontario, and streamline planning approvals.

If passed, the proposed changes would:

- Streamline development approvals processes and facilitate faster decisions,
- Increase the certainty and predictability of the planning system,
- Support a range and mix of housing options, and boost housing supply,
- Make charges for community benefits more predictable, and
- Make other complementary amendments to implement the proposed reforms, including how the proposed changes would affect planning matters that are in-process.

Amendments to the Planning Act are also proposed to address concerns about the land use planning appeal system. Proposed changes would broaden the Local Planning Appeal Tribunal's jurisdiction over major land use planning matters (e.g., official plan amendments and zoning by-law amendments) and give the Tribunal the authority to make a final determination on appeals of these matters. The Ministry of the Attorney General is also proposing changes to the Local Planning Appeal Tribunal Act, 2017 to complement these changes (see Schedule 9 of the bill).

Development Charges Act

Schedule 3 of the bill proposes changes to the Development Charges Act that would make housing more attainable by reducing costs to build certain types of housing and would increase the certainty of costs to improve the likelihood of developers proceeding with cost sensitive projects, such as rental housing.

If passed, the proposed changes would:

- Make it easier for municipalities to recover costs for waste diversion,
- Increase the certainty of development costs in specific circumstances and for certain types of developments,
- Make housing more attainable by reducing costs to build certain types of homes, and
- Make other complementary amendments to implement the proposed reforms.

Further consultation on the Planning Act and Development Charges Act

We are interested in receiving any comments you may have on the proposed changes to the Planning Act and the Development Charges Act. Comments on these proposed measures can be made through the [Environmental Registry of Ontario](#) as follows:

- Planning Act: posting number 019-0016

- Development Charges Act: posting number 019-0017

The Environmental Registry postings provide additional details regarding the proposed changes.

A Place to Grow: Growth Plan for the Greater Golden Horseshoe

As an important part of **More Homes, More Choice**, I am also pleased to provide you with [A Place to Grow: Growth Plan for the Greater Golden Horseshoe](#), which addresses the needs of the region's growing population, its diversity, its people and its local priorities. A Place to Grow will come into effect on May 16, 2019.

As you know we recently consulted on proposed policy changes to make it faster and easier for municipalities in the region to plan for growth, increase housing supply, attract investment, and create and protect jobs. I would like to thank those who participated in the consultation process, and who contributed through their feedback to the development of the Plan.

It is anticipated that A Place to Grow will:

- Provide more flexibility for municipalities to respond to local needs,
- Increase housing supply at a faster rate,
- Attract new investments and jobs,
- Make the most of transit investments, and
- Protect important environmental and agricultural assets.

A Place to Grow reflects our trust in the ability of local governments to make decisions about how their communities grow, while the province maintains protections for the Greenbelt, agriculture, and natural heritage systems. One size doesn't fit all. We're supporting municipalities so they can respond to local needs and regional priorities.

In addition to sharing the new Plan with you today, I am also informing you that we are asking for further feedback on the transition regulation. Specifically, we are seeking feedback on specific planning matters that were submitted as part of the recent consultations and for which we would provide transitional rules. These matters were deemed to be far along in their process and as such are being considered for transition so as to not unduly disrupt ongoing planning matters that may be impacted by the policies in A Place to Grow. Changes to the [transition regulation](#) can be found on Ontario's Environmental Registry and Regulatory Registry for the next 30 days.

Provincially Significant Employment Zones (PSEZs)

The economy in the Greater Golden Horseshoe is not only a critical factor provincially but also across Canada in achieving economic success and viability. As such, ensuring that lands are available to support the creation of jobs and the attraction of investments is paramount to providing homes that people can afford near stable and reliable employment.

To achieve this, we have formally identified the 29 provincially significant employment zones that we consulted on for the purposes of providing enhanced protections to existing employment areas. While no zones were removed or added to the 29 provincially significant employment zones at this time, they have been revised to address any factual errors in the mapping based on municipal official plans already in effect. These zones can be viewed on our [web portal](#).

With the technical adjustments made, we will now begin the process of reviewing Requests for Reconsideration. Through this process, my ministry will consider requests to reconsider lands within and outside of existing zones as well as requests to add new zones. We will assess requests based on a number of factors that include, but are not limited to, the local planning context, municipal support and provincial interest.

If you have questions about the zones, the Requests for Reconsideration process, or accessing mapping files you may contact ministry staff at growthplanning@ontario.ca.

Finally, we heard loud and clear throughout the recent consultation period that there was a desire for further discussions on the longer term vision for the provincially significant employment zones that would look at opportunities to support current and emerging industries. Notably, many expressed interest in utilizing zones to leverage economic development investments, programs and strategies both inside and outside of the Greater Golden Horseshoe.

Working with our partner ministries, we will be embarking on further public engagement in the coming months to explore the longer-term vision for provincially significant employment zones, along with potential opportunities to maximize the use of the zones as tools in investments, infrastructure planning and economic activity. Through these targeted engagement discussions, we will look to clearly articulate a framework for provincially significant employment zones that will position Ontario for more homes and better jobs.

If you have any questions and/or need further information on the upcoming engagement, or on any of the growth related matters, please feel free to contact Cordelia Clarke Julien, Assistant Deputy Minister, Ontario Growth Secretariat at cordelia.clarkejulien@ontario.ca or at (416) 325-5803.

Taken together, the actions outlined in **More Homes, More Choice** - including the proposed changes detailed above - will make it easier to build the right types of housing in the right places, make housing more affordable and help taxpayers keep more of their hard-earned dollars. Building more housing will make the province more attractive for employers and investors, proving that Ontario is truly Open for Business.

This action plan is complemented by our recently announced [Community Housing Renewal Strategy](#), which will help sustain, repair and grow our community housing system. Together these two plans will ensure that all Ontarians can find a home that meets their needs.

At the same time, **More Homes, More Choice** underscores our commitment to maintain Ontario's vibrant agricultural sector and employment lands, protect sensitive areas like the Greenbelt, and preserve cultural heritage. Our plan will ensure that every community can build in response to local interests and demand while accommodating diverse needs.

I look forward to continuing to work together as we implement **More Homes, More Choice**.

Sincerely,



Steve Clark

Minister

COUNCIL MEETING

Minutes from Meeting #1/19

April 1, 2019

Black Creek Pioneer Village

Voting Delegates Present:

Chair: Don MacIver, Credit Valley

Brian Horner, Ausable Bayfield
Alan Revill, Cataraqui Region
Geoff Rae, Cataraqui Region
Rick Cerna, Catfish Creek
Chris Wilkinson, Catfish Creek
Chris Darling, Central Lake Ontario
Karen Ras, Credit Valley
Deb Martin-Downs, Credit Valley
Richard Wyma, Essex Region
Linda Laliberte, Ganaraska Region
Joe Farwell, Grand River
Cathy Little, Grey Sauble
Sonya Skinner, Grey Sauble
Susan Fielding, Hamilton
Lisa Burnside, Hamilton
Ted Smith, Kawartha
Mark Majchrowski, Kawartha
Elizabeth VanHooren, Kettle Creek
Wayne Emmerson, Lake Simcoe Region
Scott MacPherson, Lake Simcoe Region
Mike Walters, Lake Simcoe Region
Michael Columbus, Long Point Region
Judy Maxwell, Long Point Region
Mark Peacock, Lower Thames Valley
Jim Alyea, Lower Trent
Glenda Rodgers, Lower Trent

Members Absent:

Lakehead Region
Mattagami Region

CO Staff:

Kristin Bristow
Kim Gavine
Nicholas Fischer
Bonnie Fox
Chitra Gowda

Dave Turton, Maitland Valley
Jeff Atkinson, Mississippi
Sally McIntyre, Mississippi
Dave Bylsma, Niagara Peninsula
Diana Huson, Niagara Peninsula
Gayle Wood, Niagara Peninsula
Lin Gibson, Nickel District (Con.Sudbury)
Carl Jorgensen, Nickel District (Con.Sudbury)
George Watson, Nottawasaga Valley
Doug Hevenor, Nottawasaga Valley
Andy Mitchell, Otonabee
Dan Marinigh, Otonabee
James Flieler, Quinte
Frank Prevost, Raisin Region
Richard Pilon, Raisin Region
Pieter Leenhouts, Rideau Valley
Sommer Casgrain-Robertson, Rideau Valley
Dan Gieruszak, Saugeen
Maureen Couture, Saugeen
Wayne Brohman, Saugeen
Bill Smirle, South Nation
George Darouze, South Nation
Angela Coleman, South Nation
Joe Faas, St. Clair Region
Brian McDougall, St. Clair Region
Sandy Levin, Upper Thames River
Ian Wilcox, Upper Thames River

Guests:

Geoff Dawe, Lake Simcoe Region
Phil Beard, Maitland
Mark Burnham, Mississippi Valley
Brad McNevin, Quinte

Jane Lewington
Nekeisha Mohammed
Leslie Rich
Jo-Anne Rzaeki
Rick Wilson

1. Welcome from the Chair

- Introductions
- Glenda Rodgers Retirement Acknowledgement
- Matthew Millar – CO staff - Acknowledgement
- Gayle Wood – NPCA Biennial Tour – ***noted that the tour is delayed to September 2020***
- Council Survey – additional question regarding location
- Don MacIver thanked the outgoing CO Board members for their contributions and asked them for a brief address on their experiences

2. Adoption of the Agenda

#01/19 Moved by: Lin Gibson Seconded by: Bill Smirle

THAT the Agenda be adopted as amended.

CARRIED

3. Declaration of Conflict of Interest

4. Approval of the Minutes of the Previous Meeting

#02/19 Moved by: Cathy Little Seconded by: Dan Gieruszak

THAT the minutes from the meeting December 10, 2018 be approved.

CARRIED

5. Business Arising from the Minutes

6. Adoption of the 2018 Audited Financial Statements, Final Report to the Budget and Audit Committee & Appointment of Auditors for 2019

#03/19 Moved by: Richard Pilon Seconded by: Alan Revill

THAT the Final Report to the Conservation Ontario Budget & Audit Committee be received;

THAT Conservation Ontario accept the Budget and Audit Committee's recommendation that the Financial Statements of Conservation Ontario for the year ended December 31, 2018 be approved;

AND THAT Conservation Ontario appoint BDO as its auditor for the 2019 audit.

CARRIED

7. Conservation Ontario's 2018 Annual Report & Presentation

Don MacIver provided an overview of the Annual Report presentation with some detail about the process and related to that report.

#04/19 Moved by: Joe Farwell Seconded by: George Watson

THAT Conservation Ontario Council adopt the 2018 Annual Report.

CARRIED

8. Council Voting Delegates & Alternates

The following corrections were made to the Voting Delegate List:

Ausable Bayfield Conservation:

Alternate: Doug Cook

2nd Alternate: Brian Horner

Lake Simcoe Region Conservaton Authority:

Alternate: Scott MacPherson

2nd Alternate: Mike Walters

Grand River Conservation Authority:

Voting Delegate: Helen Jowett

Alternate: Joe Farwell

Quinte Conservation:

Alternate: James Fleiler

2nd Alternate: Janice Maynard

Saugeen Valley Conservation:

Alternate: Maureen Couture

#05/19 Moved by: Pieter Leenhouts

Seconded by: Cathy Little

THAT the Voting Delegates and Alternates List be accepted as amended.

CARRIED

9. Orientation for New Council Members

Jane Lewington provided Council members with an orientation which is attached to the minutes.

10. Election of Conservation Ontario Chair, 2 Vice Chairs and 3 Directors

The proceedings were handed over to Kim Gavine (CO). All the positions were declared vacant for 2019 and the election procedures were reviewed.

#06/19 Moved by: Lin Gibson

Seconded by: Joe Farwell

THAT Jane Lewington and Rick Wilson be appointed as scrutineers in the event of a vote.

CARRIED

Kim Gavine called for nominations for Chair of Conservation Ontario for 2019.

Karen Ras nominated Wayne Emmerson

Kim Gavine called a second and third time for nominations and hearing none called for a motion to close the nominations.

#07/19 Moved by: Bill Smirle

Seconded by: Pieter Leenhouts

THAT the nominations for Chair of Conservation Ontario for 2019 be closed.

CARRIED

Wayne Emmerson accepted his nomination and was declared Chair of Conservation Ontario for 2019.

Kim called for nominations for Vice Chairs of Conservation Ontario for 2019.

Cathy Little nominated Lin Gibson

Pieter Leinhouts nominated Alan Revill

Kim called a second and third time for nominations and hearing none called for a motion to close the nominations.

#08/19 Moved by: Joe Farwell

Seconded by: Mark Peacock

THAT the nominations for Vice Chairs of Conservation Ontario for 2019 be closed.

CARRIED

Lin Gibson and Alan Revill accepted their nominations and were declared Vice Chairs for Conservation Ontario for 2019.

Kim Gavine called for nominations for the Directors (staff positions) for 2019.

Joe Farwell nominated Richard Wyma

Jim Alya nominated Linda Laliberte

Wayne Emerson nominated Deb Martin-Downs – ***Deb Martin-Downs stood aside for this position***

Kim Gavine called a second and third time for nominations and hearing none called for a motion to close the nominations.

#09/19 Moved by: Jim Alyea

Seconded by: Ted Smith

THAT the nominations for staff Directors of Conservation Ontario for 2019 be closed.

CARRIED

Linda Laliberte and Richard Wyma accepted their nominations and were declared Directors of Conservation Ontario.

Kim called for nominations for Director for Conservation Ontario for 2019.

Wayne Emmerson nominated Deb-Martin Downs

Kim Gavine called a second and third time for nominations and hearing none called for a motion to close the nominations.

#10/19 Moved by: Joe Farwell

Seconded by: Linda Laliberte

THAT the nominations for the Director of Conservation Ontario for 2019 be closed.

CARRIED

Deb Martin-Downs accepted her nomination and was declared Director of Conservation Ontario.

Wayne Emmerson presided as Chair for the remainder of the meeting.

11. Standing Committee Representatives

#11/19 Moved by: Deb Martin-Downs

Seconded by: Alan Revill

THAT the appointment of the Budget and Audit Standing Committee membership (as identified below) be ratified.

THAT the appointment of the Group Insurance and Benefits Committee membership (as identified below) be ratified.

THAT the appointment of the Occupational Health and Safety/Risk Management Committee membership (as identified below) be ratified.

CARRIED

12. Motion to move from Full Council to Committee of the Whole

#12/19 Moved by: Joe Farwell

Seconded by: Lin Gibson

THAT the meeting now move from Full Council to Committee of the Whole.

CARRIED

13. Discussion Items

(Item 14b) from Consent Agenda

Conservation Ontario's Comments on the "Consultation: Increasing Housing Supply in Ontario" (ERO #013-4190) and Conservation Ontario's Blog Post "Putting Growth in the Right Spot Ensures Public Health and Safety: A Response to the Housing Supply Consultation"

C.W. #01/19 Moved by: Deb Martin-Downs

Seconded by: Joe Farwell

THAT Conservation Ontario's comments on the "Consultation: Increasing Housing Supply in Ontario" (ERO #013-4190) dated January 29, 2019 be endorsed.

CARRIED

a) General Manager's Report

Deb Martin-Downs noted that retaining Strategy Corp was a positive decision for our strategic government relations work.

Wayne Emmerson noted that the BILD connection with CO is a positive one and that the meeting with Minister Phillips is an important one to have.

C.W. #02/19 Moved by: Lin Gibson

Seconded by: Dan Gieruszak

THAT Council Ontario Council receives this report as information.

CARRIED

b) Proposed Collective Conservation Authority Core Mandate and Objectives; and Conservation Ontario Client Service and Streamlining Initiative; and Representatives for leadership and support Committees

i) C.W. #03/19 Moved by: Jennifer Innis Seconded by: Alan Revill

THAT Conservation Ontario Council endorse the "Collective Conservation Authority Mandate and Objectives" for consistent use by CAs;

CARRIED

John Mackenzie commented on the lack of reference to CA education programs in the core mandate. It was explained that the core mandate and objectives are communicated at a high level and education was intended to be covered by the "connect people to the natural environment" but that it could be made more explicit.

ii) C.W. #04/19 Moved by: Andy Mitchell

Seconded by: Scott MacPherson

WHEREAS the provincial government intends to increase the supply of housing and streamline the land use planning and development approval process to achieve this goal;

AND WHEREAS the Conservation Authorities play an important role in the planning and development review process with respect to watershed protection and hazard lands;

AND WHEREAS Conservation Authorities support and can help deliver the Government's objective not to jeopardize public health and safety or the environment;

THEREFORE BE IT RESOLVED THAT Conservation Ontario Council endorse the Client Service and Streamlining Initiative (as amended) and that the resolution be sent to our clients, represented by Ontario Homebuilders Association (OHBA), Building Industry and Land Development Association (BILD) and Association of Municipalities of Ontario (AMO) and to the Ministers of Municipal Affairs and Housing; Environment, Conservation and Parks; and, Natural Resources and Forestry;

AND THAT Conservation Ontario Council request that all Conservation Authority Boards endorse a commitment to pursue streamlining and client service measures in order to contribute to achieving provincial priorities and to send such a resolution to local Municipal Councils and MPPs;

CARRIED

Bonnie directed the Council to the detailed report in the agenda and provided an overview of the three action areas (1. Improve client service and accountability; 2. Increase speed of approvals; and, 3. Reduce red tape and regulatory burden) identified in the CO Client Service and Streamlining Initiative (Attachment 2, pp66-67). Further to discussion, Bonnie noted that the committee recommendations will be guidelines and best practices for all CAs to consider in their local context and not requirements for all CAs. For clarity, Council requested that each of the three client service and streamlining action areas, identified to help the Province address the demand for housing supply, include a reference to 'protecting public health and safety, and, the environment'. The resolution includes "...endorse the 'Client Service and Streamlining Initiative (as amended)..." to enable incorporation of this amendment.

iii) C.W. #05/19 Moved by: Bill Smirle

Seconded by: Susan Fielding

THAT Joe Farwell (Grand River Conservation Authority); Mike Walters (Lake Simcoe Region Conservation Authority); Chris Darling (Central Lake Ontario Conservation Authority); Brian Tayler (North Bay-Mattawa Conservation Authority); Deborah Martin-Downs (Credit Valley Conservation); Sommer Casgrain-Robertson (Rideau Valley Conservation Authority); and, Angela Coleman (South Nation Conservation) be endorsed as members of the Conservation Ontario Client Service and Streamlining Initiative Steering Committee

CARRIED

iv) C.W. #06/19 C.W. #07/19 Moved by: Lin Gibson

Seconded by: Joe Farwell

THAT Alison McDonald (South Nation Conservation); Barbara Veale (Conservation Halton); Chris Jones (Central Lake Ontario Conservation Authority); Glen McDonald (Rideau Valley Conservation Authority); Michael Nelson (Essex Region Conservation Authority); Nancy Davy (Grand River Conservation Authority); Paula Scott (North Bay-Mattawa Conservation Authority); Rob Baldwin (Lake Simcoe Region Conservation Authority); Sameer Dhalla (Toronto and Region Conservation Authority); and, Tracy Annett (Upper Thames River Conservation Authority) be endorsed as the Conservation Ontario Timely Review and Approvals Task Force

CARRIED

c) Special Projects Budget 2019

C.W. #08/19 Moved by: Linda Laliberte

Seconded by: Dave Turton

THAT the 2019 Special Projects Budget in the amount of \$1,186,977 be approved as presented and as recommended by the Budget and Audit Committee.

CARRIED

d) Annual Report: April 2018-March 2019 Conservation Ontario (CO) Representatives and Conservation Authorities Program Discussion Group List

C.W. #08/19 Moved by: Scott MacPherson

Seconded by: Alan Revill

THAT Conservation Ontario Council receives this report.

CARRIED

e) Program Updates

i. Drinking Water Source Protection

Chitra Gowda provided an overview of the program update for the DWSP program.

C.W. #09/19 Moved by: Karen Ras

Seconded by: Dave Bylsman

THAT Conservation Ontario Council receives this report as information.

CARRIED

ii. Marketing & Communications

Jane Lewington provided an overview of the program update for the Marketing and Communications program. Nekeisha Mohammed provided an overview of the Conservation Ontario Guide to Ontario's Conservation Areas.

C.W. #10/19 Moved by: Susan Fielding

Seconded by: Dan Gierusak

THAT Conservation Ontario Council receives this report as information.

CARRIED

iii. Business Development & Partnerships

Jo-Anne Rzaeki provided a slide presentation and overview of the Business Development and Partnership program.

C.W. #11/19 Moved by: Rick Cerna

Seconded by: Scott MacPherson

THAT Angela Coleman (General Manager, Secretary Treasurer-SNC); Tim Mereu (Director, Watershed Management-CVC); Melinda Bessey (Acting Manager, Planning-LSRCA); Ashlea Brown (Senior Environmental Regulations Analyst/Capital Projects Analyst – LSRCA) and Jo-Anne Rzaeki (Business Development and Partnerships Coordinator –CO) be endorsed to represent Conservation Ontario on the Federal Flood Risk Land Use Advisory Committee

AND THAT Mark Peacock (CAO/Secretary Treasurer -LTVCA) be endorsed to represent Conservation Ontario on the Natural Research Council Federal Building Code Committee to review changes to address climate change and flood resilience.

CARRIED

iv. Information Management

Rick Wilson provided an overview of the program update for the Information Management program.

C.W. #12/19 Moved by: Bill Smirle Seconded by: Cathy Little

THAT Conservation Ontario Council receives this report as information.

CARRIED

14. Consent Items

C.W. #13/19 Moved by: Ted Smith Seconded by: Lin Gibson

THAT Council approve a consent agenda and endorse the recommendations accompanying Items 14a, 14c – 14m.

CARRIED

- a) Conservation Ontario's comments on Schedule 10 of Bill 66: Restoring Ontario's Competitiveness Act, 2018 (ERO#013-4293); the Proposed open-for-business planning tool (ERO#013-4125) and the New Regulation under the Planning Act for open-for-business planning tool (ERO#013-4239)

THAT the comments on Schedule 10 of Bill 66: Restoring Ontario's Competitiveness Act, 2018 (ERO#013-4293); the Proposed open-for-business planning tool (ERO#013-4125) and the New Regulation under the Planning Act for open-for-business planning tool (ERO#013-4239) submitted to the Ministry of Economic Development, Job Creation and Trade on January 18, 2019, be endorsed.

- ~~b) Conservation Ontario's Comments on the "Consultation: Increasing Housing Supply in Ontario" (ERO #013-4190) and Conservation Ontario's Blog Post "Putting Growth in the Right Spot Ensures Public Health and Safety: A Response to the Housing Supply Consultation"~~

- c) Conservation Ontario's comments on "Preserving and Protecting our Environment for Future Generations: A Made-in-Ontario Environment Plan" (ERO#013-4208)

THAT the comments on "Preserving and Protecting our Environment for Future Generations: A Made-in-Ontario Environment Plan" (ERO#013-4208) submitted to the Ministry of the Environment, Conservation and Parks on January 28, 2019, be endorsed.

- d) Conservation Ontario's Comments on the "Proposed Amendment to the Growth Plan for the Greater Golden Horseshoe, 2017" (ERO #013-4504)

THAT Conservation Ontario's comments on the "Proposed Amendment to the Growth Plan for the Greater Golden Horseshoe, 2017" (ERO #013-4504) dated February 28, 2019 be endorsed.

- e) Conservation Ontario's comments on the "10th Year Review of Ontario's Endangered Species Act: Discussion Paper" (ERO#013-4143)

THAT the comments on the "10th Year Review of Ontario's Endangered Species Act: Discussion Paper (ERO#013-4143) submitted to the Ministry of the Environment, Conservation and Parks on March 4, 2019, be endorsed.

- f) Provincial Flood Forecasting and Warning Committee (PFFWC) and Ontario Hydrometric Program Coordinating Committee (OHPCC) Representatives

THAT Steve Jackson (MVCA) be endorsed as the South West representative on the Provincial Flood Forecasting and Warning Committee and Dwight Boyd (GRCA) be endorsed as an alternate representative.

AND THAT Kurtis Romanchuk (NBMCA) be endorsed as the Northern CA representative on the Provincial Flood Forecasting and Warning Committee.

AND THAT Iryna Shulyarenko (KC) be endorsed as the Central CA representative on the Provincial Flood Forecasting and Warning Committee and Sameer Dhalla (TRCA) be endorsed as an alternate representative.

AND THAT Steve Jackson (MVCA) be endorsed as the CO representative on the Ontario Hydrometric Coordinating Committee and Dwight Boyd (GRCA) be endorsed as an alternate representative.

- g) Certified Crop Advisors Representation

THAT Conservation Ontario (CO) Council thank Mark Eastman (CVC) for his contributions as Conservation Ontario representative on the Certified Crop Advisor Association Board of Directors since 2013;

AND THAT CO Council endorse Michael Dick (ERCA) as CO representative on the Certified Crop Advisor Association Board of Directors.

- h) Conservation Ontario's comments on the "Proposed regulatory amendments to Ontario Regulation 267/03 under the Nutrient Management Act (ERO#013-4388)

THAT the comments on the "Proposed regulatory amendments to Ontario Regulation 267/03 under the Nutrient Management Act" (ERO#013-4388) submitted to the Ministry of Agriculture, Food and Rural Affairs and the Ministry of the Environment, Conservation and Parks on February 22, 2019, be endorsed.

- i) Submission of Conservation Ontario's 2018 Annual Effectiveness Monitoring Report on the Class Environmental Assessment for Remedial Flood and Erosion Control Projects

THAT Conservation Ontario's "2018 Annual Effectiveness Monitoring Report on the Class Environmental Assessment for Remedial Flood and Erosion Control Projects" be received as information.

- j) Update on the Memorandum of Understanding between Conservation Ontario and Hydro One

THAT Conservation Ontario Council receives this report as information.

- k) Great Lakes Water Quality Agreement Executive Committee and Annex Sub-Committees Updates and Decision Items (i) Conservation Ontario's Comments on "2019 Progress Report of

the Parties” and (ii) Conservation Ontario Representatives for Lake Erie Action Plan (LEAP) Implementation Team

- i. *THAT Conservation Ontario Council receives this report and, THAT Conservation Ontario’s comments dated January 31, 2019 on “2019 Progress Report of the Parties” be endorsed*
 - ii. *THAT Richard Wyma (ERCA); Brian McDougall (SCRCA) (Nicole Drumm (SCRCA-Alternate)); Joe Farwell (Grand River) (Sandra Cooke (Grand River-Alternate); Ian Wilcox (UTRCA) (Chris Harrington, Karen Maaskant (UTRCA –Alternates)); Mark Peacock (LTVCA) (Jason Wintermute (LTVCA –Alternate)) and Jo-Anne Rzakki (CO) be endorsed as Conservation Ontario’s representatives on the Lake Erie Action Plan Implementation Team*
- l) Dam Owners Advisory Committee letter to Minister re: Red Tape Reduction – *Lakes and Rivers Improvement Act*
- THAT this report and attached letter to Minister Yakabuski dated January 9, 2019 be received by Conservation Ontario Council for information.*
- m) Correspondence
- Ottawa River Watershed CAs to Minister of Environment and Climate Change Canada
 - Minister of Environment, Conservation and Parks to Conservation Ontario

15. Motion to Move from Committee of the Whole to Full Council

#13/19 Moved by: Joe Farwell

Seconded by: Linda Laliberte

CARRIED

16. Council Business – Council Adoption of Recommendations

#14/19 Moved by: Dave Turton

Seconded by: James Fleiler

THAT Conservation Ontario Council adopt Committee of the Whole (C.W.) Recommendations: C.W. #01/19 to C.W. #13/19.

CARRIED

17. New Business

Deb Martin-Downs provided an overview for Latonell November 19-21, 2019, and asked for auction items from CAs for the Dream Auction. It was noted that Leadership nominations are pending, and the call for those nominations will go out the second week of April.

18. Adjourn

15/19 Moved by: Bill Smirle

Seconded: Pieter Leenhouts

THAT the meeting be adjourned.

CARRIED

Report To: Board of Directors

Subject: Risk-Based Plan on Permit Compliance

Report No: FA-59-19

Date: June 19, 2019

Recommendation:

That Report No. FA-59-19 RE: Risk-Based Plan on Permit Compliance **BE RECEIVED** for information.

Purpose:

The purpose of this report is to provide the Board with an update to Recommendation 12 of the Auditor General's report with respect to a risk-based plan on permit compliance.

Background:

In September of 2018, the Office of the Auditor General of Ontario released their Special Audit of the Niagara Peninsula Conservation Authority. Within this Audit, Report Section 6.3.2 resulted in Recommendation 12. This recommendation contained 3 bullet points, one of which stated:

"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: 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".

Discussion:

Based on Recommendation 12 of the Auditor General's Special Audit, NPCA has developed a risk-based system to identify which approved permits, under Section 28 of the *Conservation Authorities Act*, require follow-up site visits.

In addition, Conservation Ontario has recently endorsed updated draft "Regulatory Compliance Guidelines: Sample Policies and Procedures" through their Regulatory Compliance Committee. This draft document will come into effect once the Province finishes its review of the Conservation Authorities Act and enacts the updated Regulation. As such, NPCA will utilize the Conservation Ontario document, in combination with our risk-based document, to ensure compliance with NPCA Section 28 permits.

Financial Implications:

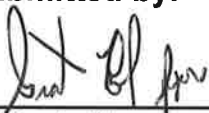
There are no financial implications as a result of this report.

Related Reports and Appendices:

Appendix 1: NPCA Risk-Based Plan on Permit Compliance

Authored by:

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

Submitted by:

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

Appendix 1: NPCA Risk-Based Plan on Permit Compliance

Feature	Risk Assessment	Type of Follow-up
Wetlands	Where no accompanying study is required and work is within 20 meters from wetland proper	Visual inspection by NPCA
	Where a study accompanies the application regardless of distance from wetland proper	A letter is required from the consultant/engineer stating works done as designed and Visual inspection by NPCA
Watercourse	Where no accompanying study is required and work within 5 meters of watercourse, (not altering channel)	Visual inspection by NPCA
	Where a study accompanies the application, regardless of distance from watercourse (not altering channel) or where the watercourse is relocated or altered	A letter is required from the consultant/engineer stating works done as designed and Visual inspection by NPCA
Slope	Where no accompanying study is required, and work is between 7.5m and 15m from top of slope	Visual inspection by NPCA
	Where a study accompanies the application, regardless of distance from top of slope	A letter is required from the consultant/engineer stating works done as designed and Visual inspection by NPCA
Shoreline	Where no accompanying study is required, and work is within the regulated area	Visual inspection by NPCA
	Where a study accompanies the application and adheres to NPCA policy	A letter is required from the consultant/engineer stating works done as designed and Visual inspection by NPCA

Report To: Board of Directors

Subject: 2019 Restoration Program Workplan

Report No: FA-63-19

Date: June 19, 2019

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:




Steve Gillis
Restoration Project Lead



Stuart McPherson
Restoration Project Lead

Reviewed by:



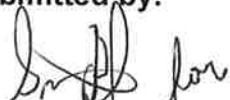
Geoff Verkade
Senior Manager, Integrated Watershed Planning/Information Management

Reviewed by:



Lise Gagnon, CPA, CGA
Director, Corporate Services

Submitted by:



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

Niagara Peninsula Conservation Authority – 2019 Restoration Program Guidelines

Section 1- Program Description

The NPCA is taking action to restore and improve water quality, wildlife habitat and forest cover across the NPCA watershed. In 2019, the NPCA has launched a revitalized restoration program with the vision of:

‘Fostering collaboration among partners in the watershed to protect and restore water quality and diverse habitats by completing projects that meet the long-term mandate of the NPCA.’

The Restoration Program is shaped by the following **Guiding Principles**:

- a) Embracing partnerships and shared responsibility;
- b) Leveraging funding opportunities for an incentive-based cost sharing program;
- c) Promoting of adaptive management to meet the changing needs on the landscape;
- d) Conveying awareness of the benefits of environmental restoration and to celebrate success.

The top line **Goals** of the Restoration Program are to:

- 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.

This guide provides information on funding opportunities, eligibility requirements, the application and evaluation process. You're welcome to apply for 2019 funding, or, if you have questions contact the NPCA for further information at 905-788-3135.

Section 2- Who Can Apply?

1. Private and Public Landowners
2. Incorporated Non-Governmental Organizations (NGOs)
3. Non-incorporated organizations (Nature Clubs, "Friends of" organizations)

Section 3- Project Process

- Step 1. Applicant expresses interest; site visit by NPCA staff; applicant completes application form
- Step 2. Project application evaluated by NPCA staff
- Step 3. Project approval by Restoration Program Review Committee
- Step 4. Detailed Project Plan completed with NPCA staff; Landowner/Partner Agreement signed
- Step 5. Project implementation
- Step 6. Project closing/reconciling accounts
- Step 7. On-going monitoring where applicable (1, 5 and 10 year)

Section 4- Restoration Project Categories

	Eligible Project Types	Funding Rate	Funding Ceiling	Application Date for 2019 projects
1	Livestock Restriction & Crossings	Up to 75%	\$10,000	N/A
2	Conservation Farm Practices	Up to 75%	\$5,000	N/A
3	Tree Planting/ Woodland Restoration	Up to 75%	\$10,000	N/A
4	Instream/Riparian Habitat Restoration	Up to 75%	\$10,000	N/A
5	Wetland Restoration	Up to 75%	Excavation \$15,000 Planting \$5,000	N/A
6	Upland Habitat Restoration	Up to 75%	\$5,000	N/A
7	Nutrient Management	Up to 75%	\$12,000	N/A
8	Water Conservation Practices	Up to 75%	\$5,000	N/A
9	Cover Crops	\$50/acre up to 50 acres	\$2,500	July 30*

*Applications will be accepted in July 2019 for 2020 projects.

** Funding rates and ceilings are program guidelines only; funding ceilings and rates may be changed at the discretion of the Restoration Program Review Committee.

Section 5- Application Evaluation

Application forms and their supporting materials will be screened for completion to ensure they meet the eligibility requirements before being reviewed and ranked by NPCA staff. The potential project will be evaluated based on specific evaluation criteria for each project category (see Appendix A).

Projects that meet a minimum score of 60% through the evaluation process will be considered by the Restoration Program Committee for funding. Funding is contingent on available budget and other eligible applications.

Projects must have a direct environmental benefit to water quality, diverse habitat and forest cover resulting in measurable results (see Appendix B). Project plans, developed with NPCA staff, will outline the performance measures meant to be achieved through the project. These may include; meters of fence installed, number of trees planted, acres of wetland created, etc.

Preference will be given to projects in Priority Areas for water quality improvement; forest cover and wetland habitat based on the following documents:

- Annual NPCA Water Quality Reports, Niagara Peninsula Conservation Authority, 2007-2019.
- Nature for Niagara's Future Project; a Natural Heritage Systems Assessment; Niagara Peninsula Conservation Authority, 2011.
- How Much Habitat is Enough?, 3rd Edition; Environment Canada, 2013.
- Southern Ontario Wetland Conversion Analysis, Final Report; Ducks Unlimited Canada, March 2010.

Section 6 - Project Approval

Restoration staff will visit the project site with the applicant and the applicant will complete an application form. The potential project will be evaluated based on the criteria outlined in Section 9 - Project Descriptions. The projects will be assessed, scored and ranked against other eligible projects. Projects that are not selected may be considered for the following year. For the 2019 program year, there will be no formal application deadline as projects will be evaluated and approved as submitted. Project approval letters will be sent once a project has been approved.

Section 7 – Funding

Approved projects will receive 75% funding, up to the program category cap limit. The landowner and/or partner organization is responsible for the remaining 25% or greater of the costs. NPCA grant dollars can be combined with other funding (i.e., Ducks Unlimited, SARFIP). In cases where applicant receives additional funding, the NPCA will cover 75% of the remaining costs up to the project cap limit (see Example 3). Where the NPCA and Partner Agencies have entered a Memorandum of Understanding alternative funding models may be used.

Example 1. A reforestation project costs \$11,050. The NPCA grant covers 75% of the costs - \$8,287.50. The applicant is responsible for the remaining \$2,762.50.

Example 2. A manure storage project costs \$18,000. The NPCA grant would reach its program category cap limit of \$12,000. The applicant organization is responsible for the remaining \$6,000.

Example 3. A wetland creation project costs \$23,800. The applicant organization receives grants for \$14,600 from another source. The NPCA Grant would then cover 75% of the remaining costs (\$6,900), the landowner is responsible for the remaining costs (\$2,300)

Payment of project expenditures (contractors, project materials) will be dependent on project specifics, in some cases the landowner will pay the project costs and be reimbursed for the NPCA's contribution when the project is complete; in other cases the NPCA will pay the project costs and the applicant will pay their contribution in two installments. In this case, a deposit at the beginning of the project and the remainder at project completion once all accounts are reconciled.

Section 8 - General Program Guidelines

To qualify for funding the following guidelines must be met:

- 1) Projects must be within the NPCA watershed (see Figure 1).
- 2) Projects must demonstrate improvement to local water quality, habitat and/or forest cover.

- 3) Projects that will result in the most significant benefits to water quality and habitat are prioritized for funding. Project approval will be based on an evaluation matrix with selection by members of an established technical advisory committee.
- 4) Landowners must contribute financially to the project.
- 5) Applicants must complete a Restoration Program application and sign a Project Agreement form before the project commences.
- 6) The NPCA must review and approve all projects before project commencement.
- 7) Projects are to take place within the calendar year.
- 8) Landowners may have up to two active projects in any one year.
- 9) Projects that are ordered or are for compensation are not eligible for funding.
- 10) Project plant material (trees, shrubs, wildflowers) shall be native to Southern Ontario; non-native or invasive species are not eligible for funding.

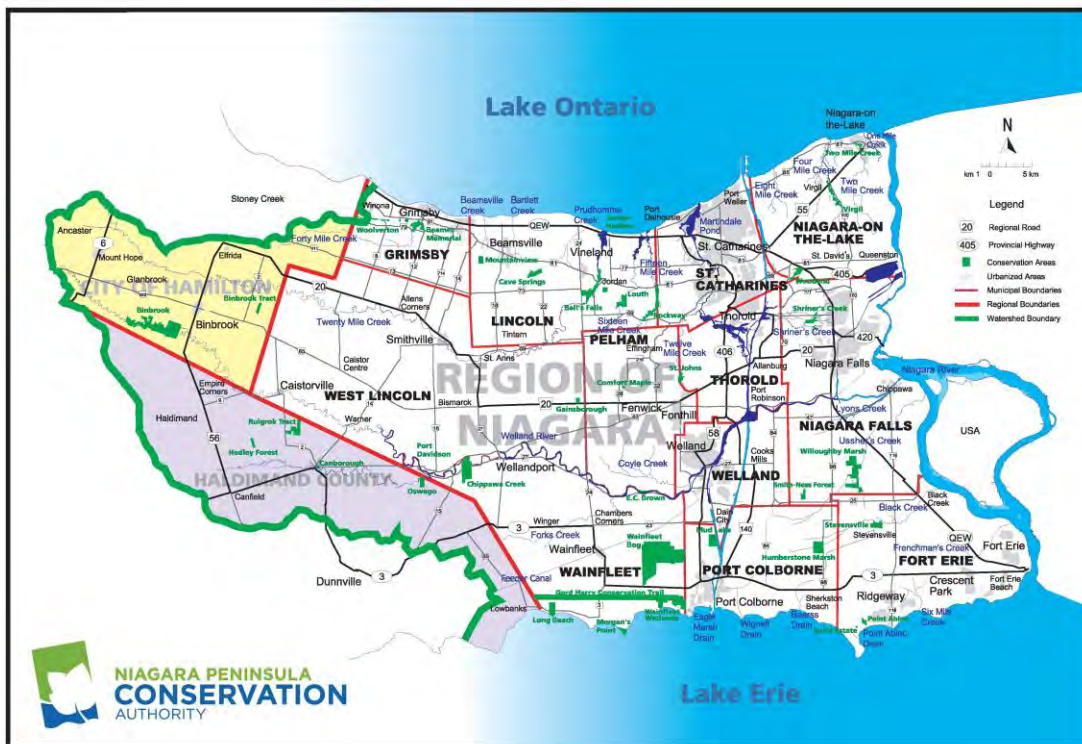


Figure 1

Section 9 - Project Descriptions

See appendices for project category descriptions, eligible projects, requirements and evaluation criteria.

1. Livestock Restriction & Crossings	Grant Rate	Grant Ceiling	Application Due		
	75%	\$10,000	N/A		
Purpose: <ul style="list-style-type: none">Projects designed to improve water quality by restricting livestock access to watercourses.					
Category Guidelines: <ul style="list-style-type: none">All necessary permits/permissions must be obtained before project commencementProjects must utilize appropriate sediment control and mitigation measures (i.e., silt fencing)					
Eligible Projects: <u>Fencing to restrict livestock access to a watercourse</u> <ul style="list-style-type: none">Fencing parallel to watercourse/wetland to restrict livestock and maintain or improve riparian conditions and function (eligible permanent fencing costs shall not exceed \$11.50 per meter, including labour)Temporary fencing will be considered eligible but will require a signed agreement requiring the applicant to install the fence before the introduction of livestockRiparian buffer planting after fencing has been installed <u>Improved stream crossings for livestock or equipment</u> <ul style="list-style-type: none">Improved crossingsBed-level, mid-level and bridge crossings eligible. All bridge crossing design must be stamped and approved by a Professional EngineerRemoval of harmful crossings/structures <u>Alternative watering systems to manage livestock:</u> <ul style="list-style-type: none">Gravity fed, solar, wind, grid line, alternative power, pump & waterline systems to provide livestock alternative water sources					
Eligible Costs: <ul style="list-style-type: none">Assessment, design and construction costsContractor labour and planting servicesExcavation servicesProject material costs (fencing, crossing materials, trees, shrubs, grasses, and wildflowers)					
Ineligible Costs: <ul style="list-style-type: none">Repair and maintenance of existing fencing or crossingsPerimeter fencing around farm propertyWater source developmentStream crossing projects that are associated with a new or expanded pasture – where no crossing has existed previously will be low priority projectsEstablishment of trees or shrubs that are intended for harvesting for economic benefit (i.e., Christmas trees, nurseries, etc.)Caliper-sized trees.Landowner labour costsAdministrative costs					
Potential Key Performance Indicators: <table><tr><td><ul style="list-style-type: none">Metres of fencingTrees plantedShrubs plantedHerbaceous plants planted</td><td><ul style="list-style-type: none">Acres of buffer createdIn-stream crossings createdHarmful crossings removedLivestock restricted from streams.Alternate watering systems installed</td></tr></table>				<ul style="list-style-type: none">Metres of fencingTrees plantedShrubs plantedHerbaceous plants planted	<ul style="list-style-type: none">Acres of buffer createdIn-stream crossings createdHarmful crossings removedLivestock restricted from streams.Alternate watering systems installed
<ul style="list-style-type: none">Metres of fencingTrees plantedShrubs plantedHerbaceous plants planted	<ul style="list-style-type: none">Acres of buffer createdIn-stream crossings createdHarmful crossings removedLivestock restricted from streams.Alternate watering systems installed				

Livestock Restrictions & Crossings Evaluation Matrix

Mailing Address:

Watershed:

Project Description:

Application

Does this project fit within the guidelines? (Yes/No)

Complete application? (Yes/No)

Is the applicant willing to sign a project agreement? (Yes/No)

Project Evaluation

Does the current system allow for livestock access to a watercourse? (10 points)

Is the watercourse currently being farmed through? (10 points)

Watercourse through the project site (within 30m) (Select One)

Cold Water System (3 Points) Warm Water System (2 points)

Does the project area contribute to a headwater area (watershed of 1st or 2nd order stream) (4 points)

Does the current system not allow for alternative crossings or watering sites? (3 points)

Does the project property have an Environmental Farm Plan? (1 points)

Part of a larger naturalization project? (3 Points)

Adjacent to a significant feature (PSW, etc.)? (1 points)

Identified fish habitat type?

Not identified (0 points) Type 3 (1 point) Type 2 (2 points) Type 1 (3 points)

Additional sources of funding? (choose one)

Funding secured (3 points) Unsecured but pending (1 point)

Does the site fall within the Priority Areas for Water Quality Improvement? (4 Points)

Staff Comments:

2. Conservation Farm Practices	Grant Rate	Grant Ceiling	Application Due
	75%	\$5,000	N/A
Purpose: <ul style="list-style-type: none"> On-farm soil stabilization projects designed to reduce erosion, compaction and sedimentation; and improve habitat connection through wildlife corridors. 			
Category Guidelines: <ul style="list-style-type: none"> Projects must be designed to appropriate OMAFRA standards as per <i>Agricultural Erosion Control Structures; A Design and Construction Manual, Publication 832</i> All necessary permits/permissions must be obtained before project commencement Projects must utilize appropriate sediment control and mitigation measures (i.e., silt fencing) 			
Eligible Projects: <p><u>Gully Stabilization and Erosion Control</u></p> <ul style="list-style-type: none"> Grassed waterways and buffer establishment Gully stabilization Contour terraces Water and Sediment Control Basins (WaSCoBs) <p><u>Agroforestry Practices</u></p> <ul style="list-style-type: none"> Hedgerows and windbreaks Alley Cropping <p><u>Soil Management</u></p> <ul style="list-style-type: none"> Rotational grazing 			
Eligible Costs: <ul style="list-style-type: none"> Design costs, professional services Contractor labour and planting services Project material costs Site Preparation Plant material Temporary fencing to prevent livestock damage 			
Ineligible Costs: <ul style="list-style-type: none"> Repair and maintenance costs Construction of new drainage channels, repair of existing drainage systems (e.g., drainage ditch clean-outs) Converting open ditches to closed drainage systems New tile drainage installations Establishment of trees or shrubs that are intended for harvesting for economic benefit (i.e., Christmas trees, nurseries, etc.) Caliper-sized trees Landowner labour costs Administrative costs 			
Potential Key Performance Indicators: <ul style="list-style-type: none"> Metres of grassed waterways established Trees planted Shrubs planted Herbaceous plants planted WaSCoBs installed 		<ul style="list-style-type: none"> Hectares of contour terraces Hectares converted to rotational grazing Metres of Hedgerows or Alley cropping Hectares of Alley cropping or Silvopasture established 	

Conservation Farm Practices Matrix

Mailing Address:

Watershed:

Project Description:

Application

Does this project fit within the guidelines? (Yes/No)

Complete application? (Yes/No)

Is the applicant willing to sign a project agreement? (Yes/No)

Project Evaluation

Site Length Size or length (Select one)

<10m OR < 1 Acre (1 point) 11-50m OR 1 to 2.5 Acres (3 points) 50-100m OR 5-10 Acres (5 points)
101- 500m OR 10-20 Acres (7 points) 500m + or 20 Acres+ (10 points)

Watercourse through or adjacent to the project site (within 30m) (Select One)

Cold Water System (5 Points) Warm Water System (4 points)

Does the project area contribute to a headwater area (watershed of 1st or 2nd order stream) (4 points)

Does the project property have an Environmental Farm Plan? (4 points)

Increase connectivity to existing habitat, reducing fragmentation? (4 points)

Part of a larger naturalization project? (1 Point)

Additional sources of funding? (choose one)

Funding secured (3 points) Unsecured but pending (1 point)

Does the site fall within the Priority Areas for Water Quality Improvement? (4 Points)

Staff Comments:

3. Tree Planting/ Woodland Restoration	Grant Rate	Grant Ceiling	Application Due
	75%	\$10,000	N/A
Purpose: <ul style="list-style-type: none"> Tree planting to reduce forest fragmentation and increase forest cover by creating wildlife corridors. 			
Category Guidelines: <ul style="list-style-type: none"> Plantings larger than 1 hectare or 1000 trees must be stamped by a Registered Professional Forester Plantings larger than 2.5 acres will meet a reforestation rate of 800 trees/acre Livestock must be restricted from the project area All necessary permits/permissions must be obtained before planting 			
Eligible Projects: <ul style="list-style-type: none"> Upland woodland reforestation, wildlife corridor creation/restoration Slough forest restoration/pit and mound restoration Replanting previously NPCA planted sites that have failed to achieve a 70% survival rate. 			
Eligible Costs: <ul style="list-style-type: none"> Contractor labour and planting services Site preparation Plant material Habitat enhancement features (nesting structures) Temporary fencing to restrict livestock access 			
Ineligible Costs: <ul style="list-style-type: none"> Maintenance costs incurred after the establishment of plant material Relocation of established trees Establishment of trees or shrubs that are intended for harvesting for economic benefit (i.e., Christmas trees, nurseries, etc.) Caliper-sized trees Landowner labour costs Administrative costs 			
Key Performance Indicators: <ul style="list-style-type: none"> Trees planted Shrubs planted Hectares of planting Hectares of forest restoration in degraded woodlands 			

Tree Planting Evaluation Matrix

Mailing Address:

Watershed:

Project Description:

Application

Does this project fit within the guidelines? (Yes/No)

Complete application? (Yes/No)

Is the applicant willing to sign a project agreement? (Yes/No)

Project Evaluation

Tree planting (1 point for each level, up to 5 points)

Less than 1 acre (1 point) 1 Acre to 2.5 acres (2 points) 2.5-5 acres (3 points)
5-10 acres (4 points) 10 acres+ (6 points)

Does the project area contribute to a headwater area (watershed of 1st or 2nd order stream)? (2 points)

Watercourse through or adjacent to planting (within 30m) (Select One)

Cold Water System (4 Points) Warm Water System (3 points) Intermittent Watercourse/ Swale (1 point)

Part of a larger naturalization project? (1 Points)

Increase connectivity to existing habitat, reducing fragmentation (Select one)

Corridors <50m wide (1 point) Corridor 50-100m wide (2 points) Corridors >100m wide (3 Points)

Increase interior forest area as defined by *How Much Habitat is Enough?* (2 points)

Within 2km of another forest patch? (1 point)

Increase the size of the largest forest patch per watershed? (1 point)

Increase habitat to adjacent to or surrounding a significant feature, PSW (3 points)

Replanting in damaged or degraded habitat? (2 points)

Additional sources of funding? (choose one)

Funding secured (3 points) Unsecured but pending (2 points)

Does the site fall within the Priority Areas for Forest Cover? (4 Points)

Does the site fall within the Priority Areas for Water Quality? (3 Points)

Staff Comments:

4. Riparian & In-stream Habitat Restoration	Grant Rate	Grant Ceiling	Application Due
	75%	\$10,000	N/A
Purpose: <ul style="list-style-type: none"> Projects designed to improve habitat and water quality in watercourses. 			
Category Guidelines: <ul style="list-style-type: none"> Livestock must be restricted from the project area All necessary permits/permissions must be obtained before project commencement Projects must utilize appropriate sediment control and mitigation measures (i.e., silt fencing) Projects where structures may be impacted by erosion will not be considered for funding 			
Eligible Projects: <ul style="list-style-type: none"> Restoration or enhancement of riparian areas Sediment control measures including bioengineering, crib walls, fish lunkers, bend-way weirs, natural channel design. In-stream aquatic habitat creation/restoration Buffer strips and riparian habitat creation/restoration Removal of fish migration barriers. Converting online ponds to offline ponds 			
Eligible Costs: <ul style="list-style-type: none"> Design costs, professional services Contractor labour and planting services Site preparation Plant material Habitat enhancement features (nesting structures, fish lunkers, spawning beds) 			
Ineligible Costs: <ul style="list-style-type: none"> Maintenance costs incurred after the establishment of plant material Hardscaping (i.e., Gabion baskets) Relocation of established trees Establishment of trees or shrubs that are intended for harvesting for economic benefit (i.e., Christmas trees, nursery trees, etc.) Caliper-sized trees Landowner labour costs Administrative costs 			
Potential Key Performance Indicators: <ul style="list-style-type: none"> Metres of riparian area/ shoreline restored Trees planted Shrubs planted Herbaceous plants planted Hectares of buffers created Fish migration barriers removed Ponds taken offline 			

Instream/ Riparian Habitat Evaluation Matrix*Mailing Address:**Watershed:**Project Description:***Application**

Does this project fit within the guidelines? (Yes/No)

Complete application? (Yes/No)

Is the applicant willing to sign a project agreement? (Yes/No)

Project Evaluation

Site Length Size (Select one)

<10m (1 point) 11-50m (2 points) 50-100m (3 points) 101- 500m (4 points) 500m + (5 points)

Watercourse through the project site (within 30m) (Select One)

Cold Water System (2 Points)

Warm Water System (1 points)

Involves removing an existing wetland from a watercourse (Select one)

Within a Cold-Water System (2 Points)

Within a Warm Water System (1 Points)

Does the project area contribute to a headwater area (watershed of 1st or 2nd order stream)? (2 points)

Existing or proposed buffer on at >80% stream

< 1m (0 points) <5m (1 points) 5-10 (2 points) 10-15m (3 points) 15-30m (4 points) 30m+ (5 points)

Part of a larger naturalization project? (1 Points)

Adjacent to a significant feature (PSW, etc.)? (2 points)

Will the project provide cover on the watercourse? (2 point)

Increase connectivity to existing habitat, reducing fragmentation (3 points)

Removal of existing fish migration barrier? (3 points)

Will the project result in both sides being vegetated? (2 points)

Identified fish habitat type?

Not identified (0 points) Type 3 (1 point)

Type 2 (2 points)

Type 1 (3 points)

Additional sources of funding? (choose one)

Funding secured (2 points) Unsecured but pending (1 point)

Does the site fall within the Priority Areas for Water Quality Improvement? (3 Points)

Staff Comments:

5. Wetland Habitat Restoration	Grant Rate	Grant Ceiling	Application Due
	75%	\$10,000 Excavation \$5,000 Planting	N/A
Purpose: <ul style="list-style-type: none"> Wetland projects designed to improve local water quality, habitat, and floodplain capacity. 			
Category Guidelines: <ul style="list-style-type: none"> Projects will follow NPCA wetland design standards Livestock must be restricted from the project area All projects must have a minimum 5m vegetated buffer surrounding most (approximately 80%) of the wetland. Projects without a vegetated buffer will not be considered for funding. Projects must be proposed in areas with suitable soils and topography to be considered. All necessary permits/permissions must be obtained before project commencement Projects must utilize appropriate sediment control and mitigation measures (i.e., silt fencing) 			
Eligible Projects: <ul style="list-style-type: none"> Creation or enhancement of wetlands 			
Eligible Costs: <ul style="list-style-type: none"> Contractor labour and planting services Excavation costs Plant material Habitat enhancement features Tenant farmer crop loss reimbursement (case specific) 			
Ineligible Costs: <ul style="list-style-type: none"> Ponds designed for irrigation/aquaculture Maintenance costs incurred after the establishment of plant material Fish stock Aeration equipment Relocation of established trees Establishment of trees or shrubs that are intended for harvesting for economic benefit (i.e., Christmas trees, nursery trees, etc.) Caliper-sized trees Landowner labour costs Administrative costs 			
Potential Key Performance Indicators: <ul style="list-style-type: none"> Hectares of wetland created Trees planted Shrubs planted Herbaceous plants planted 			

Wetland Habitat Restoration/Creation Evaluation Matrix*Mailing Address:**Watershed:**Project Description:***Application**

Does this project fit within the guidelines? (Yes/No)

Complete application? (Yes/No)

Is the applicant willing to sign a project agreement? (Yes/No)

Project Evaluation

Wetland Size (Select one)

Less than 1/4 acre (2 points)

1/4 Acre to 1/2 acres (3 points)

½ to 1 acres (4points)

1 acre + (6 points)

Does the project area contribute to a headwater area (watershed of 1st or 2nd order stream)? (2 points)

The project increases floodplain storage (3 points)

Part of a larger naturalization project? (1 Point)

Increase connectivity to existing habitat, reducing fragmentation (2 points)

Increase habitat adjacent to or surrounding a significant feature - PSW (3 points)

Addition of or existing vegetated buffer on >80% of wetland.

Less than 5m (0 points)

5-10m (2 points)

10-15M (3 points)

15-30m (4 points)

30M+ (5 points)

Excavated fill stays on-site (3 points)

Additional sources of funding? (choose one)

Funding secured (3 points) Unsecured but pending (2 points)

Does the site fall within the Priority Areas for Water Quality Improvement? (3 Points)

Does the site fall within the Priority Area for Wetland Habitat? (4 Points)

BONUS POINTS: Is the proposed site within 2km of Lake Ontario, Lake Erie or the Niagara River? (3 Points)**Staff Comments:**

6. Upland Habitat Restoration/Creation	Grant Rate	Grant Ceiling	Application Due
	75%	\$5,000	N/A
Purpose: <ul style="list-style-type: none"> Enhancing/ creation of upland terrestrial habitat including meadows and pollinator habitat. 			
Category Guidelines: <ul style="list-style-type: none"> Livestock must be restricted from the project area Projects must be proposed in areas with suitable soils and topography to be considered All necessary permits/permissions must be obtained before project commencement 			
Eligible Projects: <ul style="list-style-type: none"> Upland prairie/meadow/savannah/grassland creation/restoration Pollinator habitat creation/restoration Buffer strips on natural features Shrub thickets 			
Eligible Costs: <ul style="list-style-type: none"> Contractor labour and planting services Seeding equipment rental Site preparation Plant material Habitat enhancement features Fencing to restrict livestock access 			
Ineligible Costs: <ul style="list-style-type: none"> Maintenance costs incurred after the establishment of plant material Relocation of established trees Landowner labour costs Administrative costs 			
Potential Key Performance Indicators: <ul style="list-style-type: none"> Hectares of Upland habitat restored/ created Trees planted Shrubs planted Herbaceous plants planted 			

Upland Habitat Restoration Evaluation Matrix

Mailing Address:

Watershed:

Project Description:

Application

Does this project fit within the guidelines? (Yes/No)

Complete application? (Yes/No)

Is the applicant willing to sign a project agreement? (Yes/No)

Project Evaluation

Upland Habitat Size (Select one)

> than 1/4 acre (1 point) 1/4 Acre to 1/2 acres (2 points) ½ to 1 Acres (3 points)

1-5 Acres (5 points) 5 Acres + (7 points)

Does the project area contribute to a headwater area (watershed of 1st or 2nd order stream)? (3 points)

Watercourse through or adjacent to planting (within 30m) (Select One)

Cold Water System (4 Points) Warm Water System (3 points)

Part of a larger naturalization project? (1 Points)

Increase connectivity to existing habitat, reducing fragmentation (Select one)

Corridors <50m wide (2 point) Corridor 50-100m wide (4 points) Corridors >100m wide (5 Points)

Increase habitat to adjacent or surrounding a significant feature, PSW (3 points)

Does the surrounding landscape support a diversity of land uses (hedgerows, riparian, wetland, etc.)? (3 points)

Is the project adjacent to an existing upland habitat? (2 points)

Replanting in damaged or degraded habitat? (2 points)

Additional sources of funding? (choose one)

Funding secured (3 points) Unsecured but pending (2 points)

Does the site fall within the Priority Areas for Water Quality Improvement? (2 Points)

Staff Comments:

7. Nutrient Management	Grant Rate	Grant Ceiling	Application Date
	75%	\$12,000	N/A
Purpose: <ul style="list-style-type: none"> On-farm projects that improve local water quality through the reduction and elimination of excess nutrients from animal waste contamination and elimination or recycling of wastewater streams to recover nutrients before discharging to watercourses. 			
Category Guidelines: <ul style="list-style-type: none"> The Niagara Peninsula Conservation Authority must review and approve all projects before construction Projects will have an approved Nutrient Management Strategy that demonstrates that upgraded storage needs meet the MSTOR sizing requirements of section 69 of <i>Nutrient Management Act</i> Existing manure storages for non-regulated farm operations (not phased into <i>Nutrient Management Act</i>) All necessary permits/permissions must be obtained before project commencement 			
Eligible Projects: <ul style="list-style-type: none"> Solid & liquid manure storages (earthen, concrete, steel, roofed) tanks and in-barn (below barn) and improvements to prevent risks of contamination Runoff containment and storages Increased storage to meet winter spreading restrictions Clean water diversions Manure treatment technologies (i.e., dewatering, nutrient recovery systems, solid-liquid separation). Modifications to manure application equipment (i.e., high trajectory) for improved manure application. Manure volume-reducing in-barn modifications (i.e. liquid-solid separation technologies) Decommissioning of manure storage that is part of an improvement project Treatment trench systems, separate storage, transfer systems, vegetated filter strips that are designed to OMAFRA standards Transfer piping to suitable storages. Greenhouse recirculation equipment, collection, storage, transfer and treatment system Fruit and vegetable washing facilities Tile drainage control shutoff Other Innovative discharge treatment technologies Water meters to monitor the amount of wash water discharged and sumps when required Low-water use retrofits for sinks 			
Eligible Costs: <ul style="list-style-type: none"> Professional services (e.g., engineering costs) Approved construction materials Contractor labour Excavation services 			
Ineligible Costs: <ul style="list-style-type: none"> New or expanding operations Repair and maintenance of buildings Repair and maintenance of existing nutrient recovery equipment Equipment to move manure from storage to field (i.e., Pumping equipment) Transportation costs of exported manure or local haulage of manure Project permit fees Incineration units Manure storage additives & related technologies Decommissioning of manure storage that is not part of an improvement project Design, construction and installation costs of items not directly related to the recycling process Landowner labour costs Administrative costs 			

Potential Key Performance Indicators:

- Kg of phosphorus reduced
- Manure storage projects completed
- Waste water projects completed

Total Score /35**Nutrient Management Matrix***Mailing Address:**Watershed:**Project Description:***Application**

Does this project fit within the guidelines? (Yes/No)

Complete application? (Yes/No)

Is the applicant willing to sign a project agreement? (Yes/No)

Project Evaluation

Watercourse through or adjacent to the project site (within 30m) (Select One)

Cold Water System (5 Points) Warm Water System (4 points)

Does the project area contribute to a headwater area (watershed of 1st or 2nd order stream) (4 points)

Is this project replacing a system that is currently failing or does not exist? (7 points)

Does the current system allow for nutrients to contaminate watercourses? (7 points)

Does the project eliminate nutrients from entering a watercourse? (4 points)

Does the project property have an Environmental Farm Plan? (1 point)

Additional sources of funding? (choose one)

-additional sources of funding secured (3 points)

-additional sources of funding unsecured but pending (1 point)

Does the site fall within the Priority Areas for Water Quality Improvement? (4 Points)

Staff Comments:

8. Water Conservation Practices	Grant Rate	Grant Ceiling	Application Date
	75 %	\$5,000	N/A
Purpose: <ul style="list-style-type: none"> Improvements to irrigation practices to reduce excess agricultural nutrient loading. 			
Category Guidelines: <ul style="list-style-type: none"> The Niagara Peninsula Conservation Authority must review and approve all projects before construction All necessary permits/permissions must be obtained before project commencement 			
Eligible Projects: <ul style="list-style-type: none"> Irrigation equipment modification/improvement to increase water efficiency or nutrient use efficiency including low-pressure sprinkler nozzles, pipe/hose extensions/carts, booms for low-pressure extensions/carts, a delivery hose and small diameter flexible pipe, filters and emitters for trickle or drip systems Modification of planters to handle trickle tape installation Equipment to prevent backflow of altered irrigation water into water sources, new or improved backflow prevention mechanism/ equipment for an existing irrigation system 			
Eligible Costs: <ul style="list-style-type: none"> Professional services (e.g. project design costs) Contractor labour Approved construction materials Consultant fees to develop an irrigation management plan that results in a water conservation improvement project Pre/post project sampling and analysis 			
Ineligible Costs: <ul style="list-style-type: none"> Repair and maintenance of buildings Professional services not directly related to irrigation management planning that result in a water conservation improvement project Routine sampling and analysis Project permit fees Purchase and installation of irrigation monitoring equipment Water source development, drilling, and changes to water licensing agreements Upstream water distribution systems that are not part of a farmer's operation Landowner labour costs Administrative costs 			
Potential Key Performance Indicators: <ul style="list-style-type: none"> Hectares of drip or trickle irrigation completed 			

Water Conservation Practices Evaluation Matrix

Mailing Address:

Watershed:

Project Description:

Application

Does this project fit within the guidelines? (Yes/No)

Complete application? (Yes/No)

Is the applicant willing to sign a project agreement? (Yes/No)

Project Evaluation

Watercourse through or adjacent to the project site (within 30m) (Select One)

Cold Water System (4 Points) Warm Water System (3 points) Drainage Ditch (2 Points)

Does the project area contribute to a headwater area (watershed of 1st or 2nd order stream) (4 points)

Is this project replacing a system that is currently failing or does not exist? (8 points)

Does the current system allow for nutrients to contaminate watercourses? (8 points)

Does the project property have an Environmental Farm Plan? (2 points)

Additional sources of funding? (choose one)

-additional sources of funding secured (3 points)

-additional sources of funding unsecured but pending (1 point)

Does the site fall within the Priority Areas for Water Quality Improvement? (6 Points)

Staff Comments:

9. Cover crops	Grant Rate	Grant Ceiling	Application Date
	\$50/ acre up to 50 acres	\$2,500	July 1
Purpose: <ul style="list-style-type: none"> A one-time grant to promote the establishment and over-wintering of cover crops (living or dead), which help provide soil protection and reduce soil erosion, sedimentation and nutrient loading to watercourses. 			
Category Guidelines: <ul style="list-style-type: none"> A one-time grant per-property. Landowners with multiple properties can apply once per property. Properties where cover crops are currently used are not eligible. The Niagara Peninsula Conservation Authority must review and approve all projects before commencing. Only cover crops used exclusively for cover such as rye, oats, clover, or multi-mixes are eligible. Cover crops tilled no sooner than the spring of the year following planting, and cover crops must be destroyed by June 1st. A spring residue of at least 50% cover is required to receive the incentive. All necessary permits/permissions must be obtained before project commencement 			
Eligible Projects: <ul style="list-style-type: none"> Cash cropping fields up to 50 acres 			
Eligible Costs: <ul style="list-style-type: none"> Seed 			
Ineligible Costs: <ul style="list-style-type: none"> Maintenance costs incurred after the establishment of plant material Planting costs Equipment rental/operation Landowner labour costs Administrative costs 			
Potential Key Performance Indicators: <ul style="list-style-type: none"> Hectares of cover crops planted 			

Cover Crops Evaluation Matrix*Mailing Address:**Watershed:**Project Description:***Application**

Does this project fit within the guidelines? (Yes/No)

Complete application? (Yes/No)

Is the applicant willing to sign a project agreement? (Yes/No)

Has this applicant previously received funding for cover crops at this project site? (Yes/No)

Project Evaluation

Watercourse through or adjacent to the project site (within 30m) (Select One)

Cold Water System (5 Points) Warm Water System (4 points)

Does the project area contribute to a headwater area (watershed of 1st or 2nd order stream) (4 points)

Does the project site currently allow for bare soils in winter? (9 points)

Does this project site presently spread manure in winter? (9 points)

Does the project property have an Environmental Farm Plan? (1 point)

Additional sources of funding? (choose one)

Funding secured (3 points) Unsecured but pending (2 points)

Does the site fall within the Priority Areas for Water Quality Improvement? (4 Points)

Staff Comments:

Restoration Program Application

Program Purpose

The Niagara Peninsula Conservation Authority's (NPCA) Restoration Program aims to improve water quality, forest cover and habitat, to the benefit of local ecosystems and the overall health of the Niagara Peninsula Watershed. This will be done by fostering partnerships with local landowners and providing financial incentives to implement voluntary stewardship projects.

Applicant Name(s) _____

Mailing Address _____ Municipality _____ Postal Code _____

Telephone Number: _____

Email _____ ☐ Current Environmental Farm Plan (EFP)?

Project Location

Project Address (if different from above) _____

Township _____ Lot _____ Concession _____

Property Size _____ ☐ hectares ☐ acres Watershed _____

Project Types

Please check the project types that you are applying for:

- | | |
|--|--|
| <input type="checkbox"/> (1) Live Stock Restrictions and Crossings | <input type="checkbox"/> (5) Wetlands |
| <input type="checkbox"/> (2) Conservation Farm Practices | <input type="checkbox"/> (6) Upland Habitat |
| <input type="checkbox"/> (3) Tree Planting | <input type="checkbox"/> (7) Nutrient Management |
| <input type="checkbox"/> (4) Instream and Riparian Habitat | <input type="checkbox"/> (8) Water Conservation |
| | <input type="checkbox"/> (9) Cover Crops |

Project Description

Please provide a brief description of your proposed project: _____

Project Cost Summary

Total estimated cost of the project (if known): _____

Project Process

In order to qualify for current funding the following criteria must be met:

- **Step 1:** Applicant expresses interest; site visit by NPCA staff; applicant completes application form.
- **Step 2:** Project application is evaluated by NPCA staff.
- **Step 3:** Project approval by restoration Program Review Committee.
- **Step 4:** Detailed Project Plan completed with NPCA staff; Landowner/Partner Agreement signed.
- **Step 5:** Project implementation.
- **Step 6:** Project closing/reconciling accounts.
- **Step 7:** On-going monitoring where applicable (1, 5, and 10 year).

Submitting Application

- Email to restoration@npca.ca.
- Bring to NPCA Head Office located at 250 Thorold Road West in Welland (Third Floor).
- Mail to address above.

Contact

For more information on this restoration program, interested applicants can contact: restoration@npca.ca
905-788-3135 (ask for Restoration)

How did you hear about us? Please check all that apply.

- | | |
|---|--|
| <input type="checkbox"/> www.npca.ca | <input type="checkbox"/> Social Media |
| <input type="checkbox"/> Google/Internet | <input type="checkbox"/> Word of Mouth |
| <input type="checkbox"/> Community Event | <input type="checkbox"/> Promo brochures |

If possible, please share the specifics of your answer:

***"There can be no purpose more enspiriting than to begin the age of restoration,
reweaving the wondrous diversity of life that still surrounds us."***

Site Plan Sketch

Please provide a sketch of the proposed project site showing your project idea in relation to existing site condition.



The Niagara Peninsula Conservation Authority collects and uses your personal information pursuant to Section 29(2) of the Municipal Freedom of Information and Protection of Privacy Act 1991, and under the legal authority of the Conservation Authorities Act R.S.O. 1990 as amended. Any personal information collected and or used as part of a program application is intended for administration purposes to process, issue, monitor, determine, plan, and direct the stewardship project, including the granting of subsidies thereunder. The NPCA will only use the information that is required. It is understood and agreed such information may be disclosed to other funding agencies consistent with project reporting requirements.

The NPCA is governed by the Municipal Freedom of Information and Protection of Privacy Act ("MFIPPA"), and the Personal Information and Protection Electronic Documents Act ("PIPEDA").
Questions about the collection of personal data can be made to the NPCA's Senior Manager of Information Services.

THIS AGREEMENT made this **XX** day of **XX**, 20**XX**

B E T W E E N

XXXX

Herein referred to as the "Landowner",

- and -

THE NIAGARA PENINSULA CONSERVATION AUTHORITY,

Herein referred to as the "NPCA"

This Agreement sets out what is to be done and how the NPCA and its partner(s) will be involved with the "Project".

WHAT WILL BE DONE?

The NPCA will construct the "Project" generally as shown on the Work Sketch.

WHAT ARE THE GOALS THE WORK WILL ACHIEVE?

The Project is designed to:

WHERE WILL IT BE DONE?

The Project will be carried out on the property of the Landowner shown on the Work Sketch.

WHO WILL DO IT?

The NPCA will hire a mutually agreed contractor to do the Project and will provide the other party with a copy of it.

WHEN WILL IT BE DONE?

The Project must be completed by **XXXX** in order to qualify for the funding from NPCA and its Partners

WHAT WILL IT COST?

The projected cost of the Project is \$

WHO PAYS FOR IT?

The NPCA will pay the contractor and provide Landowner with proof of payment. The NPCA will contribute up to 75% of the cost of the Project to maximum grant rate of the

project category. **The Landowner will pay a deposit of half of their projected contributions before the project begins and pay the balance upon being invoiced by NPCA.**

The Landowner understands that NPCA is not the sole source of funds for the Project and the Landowner will contribute to the cost.. The landowner agrees that

1. They will co-operate in posting signs or other recognition of the support.
2. They will co-operate with inspections and the preparation of reports need to obtain funding.
3. Funding may be dependent on the approval in the Provincial or Federal budgets of the programs that permit the Project to be supported.
4. That payment may be delayed or refused if these terms are not met.

WHEN WILL PAYMENT BE MADE?

The Landowner will pay its share **upon being invoiced by NPCA.** The NPCA will pay its share 30 days after final inspection or as may be provided in its contract.

WHAT HAPPENS AFTER THE WORK IS FINISHED?

The Landowner agrees that the Project as shown on the Work Sketch will be to the best of the ability left intact encouraged to grow as a natural feature in the landscape for a period of 15 years following completion.

The Landowner also agrees to communicate the details of the project to any subsequent owner, so that they may fully appreciate the value in the project area.

WHAT IF EITHER OF US IS UNHAPPY WITH THE WORK?

The Parties will meet as soon as possible and preferably at the site to discuss what the problem is and the possible solutions and will try to reach an acceptable resolution which shall be reduced to writing and become a binding amendment to this Memo. If this is not possible, either party may seek binding Arbitration by a single Arbitrator who shall be a professional engineer having expertise in the problem that has arisen. The Arbitrator shall be agreed to by the parties or, failing agreement, appointed by a Judge on an Application pursuant to the Arbitrations Act of Ontario.

PRIVACY

The Niagara Peninsula Conservation Authority collects and uses your personal information pursuant to Section 29(2) of the Municipal Freedom of information and Protection of Privacy Act 1991, and under the legal authority of the Conservation Authorities Act R.S.O. 1990 as amended. Any personal information collected and or used as part of a program application is intended for administration purposes to process, issue, monitor, determine, plan, and direct the stewardship project, including the granting of subsidies thereunder. The NPCA will only use the information that is required. It is

understood and agreed such information may be disclosed to other funding agencies consistent with project reporting requirements.

The NPCA is governed by the Municipal Freedom of Information and Protection of Privacy Act ("MFIPPA"), and the Personal Information and Protection Electronic Documents Act ("PIPEDA").

Questions about the collection of personal data can be made to the NPCA's Executive Coordinator to CAO and Board of Directors.

IN WITNESS WHEREOF the parties have hereunto set their hands and seals.

**SIGNED, SEALED AND
DELIVERED IN THE
PRESENCE OF**

XXXX

Landowner

Signed this _____ day of _____, 20XX

XXXXXX

Niagara Peninsula Conservation Authority

Signed this _____ day of _____, 20XX

**MEMORANDUM OF AGREEMENT
NIAGARA PENINSULA CONSERVATION AUTHORITY (NPCA)
AND
PARTNER ORGANIZATION**

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 -

Partner Agency
Address

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 watershed. (CHANGE TO MEET PARTNERSHIP DETAILS)

AND WHEREAS the Partner intends to implement restoration projects on privately owned lands listed on Schedule 'A'. The Corporation will provide funding and technical assistance to assist the Partner for the implementation of each restoration project conditional that each cooperating landowner signs a NPCA Landowner Agreement for the project. (CHANGE TO MEET 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 ____ day of _____, 2019 and terminate on the ____ day of _____ 20__.

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: Partner Representative
Partner Agency
Partner Telephone

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 as the project proponent and lead agency for the 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 Corporation will secure quotations, hire contractors and equipment, provide construction supervision and all materials that may be required for the works. (AMMEND AS NECESSARY)

4. PARTNER OBLIGATIONS

- i) The Partner agrees to provide payment of \$_____ upon execution of this agreement and receipt of appropriate invoice(s) from the Partner detailing the expenses incurred, up to the maximum amount available according to the Schedule 'A', to the Corporation in support of the implementation of the restoration projects listed.

- ii) The Partner agrees to provide to the Corporation upon request, technical assistance for the purposes of project design and regulatory compliance and approvals

6. 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 agrees 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.

7. 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.

8. 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
Niagara Peninsula Conservation)	
)	
)	
_____ Witness as to execution by)	_____ Authorized Signature
)	
)	
)	_____ Position

Schedule 'A' to MOA with PARTNER AGENCY

This schedule lists the properties and DUC funding commitments for wetland 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 DUC is listed for each project.

Wetland Restoration Project #1

Address:
Property Description:
Estimated area of wetland to be restored: 0.25 ha (0.62 ac)
The DUC cash funding commitment to this project is: \$5,000

Wetland Restoration Project #2

Address:
Property Description:
Estimated area of wetland to be restored: 0.12 ha (0.30 ac)
The DUC cash funding commitment to this project is: \$1,500

Wetland Restoration Project #3

Address:
Property Description:
Estimated area of wetland to be restored: 0.41 ha (1.01 ac)
The DUC cash funding commitment to this project is: \$4,500

Wetland Restoration Project #4

Address:
Property Description:
Estimated area of wetland to be restored: 0.15 ha (0.37 ac)
The DUC cash funding commitment to this project is: \$3,500

Wetland Restoration Project #5

Address:
Property Description:
Estimated area of wetland to be restored: 0.20 ha (0.49 ac)
The DUC cash funding commitment to this project is: \$4,000

Wetland Restoration Project #6

Address:
Property Description:
Estimated area of wetland to be restored: 0.14 ha (0.35 ac)
The DUC cash funding commitment to this project is: \$3,500

Wetland Restoration Project #7

Address:
Property Description:
Estimated area of wetland to be restored: 0.10 ha (0.25 ac)
The DUC cash funding commitment to this project is: \$4,000

The total DUC funding contribution to these projects is \$26,000.00 and is conditional on receipt of 2 copies of signed DUC Conservation Agreement with the landowners and copies of construction invoices. The NPCA will invoice DUC 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.

Draft Terms of Reference:
Restoration Program Review Committee

- Committee Name:* Restoration Program Review Committee
- Committee Type:* Standing Committee
- Purpose/Scope:* The Restoration Program Review Committee reviews evaluated applications for Restoration projects and approves projects that meet program criteria.
- Authority:* Decisions will be made by the Committee members.
- Membership:* The Committee will have a minimum of Five (5) Members and will include the Manager of Integrated Watershed Management and Information Management. It may include: one (1) Water Quality Staff, one (1) Ecology/Biology Staff, one (1) Community Engagement & Volunteer Coordinator, one (1) Watershed Analyst, and one (1) RAP Project Manager.
- Meeting Requirements:* Meetings will be held –biannually, once after the application deadline, and the second at the end of the grant cycle to review the program success in improving water quality. Meetings will be at the call of the Committee Chair. Agendas will be prepared by the Committee Chair in consultation with staff. Minutes will be prepared by staff and distributed to all Committee members and Senior Management prior to the next meeting.
- Meeting Location:* Meetings will be at NPCA Head Office (250 Thorold Rd. West, Welland), Ball's Falls Conservation Area or at a location determined by the Committee Chair.
- Responsibilities/duties:* The responsibilities of the Restoration Program Review committee are to:
- Ensure projects are considered fairly and without personal bias, following the program's four Guiding Principles:
 - a) Embracing partnerships and shared responsibilities;
 - b) Leveraging funding opportunities for an incentive-based cost sharing program;
 - c) Promoting adaptive management to meet the changing needs of the landscape; and
 - d) Conveying awareness of the benefits of environmental restoration and to celebrate successes.
 - Prioritize projects that demonstrate the greatest potential improvement to Water Quality, Habitat and/or Forest Cover.
 - Provide feedback and guidance on program focus and priority areas
 - Validate and review project evaluation criteria to align with program priorities
 - Make every effort to attend all meetings, participate in the discussions.

Decision Making:

The Committee will operate openly with the aim of arriving at recommendations through consensus. However, votes may be called by the Committee Chair to advance the agenda. Results of the discussions will be reflected in the minutes.

<i>Realms of Knowledge</i>	<i>Member 1</i>	<i>Member 2</i>	<i>Member 3</i>	<i>Member 4</i>	<i>Member 5</i>
<i>Interest/Availability</i>					
<i>Ecological Restoration</i>	X	X	X	X	X
<i>Water Quality</i>	X	X			
<i>Biology/Ecology</i>	X	X	X	X	X
<i>Engagement/Partnerships</i>		X	X	X	X
<i>Outreach/Stewardship</i>	X	X			X
<i>Integrated Watershed Planning</i>			X		
<i>Agriculture</i>	X				
<i>Budgetary Oversight</i>	X		X		X

Report To: Board of Directors

Subject: Niagara Region New Official Plan Draft Watershed Planning Discussion Paper

Report No: FA-65-19

Date: June 19, 2019

Recommendation:

That Report No. FA-65-19 RE: Region of Niagara Official Plan Draft Watershed Planning Discussion Paper **BE RECEIVED** for information.

Purpose:

The purpose of this Report is to keep the NPCA Board of Directors abreast with respect to staff's comment on watershed planning implementation within the Niagara Peninsula as it pertains to the Natural Environment Work Program for Niagara Region's New Official Plan.

Background:

In 2011, due to budget constraints, the NPCA Board of Directors discontinued the NPCA Watershed Planning program. Watershed planning undertaken by the Authority was originally identified as a "Direct Action" in the former Niagara Water Strategy, a local water management partnership between NPCA, Niagara Region and the MOE(CP) developed in the wake of the Walkerton tragedy.

In October 2016, NPCA staff brought report *FA-109-16 RE: Watershed Plans – Establishing a Framework* (Appendix 1) to the Board of Directors for information purposes. The purpose of this Framework was to assess the status of the NPCA watershed plans and prioritize the recommended actions for updating watershed plans in the Niagara Peninsula. Further, an additional purpose was to re-highlight the importance of prioritized watershed planning in addressing water quality issues in the NPCA watershed. A business case for undertaking watershed planning was not proposed in 2017 as it communicated, however.

The Niagara Region approved a project framework for the natural environment component of the new Regional Official plan in April 2018. At this time, watershed planning was added to the scope of the work and was identified as a high priority consideration in response to draft guidance for watershed planning in Ontario that the province had prepared for land use planning authorities. As part of the project framework, Niagara Region committed to developing a discussion paper in advance of their natural environment background study for the new Official Plan.

NPCA staff have received the Draft Watershed Planning Discussion Paper for comment and have collaborated on the response accompanying this report in Appendix 2.

Discussion:

Staff were very pleased to see Niagara Region identify watershed planning with a key role in the Natural Environment Work Program supporting the new Official Plan recognizing the value towards informed land use planning policy development. The Draft Watershed Planning Discussion Paper contains an excellent overview of the watershed planning process and requirements to comply with the various provincial plans addressing the natural environment and the protection of water quality and quantity.

Considering the roles and responsibilities identified in the Discussion Paper, NPCA requested Niagara Region entertain re-establishing a partnership for watershed planning implementation. The province identifies that municipalities may partner with conservation authorities, as appropriate, to undertake watershed planning. The provincial guidance clarifies “municipalities and partner organizations will need to coordinate watershed planning across jurisdictional boundaries and agree on how to develop watershed plans” and offers “working groups, or agencies with clear leadership for multi-jurisdictional coordination, will remain essential to support watershed planning endeavors”. Conservation Authorities are mentioned specifically as valuable partners in these planning and implementation efforts where they exist in Ontario.

Staff highlighted the NPCA and Niagara Region’s long history of partnership on local water management issues, including the NPCA’s former watershed planning program. Based on the watershed planning work previously undertaken by the Authority, staff encouraged Niagara Region discuss the scale of watershed and subwatershed studies with NPCA and consider the “Watershed Planning Areas” it uses to this day in its watershed management operations.

Earlier this month, representatives from NPCA senior management met with officials from the Niagara Region Planning and Development services department to begin a dialogue on a potential partnership for watershed planning implementation, and assistance with the Natural Environment Work Program. Subsequent discussion at the staff level from both organizations has been initiated to further explore how the NPCA can assist the Niagara Region with these efforts, and where Niagara Region requires support.

Financial Implications:

None currently.

Further discussions with Niagara Region may present considerations for and help inform development of the NPCA’s 2020 budget.

Related Reports and Appendices:

Appendix 1. - FA-109-16 RE: Watershed Plans – Establishing a Framework

Appendix 2. - NPCA Comments - Region of Niagara Draft Watershed Planning Discussion Paper.pdf

Authored by:




Geoff Verkade
Senior Manager, Integrated Watershed Planning/Information Management

Reviewed by:



Lise Gagnon, CPA, CGA
Director, Corporate Services

Submitted by:



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

Report To: Board of Directors

Subject: Watershed Plans – Establishing a Framework

Report No: 109-16

Date: October 19, 2016

RECOMMENDATION:

THAT Report No. 109-16 and the attached consultant's report titled, "Establishing a Framework for Watershed Plans in the NPCA Watershed" be RECEIVED for information purposes.

PURPOSE:

The purpose of this report is to:

- Present the Aecom Report titled, "Establishing a Framework for Watershed Plans in the NPCA Watershed," which assesses the status of the Niagara Peninsula Conservation Authority's (NPCA's) watershed plans and prioritizes the recommended actions for updating watershed plans in NPCA watersheds.
- Highlight the importance of prioritized watershed planning in addressing water quality issues in the NPCA watersheds.

This report aligns with NPCA's mandate to advocate and implement programs that "improve the quality of lands and water within its jurisdiction".

BACKGROUND:

Between 2005 and 2012 the NPCA developed watershed plans for 12 of its 18 watershed planning areas. The program was suspended in 2012 due to budget constraints. However, the development and implementation of watershed plans is highly recommended for various reasons, including:

- The province has been increasingly emphasizing the importance of using watershed plans and sub-watershed plans as a planning tool to help protect the natural environment while directing development to occur in an appropriate and sustainable manner. This focus on the use of watershed plans is evident in the province's proposed amendments to the Greenbelt Plan, Niagara Escarpment Plan, and the Growth Plan for the Greater Golden Horseshoe.
- Completing the NPCA's remaining six (6) plans, updating the existing 12 plans, and maintaining and implementing the plans was listed as an objective in Niagara Region's Water Quality Strategy (2014).

- Watershed plans provide an integrated and systematic approach to addressing water quality issues.
- The public expressed concern about the suspension of the program during the NPCA strategic plan consultation process.

In 2014 the Niagara Peninsula Conservation Authority (NPCA) was awarded a grant of \$25,000 from *Niagara WaterSmart* to conduct an assessment of its watershed plans. The purpose of the study was to:

- Outline the evolution of watershed planning in Ontario;
- Review current best practices and legislation covering watershed planning in Ontario, and outline how it affects NPCA;
- Evaluate the status of NPCA's watershed plans and conduct a gap analysis by comparing the existing plans to current best practices and requirements;
- Provide recommendations on the content of watershed and sub-watershed plans; and
- Provide recommendations on how to move forward with completing the remaining watershed plans, and updating existing plans.

Aecom was retained to undertake the study. The results of the study are provided in the draft report (Attachment #1). Prioritizing the recommended actions was a key element of the study report. For instance, NPCA wanted to know if existing older watershed plans should be updated first or whether the areas with no watershed plans should be a higher priority.

The Community Liaison Advisory Committee (CLAC) and a technical steering committee consisting of staff from NPCA, Niagara Region, and some municipalities provided input to the study.

DISCUSSION

The following is a brief description of the report sections to help guide the reader.

Section 1 outlines the purpose of the report.

Section 2 of the report outlines the development of watershed planning in Ontario, and describes how it affects the NPCA. Watershed planning focused on floodplain mapping in the early 1980s, but this has since evolved towards integrated watershed management where human activities and natural resources are managed on a watershed basis, and multiple issues and factors are addressed in a more holistic and integrated approach.

The NPCA's mandate is to *establish and undertake programs designed to further the conservation, restoration, development and management of natural resources (other than gas, oil, and minerals)*. Watershed and sub-watershed plans can assist NPCA in fulfilling this mandate in two main areas:

- Watershed plans can assist with policy review and development to oversee land use practices (e.g. hazard land identification and control, and application of stormwater management requirements).
- Watershed plans can provide direction to stewardship programs (e.g. implementation of programs that promote best management practices to protect and enhance watersheds).

Section 3 outlines the documents that were reviewed in the study including existing watershed plans, and other information obtained through more recent projects.

Section 4 outlines input from the CLAC and technical steering committee.

Section 5 provides a summary of the existing watershed plan reports and outlines the gaps that were identified. Table 5.2 describes the gaps that were identified for each watershed.

Section 6 summarizes the tasks that need to be completed for each watershed based on the gaps analysis and input from the steering committee and the CLAC. This section also explains how the watersheds and tasks were prioritized.

Summary

Watershed plans use a broad integrated approach where the primary intent is to protect the health of the ecosystem in the watershed through a more holistic approach.

Surface water quality is often linked to other factors such as soil erosion, and types of land uses; consequently, surface water quality was one of the key factors considered by the Aecom report, when prioritizing the watershed plans/studies.

A number of watershed planning areas were considered high priority based on the analysis by Aecom. Watersheds studies given a high priority should be completed in 2 to 5 years. Moderate priority watershed studies should be completed in 5 to 10 years.

Given they have no watershed plans or sub-watershed plans and are experiencing strong development pressures, Grimsby, Lincoln and South Niagara Falls are considered high priority areas. Big Forks Creek watershed was also considered a high priority area because of the poor quality of the surface water (e.g. high phosphorus concentrations). A key recommendation is to conduct surface water quality modelling in Big Forks Creek as well as the remainder of Central Welland River watershed. Other higher priority watersheds include Lake Erie North Shore, Fort Erie, and Beaverdams and Shriners Creek.

FINANCIAL IMPLICATIONS

This report is provided for information purposes only; however, a business case for undertaking watershed planning will be proposed in 2017.

RELATED REPORTS AND APPENDICES:

1. Attachment 1: Establishing a Framework for Watershed Plans in the NPCA Watershed – Draft, Sept 2016, by Aecom.

Previous Related NPCA Board Reports

1. NPCA Board report 112-14, *Niagara WaterSmart* Grant for Gap Analysis to establish a framework for Watershed Plans.
2. NPCA Board report 67-16, 2016 NPCA Water Quality Report.
3. NPCA Board report 80-16, Prioritization of BMPs to Improve Water Quality.

Prepared by:

Reviewed by:

Brian Wright, P.Eng.
Manager, Watershed Projects

Peter Graham, P.Eng.
Director, Watershed Management

Submitted by:

Carmen D'Angelo
Chief Administrative Officer / Secretary Treasurer



June 5, 2019

File LUP.30.1.15.1

Planning and Development Services
Niagara Region
1815 Sir Isaac Brock Way
Thorold, Ontario L2V 4T7

Attn: Sean Norman, PMP, MCIP, RPP

Subject: **DRAFT – Watershed Planning Discussion Paper**
New Regional Official Plan, Natural Environment Work Program

Thank you for the opportunity to comment on the DRAFT Watershed Planning Discussion Paper which has been prepared as part of the natural environment work program for the new Regional Official Plan.

As a local watershed natural resources management agency, the Niagara Peninsula Conservation Authority (NPCA) applauds Niagara Region for strongly recognizing and valuing watershed planning towards informed land use planning policy development. NPCA staff are pleased to see it identified in its key role as part of the natural environment workplan. Further, as watershed specialists, the NPCA looks forward to continuing the discussion and focusing on re-establishing a partnership in watershed planning with Niagara Region. The Authority is ready to assist the Region in a cost effective and efficient manner with watershed planning and related natural environment work program tasks as it has collaborated with the Region in the past.

The feedback below has been completed in consultation with our natural resources management team, including experts in natural heritage, ecological restoration, water resources, environmental planning and water resource engineering. Comments are discussed on an issue basis for the most prominent themes that emerged from review of the Discussion Paper.

Watershed Planning Overview

NPCA staff concur that the document contains an excellent overview of the watershed planning process and requirements required to support compliance with various Provincial Plans. Staff largely agree with the recommendations around content of watershed and subwatershed plans. It is important to note that most of the watershed planning elements and best practices identified in the draft guidance from the province are operational in the existing programs and services already running at the Conservation Authority.

Highlighting the Adaptive Management Cycle is strongly supported. This cycle is currently being strategically integrated into the development of the Authority's revised Restoration Program. Staff noted that most of the challenges listed with implementation of this cycle (i.e. cross-jurisdictional challenges, cumulative impacts) would be alleviated with a watershed-based agency as a partner with the Region.

NPCA review has identified several minor suggestions and/or clarifications (specifically with respect to federal and provincial agreements and management plans addressing Great Lakes water quality) that could add value to certain details in the report. Staff propose a meeting to communicate these further. This would be an excellent way to introduce our watershed management planning team at the Authority to the

Regional staff and its consulting team considering there are many new individuals at each organization since the days when the Region and NPCA worked closer on these matters.

Watershed Delineation

Staff expressed concern with the recommended approach to watershed delineation for watershed planning studies by using tertiary and quaternary watersheds. The Niagara Peninsula is a unique geography in terms of surface water drainage. The peninsula by its very nature has many single outlet systems considered watersheds that vary in their sizes and contribute to the three significant receiving bodies. Further, surface waters in the peninsula are further complicated by a bisecting canal and hydro operations.

The current 'Watershed Planning Areas' employed by the Authority were strategically formed through the former Niagara Water Quality Protection Strategy by the amalgamation of its Local Management Areas (LMAs) in full consideration of these complexities. They were also intentionally designed for ease of engagement and implementation through partnership with the local municipalities. Significant expertise and agreement was reached in establishing these boundaries through the Strategy partnership between the Region, MOE(CP), NPCA and local municipalities. In addition, NPCA operations are currently using these watershed planning areas in its operations (monitoring, water budgeting, flood plain mapping, watershed reporting, etc.).

NPCA agrees that there is confusion, as highlighted in the Paper regarding the watershed planning area scale and terminology, and that both the Region and NPCA would benefit from further discussion regarding this and the associated mapping.

NPCA strongly believes that the existing approach to watershed delineation for watershed planning purposes should persist for continuity. Further discussion in this regard would be appreciated.

NPCA's Historic Involvement in Local Watershed Planning

The Draft Discussion Paper references the 2016 report entitled '*Establishing a Framework for Watershed Plans in the NPCA Watershed*' that was funded by the Niagara Region through the Niagara Water Strategy (formerly known as the Niagara Water Quality Protection Strategy). Because this section of the Discussion Paper provides historical context, we believe that an expansion to this section would be warranted,

It is important to note that the Province of Ontario first requested that conservation authorities complete watershed plans in 1983, establishing CA's clear involvement as a leader in watershed planning and implementation.

In 2003, post Walkerton, the Region, NPCA and MOE(CP) partnered to develop a Niagara Water Strategy. Implementation of the watershed planning recommended by this Strategy through its 'Direct Actions' was undertaken by NPCA as the local watershed-based agency between 2003 and 2011. This included significant studies such as the Natural Area's Inventory, and Nature for Niagara's Future. Steering committees for completed watershed plans, led by the CA and funded by the Region included representation from both tiers of local government in order to address the informed land use planning requirements. During this time, NPCA completed 12 of 18 watershed plans.

The resulting watershed planning program was levied as part of the Authority's operational budget to the Region. Complementary technical studies and programs and services (i.e. floodplain mapping, targeted water quality monitoring), were regularly presented in their business cases as supporting the watershed planning and associated information management cycle. This integrated watershed planning approach, was discontinued with the rationale of 'budgetary constraints' in 2011.

The document entitled '*Establishing a Framework for Watershed Plans in the NPCA Watershed*' was funded by the Region of Niagara in 2016 through the Niagara Water Strategy. The purpose of this Framework was to assess the status of the NPCA watershed plans and prioritize the recommended actions for updating watershed plans in the NPCA watershed. Further an additional purpose was to re-highlight the importance of prioritized watershed planning in addressing water quality issues in the NPCA watershed.

We believe this history is important to reflect in the Discussion Paper. Further, NPCA's long history in watershed planning and our expertise in this area warrants further discussion with the Region regarding our future role as identified in the Discussion Paper.

Responsibility and Roles

Staff have commented that the Discussion Paper acknowledges the Niagara Region as the lead for watershed planning in the framework it proposes, and notes there is little identified in terms of the Conservation Authority's role outside of natural hazards. NPCA staff believe there is value in a partnership with the Conservation Authority for watershed planning implementation considering its mandate and expertise. Further, as documented, NPCA and Niagara Region have a strong history of partnering in watershed planning that bears credence.

The mandate of the NPCA as prescribed by the Conservation Authorities Act and referenced in its most recent strategic plan is "*to establish and undertake programs and services, on a watershed basis, to further the conservation, restoration, development, and management of natural resources*". Watershed planning as referenced in the Discussion Paper is "a framework used to define values, objectives, and targets that support the protection, enhancement, or restoration of the natural resources within a watershed through the development of management plans and policies". As a watershed-based agency, an integrated watershed planning process is the primary approach with which the NPCA manages the natural resources within its jurisdiction to deliver on this mandate.

NPCA does not believe that there has been a shift in responsibility for watershed planning as presented in the Discussion paper based on policy 4.2.1.1 of the 2017 Growth Plan which states "*Municipalities, partnering with conservation authorities as appropriate, will ensure that watershed planning is undertaken to support a comprehensive, integrated, and long-term approach to the protection, enhancement, or restoration of the quality and quantity of water within a watershed*." 'Ensure' means that land use planning policy development is no longer to proceed in the absence of watershed planning studies. This is simply clarification that watershed planning is required, not just best practice. The province is making it clear that the protection of water quality and quantity is not optional.

The province clearly identifies that municipalities may partner with conservation authorities, as appropriate, to undertake watershed planning. The guidance indicates that "municipalities and partner organizations will need to coordinate watershed planning across jurisdictional boundaries and agree on how to develop watershed plans". Upper tier municipalities agreeably have the benefit of encompassing a greater portion of a watershed, "however, working groups, or agencies with clear leadership for multi-jurisdictional coordination, will remain essential to support watershed planning endeavors. Municipalities may partner with conservation authorities as watershed-based agencies to undertake watershed and subwatershed planning, where conservation authorities exist". In the Growth Plan area, where development pressure is high, like Niagara, conservation authorities are clearly recommended by the province "as valuable partners in these planning and implementation efforts". The provincial policy and guidance affirms the role of the conservation authority as a legitimate partner to aid municipalities with their watershed planning needs in Ontario.

NPCA staff also identified that the guidance for watershed planning for much of the Discussion Paper's content is draft at this time. The last provincially endorsed reference material for watershed planning was released in 1993 and remains current. It is anticipated with the Planning Act and Provincial Policy Statement reviews currently underway, that provincial direction and guidance with watershed planning may

be subject to further change. Lastly, there could be significant changes to local municipal structure as a result of the current municipal governance review that may also have implications for watershed planning implementation considerations.

Conclusion

NPCA is grateful for the opportunity to review and comment on the draft Watershed Planning Discussion Paper. Authority staff, as watershed specialists, strongly believe that a partnered approach across the Niagara Peninsula is ideal for addressing watershed planning implementation issues and preparing Niagara to move forward with whatever direction the province settles on.

NPCA looks forward to discussing the benefits of a watershed planning partnership opportunity with the Region to further develop resiliency in local watershed planning and assist with the natural environment work program for the New Official Plan at your earliest convenience. NPCA and Niagara Region have a strong tradition of successfully partnering on water management issues and the opportunity to strengthen this relationship for mutual benefit, and that of local natural resources, is of the Authority's highest interest.

Yours truly,



Geoff Verkade
Senior Manager, Integrated Watershed Planning/
Information Management (ext. 244)

cc. Gayle Wood, Interim NPCA CAO
Darren MacKenzie, Director, Watershed Management

Report To: Board of Directors

Subject: 2018 Freedom of Information (FOI) Annual Statistics

Report No: FA-70-19

Date: June 19, 2019

Recommendation:

That Report No. FA-70-19 RE: 2018 FOI Annual Statistics **BE RECEIVED** for information.

Purpose:

The purpose of this report is to provide a summary of 2018 FOI requests as reported to the Information and Privacy Commissioner of Ontario (IPC).

Background:

The Information and Privacy Commissioner of Ontario requires mandatory annual reporting of FIPPA/MFIPPA requests with details pertaining to types of requests made and information released.

Discussion:

The attached Appendix 1– 2018 FOI Annual Statistics is a copy of the report submitted to the Information and Privacy Commissioner.

Financial Implications:

There are no financial implications.

Related Reports and Appendices:

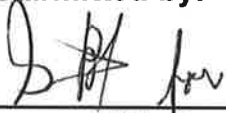
Appendix 1 – 2018 FOI Annual Statistics

Authored by:



Misti Ferrusi, CHRL
Human Resources Manager
Interim FOI Coordinator

Submitted by:



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



The Year-End Statistical Report
for the
Information and Privacy Commissioner of Ontario

**Statistical Report of
Niagara Peninsula Conservation Authority
for the Reporting Year 2018**

for
Municipal Freedom of Information and Protection of Privacy Act

Section 1: Identification

1.1	Organization Name	Niagara Peninsula Conservation Authority
	Head of Institution Name & Title	Dave Bylsma, Chair of the NPCA Board of Directors
	Head of Institution E-mail Address	dbylsma@westlincoln.ca
	Management Contact Name & Title	Misti Ferrusi, Human Resources Consultant
	Management Contact E-mail Address	mferrusi@npca.ca
	Primary Contact Name & Title	Misti Ferrusi, Human Resources Consultant
	Primary Contact Email Address	mferrusi@npca.ca
	Primary Contact Phone Number	9057883135 ext. 263
	Primary Contact Fax Number	9057881121
	Primary Contact Mailing Address 1	250 Thorold Road W
	Primary Contact Mailing Address 2	3rd Floor
	Primary Contact Mailing Address 3	
	Primary Contact City	Welland
	Primary Contact Postal Code	L3C 3W2
1.2	Your institution is:	Conservation Authority

Section 2: Inconsistent Use of Personal Information

2.1	Whenever your institution uses or discloses personal information in a way that differs from the way the information is normally used or disclosed (an inconsistent use), you must attach a record or notice of the inconsistent use to the affected information.	0
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Your institution received:

☐ No formal written requests for access or correction

☒ Formal written requests for access to records

Section 2: Inconsistent Use of Personal Information

Section 3: Number of Requests Received and Completed

Enter the number of requests that fall into each category.

3.1 New Requests received during the reporting year

3.2 Total number of requests completed during the reporting year

Personal Information	General Records
0	8
0	13

Section 4: Source of Requests

Enter the number of requests you completed from each source.

4.1 Individual/Public

4.2 Individual by Agent

4.3 Business

4.4 Academic/Researcher

4.5 Association/Group

4.6 Media

4.7 Government (all levels)

4.8 Other

4.9 Total requests (Add Boxes 4.1 to 4.8 = 4.9)

Personal Information	General Records
0	13
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	13

BOX 4.9 must equal BOX 3.2

Section 5: Time to Completion

How long did your institution take to complete all requests for information? Enter the number of requests into the appropriate category. How many requests were completed in:

5.1 30 days or less

5.2 31 - 60 days

5.3 61 - 90 days

5.4 91 days or longer

5.5 Total requests (Add Boxes 5.1 to 5.4 = 5.5)

Personal Information	General Records
0	8
0	5
0	0
0	0
0	13

BOX 5.5 must equal BOX 3.2

Section 6: Compliance with the Act

NO notices issued;
BOTH a Notice of Extension (s.27(1)) and a Notice to Affected Person (s.28(1)) issued;
ONLY a Notice of Extension (s.27(1)) issued;
ONLY a Notice to Affected Person (s.28(1)) issued.

Please note that the four different situations are mutually exclusive and the number of requests completed in each situation should add up to the total number of requests completed in Section 3.2. (Add Boxes 6.3 + 6.6 + 6.9 + 6.12 = BOX 6.13 and BOX 6.13 must equal BOX 3.2)

A. No Notices Issued

		Personal Information	General Records
6.1	Number of requests completed within the statutory time limit (30 days) where neither a Notice of Extension (s.27(1)) nor a Notice to Affected Person (s.28(1)) were issued.	0	8
6.2	Number of requests completed in excess of the statutory time limit (30 days) where neither a Notice of Extension (s.27(1)) nor a Notice to Affected Person (s.28(1)) were issued.	0	5
6.3	Total requests (Add Boxes 6.1 + 6.2 = 6.3)	0	13

B. Both a Notice of Extension (s.27(1)) and a Notice to Affected Person (s.28(1)) Issued

		Personal Information	General Records
6.4	Number of requests completed within the time limits permitted under both the Notice of Extension (s.27(1)) and a Notice to Affected Person (s.28(1)).	0	0
6.5	Number of requests completed in excess of the time limit permitted by the Notice of Extension (s.27(1)) and the time limit permitted by the Notice to Affected Person (s.28(1)).	0	0
6.6	Total requests (Add Boxes 6.4 + 6.5 = 6.6)	0	0

C. Only a Notice of Extension (s.27(1)) Issued

		Personal Information	General Records
6.7	Number of requests completed within the time limits permitted under both the Notice of Extension (s.27(1)).	0	0
6.8	Number of requests completed in excess of the time limit permitted by the Notice of Extension (s.27(1)).	0	0
6.9	Total requests (Add Boxes 6.7 + 6.8 = 6.9)	0	0

D. Only a Notice to Affected Person (s.28(1)) Issued

		Personal Information	General Records
6.10	Number of requests completed within the time limits permitted under both the Notice to Affected Person (s.28(1)).	0	0
6.11	Number of requests completed in excess of the time limit permitted by the Notice to Affected Person (s.28(1)).	0	0
6.12	Total requests (Add Boxes 6.10 + 6.11 = 6.12)	0	0

E. Total Completed Requests (sections A to D)

Section 6a: Contributing Factors

Please outline any factors which may have contributed to your institution not meeting the statutory time limit. If you anticipate circumstances that will improve your ability to comply with the Act in the future, please provide details in the space below.

Requests fell over the Christmas Holidays around which the FOI Coordinator had pre-booked vacation/time off due to the holidays.

Section 7: Disposition of Requests

What course of action was taken with each of the completed requests? Enter the number of requests into the appropriate category.

	Personal Information	General Records
7.1 All information disclosed	0	2
7.2 Information disclosed in part	0	2
7.3 No information disclosed	0	7
7.4 No responsive records exists	0	2
7.5 Request withdrawn, abandoned or non-jurisdictional	0	0
7.6 Total requests (Add Boxes 7.1 to 7.5 = 7.6)	0	13

BOX 7.6 must be greater than or equal to BOX 3.2

Section 8: Exemptions & Exclusions Applied

For the Total Requests with Exemptions/Exclusions/Frivolous or Vexatious Requests, how many times did your institution apply each of the following? (More than one exemption may be applied to each request)

	Personal Information	General Records
8.1 Section 6 — Draft Bylaws, etc.	0	0
8.2 Section 7 — Advice or Recommendations	0	0
8.3 Section 8 — Law Enforcement ¹	0	0
8.4 Section 8(3) — Refusal to Confirm or Deny	0	0
8.5 Section 8.1 — Civil Remedies Act, 2001	0	0
8.6 Section 8.2 — Prohibiting Profiting from Recounting Crimes Act, 2002	0	0
8.7 Section 9 — Relations with Governments	0	0
8.8 Section 10 — Third Party Information	0	0
8.9 Section 11 — Economic/Other Interests	0	0
8.10 Section 12 — Solicitor-Client Privilege	0	0
8.11 Section 13 — Danger to Safety or Health	0	0
8.12 Section 14 — Personal Privacy (Third Party) ²	0	2
8.13 Section 14(5) — Refusal to Confirm or Deny	0	0

Section 8: Exemptions & Exclusions Applied

- 8.16** Section 38 — Personal Information (Requester)
- 8.17** Section 52(2) — Act Does Not Apply³
- 8.18** Section 52(3) — Labour Relations & Employment Related Records
- 8.19** Section 53 — Other Acts
- 8.20** PHIPA Section 8(1) Applies
- 8.21** Total Exemptions & Exclusions
Add Boxes 8.1 to 8.20 = 8.21
- ¹ not including Section 8(3)
² not including Section 14(5)
³ not including Section 52(3)

0	0
0	2
0	0
0	0
0	0
0	11

Section 9: Fees

Did your institution collect fees related to request for access to records?

- 9.1** Number of REQUESTS where fees other than application fees were collected
- 9.2.1** Total dollar amount of application fees collected
- 9.2.2** Total dollar amount of additional fees collected
- 9.2.3** Total dollar amount of fees collected (Add Boxes 9.2.1 + 9.2.2 = 9.2.3)
- 9.3** Total dollar amount of fees waived

Personal Information	General Records	Total
0	0	0
\$0.00	\$70.00	\$70.00
\$0.00	\$0.00	\$0.00
\$0.00	\$70.00	\$70.00
\$0.00	\$0.00	\$0.00

Section 10: Reasons for Additional Fee Collection

Enter the number of REQUESTS for which your institution collected fees other than application fees that apply to each category.

- 10.1** Search time
- 10.2** Reproduction
- 10.3** Preparation
- 10.4** Shipping
- 10.5** Computer costs
- 10.6** Invoice costs (and other as permitted by regulation)
- 10.7** Total (Add Boxes 10.1 to 10.6 = 10.7)

Personal Information	General Records	Total
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0

Section 11: Correction and Statements of Disagreement

Did your institution receive any requests to correct personal information?

Section 11: Correction and Statements of Disagreement

- 11.3** Correction requests carried over to next year
- 11.4** Total Corrections Completed $[(11.1 + 11.2) - 11.3 = 11.4]$

0

0

BOX 11.4 must
equal BOX 11.9

What course of action did your institution take regarding the requests that were received to correct personal information?

**Personal
Information**

- 11.5** Correction(s) made in whole
- 11.6** Correction(s) made in part
- 11.7** Correction refused
- 11.8** Correction requests withdrawn by requester
- 11.9** Total requests (Add Boxes 11.5 to 11.8 = 11.9)

0

0

0

0

0

BOX 11.9 must
equal BOX 11.4

In cases where correction requests were denied, in part or in full, were any statements of disagreement attached to the affected personal information?

**Personal
Information**

- 11.10** Number of statements of disagreement attached:

0

If your institution received any requests to correct personal information, the Act requires that you send any person(s) or body who had access to the information in the previous year notification of either the correction or the statement of disagreement. Enter the number of notifications sent, if applicable.

**Personal
Information**

- 11.11** Number of notifications sent:

0

Note:

This report is for your records only and should not be faxed or mailed to the Information and Privacy Commissioner of Ontario in lieu of online submission. Faxed or mailed copies of this report will NOT be accepted. Please submit your report online at: <https://statistics.ipc.on.ca>.

Thank You for your cooperation!

Declaration:

I, Misti Ferrusi, Human Resources Consultant, confirm that all the information provided in this report, furnished by me to the Information and Privacy Commissioner of Ontario, is true, accurate and complete in all respects.

Signature

Date

Report To: Board of Directors

Subject: Communications Update April-May 2019

Report No: FA-71-19

Date: June 19, 2019

Recommendation:

That Report No. FA-71-19 RE: Communications Update April-May **BE RECEIVED** for information.

Purpose:

The purpose of this Report is to provide the Board of Directors with an update of media exposure surrounding the work of the NPCA from April to May 2019. This media coverage and communications update report will be provided to the Board of Directors as needed.

To assist with this, it would be helpful for Board Members to liaise with the Communications Department in advance of media interviews, until such time that the Communications & Social Media Protocol is updated for the consideration of the Board of Directors. This will ensure consistency and the inclusion of these media opportunities in future reports.

Background:

The Media Report consists of all media coverage since April 23, 2019. This includes outlet names, dates of coverage, titles, links when available, tonality, and PR value.

Discussion:

There are no pending/upcoming media opportunities that staff are aware of at this time.

Media Releases:

- Family Fishing Tradition Continues at St. Johns: <https://npca.ca/our-voice/post/family-fishing-tradition-continues-at-st-johns>
- Voluntary CAO Salary Disclosure Statement: <https://npca.ca/our-voice/post/message-from-cao-secretary-treasurer>
- AG Recommendations Initiated by NPCA: <https://npca.ca/our-voice/post/auditor-general-recommendations-initiated-by-npca>

- Statement from Interim CAO, Gayle Wood, Regarding NPCA v. Baker: <https://npca.ca/our-voice/post/statement-npca-v-baker>
- NPCA and Niagara Restoration Council Continue Research on RAMSAR Designation: <https://npca.ca/our-voice/post/npca-and-niagara-restoration-council-ramsar>
- Launching Healthy Twelve Mile Creek Pilot Program: <https://npca.ca/our-voice/post/twelve-mile-creek-pilot-program-niagara>
- NPCA Receives Ruling on Board Composition: <https://npca.ca/our-voice/post/npca-receives-ruling-board-composition>
- NPCA Welcomes Citizen Appointees to Board of Directors: <https://npca.ca/our-voice/post/npca-welcomes-citizen-appointees-to-board-of-directors>
- Star Trek Discovery Films at Ball's Falls Conservation Area: <https://npca.ca/our-voice/post/star-trek-discovery-films-at-balls-falls-conservation-area>

Upcoming Media Releases:

- Niagara Peninsula Conservation Foundation updates
- NPCA Restoration Program
- Source Water Protection Program Update

Events

- Niagara Envirothon
- 2021 Canada Summer Games Mascot Challenge
- Ball's Falls Heritage Day: July 14- 10 a.m. to 4 p.m.

Related Reports and Appendices:

Appendix 1 - Media Report April-May

Authored by:



Renee Bisson,
Acting Senior Manager, Communications
Manager, Community Engagement

Submitted by:



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

This report was prepared in collaboration with Erika Navarro, Communication Specialist



Niagara Peninsula Conservation Authority

MEDIA COVERAGE REPORT

April to May 2019

Total Media Hits: 96
Estimated media impressions: 18,207,465
Estimated PR value: \$411,846

Outlet	Date	Headline	Link	Tone	Circulation/ Visitors Per Month	PR Value
Online						
Global News	Apr. 23, 2019	Binbrook Conservation Area's newest attraction to open in May	https://globalnews.ca/news/5194967/binbrook-conservation-area-new-attraction-may/	Positive	3,308,300	N/A
Newstalk 610 CKTB	Apr. 26, 2019	NIAGARA STILL IN GOOD SHAPE AS ONTARIO COPEs WITH MAJOR FLOODING	http://www.iheartradio.ca/610cktb/news/niagara-still-in-good-shape-as-ontario-cope-with-major-flooding-1.9114132	Positive	N/A	N/A
Niagara Independent	Apr. 26, 2019	NPCA 'headed in right direction'	https://niagaraindependent.ca/npc-head-in-right-direction/	Positive	103,871	\$6,000
Niagara Families	Apr. 26, 2019	St. Johns Pond Opening	https://niagarafamilies.com/event/st-johns-pond-opening/	Positive	10,000	\$3,920
St. Catharines Standard	Apr. 28, 2019	Anglers reel in start of trout-fishing season	https://www.stcatharinesstandard.ca/news-story/9306149-anglers-reel-in-start-of-trout-fishing-season/	Positive	57,000	\$6,500
Welland Tribune	Apr. 28, 2019	Anglers reel in start of trout-fishing season	https://www.wellandtribune.ca/news-story/9306149-anglers-reel-in-start-of-trout-fishing-season/	Positive	33,000	\$6,500
Niagara this Week	Apr. 29, 2019	ANALYSIS: What is the ideal makeup of a conservation authority board?	https://www.niagarathisweek.com/news-story/9297044-analysis-what-is-the-ideal-makeup-of-a-conservation-authority-board-/	Neutral	161,400	\$9,744
Niagara Falls Review	Apr. 29, 2019	ANALYSIS: What is the ideal makeup of a conservation authority board?	https://www.niagarafallsreview.ca/news-story/9297044-analysis-what-is-the-ideal-makeup-of-a-conservation-authority-board-/	Neutral	34,000	\$6,500
Niagara this Week	Apr. 29, 2019	ANALYSIS: What is the ideal makeup of a conservation authority board?	https://www.niagarathisweek.com/news-story/9297044-analysis-what-is-the-ideal-makeup-of-a-conservation-authority-board-/	Neutral	161,400	\$9,744
St. Catharines Standard	Apr. 29, 2019	NPCA tree planting axed by provincial cuts	https://www.stcatharinesstandard.ca/news-story/9308617-npc-tree-planting-axed-by-provincial-cuts/	Neutral	57,000	\$6,500

Trout Unlimited Canada	May 2019	Naturally Niagara	https://tucanada.org/wp-content/uploads/2019/05/Newsletter-May-2019-2.pdf	Positive	N/A	N/A
CBC	May 1, 2019	'I dropped my iPhone': Hamilton stunned by court ruling saying it has to pay the NPCA	https://www.cbc.ca/news/canada/hamilton/npc-hamilton-1.5118211	Negative	N/A	N/A
Hamilton News	May 1, 2019	Hamilton loses appeal again after court upholds NPCA rate apportionment	https://www.hamiltonnews.com/news-story/9332887-hamilton-loses-appeal-again-after-court-upholds-npca-rate-apportionment/	Neutral	N/A	N/A
Niagara Falls Review	May 1, 2019	A reminder to take care of our waterways	https://www.niagarafallsreview.ca/opinion-story/9306424-a-reminder-to-take-care-of-our-waterways/	Positive	34,000	\$6,500
Niagara this Week	May 1, 2019	A reminder to take care of our waterways	https://www.niagarathisweek.com/opinion-story/9306424-a-reminder-to-take-care-of-our-waterways/	Positive	161,400	\$9,744
Welland Tribune	May 1, 2019	Hamilton loses appeal again after court upholds NPCA rate apportionment	https://www.wellandtribune.ca/news-story/9332887-hamilton-loses-appeal-again-after-court-upholds-npca-rate-apportionment/	Neutral	33,000	\$6,500
Newstalk 610 CKTB	May 2, 2019	HAMILTON COUNCIL LOSES BID TO LOWER NIAGARA PENINSULA CONSERVATION AUTHORITY LEVY	http://www.iheartradio.ca/cjad/news/hamilton-council-loses-bid-to-lower-niagara-peninsula-conservation-authority-levy-1.9156842	Neutral	N/A	N/A
Global News Hamilton	May 3, 2019	Lake Ontario water levels now 1.5 feet above normal: conservation authority	https://globalnews.ca/news/5238497/lake-ontario-water-levels-hamilton/	Neutral	3,308,300	N/A
Hamilton News	May 3, 2019	NPCA's interim CAO Gayle Wood says agency is taking action on auditor's report recommendations	https://www.hamiltonnews.com/news-story/9336631-npca-s-interim-cao-gayle-wood-says-agency-is-taking-action-on-auditor-s-report-recommendations/	Positive	N/A	N/A
Newstalk 610 CKTB	May 3, 2019	ONTARIO AG AT NPCA TO CHECK UP ON AUDIT PROGRESS	http://www.iheartradio.ca/610cktb/news/ontario-ag-at-npca-to-check-up-on-audit-progress-1.9167057	Positive	N/A	N/A

Niagara this Week	May 3, 2019	High water level alters NOTL Sailing Club operations	https://www.niagarathisweek.com/news-story/9335557-high-water-level-alters-notl-sailing-club-operations/	Neutral	161,400	\$9,744
Power 97	May 3, 2019	Lake Ontario water levels now 1.5 feet above normal	https://power97.com/news/5238497/lake-ontario-water-levels-hamilton/	Neutral	N/A	N/A
St. Catharines Standard	May 3, 2019	High water level alters NOTL Sailing Club operations	https://www.stcatharinesstandard.ca/news-story/9335557-high-water-level-alters-notl-sailing-club-operations/	Neutral	57,000	\$6,500
Niagara at Large	May 4, 2019	The Rebirth of Niagara's Time-Honoured Conservation Authority is Now Well Underway	https://niagaraatlarge.com/2019/05/04/the-rebirth-of-niagaras-time-honoured-conservation-authority-is-now-well-underway/	Neutral	N/A	N/A
Thorold News	May 4, 2019	16th annual Children's Water Festival kicks off Tuesday	https://www.thoroldnews.com/local-news/16th-annual-childrens-water-festival-kicks-off-tuesday-1426683	Positive	N/A	N/A
105 The River	May 6, 2019	IMPROVING THE TWELVE MILE CREEK WATERSHED	http://www.105theriver.ca/news1/improving-the-twelve-mile-creek-watershed/	Neutral	N/A	N/A
Niagara at Large	May 6, 2019	Some Breaking News on Longstanding NPCA Lawsuit Against Former Employee	https://niagaraatlarge.com/2019/05/06/some-breaking-news-on-longstanding-npca-lawsuit-against-former-employee/	Positive	N/A	N/A
Toronto Hispanocity	May 6, 2019	Alerta de inundación por altos niveles de agua en Lago Ontario	https://toronto.hispanocity.com/publicacion/alerta-de-inundacion-por-altos-niveles-de-agua-en-lago-ontario/	Neutral	N/A	N/A
DSBN.org	May 7, 2019	DSBN Students Explore Indigenous Ways of Knowing Nature	https://www.dsbn.org/news-release/2019/05/07/dsbn-students-explore-indigenous-ways-of-knowing-nature	Positive	N/A	N/A
Hamilton Spectator	May 7, 2019	NPCA drops lawsuit against former employee	https://www.thespec.com/news-story/9342718-npca-drops-lawsuit-against-former-employee/	Positive	N/A	N/A
Niagara this Week	May 7, 2019	NPCA resolves lawsuits with former employee	https://www.niagarathisweek.com/news-story/9341862-npca-resolves-lawsuits-with-former-employee/	Positive	161,400	\$9,744
St. Catharines Standard	May 7, 2019	NPCA drops lawsuit against former employee	https://www.stcatharinesstandard.ca/news-story/9342718-npca-drops-lawsuit-against-former-employee/	Positive	57,000	\$6,500

The Weather Network	May 7, 2019	Great Lakes: Watching for damaging waves, shoreline erosion	https://www.theweathernetwork.com/ca/news/article/lake-ontario-flooding-shoreline-hazard-toronto-islands-water-levels-rise	Neutral	N/A	N/A
Niagara This Week	May 13, 2019	'A real need for it': Welland school unveils new outdoor classroom	https://www.niagarathisweek.com/news-story/9333111--a-real-need-for-it-welland-school-unveils-new-outdoor-classroom/	Positive	161,400	\$9,744
St. Catharines Standard	May 13, 2019	Bylsma wants interim NPCA board made permanent	https://www.stcatharinesstandard.ca/news-story/9352043-bylsma-wants-interim-npca-board-made-permanent/	Neutral	57,000	\$6,500
St. Catharines Standard	May 13, 2019	Niagara entitled to 27 reps on NPCA board, court rules	https://www.stcatharinesstandard.ca/news-story/9351925-niagara-entitled-to-27-reps-on-npca-board-court-rules/	Neutral	57,000	\$6,500
Newstalk 610 CKTB	May 14, 2019	JUDGE RULES ON NPCA BOARD MAKEUP, CHAIR WANTS BOARD TO BECOME PERMANENT	http://www.iheartradio.ca/610cktb/news/judge-rules-on-npca-board-makeup-chair-wants-board-to-become-permanent-1.9229276	Neutral	N/A	N/A
Niagara this Week	May 14, 2019	Naturalist Bruce MacKenzie to serve Grimsby at the Niagara Peninsula Conservation Authority	https://www.niagarathisweek.com/news-story/9353210-naturalist-bruce-mackenzie-to-serve-grimsby-at-the-niagara-peninsula-conservation-authority/	Positive	161,400	\$9,744
St. Catharines Standard	May 14, 2019	NPCA chair says he won't 'bully' neighbouring communities	https://www.stcatharinesstandard.ca/news-story/9353948-npca-chair-says-he-won-t-bully-neighbouring-communities/	Neutral	57,000	\$6,500
Niagara this Week	May 15, 2019	Editorial: Making decisions without a road map	https://www.niagarathisweek.com/opinion-story/9353750-editorial-making-decisions-without-a-road-map/	Negative	161,400	\$9,744
St. Catharines Standard	May 15, 2019	Tree planting program to get brief reprieve	https://www.stcatharinesstandard.ca/news-story/9356078-tree-planting-program-to-get-brief-reprieve/	Positive	57,000	\$6,500
Global News	May 16, 2019	Treetop Trekking opens at Binbrook Conservation Area	https://globalnews.ca/news/5284746/treetop-trekking-opens-at-binbrook-conservation-area/	Positive	3,308,300	N/A

Niagara at Large	May 18, 2019	NPCA Welcomes Citizen Appointees To Board Of Directors	https://niagaraatlarge.com/2019/05/18/npca-welcomes-citizen-appointees-to-board-of-directors/	Positive	N/A	N/A
Newstalk 610 CKTB	May 20, 2019	NPCA INTERIM BOARD CHAIR: 'DEMOCRACY AT THE END OF THE DAY WILL HAVE ITS SAY'	http://www.iheartradio.ca/610cktb/news/npca-interim-board-chair-democracy-at-the-end-of-the-day-will-have-its-say-1.9235317	Neutral	N/A	N/A
St. Catharines Standard	May 20, 2019	Regional council makes changes to NPCA board	https://www.stcatharinesstandard.ca/news-story/9360725-regional-council-makes-changes-to-npca-board/	Neutral	57,000	\$6,500
105 The River	May 21, 2019	CITIZEN APPOINTEES JOINING NPCA BOARD	http://www.105theriver.ca/news1/citizen-appointees-joining-npca-board/	Positive	N/A	N/A
Newstalk 610 CKTB	May 21, 2019	CITIZEN REPS FROM ACROSS THE REGION SET TO TAKE THEIR SEATS AT THE NPCA	http://www.iheartradio.ca/610cktb/news/citizen-reps-from-across-the-region-set-to-take-their-seats-at-the-npca-1.9250043	Positive	N/A	N/A
Niagara this Week	May 21, 2019	Port Weller residents advocate to keep Sunset Beach multi-use amid rising water levels	https://www.niagarathisweek.com/news-story/9362868-port-weller-residents-advocate-to-keep-sunset-beach-multi-use-amid-rising-water-levels/	Neutral	161,400	\$9,744
St. Catharines Standard	May 21, 2019	Geopark project founder boosts Niagara's effort	https://www.stcatharinesstandard.ca/news-story/9364363-geopark-project-founder-boosts-niagara-s-effort/	Positive	57,000	\$6,500
NOTL Advance	May 22, 2019	NOTL anticipates water levels to surpass those of 2017	https://www.stcatharinesstandard.ca/news-story/9365650-notl-anticipates-water-levels-to-surpass-those-of-2017/	Neutral	N/A	N/A
Welland Tribune	May 22, 2019	Hamilton Mayor Fred Eisenberger ready to negotiate to determine NPCA board composition	https://www.wellandtribune.ca/news-story/9363210-hamilton-mayor-fred-eisenberger-ready-to-negotiate-to-determine-npca-board-composition/	Neutral	33,000	\$6,500
CBC Hamilton	May 23, 2019	Hamilton drops its NPCA fight to lower amount residents have to pay	https://www.cbc.ca/news/canada/hamilton/npca-levy-1.5146108	Neutral	N/A	N/A
Niagara Falls Review	May 24, 2019	Niagara's flood watch continues	https://www.niagarafallsreview.ca/news-story/9390215-niagara-s-flood-watch-continues/	Neutral	34,000	\$6,500

Welland Tribune	May 24, 2019	Niagara's flood watch continues	https://www.wellandtribune.ca/news-story/9390215-niagara-s-flood-watch-continues/	Neutral	33,000	\$6,500
St. Catharines Standard	May 26, 2019	Lake Erie level stabilizes while Ontario continues to rise	https://www.stcatharinesstandard.ca/news-story/9391710-lake-erie-level-stabilizes-while-ontario-continues-to-rise/	Neutral	57,000	\$6,500
St. Catharines Standard	May 27, 2019	Jordan Harbour floods rowing school	https://www.stcatharinesstandard.ca/news-story/9393471-jordan-harbour-floods-rowing-school/	Neutral	57,000	\$6,500
Global News	May 28, 2019	Hamilton closes waterfront trails due to high water levels	https://globalnews.ca/news/5325221/hamilton-burlington-niagara-water-levels/	Neutral	3,308,300	N/A
Toronto Star	May 28, 2019	Flooded Niagara rowing school continues to operate	https://www.thestar.com/news/gta/2019/05/28/flooded-niagara-rowing-school-continues-to-operate.html	Neutral	361,323	\$41,230
St. Catharines Standard	May 29, 2019	UPDATED: All The Chair's Men Exclusive: NPCA manager blocked Ombudsman access to evidence	https://www.stcatharinesstandard.ca/news-story/9398428-updated-all-the-chair-s-men-exclusive-npca-manager-blocked-ombudsman-access-to-evidence/	Negative	57,000	\$6,500
Welland Tribune	May 30, 2019	New water ski club approved for Port Colborne	https://www.wellandtribune.ca/news-story/9398256-new-water-ski-club-approved-for-port-colborne/	Neutral	33,000	\$6,500
Niagara Independent	May 31, 2019	Ball's Falls is the 'New Eden'	https://niagaraindependent.ca/balls-falls-is-the-new-eden/	Positive	103,871	\$6,000
Niagara this Week	May 31, 2019	Hiking Club heads out to Morgan's Point	https://www.niagarathisweek.com/community-story/9402679-hiking-club-heads-out-to-morgan-s-point/	Positive	161,400	\$8,000
105 The River	May 31, 2019	WAINFLEET RECOMMENDS TOWNSHIP COUNCILLOR FOR NPCA BOARD	http://www.105theriver.ca/news1/wainfleet-recommends-township-councillor-for-npca-board/	Neutral	N/A	N/A
Print						
Niagara this Week	Apr. 25, 2019	What is the ideal makeup of a Conservation Authority Board?	N/A	Neutral	161,400	\$8,000

Niagara this Week	Apr. 25, 2019	Weather can't dampen the spirits of Grimsby Hawkwatch	http://edition.pagesuite-professional.co.uk/html5/reader/production/default.aspx?pubname=&pubid=fb4c551e-9691-47b8-8fe6-0d40d81be28f	Positive	161,400	\$8,000
St. Catharines Standard	Apr. 29, 2019	Anglers reel in start of trout fishing season	N/A	Positive	57,000	\$6,500
Welland Tribune	Apr. 29, 2019	Anglers reel in start of trout fishing season	N/A	Positive	33,000	\$6,500
Niagara this Week	May 2, 2019	NPCA tree planting axed by provincial cuts	http://edition.pagesuite-professional.co.uk/html5/reader/production/default.aspx?pubname=&edid=0600d3ae-5c4c-4487-bbe1-a98428884716	Neutral	161,400	\$8,000
Niagara this Week	May 2, 2019	A reminder to take care of our waterways	http://edition.pagesuite-professional.co.uk/html5/reader/production/default.aspx?pubname=&edid=0600d3ae-5c4c-4487-bbe1-a98428884716	Positive	161,400	\$8,000
Niagara this Week	May 2, 2019	Family fishing tradition returns to St. Johns Conservation Area	http://edition.pagesuite-professional.co.uk/html5/reader/production/default.aspx?pubname=&edid=0600d3ae-5c4c-4487-bbe1-a98428884716	Positive	161,400	\$8,000
Welland Tribune	May 6, 2019	What has the new NPCA board achieved? Letter to the Editor	N/A	Negative	33,000	\$6,500
Voice of Pelham	May 8, 2019	NPCA Board pledges to move forward	https://issuu.com/thevoiceofpelham/docs/the_voice_may_8_2019_digital_rev	Positive	17,000	N/A
St. Catharines Standard	May 8, 2019	NPCA Drops lawsuit against former employee	N/A	Positive	57,000	\$6,500
Niagara this Week	May 9, 2019	Niagara Children's Water Festival opens at Ball's Falls	N/A	Positive	161,400	\$8,000
Niagara this Week	May 16, 2019	Naturalist Bruce MacKenzie to serve Grimsby at the Niagara Peninsula Conservation Authority	http://edition.pagesuite-professional.co.uk/html5/reader/production/default.aspx?pubname=&pubid=fb4c551e-9691-47b8-8fe6-0d40d81be28f	Positive	161,400	\$8,000

Niagara this Week	May 16, 2019	Niagara Entitled to 27 NPCA Board Members, Court Rules	http://edition.pagesuite-professional.co.uk/html5/reader/production/default.aspx?pubname=&pubid=77015b8c-bd9a-479c-ba31-a6ee9c4fe181	Neutral	161,400	\$8,000
St. Catharines Standard	May 17, 2019	Tree planting program to get brief reprieve	N/A	Positive	57,000	\$6,500
St. Catharines Standard	May 21, 2019	Regional Council Changes NPCA Board	N/A	Neutral	57,000	\$6,500
St. Catharines Standard	May 22, 2019	Eisenberger ready to negotiate to determine makeup of NPCA Board	N/A	Neutral	57,000	\$6,500
St. Catharines Standard	May 28, 2019	Jordan Harbour floods rowing school	N/A	Neutral	57,000	\$6,500
St. Catharines Standard	May 30, 2019	NPCA Manager denied Ontario Ombudsman access to evidence	N/A	Negative	57,000	\$6,500
Broadcast						
Newstalk 610 CKTB	Apr. 25, 2019	Interim CAO, Gayle Wood, on the Roundtable with Tim Dennis & Tom McConnell	http://www.iheartradio.ca/610cktb/audio/npca-in-studio-1.9090072	Positive	N/A	N/A
Newstalk 610 CKTB	Apr. 25, 2019	Ryan Kitchen chats re: flooding in Ontario	N/A	Positive	N/A	N/A
Newstalk 610 CKTB	Apr. 29, 2019	Ryan Kitchen chats re: flooding in Ontario	N/A	Positive	N/A	N/A
Newstalk 610 CKTB	Apr. 30, 2019	LAKE ONTARIO WATER LEVELS ARE RISING IN NIAGARA/HAMILTON	http://www.iheartradio.ca/610cktb/audio/lake-ontario-water-levels-are-rising-in-niagara-hamilton-1.9145888?mode=Article	Positive	N/A	N/A
YourTV Niagara	May 3, 2019	Niagara Envirothon	https://yourtv.tv/node/180711	Positive	N/A	N/A
Newstalk 610 CKTB	May 2, 2019	FLOODPLAIN MAPPING AND FLOOD AREAS IN NIAGARA Steve Miller	http://www.iheartradio.ca/610cktb/audio/floodplain-mapping-and-flood-areas-in-niagara-1.9160390?mode=Article	Positive	N/A	N/A
Newstalk 610 CKTB	May 3, 2019	ONTARIO'S AUDITOR GENERAL WAS IN NIAGARA	http://www.iheartradio.ca/610cktb/audio/ontario-s-auditor-general-was-in-	Positive	N/A	N/A

		TODAY CHECKING UP ON THE NPCA	niagara-today-checking-up-on-the-npca-1.9167318?mode=Article			
Newstalk 610 CKTB	May 5, 2019	GAYLE WOOD - CEO NPCA re: Auditor General of Ontario visit	http://www.iheartradio.ca/610cktb/audio/gayle-wood-ceo-npca-1.9178186?mode=Article	Positive	N/A	N/A
YourTV Niagara	May 8, 2019	Water Festival 2019	https://yourtv.tv/node/181501	Positive	N/A	N/A
Newstalk 610 CKTB	May 13, 2019	NIAGARA - FLOODING UPDATE- Ryan Kitchen	http://www.iheartradio.ca/610cktb/audio/niagara-flooding-update-1.9223393?mode=Article	Positive	N/A	N/A
Newstalk 610 CKTB	May 14, 2019	NIAGARA ENTITLED TO 27 NPCA BOARD MEMBERS	http://www.iheartradio.ca/610cktb/audio/niagara-entitled-to-27-npca-board-members-1.9229175?mode=Article	Neutral	N/A	N/A
Newstalk 610 CKTB	May 19, 2019	Leah Feor NPCA Board Member Fort Erie	http://www.iheartradio.ca/610cktb/audio/leah-feor-npca-board-member-fort-erie-1.9246079?mode=Article	Positive	N/A	N/A
Newstalk 610 CKTB	May 23, 2019	NPCA WELCOMES CITIZEN APPOINTEES TO BOARD OF DIRECTORS- Bruce MacKenzie	http://www.iheartradio.ca/610cktb/audio/npca-welcomes-citizen-appointees-to-board-of-directors-1.9263611?mode=Article	Positive	N/A	N/A
Newstalk 610 CKTB	May 24, 2019	WELLAND NPCA CITIZEN APPOINTEE - JOHN INGRAO	http://www.iheartradio.ca/610cktb/audio/welland-npca-citizen-appointee-john-ingrao-1.9267615?mode=Article	Positive	N/A	N/A
Newstalk 610 CKTB	May 25, 2019	ED SMITH - NPCA CITIZEN APPOINTEE FOR ST. CATHARINES	http://www.iheartradio.ca/610cktb/audio/ed-smith-npca-citizen-appointee-for-st-catharines-1.9269178?mode=Article	Positive	N/A	N/A

Report To: Board of Directors

Subject: Update - Auditor General Report Recommendations

Report No: FA-73-19

Date: June 19, 2019

Recommendation:

That Report No. FA-73-19 RE: Update - Auditor General Report Recommendations **BE RECEIVED** for information.

Purpose:

The purpose of this Report is to update 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*. Staff, through Report No. FA-50-19, provided an Update regarding the NPCA's progress to date in responding to the Auditor General's recommendations.

The Auditor General advised the Board that she and her team will return in 2020 to complete 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-73-19 is an updated Table, dated June 19, 2019. The column entitled **NPCA Response** outlines in red progress made since the May 3, 2019 meeting.

Staff are working on embedding links into the document on reports approved by the NPCA in response to the Auditor General's Report.

Financial Implications:

There are no financial implications as a result of this Report.

Related Reports and Appendices:

Table: Auditor General's Recommendations and NPCA Response

Submitted by:

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

TABLE: Auditor General’s Recommendations and NPCA Response - Updated June 19, 2019

LEGEND:

- Ministry of Environment, Conservation and Parks (MOECP)
- 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 - Modernizing conservation authority operations and Focusing conservation authority’s development permits on the protection of people and property. 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>. 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.”</p> <p>Orientation with the Board of Directors will begin 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 will continue at the June 19, 2019 meeting regarding confidentiality and code of conduct. On going Orientation session will occur as the new members from the Region are selected around August 2019.</p> <p>NPCA is awaiting further information and clarification from MOECP.</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:				
(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>Further reviews of the By-law will continue in July 2019 and Code of Conduct Investigation Procedures will be developed.</p>	X	Q2 2019	

Lead and Rec. #	AUDITOR GENERAL RECOMMENDATIONS	NPCA RESPONSE	INITIATED	TARGETTED COMPLETION	COMPLETE
(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 Q2 review of the By-law, the Board will define circumstances that could lead to an actual or perceived conflict of interest.	X	Q2 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>Niagara Region appointed four new public appoints to the Board whose first meeting with NPCA will by June 19, 2019. An Orientation meeting for them will be held on June 10, 2019. Additional appointees will be considered by the Region after July 31, 2019.</p> <p>Both the Board of Directors and the NPCA Public Advisory Committee will be requested to develop profiles on each member. Based on this, a gaps analysis can be completed, and a strategy developed to address any gaps.</p> <p>An additional Orientation will occur once the Niagara Region confirms final Board appointees to the NPCA in August 2019. A Training Program for the Board will be developed after final confirmation of the Board in June.</p>	X	Q3 2019	
(CM) # 3.2	Work with the NPCA's funding municipalities to ensure that their Board appointment processes consider skills and experience requirements;	<p>A letter was circulated to Niagara, Hamilton and Haldimand regarding a recommended list of competencies and a reference to the Alberta Public Agencies – Board Profile & Competency Matrix Tool, as approved by the Board of Directors on April 17, 2019.</p> <p>The NPCA CAO met with the Niagara Region CAO and senior staff on June 5, 2019 to discuss the appointment process and procedures based on the matrix.</p>	X	Q2 2019	X

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. A Report on the NPCA Public Advisory Committee, with recommendations for a revised Terms of Reference was considered by the Board of Directors on May 3, 2019.</p> <p>The PAC is meeting on June 27, 2019 to review their Terms of Reference, provide recommendations on Committee vacancies and develop “profiles” for each Committee member.</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>Further training needs to be identified through a Board survey once the new board is finalized around August 2019. Training will be initiated throughout 2019 and annually.</p>	X	Q4 2019	
(M) # 4	We recommend that the Ministry of the Environment, Conservation and Parks:				
(M) # 4.1	Make a recommendation to the Executive Council of Ontario to proclaim Section 40 of the Conservation Authorities Act;	<p>Section 40 of the CAA states that the Lieutenant Governor in Council may make regulations dealing with CA composition, advisory boards, programs/services, apportionment of capital costs and governing reviews under Section 27 and 27.1 of the CAA. The province began this review by launching ERO reviews on April 5, 2019.</p> <p>With the passage of Bill 108, the province approved amendments to <i>The Conservation Authorities Act</i> on June 4, 2019, with regulations to follow.</p>	X	2020	
(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 dependant upon the province’s review noted above.		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 dependant upon the province’s review noted above.		2020	

Lead and Rec. #	AUDITOR GENERAL RECOMMENDATIONS	NPCA RESPONSE	INITIATED	TARGETTED COMPLETION	COMPLETE
(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 Interim CAO's performance will be evaluated in July 2019. The Board can determine a performance schedule with the new CAO when hired in Q2 of 2019.	X	Q2 2019	
(BC) # 5.2	Develop performance indicators to facilitate the Board's evaluation of its oversight processes and activities;	A Board evaluation, and self evaluation process has been developed, in draft, by the Interim CAO and will be forwarded to the NPCA Governance Committee for review and recommendations to the Board in July 2019.	X	Q2 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, in draft, by the Interim CAO and will be forwarded to the Governance Committee by June 2019.	X	Q3 2019	
(BD) # 6	To ensure that per diem payments to Board members are reasonable and transparent, we recommend that the Niagara Peninsula Conservation Authority:				
(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;	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. The per diem and honorarium policy is updated and outlined in the Administrative By-law. Further review of the By-law will occur in July 2019 to specify the meetings and functions for which a Board member may receive a per diem.	X	Q2 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	
(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:				

Lead and Rec. #	AUDITOR GENERAL RECOMMENDATIONS	NPCA RESPONSE	INITIATED	TARGETTED COMPLETION	COMPLETE
(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 is meeting with the Welland River Floodplain Advisory Committee on June 13, 2019 to review updated flood lines and discuss public consultation. The first drafts of the other studies are scheduled to be reviewed in Q2 of 2019.</p>	X	Q2 2019 draft review 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.</p> <p>This cost will be addressed in the 2020 budget preparation.</p>	X	2026 subject to funding being received	
(OPS) # 7.3	Schedule this work, based on its risk assessment and for the watercourses for which the Ministry of Natural Resources and Forestry recommends floodplain maps be prepared.	A risk-based assessment for the remaining mapping will be developed in 2019. NPCA believes that MNRF does not recommend flood plain mapping priorities.		Q2 2019	
(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>	x	Q4 2019	

Lead and Rec. #	AUDITOR GENERAL RECOMMENDATIONS	NPCA RESPONSE	INITIATED	TARGETTED COMPLETION	COMPLETE
(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 and it became effective November 2018. Staff have been directed to follow the new policy document as approved.</p> <p>Housekeeping amendments and an update on the consultation policy will be forwarded to the Board for approval on June 19, 2019.</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>	X	Q4 2018	X
(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. 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>	X	2020	
(OPS) # 10.2	In developing such an HR plan, review its staffing mix to determine the appropriate level of administrative and corporate support staff;	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.	X	Q4 2019	

Lead and Rec. #	AUDITOR GENERAL RECOMMENDATIONS	NPCA RESPONSE	INITIATED	TARGETTED COMPLETION	COMPLETE
(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	Q2 2019	
(BD/CAO) # 10.4	Provide information about planned re-structuring decisions, including their financial implications, to the NPCA Board prior to implementing such decisions.	The 2019 organization review was discussed and approved by the Board on April 17, 2019. This review was accompanied by a financial assessment. Further staff considerations will be completed by the Board of Directors at their June 19, 2019 meeting.	X	Q2 2019	X
(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;	A Supervisor of Permits and Compliance was hired in March 2019. 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. Given current permitting and enforcement requirements, a Business Case will be developed as part of the 2020 budget to recommend enhanced staff in this area.	X	Q4 2019	
(OPS) # 11.2	Ensure that enforcement staff obtain the necessary training to discharge their responsibilities;	All four compliance staff have received Level 1 Conservation Ontario Compliance training as of March 2019.	X	Q3 2019	
(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;	Conservation Ontario is updating the manual on behalf of all conservation authorities. Progressive actions to address violations will be included as part of the manual review. NPCA is actively involved in the review and updating of the manual through the Conservation Ontario Regulatory Advisory Committee. The manual is drafted as of June 2019 and should be forwarded to CA staff for final review and subsequent forwarding to the Board of Directors.	X	Q3 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 review. NPCA is actively involved in the review and updating of the manual through the Conservation Ontario Regulatory Advisory Committee.	X	Q3 2019	

Lead and Rec. #	AUDITOR GENERAL RECOMMENDATIONS	NPCA RESPONSE	INITIATED	TARGETTED COMPLETION	COMPLETE
(OPS) # 11.5	Use CityView to track reports of possible violations.	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. An update to CityView to handle Compliance/Violation issues in underway and should be completed by October 1, 2019.	X	Q4 2018	X
(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:				
(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 is finalized and will be reviewed by the Board of Directors at their June 19, 2019 meeting.	X	Q2 2019	
(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 numbers 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 will be considered by the Board of Directors on June 19, 2019.	X	Q2 2019	

Lead and Rec. #	AUDITOR GENERAL RECOMMENDATIONS	NPCA RESPONSE	INITIATED	TARGETTED COMPLETION	COMPLETE
(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):				
(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. The Board of Directors will receive the MOU for approval at their June 19, 2019 meeting.</p>	X	Q2 2019	
(BD/OPS) # 14.2	Revise, as necessary, the formal agreement between the NPCA and OPG to outline such expectations;	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 is scheduled for May 6, 2019 to finalize the Draft MOU, discuss expenditure of funds and establish reporting requirements. Current funding will serve as a starting point for a Final MOU detailing goals and objectives for the funding allocations.	X	Q2 2019	
(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.	After the approval of the Final MOU, NPCA staff will develop a plan that identifies projects and their locations, ensuring that these projects focus on priority areas of concern. Regular meetings with OPG will be held to ensure that project targets are met.	X	Q2 2019	
(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.	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;	An initial land acquisition criteria list has been developed. When reviewing a land acquisition opportunity, the following will be considered: <ul style="list-style-type: none"> • Protection of areas of ecological significance including wetlands, woodlands, ANSI's and species of concern or at risk; • Enhancing biodiversity; • Creating connectivity to CA lands, within CA lands or with other public lands; • Protection of, and access to shorelines; • Financial considerations, such as market value, donation of land, land taxes, maintenance costs, NPCA funding available; • Size of the property; • Continued ability to address water quality issues. 	X	Q4 2019	
(BD/OPS) # 15.3	Prioritize its current land acquisition criteria to reflect the revised goals;	Once the land acquisition criteria have been drafted, staff will recommend a ranking of the criteria to be considered and approved by the Board.		Q4 2019	
(OPS) # 15.4	Determine the total cost of its land acquisition plan and how it will fund the acquisitions;	As part of the updated Land Acquisition Plan, costs for securement and funding strategies will be developed.		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.	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 is considering one acquisition for 2019, of which the Board is fully appraised.	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	2017 ongoing	
(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	2017 ongoing	
(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 analysing 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	ongoing	
(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.	<p>Quarterly and annual reports will be refined to outline how NPCA initiatives and projects are fulfilling our mandate and goals.</p>	X	Q2 2019	

Lead and Rec. #	AUDITOR GENERAL RECOMMENDATIONS	NPCA RESPONSE	INITIATED	TARGETTED COMPLETION	COMPLETE
(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. Recruitment Policy updates will be presented to the Board of Directors for approval at their June 19, 2019 meeting.	X	Q2 2019	
(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 will be considered as part of the Recruitment Policy Update.	X	Q2 2019	
(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.	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's Code of Practice, we recommend that the Niagara Peninsula Conservation Authority (NPCA):				
(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;	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. Updates to the Harassment Policy will be presented to the Board of Directors for approval at their June 19, 2019.	X	2016 Q2 2019 update	

Lead and Rec. #	AUDITOR GENERAL RECOMMENDATIONS	NPCA RESPONSE	INITIATED	TARGETTED COMPLETION	COMPLETE
(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 Policy Update, a process for handling complaints against the CAO will be developed, using an external investigator rather than in house staff.	X	Q2 2019	
(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;	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. Workplace concerns which emerged during the CAOs April review will be reported at the July Board meeting along with an Action Plan.	X	2017 to Q1 2019	X
(BD/OPS) # 19.2	Present this action plan and related timeline to the NPCA Board of Directors for review and approval;	Overall concerns will be reported to the Board in July 2019. An updated Workplace Comments and Concerns Process and Action Plan will be developed for approval in 2019.	X	Q3 2019	
(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	

Lead and Rec. #	AUDITOR GENERAL RECOMMENDATIONS	NPCA RESPONSE	INITIATED	TARGETTED COMPLETION	COMPLETE
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;	<p>Since March 2018 the NPCA has been conducting competitive procurements as per its existing policy as evidenced by the document "Planned Procurement".</p> <p>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.</p> <p>Additional revisions to existing Purchasing & Procurement Policy are in progress.</p>	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	
(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.</p>	X	Q3 2019	

Lead and Rec. #	AUDITOR GENERAL RECOMMENDATIONS	NPCA RESPONSE	INITIATED	TARGETTED COMPLETION	COMPLETE
(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>	X	Q2 2019	
(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	Q2 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.		Q2 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.		Q2 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.		Q2 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:				

Lead and Rec. #	AUDITOR GENERAL RECOMMENDATIONS	NPCA RESPONSE	INITIATED	TARGETTED COMPLETION	COMPLETE
(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 - Modernizing conservation authorities’ operations - CAA and Focusing conservation authority’s development permits on the protection of people and property. 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 was we move toward establishing regulations which will enact Bill 108.	X	2020	
(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	
(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 MOECP and municipalities regarding reporting processes.	X	2020	

Lead and Rec. #	AUDITOR GENERAL RECOMMENDATIONS	NPCA RESPONSE	INITIATED	TARGETTED COMPLETION	COMPLETE
(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: Ontario Power Generation (OPG) Memorandum of Understanding (MOU) Update

Report No: FA-55-19

Date: June 19, 2019

Recommendation:

1. That Report No. FA-55-19 RE: Ontario Power Generation (OPG) Memorandum of Understanding (MOU) Update **BE RECEIVED**.
2. That the Board of Directors **AUTHORIZE** the Interim CAO/Secretary-Treasurer and Chair to sign the Memorandum of Understanding, included as Appendix 1 to Report No. FA-55-19, with Ontario Power Generation (OPG).

Purpose:

The purpose of this report is to seek approval for the Interim CAO/Secretary-Treasurer and Chair to enter into a Memorandum of Understanding (MOU) with Ontario Power Generation (OPG).

Further, addressing this MOU will respond to a matter outlined by the Auditor General of Ontario in her recommendations.

Background:

On June 1, 2007, OPG contributed \$3,000,000 to the NPCA to spend on projects to restore, improve and benefit the Welland River Watershed. These funds were to be utilized by May 31, 2012. Utilization of all the funds did not occur by 2012 and OPG and the NPCA continued to work together to utilize the remaining funds without a proper agreement in place.

Discussion:

In 2018, OPG and NPCA met on 3 separate occasions to discuss all the works that had occurred in relation to the contribution made by OPG since 2007. During those meetings it was determined that both parties wanted to build on the existing letter agreements through increased accountability and transparency entering into a formal Memorandum of Understanding.

On May 6, 2019 OPG and NPCA staff met to finalize a draft MOU outlining the time frame to utilize the remaining funds and identify that the remaining funds would be used for projects and activities to restore, improve and benefit the Welland River and Welland River Watershed.


Financial Implications:

As per NPCA's Audited 2018 Financial Statements, the current outstanding amount to be utilized is \$1,262,342.00 by June 1, 2027, the 20th anniversary of the OPG funding

Related Reports and Appendices:


Appendix 1: OPG Memorandum of Understanding

Authored by:



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

Submitted by:



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

MEMORANDUM OF UNDERSTANDING

This AGREEMENT made as of the ____ of _____, 2019.

BETWEEN

NIAGARA PENINSULA CONSERVATION AUTHORITY
a conservation authority established under the *Conservation Authorities Act*, R.S.O. 1990, c. C. 27, ("NPCA")

and

ONTARIO POWER GENERATION INC., a corporation existing under the laws of Ontario ("OPG")

(Individually a "Party"; together, the "Parties")

WHEREAS on June 1, 2007, OPG contributed \$3,000,000 CAD to NPCA to spend on projects to restore, improve and benefit the Welland River Watershed;

WHEREAS a significant portion of those funds remain unspent by NPCA;

AND WHEREAS OPG and NPCA want to build on their existing letter agreements through increased accountability and transparency.

THEREFORE, the Parties agree as follows:

1.0 EXISTING AGREEMENTS

- 1.1** This Memorandum of Understanding ("MOU") incorporates by reference the letter agreement between OPG and NPCA dated November 1, 2006 attached as Schedule "A" ("2006 Letter") and the letter agreement between OPG and NPCA dated May 8, 2007 attached as Schedule "B" ("2007 Letter") (together, the "Letter Agreements").
- 1.2** In addition, for context, attached at Schedule "C" is the OPG cover letter for the \$3,000,000 CAD contribution to NPCA dated June 1, 2007.
- 1.3** The Letter Agreements remain in full force and effect.
- 1.4** Where any terms in this MOU conflict with any terms in the 2006 Letter and/or the 2007 Letter, this MOU will prevail to the extent of the conflict.
- 1.5** NPCA asserts that all funds spent as at December 31, 2018 were in compliance with the Letter Agreements.

Appendix 1: OPG Memorandum of Understanding

2.0 REMAINING FUNDS AND PURPOSE

- 2.1** By June 30, 2019, NPCA and OPG shall establish in writing, by completing and executing Schedule “D” to this MOU, the final remaining unspent balance of OPG’s original \$3,000,000 CAD contribution, as of December 31, 2018 (the “Remaining Funds”).
- 2.2** NPCA recommit to spending the Remaining Funds on NPCA projects and activities to restore, improve and benefit the Welland River and Welland River Watershed (the “Purpose”).

3.0 REGULAR MEETINGS

- 3.1** Representatives of the Parties will continue to meet quarterly and may mutually agree to amend the meeting frequency as required to discuss various matters including the status of NPCA’s ongoing projects, proposals for new projects and expenditures related to the Purpose (“Regular Meetings”).

4.0 ONGOING PROJECTS, PROPOSALS AND APPROVALS

- 4.1** By June 30, 2019, NPCA and OPG shall establish in writing, by completing and executing Schedule “D” to this MOU, a list of ongoing NPCA projects and activities that fit the Purpose and therefore are eligible for continued funding using the Remaining Funds (“Approved Ongoing Projects”).
- 4.2** NPCA shall prepare new project proposals for the Purpose with detailed budgets for the use of the Remaining Funds (“Proposals”).
- 4.3** NPCA shall provide Proposals to OPG at Regular Meetings.
- 4.4** OPG shall review Proposals to ensure that they fit the Purpose.
- 4.5** If required by OPG, OPG shall have the time between one Regular Meeting and the next Regular Meeting to review Proposals.
- 4.6** OPG representatives shall approve, approve with modifications, and/or refuse Proposals orally at Regular Meetings and these OPG decisions will be recorded by OPG or NPCA in the meeting minutes.
- 4.7** OPG shall not unreasonably withhold its approval of Proposals that fit the Purpose, although OPG may approve such Proposals with modifications.
- 4.8** OPG reserves the right to approve, or approve with modifications, Proposals that do not strictly fit the Purpose.
- 4.9** Once Proposals are approved by OPG or approved by OPG with modifications (“Approved Proposals”), NPCA may proceed to implement Approved Proposals.
- 4.10** NPCA shall only use the Remaining Funds for Approved Ongoing Projects and Approved Proposals.

Appendix 1: OPG Memorandum of Understanding

5.0 ANNUAL REPORTS

- 5.1** NPCA shall provide OPG with annual reports, which will include details regarding: (a) the opening balance of the Remaining Funds at the beginning of the fiscal year; (b) all expenditures on Approved Ongoing Projects and Approved Proposals broken down by project; (c) the budgeted amounts on Approved Ongoing Projects and Approved Proposals broken down by project; and (d) the closing balance of the Remaining Funds at the end of the fiscal year ("Annual Reports").
- 5.2** Each year, within 6 months of NPCA's fiscal year end, NPCA will provide OPG with a copy of its annual audited financial statements. The Remaining Funds balance and transactions in NPCA's annual audited financial statements must correspond with the Annual Reports.

6.0 TERM

- 6.0** This MOU remains in force and effect until the earlier of: (a) January 1, 2025; or (b) NPCA provides OPG with an Annual Report that concludes that NPCA has spent all of the Remaining Funds on Approved Proposals, and OPG accepts this Annual Report (the "End Date").
- 6.1** This MOU also extends the term of the Letter Agreements until the End Date.
- 6.2** NPCA will use all reasonable efforts to spend all of the Remaining Funds on Approved Ongoing Projects and Approved Proposals before January 1, 2025.
- 6.3** If NPCA is unable to spend all of the Remaining Funds by January 1, 2025, OPG may agree to extend the term of this MOU and the Letter Agreements for additional one year period(s) subject to the same terms and conditions.
- 6.4** If NPCA has not spent all of the Remaining Funds by June 1, 2027, the 20 year anniversary of OPG's original \$3,000,000 CAD contribution to NPCA, then NPCA will promptly return the unspent portion of the Remaining Funds to OPG.

7.0 GENERAL

- 7.1** This MOU shall be interpreted in accordance with the laws of Ontario.
- 7.2** This MOU may be executed in counterparts, each of which shall constitute an original and all of which taken together shall constitute one and the same instrument.

Appendix 1: OPG Memorandum of Understanding

The Parties have duly executed this MOU:

**NIAGARA PENINSULA CONSERVATION
AUTHORITY**

ONTARIO POWER GENERATION INC.

Name: Dave Bylsma
Title: Chair

Name:
Title:

I have the Authority to bind the Corporation

Name: D. Gayle Wood
**Title: Interim CAO/
Secretary-Treasurer**

We have the Authority to bind NPCA

Appendix 1: OPG Memorandum of Understanding

SCHEDULE "A"

905 357 6954

HUMAN RESOURCES N

03:57:48 p.m. 11-07-2006

2/3-4



250 Thorold Road West, 3rd Floor
Welland, Ontario L7L 3H2
Tel (905) 788-2135
Fax (905) 788-1121
E-mail: noca@conservation-niagara.on.ca

in agreement

cc: R. Everdell
T. English

November 1, 2006

Our File No. WMWQ.10.9

Mr. David Heath
Niagara Plant Group Manager
Ontario Power Generation
14000 Niagara Parkway
Niagara-on-the-Lake, ON L0S 1J0

Dear Mr. Heath:

Re: Welland River Fluctuations

I am writing to you in regard to the Welland River Flow Study initiated earlier this year with the funding support of Ontario Power Generation to re-examine solutions to eliminate or reduce the historical fluctuations on the Welland River.

Conservation Authority staff have reviewed the Philips Engineering report of June 2006 regarding various alternatives they have examined. Given the complexity of the river and its flow conditions, Conservation Authority staff also met with 3 independent experts in river biology and hydraulics to discuss the alternatives and the potential impacts of another structure in the watercourse.

The Welland River is a riverine system in need of restoration as has been identified in the Welland River Watershed Plan and the Niagara River Remedial Action Plan. While the construction of a weir and hydraulic gate structure as identified in the consultant's report would virtually eliminate the fluctuations experienced upstream of the weir location, we are concerned that there may be other unanticipated adverse impacts from another structure in the watercourse.

The Conservation Authority believes that a more effective and beneficial solution for both the river and the residents would be to undertake a program to improve the existing environment of the Welland River by expanding restoration programs and other initiatives that target water quality, quantity and habitat improvements in accordance with the Welland River watershed plan. The projects would be complementary to the current Conservation Authority initiatives and would include restoration and fisheries improvement projects, improvements in public access to the river and community education and awareness programs.

The Philips Engineering report of June 2006 identified 4 possible locations for a weir and hydraulic gate structure and estimated the costs of a new structure to be approximately \$3 million. The consultant's suggestion of possibly locating a structure as part of the "old" siphon would not be acceptable to the Conservation Authority given the age and condition of the siphon structure and the significant long term financial liability which could be expected with a new structure at this location.

← do we
have a
copy?

Appendix 1: OPG Memorandum of Understanding

SCHEDULE "A"

905 357 6954

HUMAN RESOURCES N

03:58:07 p.m. 11-07-2006

3 /3--

The Conservation Authority is proposing that Ontario Power Generation invest the \$3 million (which would have been expended to construct a weir and hydraulic gate structure) to improve the ecological health of the river through an expanded restoration program. The program would be implemented over a 5 to 10 year time period and would include:

a) Restoration -- investment = \$1,000,000

- tree planting -- target of 350 acres reforested
- wetland restoration -- target of restoring/creating 50 acres
- riparian buffers -- target of restoring/creating 15 km. of riparian buffers
- non-point source pollution enhancements through support of best management practices

b) Fisheries Improvements -- investment = \$500,000

- spawning bed improvements
- fish passage barrier removal
- fishery access improvements -- fishing piers, boat launch facilities

c) Community Outreach and Education -- investment = \$300,000

- water quality/wetland improvement demonstration projects
- Welland River fact sheets and information activities

d) Welland River Floodplain & Wetland Acquisition -- investment = \$1,200,000

- target to acquire 400 acres of wetlands and floodplain lands of the Welland River which are impacted by flow fluctuations

In addition to the funding support from Ontario Power Generation, the Conservation Authority will continue to seek out other sources of funding and partnerships. The Conservation Authority is most appreciative of the support and commitment of Ontario Power Generation to date in addressing concerns affecting the Welland River. I firmly believe our proposed approach is one that will be beneficial for the Welland River, the environment and our watershed residents and also allows numerous opportunities for the community commitment and support of Ontario Power Generation to be publicly recognized.

I am hopeful that our proposal is acceptable to you and your Board. I would be most happy to meet with you to provide any further information that may be required.

Sincerely



Andrew L. Burt
General Manager/Secretary-Treasurer, Ext. 251

Appendix 1: OPG Memorandum of Understanding

SCHEDULE "B"

ONTARIO POWER GENERATION

Niagara Plant Group, 14,000 Niagara Parkway, Niagara-on-the-Lake, Ontario L0S 1J0 Tel. 905 357-6932 Fax. 905 374-5485

May 8, 2007

Delivery Method: Courier

File: NPG-00549.1

Andrew L. Burt
General Manager/Secretary – Treasurer
Niagara Peninsula Conservation Authority
250 Thorold Road West, 3rd Floor
Welland, Ontario
L3C 3W2

CONFIDENTIAL

Filed in
Niagara -
Secure (confidential)
File

Dear Mr. Burt:

Confidential Terms of Resolution of Watershed Issues

This is a follow up to my November 16, 2006 preliminary response to your November 1, 2006 letter and our subsequent discussions to confirm the terms upon which OPG has agreed to provide \$3,000,000 of funding to NPCA for certain Welland River Watershed (the Watershed) projects. We wish to make it clear that in agreeing to make that contribution on the terms set out in this letter, OPG should not be misconstrued as admitting liability for impacts to the Watershed. You are aware that the Watershed is a complex system and its current condition is the result of numerous causes stretching back many decades.

The NPCA, on behalf of the many users of the Watershed has for years sought assistance for its restoration needs (including with respect to river fluctuations) from OPG and its predecessors. In response, OPG and its predecessors have cooperated with the NPCA, in part by providing significant funding for studies (including the 2002 Welland River Water Level Fluctuation Study and the 2006 Welland River Flow Study) designed to identify technical solutions to which the NPCA and the other users of the Watershed might contribute. We understand that the NPCA has concluded that because of the inherent complexity of the Watershed, technical solutions like the one arising from the Welland River Flow Study could result in unanticipated adverse impacts, and it would therefore be preferable if OPG made its contribution to watershed restoration by funding the projects itemized in your November 1, 2006 letter.

As we have discussed, the proposal in your November 1, 2006 letter is acceptable to OPG in part because you have agreed that our substantial monetary contribution will be in full and final satisfaction for any actual or perceived Watershed impacts from OPG's operations as configured and run to date, or as those operations are expected to run, all as contemplated in the approved Environmental Assessment and the "Effects of Water Levels and Fluctuations on the Welland River" report dated November 14, 2005 ("Hatch Report"), after the Niagara Tunnel Project (the "NTP") has been completed and is fully operational. We have also placed considerable weight on your view that the proposed manner of contribution

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Report No. FA-55-19

Ontario Power Generation (OPG) Memorandum of Understanding (MOU) Update

Page 9 of 16

Appendix 1: OPG Memorandum of Understanding

SCHEDULE "B"

- 2 -

(through the itemized projects described in your letter), will in fact provide real and substantial benefits to the Watershed sufficient to compensate for any actual or perceived negative affects OPG operations may have had to date on the Watershed or its users, or would reasonably be anticipated to have after the NTP is operational as contemplated in the approved Environmental Assessment and the Hatch Report. For reference, some of the documents relevant to that assessment (with which you are familiar) are listed in the attached Appendix A.

Of course, given the importance of the nature of the projects itemized in your November 1, 2006 letter, a key element of our agreement is your commitment that each of them will be carried out as soon as reasonably possible (in no event more than five years from the date of payment to you) and that we will be provided with an annual report of your progress. We also confirm that you will continue in the future to seek monetary contribution to these works from other users of the Watershed, and you will keep us informed as the specifics of each project are developed and executed to make sure that OPG's participation is publicly recognized in a manner satisfactory to us. Finally, in order to ensure that we are protected from any claims brought by any contractors engaged by you to perform the work associated with each project, we will require that you include the clause attached as Appendix B in any contract between the NPCA and its contractors (or subcontractors) performing the work.

We are looking forward to seeing the NPCA implement these exciting projects.

Sincerely,



David Heath
Niagara Plant Group Manager

Please confirm this letter reflects the terms of our agreement by signing and returning three (3) copies to me.

Agreed and Accepted on behalf of:

NIAGARA PENINSULA CONSERVATION AUTHORITY

By:



Andrew L. Burt
General Manager/Secretary - Treasurer

Date:

MAY 10, 2007

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14504-2060

SCHEDULE "B"

APPENDIX A

**CHRONOLOGY
WELLAND RIVER WATERSHED**

Background:

The Niagara Peninsula Conservation Authority ("NPCA") has had ongoing concerns about flow changes and water level fluctuations in the Welland River resulting from hydroelectric operations and other watershed modifications over the past several decades, and the impact of these changes on agricultural land use, riparian rights, and water quality along the river. This chronology lists the key documents setting out these concerns and the various remedial options considered.

Chronology:

1. **March, 1995 – Niagara River Remedial Action Plan**
2. **September 2, 1998 – Letter from NPCA**
 - Letter states that "the reversal of flows on the Welland River resulting from the operations of Ontario Hydro has been occurring for many years and the concerns of municipalities and residents along the watercourse have been enunciated in the past. Our preliminary work on our Welland River Watershed Strategy indicates that the changing flow pattern alters the natural processes of this watercourse resulting in reduced transfer of sediment, increased turbidity and an overall reduction of water quality with subsequent impacts on the riparian vegetation and fisheries of this important resource".
3. **December 18, 1998 – Letter to OPG from NPCA re; Welland River Watershed Strategy**
 - Attached Issues and Options paper sets out the Welland River issues with potential solutions.
4. **October 23, 1998 – Approval of Environmental Assessment ("EA") for NRHD Received.**
 - EA Condition 7.5 requires OPG to provide NPCA with "documentation demonstrating that the hydraulic grade line of the Welland River west of the Niagara River will remain within present levels of fluctuations and will not reduce the present sediment carrying capacity of the Welland River".
5. **November, 1999 – Welland River Watershed Strategy**
 - Intention to develop a comprehensive and focussed strategy to restore the health of the Welland watershed.

Appendix 1: OPG Memorandum of Understanding

SCHEDULE "B"

6. March, 2001 - Welland River Water Level Fluctuation Study Terms of Reference
7. August 29, 2001 – Letter from OPG to NPCA re; Welland River Fluctuation Study
 - Confirming OPG's participation in Welland River Fluctuation Study and commitment to fund the study in its entirety (cost not to exceed \$212,800).
8. March, 2004 – Welland River Water Level Fluctuation Study (Draft Final Report - #3)
 - Study prepared by Philips Engineering Ltd. Study objective to "comprehensively evaluate opportunities to either mitigate the impacts on the Welland River ecosystem, due to the water level fluctuations, and/or moderate the extent/significance of the water level fluctuations.
9. July 9, 2004 – Letter From W.F. Baird & Associates to Philips Engineering re; Impact of Proposed Diversion Tunnel on the Welland River
 - Contains a brief analysis of the potential impacts on the Welland River hydraulics due to the addition of a proposed diversion tunnel to the existing Sir Adam Beck station.
10. August 11, 2004 – NPCA Report to Chairman and Board re; Welland River Flow Fluctuation Study
 - Recommends that NPCA support the EA for the 3rd tunnel construction subject to the following Conditions:
 1. OPG being required to not increase the present flow fluctuation levels of the Welland river in any way including daily and long term maximums, minimums, averages and duration; and
 2. That a monitoring gauge with full accessibility by the Conservation Authority be installed to monitor future flow fluctuation; and
 3. That the Province of Ontario and Ontario Power Generation be requested to undertake the necessary remedial measures to eliminate all flow fluctuations on the Welland River as soon as possible.
11. July 13, 2005 - Letter from NPCA to OPG re; EA Conditions 7.4 and 7.5
 - Letter to Emad Elsayed advising that the NPCA cannot clear Conditions 7.4 or 7.5 of the EA due to ongoing concerns over water level increases and low sediment carrying capacity in the Welland River.
12. July 20, 2005 – Letter from OPG to NPCA re; EA Conditions 7.4 and 7.5
 - Letter to Tony D'Amario (responding to July 13, 2005 letter from NPCA) requesting approval for EA Condition 7.4.
13. August 18, 2005 – Letter from NPCA to OPG re; EA Condition 7.4
 - NPCA's response denying approval for EA Condition 7.4.

Appendix 1: OPG Memorandum of Understanding

SCHEDULE "B"

14. September 21, 2005 – Letter from OPG to NPCA re; Welland River Fluctuations
 - Letter from OPG proposing a joint study into water level fluctuation on the Welland River. "That arrangement would involve both parties jointly overseeing and supporting a structured examination and consideration of the existing issues and potential solutions". OPG indicates that it would be willing to participate in the funding of any action plan identified as part of the study.
15. September 22, 2005 – Letter from NPCA to OPG re; Welland River Fluctuations
 - Letter from Andrew Burt advising that although NPCA is willing to participate in the study proposed by OPG, it will not release EA Condition 7.4.
16. September 27, 2005 – Letter from OPG to NPCA re; Welland River Fluctuations
 - Letter from Emad Elsayed requesting NPCA to reconsider its position on EA Condition 7.4.
17. October 3, 2005 – Letter from OPG to NPCA re; Welland River Fluctuations
 - OPG offers to participate in a partnered approach to "jointly overseeing and supporting a structured examination and consideration of the existing issues and potential solutions. The ultimate aim would be to find a mutually acceptable action plan to address the issues, which would include concrete steps and an implementation schedule."
18. October 11, 2005 – Letter from NPCA to MOE re; EA Condition 7.4
 - Letter to James O'Mara, Ministry of Environment, approving EA Condition 7.4.
19. November 14, 2005 – Effects of Water Levels and Fluctuations on the Welland River and Chippawa Canal EA Conditions (with Attached report prepared by W.F Baird & Associates)
 - Report concludes that:
 - The backwater and water level fluctuation effects on the Welland River are primarily a result of GIP operation and, secondarily, on the Crossover water level that results from the diversion flow.
 - The mean water level of the Welland River will increase in the order of 0.5 cm to 3 cm under average to high flow Conditions of the Niagara river.
 - The change in average daily fluctuations on the Welland River will be small to insignificant (0.0 to 0.1cm).
 - The average discharge on the Welland River will not change; however a reduction in the Chippawa-Queenston channel flow will occur.
20. December, 2005 – Welland River Water Level Fluctuation, Alternatives Assessment – Terms of Reference (draft)

Appendix 1: OPG Memorandum of Understanding

SCHEDULE “B”

21. June 15, 2006 – Welland River Water Level Fluctuation Study, Scoped Alternative Assessment, Phase 1 – *Draft Final Report*

- Recommended gate control at Old Siphon as the preferred alternative, but to look at the option of operating the existing structure as a weir on an interim basis.
- Philips also provided memorandum on the Implementation Process issues and opportunities.

22. November 1, 2006, - Letter from NPCA re; Welland River Fluctuations

- Letter requesting that OPG invest \$3 million to improve the ecological health of the Welland River through an expanded restoration program.

23. November 16, 2006 – Letter from OPG to NPCA re; Welland River

- OPG agrees to consider funding Welland River projects subject to agreement on certain conditions.

APPENDIX B Contractor Clause

No Claims Against OPG. Contractor agrees not to commence any claim for any and all manner of actions, causes of action, suits, proceedings, claims, demands, costs, damages, expenses, losses, liabilities, debts, sums of money, obligations, dues, accounts, interest and statutory rights or remedies, whether express, implied or otherwise, known or unknown, (collectively, “**Claims**” and any one individually, a “**Claim**”) against Ontario Power Generation Inc. and each of its subsidiaries, directors, officers, employees, agents, representatives and contractors (collectively, “**OPG**” and this term includes each such person’s predecessors, heirs, executors, administrators, personal and legal representatives, successors and assigns) and the Contractor irrevocably releases and forever discharges OPG from any Claim which Contractor had, now has, can, will or may hereafter have respecting OPG, in respect of this [Agreement].

Additional Named Insured. Contractor agrees to ensure that all insurers providing insurance in respect of the [Agreement] include OPG as an additional insured and Contractor further agrees, on request, to provide proof of same to OPG.

Appendix 1: OPG Memorandum of Understanding

SCHEDULE "C"



700 University Avenue Toronto, Ontario M5G 1X6

Rick Everdell
Project Director

Niagara Tunnel Project

Tel: 416-592-7543 Fax: 416-592-3489
Email address: rick.everdell@opg.com

June 1, 2007

File: NAW130-00549 P

Niagara Peninsula Conservation Authority
250 Thorold Road West, 3rd Floor
Welland, ON
L3C 3W2

Attention: Andrew Burt, General Manager / Secretary - Treasurer

Dear Sir:

Enclosed is our cheque for \$3,000,000 to fund various Welland River Watershed projects in accordance with our agreement letter dated May 8, 2007. This funding will permit the Niagara Peninsula Conservation Authority to carry out specific projects proposed in your November 1, 2006 letter to Mr. David Heath as follows:

- Restoration = \$1,000,000
- Fisheries Improvements = \$500,000
- Community Outreach and Education = \$300,000 and
- Welland River Floodplain and Wetland Acquisition = \$1,200,000.

We expect NPCA to provide OPG with regular, at least annual, reports documenting your progress on these projects. Please do not hesitate to contact David Heath or me if you require any clarification on this matter. We look forward to your successful completion of these important initiatives, and we welcome your ongoing efforts to recognize OPG as the specific projects move forward over the next 5 to 10 years.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Everdell".

Rick Everdell
Project Director – Niagara Tunnel
Ontario Power Generation Inc.

cc David Heath, Niagara Plant Group, ND2
bcc Harry Charalambu, Hatch Mott MacDonald
Dean Norton, Niagara Plant Group, ND2
Bill McKinlay, H19

Appendix 1: OPG Memorandum of Understanding

SCHEDULE "D"

AGREEMENT RE REMAINING FUNDS AND APPROVED ONGOING PROJECTS

The Niagara Peninsula Conservation Authority ("NPCA") and Ontario Power Generation Inc. ("OPG") (together, the "Parties") agree as follows:

- A. Once executed, this Schedule "D" forms part of the Memorandum of Understanding, dated _____, between NPCA and OPG ("MOU") and is binding upon the Parties.
- B. All terms in this Schedule "D" have the same meaning as in the MOU.
- C. The following is the balance of the Remaining Funds in Canadian dollars as at December 31, 2018: \$1,262,342
- D. The following are the Approved Ongoing Projects:
 - 1. Upgrade NPCA Stream Gauge Station on the Welland River (Riverbank Park)
 - 2. Survey Equipment and Software to measure river cross section and water velocity
 - 3. Data Management System to collect, analyze and report stream gauge flows and water data
 - 4. Welland River Floodplain Project

The Parties have duly executed this Schedule "D" to the MOU on _____, 2019:

**NIAGARA PENINSULA CONSERVATION
AUTHORITY**

ONTARIO POWER GENERATION INC.

Name: Dave Bylsma
Title: Chair

Name:
Title:

Name: D. Gayle Wood
Title: Interim CAO/Secretary-Treasurer

We have the Authority to bind NPCA

I have the Authority to bind the Corporation

Report To: Board of Directors

Subject: NPCA Planning and Permitting Policy Housekeeping Amendment

Report No: FA-60-19

Date: June 19, 2019

Recommendation:

1. That Report No. FA-60-19 RE: NPCA Planning and Permitting Policy Housekeeping Amendment **BE RECEIVED**;
2. That the proposed changes under Section 1 of Appendix 1 of the Planning and Permitting Policy Housekeeping Amendment **BE APPROVED**;
3. That the manner of public consultation described in this report for the proposed changes under Section 2 of Appendix 1 **BE APPROVED**;
4. That subject to Recommendation 3 and having considered all public comments, NPCA staff **BE DIRECTED** to bring the proposed changes (as amended via consultation) under Section 2 of Appendix 1 to the Board for consideration.

Purpose:

The purpose of this report is to recommend several housekeeping changes to the NPCA's Planning and Permitting policies and seek Board approval to publicly consult on additional proposed changes identified.

Background:

The NPCA's current Planning and Permitting policies, titled *NPCA Policy Document: Policies for the Administration of Ontario Regulation 155/06 and the Planning Act* (the Policy Document) were adopted in September 2018 and took effect on November 1, 2018. NPCA staff advised that periodic updates/housekeeping amendments would take place to ensure the document contains appropriate policies that reflect current best management practices.

Since the policies were implemented, several areas in the document require clarification and changes.

Discussion:

Development Setbacks for Valleylands:

The Policy Document provide setbacks from the physical/stable top of slope in valley systems. Section 6.2.4.2 pertains to existing lots of record and requires a 7.5 metre setback that can be reduced to 6 metres where supported by a geotechnical report and mitigation measures. This policy was intended to apply outside of Urban Areas, however, that is not clear in the policy. Furthermore, staff have found the policy to be overly restrictive. The changes proposed would clarify that this policy applies outside of Urban Areas (there is a separate policy that addresses development within Urban Areas) and to change the 6 metre setback to 3 metres. The remaining wording of the policy continues to ensure the setback reduction does not compromise ecological integrity and slope stability of the valleyland and provides for site-by-site consideration of a setback reduction.

Lot Creation Policies:

The Policy Document only addresses lot creation in relation to wetlands. Other sections do not contain explicit policies for lot creation in relation to other regulated features. NPCA staff propose adding policies for lot creation in Great Lakes shorelines, valleylands, hazardous lands, and river and stream flood hazards.

Current lot creation policies for wetlands require a minimum 15 metre setback. This is appropriate for new vacant lots. There have been issues where a proponent wishes to sever an existing house and accessory structures that are closer than 15 metres to a wetland. This is not an uncommon situation which has arisen in relation to surplus farm dwelling severances. In these situations, development has previously taken place and there already exists an impact to the wetland. Requiring a 15 metre setback in these cases appears restrictive. Therefore, staff recommend amending the definition of Legal and Technical to include new lots based on existing structures.

Septic Systems within 30 Metres of a Wetland:

The Policy Document includes a policy prohibiting new septic systems within 30 metres of a wetland. This policy was carried over from the previous NPCA policy document (2011). It is unclear what the rationale was for the prohibition, given that the policy could allow for a house to be constructed within the 30 metre buffer. In checking the policies of other Conservation Authorities, staff found that some CAs also prohibit new septic systems within 30 metres of a wetland and others allow for a setback as small as 15 metres.

Much of Niagara's wetland systems are surface water fed and not ground water fed due to the predominantly clay soils. It is, therefore, less likely that a septic system will have a hydrologic impact to a wetland. NPCA staff recommend removing the prohibition of new septic systems within 30 metres of a wetland and instead allow for consideration of a reduction to 15 metres. Appropriate impact review would be required as part of an NPCA Work Permit to ensure there are no negative impacts to the wetland.

Public Consultation:

Requirements for public consultation when amending Conservation Authority Policies is not provided in the *Conservation Authorities Act*. Conservation Ontario provided a guidance document (*Policies and Procedures for Conservation Authority Plan Review and Permitting Activities*, May 2010), which

recommends that Conservation Authorities should provide public notice and undertake public consultations before Board approval of proposed policies for service delivery policies. However, the guidance document does not describe the manner in which notice should be provided, the type of consultation process that should be used and does not differentiate notice requirements for a housekeeping amendment versus a completely new policy document.

To date there has not been any formal consultation on these proposed amendments to the Policy Document. NPCA staff recommend that the Board consider the changes to the valleyland policies and the lot creation policies to be minor housekeeping changes and not require public consultation prior to adoption. With respect to the change to the septic systems within 30 metres of a wetland, NPCA staff consider this more significant and recommend that notice of the proposed change be posted on the NPCA's website. The notice would direct the user to a comment page where a form can be completed to advise of any comments. In addition, staff's email and phone contact would be provided should the user have any questions. The comment period would be at least three weeks, at which time, staff would review any comments received and provide a further report to the Board with a recommended policy change.

Financial Implications:

There are no financial considerations unless the Board directs staff to conduct a broader public consultation process.

Related Reports and Appendices:

Appendix 1: Proposed Policy Changes


Authored by:


David Deluce, MCIP, RPP
Senior Manager, Planning & Regulations

Reviewed by:


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

Submitted by:


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

Appendix 1: Proposed Policy Changes

Section 1

Valleyland Policy Changes:

Current Policy:

6.2.4.2 Existing Lots of Record

For existing lots adjacent to valleys (bank height equal to or greater than 3 metres), a minimum setback of 7.5 metres (25 feet) from the NPCA approved physical top of slope as surveyed by the applicant shall be required for stability purposes and the conservation of land, for all development, buildings, and structures (including swimming pools).

Notwithstanding the minimum 7.5 metre setback noted in this policy, a smaller setback may be considered where an existing lot of record contains insufficient depth to accommodate required setbacks and a geotechnical investigation reveals that some infringement within the setback area, together with mitigative measures can be accommodated on-site while maintaining bank stability and will result in no adverse long term environmental impacts. In no case shall the setback reduction be such that development is allowed beyond the physical top of slope. In no case shall the setback be reduced to less than 6 metres.

Proposed Policy (changes in red):

6.2.4.2 Existing Lots of Record *Outside of Urban Areas*

For existing lots adjacent to valleys (bank height equal to or greater than 3 metres), a minimum setback of 7.5 metres (25 feet) from the NPCA approved physical top of slope as surveyed by the applicant shall be required for stability purposes and the conservation of land, for all development, buildings, and structures (including swimming pools).

Notwithstanding the minimum 7.5 metre setback noted in this policy, a smaller setback may be considered where an existing lot of record contains insufficient depth to accommodate required setbacks and a geotechnical investigation reveals that some infringement within the setback area, together with mitigative measures can be accommodated on-site while maintaining bank stability and will result in no adverse long term environmental impacts. In no case shall the setback reduction be such that development is allowed beyond the physical top of slope. In no case shall the setback be reduced to less than **3 metres**.

Lot Creation Policies

8.2.3.4 Lot Creation within 30 metres

Lot creation (unless for legal or technical reasons) should not be permitted within 30 metres (98 feet) of a wetland. However, lot creation may be permitted between 30 metres and 15 metres (49 feet) of a wetland where items the policies of 8.2.3.3 are addressed. Lot creation within 15 metres of a wetland shall not be permitted.

Appendix 1: Proposed Policy Changes

Proposed Policies (new policy/wording in red):

4.2.15 Lot Creation in River and Stream Flood Hazards (NEW)

The NPCA will not support lot creation in flood hazards. Lot additions and boundary adjustments may be supported where it has been demonstrated that there is sufficient room outside of the flood hazard to accommodate a building envelope, including space for servicing and amenities.

5.2.1.14 Lot Creation in Shoreline Hazard Areas (NEW)

Lot creation may be permitted in those portions of the shoreline hazard area where the effects and risk to public safety are minor, could be mitigated in accordance with provincial standards, and where all of the following are demonstrated and achieved:

- a) development and site alteration is carried out in accordance with floodproofing standards, protection works standards, and access standards;
- b) vehicles and people have a way of safely entering and exiting the area during times of flooding, erosion and other emergencies;
- c) new hazards are not created and existing hazards are not aggravated; and
- d) no adverse environmental impacts will result.

Notwithstanding the above, lot creation will not be supported within the dynamic beach hazard.

6.2.11 Lot Creation in Valleylands (NEW)

Lots created through Consent are to be setback from the physical top of slope in accordance with 6.2.4.2 and 6.2.5.2. Lots created through Plan of Subdivision are to maintain a minimum setback of 7.5 metres.

7.2.8 Lot Creation in Hazardous Sites (NEW)

Lot creation may be permitted in those portions of hazardous lands and hazardous sites where the effects and risk to public safety are minor, could be mitigated in accordance with provincial standards, and where all of the following are demonstrated and achieved:

- a) development and site alteration is carried out in accordance with floodproofing standards, protection works standards, and access standards;
- b) vehicles and people have a way of safely entering and exiting the area during times of flooding, erosion and other emergencies;
- c) new hazards are not created and existing hazards are not aggravated; and
- d) no adverse environmental impacts will result.

8.2.3.4 Lot Creation within 30 metres

Lot creation (unless for legal or technical reasons) should not be permitted within 30 metres (98 feet) of a wetland. However, lot creation may be permitted between 30 metres and 15 metres (49 feet) of a wetland where items the policies of 8.2.3.3 are addressed. Lot creation within 15 metres of a wetland shall not be permitted **except where the lot to be created is for a surplus farm dwelling or other existing building and the lot lines are based on existing site disturbances.**

Appendix 1: Proposed Policy Changes

Section 2

Current Policy:

8.2.3.5 Proposed New Development within 30 metres of a Wetland

Where no new development exists within 30m (98 feet) of any wetland:

- a) For new residential development, no new septic systems are permitted within 30m of any wetland.
- b) For replacement septic systems where residential development is already established, septic systems shall not be permitted within 30 metres of any wetland, except where no alternative location outside of 30 metres exists in proximity to the residence. In this case the replacement septic system shall be placed as far from the wetland as possible.
- c) For major development (as determined by the NPCA) including, but not limited to; plans of subdivision; extensions of draft approval for existing plans; and, major commercial, industrial, or institutional uses, no new development is permitted within 30m of a PSW. Reductions will only be considered based on a site specific evaluation by NPCA staff to determine whether a reduction is warranted, depending on scale, nature and proximity of the proposed development, the following may be taken into consideration:
 - i. The nature of the proposed development/site alteration;
 - ii. The proximity to the wetland;
 - iii. Adjacent land use;
 - iv. The condition of the 30 metre Regulated area;
 - v. The extent of existing natural buffer;
 - vi. Restoration of buffer functions;
 - vii. Presence of existing roads;
 - viii. Removal of invasive species;
 - ix. Presence of sensitive ecological features; and,
 - x. Other ecological or hydrological function considerations specific to the site; and,
 - xi. Other items as required.

Proposed Policy (changes in red):

8.2.3.5 Proposed New Development within 30 metres of a Wetland

Where no new development exists within 30m (98 feet) of any wetland:

- a) For new residential development, no new septic systems are permitted within **15 metres** of any wetland.
- b) For replacement septic systems where residential development is already established, septic systems shall not be permitted within **15 metres** of any wetland, except where no alternative location outside of **15 metres** exists in proximity to the residence. In this case the replacement septic system shall be placed as far from the wetland as possible.
- c) For major development (as determined by the NPCA) including, but not limited to; plans of subdivision; extensions of draft approval for existing plans; and, major commercial, industrial, or institutional uses, no new development is permitted within 30 metres of a PSW. Reductions will only be considered based on a site specific evaluation by NPCA staff to determine whether a reduction is warranted, depending on scale, nature and proximity of the proposed development, the following may be taken into consideration:
 - i. The nature of the proposed development/site alteration;
 - ii. The proximity to the wetland;
 - iii. Adjacent land use;
 - iv. The condition of the 30 metre Regulated area;

Appendix 1: Proposed Policy Changes

- v. The extent of existing natural buffer;
- vi. Restoration of buffer functions;
- vii. Presence of existing roads;
- viii. Removal of invasive species;
- ix. Presence of sensitive ecological features; and,
- x. Other ecological or hydrological function considerations specific to the site; and,
- xi. Other items as required.

Report To: Board of Directors

Subject: NPCA Standing and Ad Hoc Committee / NPCF Update

Report No: FA-62-19

Date: June 19, 2019

Recommendation:

1. That Report No. FA-62-2019 RE: NPCA Standing and Ad Hoc Committee / NPCF Update **BE RECEIVED** for information.
2. That the Water Quality Improvement Grant Review Committee and the NPCA Conservation Ontario Biennial Tour Planning Committee be dissolved with responsibilities for this initiative shifted to NPCA staff, with reporting as required to the Board of Directors.
3. That the following two Board Members **BE APPOINTED** to the C.A.O. Selection Committee:
_____ and _____.
4. That Board Member John Ingrao **BE APPOINTED** to the Watershed Floodplain Committee for a term consistent with the other Board Member appointees to the Committee.

Purpose:

The purpose of this report is:

- to appoint new members to NPCA Committees
- to update the Board on the current status of the NPCA committees; and
- to identify any proposed administrative changes for the Board to consider.

Background:

This report is intended as a follow-up and update to Report No. FA-21-19 RE: Status of NPCA Committees dated March 20, 2019.

Discussion:

Appendix 1 as attached outlines the status and current membership of the existing NPCA committees. Due to the recent changes in Board membership, it will now be necessary to appoint Members to the C.A.O. Selection Committee and the Watershed Floodplain Committee to replace those individuals who are no longer on the Board.

Former Board Member from Welland, Pat Chiocchio sat on the Watershed Floodplain Committee. With the ongoing mapping of the Welland River floodplain, it is recommended by staff that the Board appoint the incoming Member from Welland, Mr. John Ingrao to the Watershed Floodplain Committee.

Additionally, along with current Member Rob Foster, membership on the Niagara Peninsula Conservation Foundation included previous Board Member Tom Insinna. A recent review of the Conservation Foundation By-laws however, has determined that the Board is to appoint only one Member with the NPCA CAO sitting as ex-officio on the Foundation. Therefore, with Member Foster currently in place, no additional appointments are required to the Niagara Peninsula Conservation Foundation.

In regards to the Water Quality Improvement Grant Review Committee, Section 6.4.1 of the Auditor General's Special Audit of the NPCA states: "Board member involvement in day-to-day decision-making, such as approving grant applications is inconsistent with governance best practices". Staff is therefore recommending that the Water Quality Improvement Grant Review Committee be eliminated with responsibilities for these initiatives shifted to NPCA staff who then recommend applications directly to the full Board for approval. For further information, please refer to Report FA-63-19 RE: 2019 Restoration Program Workplan (included in the Board meeting agenda of June 19, 2019).

Finally, staff is recommending the elimination of the NPCA Conservation Ontario Biennial Tour Planning Committee. Preparations for the Conservation Ontario Biennial Tour can be addressed by staff without the necessity of a dedicated committee. Staff can then report into the Board as required and provide pertinent updates.

Financial Implications:

None.

Related Reports and Appendices:

Appendix 1: NPCA Committees and NPCF - Status and Membership

Authored by:



Grant Bivol
Interim Clerk

Submitted by:



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

Prepared with input from Renee Bisson, Manager, Community Engagement, Interim Manager of Communications and Steve Miller, Senior Manager, Water Resources and Restoration, Geoffrey Verkade, Manager, Information Management and Technology Systems.

Appendix 1: NPCA Committees and NPCF– Status and Membership

COMMITTEE / ORGANIZATION NAME	STANDING (SC), AD HOC (AH) OR OTHER	CREATED	RECOMMENDATION (AS PER REPORT NO. FA-21-19)	STATUS UPDATE	NPCA BOARD MEMBERSHIP	COMMITTEE MANDATE
Audit and Budget	SC	2019	Recommend blending with the Budget Committee in Q1 of 2019	Committee amalgamated and actively meeting.	D. Bylsma (ex-officio), D. Huson (ex-officio), J. Metcalfe, B. Wright, G. Zalepa (Chair)	To assist the Board of Directors in the provision of effective oversight of prudent fiscal management, by overseeing annual budget preparations, and annual review of the Audited Financial Statements
C.A.O. Selection	AH	2019	High priority for continuance into second quarter of 2019	CAO recruitment ongoing; Committee active.	D. Bylsma (ex-officio), D. Huson (ex-officio), B. Johnson, B. Steele (Chair), Two Board Members need to be appointed to replace Members Chiocchio and Insinna.	To facilitate the recruitment process for the CAO and recommend to the NPCA Board a preferred candidate for the role of CAO
Governance	AH	2019	High priority for continuance in 2019. Next meeting will be held March 27, 2019	Committee active. Next meeting scheduled for July.	D. Bylsma (ex-officio) , B. Clark (Chair), R. Foster, D. Huson (ex-officio), R. Shirton	To review NPCA Procedural By-laws, code of conduct, conflict of interest, the NPCA policy manual and board roles and responsibilities
Conservation Ontario Biennial Tour Planning	AH	2017	Given the tour is in September 2019, it is recommended that staff work directly with Chair and Vice Chair and provide continuous reports to the Board of Directors.	Biennial moved to 2020;	Requires Board Chair, Vice Chair and 3 Board member appointees; Staff recommendation within this report is to conclude the Committee and shift responsibility to staff.	To prepare the NPCA to host the Conservation Ontario Biennial Tour

Appendix 1: NPCA Committees and NPCF– Status and Membership

COMMITTEE / ORGANIZATION NAME	STANDING (SC), AD HOC (AH) OR OTHER	CREATED	RECOMMENDATION (AS PER REPORT NO. FA-21-19)	STATUS UPDATE	NPCA BOARD MEMBERSHIP	COMMITTEE MANDATE
NPCA Public Advisory	SC	2014	Important Committee – needs further consideration by the new Board of Directors and reactivation in fourth quarter of 2019	Committee reactivated; initial meeting anticipated for June 27.	The Committee Terms of Reference stipulate that the Board Chair is the only Board appointee to and is Co-Chair of the Committee.	To provide collaborative local perspective, guidance and expert advice in the implementation of NPCA policies, plans and/or other issues as the Board may request. Members will serve in a non-governance capacity with a focus on providing advice and recommendations for consideration by NPCA Board (Proposed new mandate: To approve involvement in up to four projects per year, which are aligned with the approved NPCA annual workplans from each Division – Corporate Services, Land Management, Watershed Management, and Communications / Engagement)
Strategic Planning	AH	2017	Committee should be re-activated after the completion of a Business Plan and prior to consideration of the new strategic plan prior to 2021	Inactive	Minimum of three members, plus the Chair and the Vice Chair of the Authority as ex-officio	To provide recommendations into the formulation of an updated Strategic Plan
Water Quality Improvement Grant Review	SC	2018	Committee should be reactivated after consideration of a report in April 2019	Please refer to Report No. FA-63-19 in the Board meeting agenda of June 19, 2019.	Please refer to Report No. FA-63-19 in the Board meeting agenda of June 19, 2019.	To review evaluated applications for Water Quality Improvement projects and recommend to the Full Authority for approval Water Quality Improvement Grants to recipients who meet program criteria

Appendix 1: NPCA Committees and NPCF– Status and Membership

COMMITTEE / ORGANIZATION NAME	STANDING (SC), AD HOC (AH) OR OTHER	CREATED	RECOMMENDATION (AS PER REPORT NO. FA-21-19)	STATUS UPDATE	NPCA BOARD MEMBERSHIP	COMMITTEE MANDATE
Watershed Floodplain	SC	2018	Committee's role should be re-considered during the fourth quarter of 2019.	Committee reactivated; initial meeting was June 13, 2019. Public membership includes: Lois Johnson, Glen Robins, Chris Freure, John MacLellan, Bev Lepard, Don Smith, Len Aarts.	S. Beattie, D. Bylsma (ex-officio), K. Gibson. B. Greenwood, D. Huson (ex-officio), T. Whalen; A Board Member needs to be appointed to replace Member Chiocchio.	To make appropriate recommendations to the Full Authority Board with respect to floodplain mapping exercises and projects, both internal and those driven through an outside/third party company, under the NPCA Procurement Policy and Request for Proposal process, for updates to existing floodplain mapping and/ or new floodplain mapping across the NPCA watershed

Appendix 1: NPCA Committees and NPCF– Status and Membership

COMMITTEE / ORGANIZATION NAME	STANDING (SC), AD HOC (AH) OR OTHER	CREATED	RECOMMENDATION (AS PER REPORT NO. FA-21-19)	STATUS UPDATE	NPCA BOARD MEMBERSHIP	COMMITTEE • MANDATE
Niagara Peninsula Conservation Foundation	Independent incorporated legal entity	1969	The NPC Foundation was not discussed in Report No. FA-21-19.	No appointment is required. The CAO/ Secretary - Treasurer of the NPCA sits ex-officio on the Foundation Board.	R. Foster	<ul style="list-style-type: none"> • To raise funds for the Niagara Peninsula Conservation Authority as well as registered charities working within the Niagara Peninsula Conservation Authority watershed in support of the following objects: • to protect and enhance water quality and quantity; • to protect and enhance sustainable forest and wildlife communities using an eco-system approach; • to promote land owner stewardship programs that contribute to the conservation of our natural environment and wildlife resources; • for environmental education accessible to people of all ages and backgrounds; • for affordable and ecologically sustainable recreation accessible to people of all ages and backgrounds; • to sustain natural heritage aspects within our properties; • for scholarships and bursaries for individuals in the environmental/conservation fields of education and research

Report To: Board of Directors

Subject: NPCA Drone Policy

Report No: FA 64-19

Date: June 19, 2019

Recommendation:

1. That Report No. FA 64-19 RE: NPCA Drone Policy **BE APPROVED**; and
2. That the NPCA Board of Directors **AUTHORIZE** the NPCA to integrate the NPCA Drone Company Operations Manual (COM) into the NPCA's organizational policies.

Purpose:

The purpose of this report is for the Board to establish a Drone Policy integrating the NPCA's Drone Company Operations Manual (COM) into the NPCA's organizational policies.

Background:

After five confirmed fires at the Wainfleet Bog since 1997 NPCA staff consulted with local Fire Chiefs, MNR officials (local office, Regional Fire Advisor, and Wainfleet Bog Fire Incident Commander) on June 28, 2016. Based on these consultations, staff brought forward a board report recommending Fire Suppression Equipment.

At the July 20, 2016 Board meeting the Board of Directors authorized NPCA staff to purchase Fire Suppression Equipment for an estimated cost of \$112,000 from capital reserves for fires at the Wainfleet Bog. Equipment purchased included the following

Description	Estimated Cost
3-4 Portable Water Tanks of Various Size	\$35,000
ARGO/ATV with Off-road Trailer	\$35,000
Drone with Video, Thermal-Imaging and GPS	\$14,000
Hand-held Thermal-Imaging Camera	\$8,000
Enclosed Trailer (for Storage)	\$20,000
TOTAL	\$112,000

Discussion:

To operate a drone at the Wainfleet Bog a SFOC (Special Flight Operating Certificate) is required through Transport Canada. Anytime the drone is flown in a controlled airspace (airspace with an airport, hospital helipad etc.) a special SFOC with certain licensees and certificates are required. Properties such as the Wainfleet Bog and Binbrook Conservation Area require these special permits and certificates.

For staff training the NPCA contracted Principle Point to provide a six-day course to certify staff with a ROC-A certificate. Staff have also completed an advanced flight written test and are currently in the process of finishing a flight school test that is required by Transport Canada.

With the dangers of flying a drone and the importance of safety NPCA staff contracted Principle Point to complete an Organizational Operation Manual. (NPCA Drone Operation Manual is attached as Appendix 1). The aim of the Manual is to outline, address and establish procedures and routines for procedures that are required prior to, during and after a mission, so it can act as a reference point for current and new team members. NPCA staff requires Board approval of this Manual so that it may be integrated into the NPCA's Policies.


Financial Implications:

The NPCA spent \$2,500.00 for the Company Operations Manual (COM).

Related Reports and Appendices:

Appendix 1 NPCA Drone Company Operations Manual (COM)

Authored by:

Adam Christie
Acting Senior Manager of Operations and Special Projects**Submitted by:**

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



NPCA DRONE COMPANY OPERATIONS MANUAL

**250 THOROLD ROAD WEST
WELLAND, ONTARIO, L3C 3W2**

DRAFT EDITION — 20 DECEMBER 2018

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1.0 Preamble

This Flight Operations Manual has been compiled for the use and guidance of personnel in the execution of duties related to aviation operations at the Niagara Peninsula Conservation Authority (NPCA). It contains information and instructions on the manner in which NPCA flight operations shall be conducted.

The NPCA is dedicated to highly professional flight operations. Safety is always our first priority and we will be persistent in continuously demonstrating high safety consciousness in our flight operations. We strive to provide safe, reliable, high quality and cost-effective airborne research, products and services that meet the needs of our users.

It is the duty of all NPCA employees and contracted agents to openly and honestly report events and hazards. Any events and incidents will be thoroughly investigated in a non-punitive manner. NPCA recognizes the value of operating to a well-recognized standard. As organization policy, we operate with reference to current standards and practices for manned aviation. Relying upon guidelines and regulations from established and vetted industry best safety practices allows the NPCA to achieve our goal of high standards concerning operational safety.

The Company Operations Manual (COM) has been developed to satisfy the specific requirements of Transport Canada (TC) regulations.

All personnel involved in the aviation enterprise are to be familiar with this manual and are to comply with its provisions. Changes to the manual will undergo a structured review and acceptance procedure and will be promptly disseminated to all personnel involved in NPCA flight operations once changes have been approved and integrated.

I am personally assuming responsibility for keeping the COM current and for the conduct of the operations in accordance with the regulations and best practices as applicable. Although specific policies and procedures are subject to refinement and will continue to develop as flight experience dictates, this COM forms the basis for NPCA operations.

Jeffrey Fazekas
Director of Flight Operations

2.0 Manual Amendment Procedures

Manual amendments will be promulgated as required by the Director of Flight Operations. They will be issued to each Manual holder.

Each amended page shall record the appropriate amendment number and date.

It is the responsibility of the Manual holder to insert all amendments issued to him/her in a timely manner and ensure all manual pages are consistent with the List of Effective Pages (LEP). Manuals issued to aircraft will be amended by the Chief Pilot and kept with the aircraft at all times. A copy of the COM will also be issued to and kept at various NPCA locations.

Any discrepancy between the LEP and the actual Manual pages will be brought to the attention of the Director of Flight Operations immediately.

2.1 List of Manual Holders

Manual Copy	Name	Address
Master	Jeffrey Fazekas	3292 Sixth Avenue Lincoln, Ontario, Canada L0R 1S0
Copy 1	Ryan Kitchen	250 Thorold Road West 3 rd Floor Welland, Ontario, Canada L3C 3W2

3.0 Record of Amendments

Number	Date	Date Entered	Entered By
Draft	20 December 2018	20 December 2018	Director, Flight Operations
Draft Revision	XX December 2018	XX December 2018	Director, Flight Operations

4.0 List of Effective Pages

Page Number	Issue/ Revision Number	Effective Date
4	Revision 1.0	20 December 2018
5	Revision 1.0	20 December 2018
6	Revision 1.0	20 December 2018
7	Revision 1.0	20 December 2018
8	Revision 1.0	20 December 2018
9	Revision 1.0	20 December 2018
10	Revision 1.0	20 December 2018
11	Revision 1.0	20 December 2018
12	Revision 1.0	20 December 2018
13	Revision 1.0	20 December 2018
14	Revision 1.0	20 December 2018
15	Revision 1.0	20 December 2018
16	Revision 1.0	20 December 2018
17	Revision 1.0	20 December 2018
18	Revision 1.0	20 December 2018
19	Revision 1.0	20 December 2018
20	Revision 1.0	20 December 2018
21	Revision 1.0	20 December 2018
22	Revision 1.0	20 December 2018
23	Revision 1.0	20 December 2018
24	Revision 1.0	20 December 2018
25	Revision 1.0	20 December 2018
26	Revision 1.0	20 December 2018
27	Revision 1.0	20 December 2018
28	Revision 1.0	20 December 2018
29	Revision 1.0	20 December 2018
30	Revision 1.0	20 December 2018
31	Revision 1.0	20 December 2018
32	Revision 1.0	20 December 2018
33	Revision 1.0	20 December 2018
34	Revision 1.0	20 December 2018
35	Revision 1.0	20 December 2018
36	Revision 1.0	20 December 2018
37	Revision 1.0	20 December 2018
38	Revision 1.0	20 December 2018

39	Revision 1.0	20 December 2018
40	Revision 1.0	20 December 2018
41	Revision 1.0	20 December 2018
42	Revision 1.0	20 December 2018
43	Revision 1.0	20 December 2018
44	Revision 1.0	20 December 2018
45	Revision 1.0	20 December 2018
46	Revision 1.0	20 December 2018
47	Revision 1.0	20 December 2018
48	Revision 1.0	20 December 2018
49	Revision 1.0	20 December 2018
50	Revision 1.0	20 December 2018
51	Revision 1.0	20 December 2018
52	Revision 1.0	20 December 2018
53	Revision 1.0	20 December 2018
54	Revision 1.0	20 December 2018
55	Revision 1.0	20 December 2018
56	Revision 1.0	20 December 2018
57	Revision 1.0	20 December 2018
58	Revision 1.0	20 December 2018
59	Revision 1.0	20 December 2018
60	Revision 1.0	20 December 2018
61	Revision 1.0	20 December 2018
62	Revision 1.0	20 December 2018
63	Revision 1.0	20 December 2018
64	Revision 1.0	20 December 2018

5.0 Introduction

This manual describes the flight operations of the Niagara Peninsula Conservation Authority (NPCA). This includes organizational structure, sUAS platform, standard operation procedures, roles and responsibilities, mission phases, safety management system, emergency procedures, and training.

The aim of this document is to outline, address and establish procedures and routines for everything that is required prior to, during and after a mission, so it can act as a reference point for current and new team members.

This document is built with a project-based focus and with an eye to expansion in the number of flight crew personnel and operation type undertaken. During the early stages of the NPCA small Unmanned Aerial System (sUAS) Program, roles will be shared but will not be compromised. Due to the current small size of the organization, limited breadth of applications and the conduct of these operations in relatively rural areas, the NPCA has developed the following shared roles and responsibilities that largely speak to a division from an administrative to operational scenario.

As an example, Director of Flight Operation (DFO) responsibilities are largely administrative in nature and are not at present concurrent with field responsibilities during operations. Sharing the DFO role and responsibilities with ground supervision allows the DFO to take an active role in operations and with the subsequent flight crew, which creates an effective bridge and extension of policies and procedures from office to operations to ensure adequate execution and mindfulness. The NPCA believes this to be an advantage in maintaining continuity from administration to execution and thus provides the utmost safety and opportunity for success. In addition, there is a logical opportunity to extend the DFO role into the field as Pilot-in-Command. The DFO has possession of the aircraft and provides the sUAS storage facility at one of the NPCA's main offices. As such, the DFO has the greatest opportunity to fly the aircraft, track its hours and operation and observe (and carry out) any required maintenance. Finally, it is believed that serialized roles facilitate communication on all relevant flight operation considerations and potential feedback loops.

This policy and framework will be reviewed annually for applicability or as an increase in staff or unmanned systems occurs.

6.0 Unmanned Aerial Systems

Aerial flight operations will be conducted with commercial-off-the-shelf sUASs. All of the sUASs are ready to fly aircraft meant for relatively small payloads and limited flight range usage. The complete specifications and operating limits for all sUASs used in flight operations can be found in the manufacturer supplied User Manual located as Appendices to this document. Applicable operation characteristics, for each system, are listed in Sections 6.1 to 6.3. In addition, it is instructive to highlight some of the more pertinent operational considerations and limits that bound the risk of usage for all systems:

- General Operations
 - Have several built-in safety features that are part of NPCA SOPs and used at-all-times to prevent flight emergencies
 - Operations will include attached gimbal and sensor system(s)
 - Human pilots using standard RC equipment will control the aircraft at-all-times
 - All flights operate within Transport Canada (TC) requirements for VFR flight
 - Visual-line-of-sight (VLOS) to aircraft will be maintained at-all-times
 - Flight operations adhere to the NPCA COM procedures to insure safety to people, vehicles and structures
 - First person viewing devices will never be used to supplement VLOS or sense and avoid procedures
 - Only one aircraft will be used at any time for the duration of the aerial surveying and flight operations
- System characteristics
 - Maximum dimensions range from 13.78 to 34.65 inches, which considers the maximum diagonal distance including maximum swept area of the propellers
 - Maximum weights are less than the 25 kilograms which includes the on-board imaging sensors and gimbal
 - Maximum speeds range from approximately 30.41 to 44.66 knots. In practice however, no systems are ever flown at maximum speeds for NPCA proposed applications, as it is contrary to the objective of sharp photographs and/or smooth video.
 - Maximum average flight time is approximately 25 minutes limited by the available charge stored in the onboard battery and dependent upon flight characteristics, maneuvers, electrical system operation and weather.
 - Exceptional agility is provided by fast yaw and climb rates. This agility allows all systems to be safely operated in smaller, less accessible spaces than could ever be imagined with conventional aircraft. Also, avoiding obstacles or responding to flight emergencies can be accomplished with significantly less standoff distance than is currently required for larger, manned aircraft.
- Significant risk mitigation is provided by virtue of the fact that the aircraft is inherently unmanned. Any risk of injury to people onboard the aircraft is completely eliminated. This provides a significant safety upgrade over current operations that use manned helicopters to provide similar services.
- All systems are electric sUASs and thus the absence of combustible fuel is an important factor in reducing risk to people and property on the ground should an accident occur.
- Built-in safety features to mitigate common malfunctions for sUAS
 - Loss of communication with the base station
 - Risk associated with loss of communication (e.g., exceeding transmitter range, blocked RF signal, electrical malfunction) is mitigated by incorporating GPS functionality. All flight systems record the “home” GPS coordinates (set automatically on startup, verified during the preflight inspection) therefore if radio control communication is lost during flight, the sUAS can hover in place to see if signal is restored or initiate an automated “Return to Home” sequence and return to the “home” GPS coordinates and executing a landing there. RTH flight altitudes are set by the Pilot prior to operation and based upon the site will be set above the maximum clearance levels of any obstacle(s).
 - Low battery levels
 - If the battery on any flight systems reaches a critically low level, the RTH feature is initiated to return the vehicle to the home position pre-recorded prior to take-off and will execute a landing before power is critically lost. If this procedure is not feasible at the specific time of occurrence the aircraft will be manually flown to the nearest emergency-landing zone. This feature, and the Standard Operating Procedures discussed in Section 10.0 of the NPCA COM, which includes battery level percentage requirements, mitigates one of the most tangible risks to sUAS – exhausting onboard battery charge that often leads to a crash.
 - Boundary incursion
 - Programmable maximum altitude and horizontal range to prevent accidental flight boundary incursions (limits in horizontal and vertical range, respectively, will be set as flight operations dictate from the standard operation take-off/landing zone).
 - Autopilot software includes defined “restricted areas” within 4.31 nautical miles of airports, to which most in North America are registered and included, where the vehicle will not be able to operate. This is supplemented by the NPCA Standard Operating Procedures, as discussed in Section 10.0 of this document, which further limit operating areas to reduce the risk of boundary incursions.

6.1 DJI Phantom 3

The DJI Phantom 3 uses the DJI NAZA-M flight control system, which provides auto level stability, altitude hold (via on-board barometer), position hold via GPS and in providing failsafe return-to-home safety feature. The complete specifications and operating limits for the DJI P3 can be found in the manufacturer supplied User Manual attached as an appendix to the NPCA COM. Figure 3 shows the DJI Phantom 3 sUAS flight system and attached gimbal and camera.



Figure 1 DJI Phantom 3 sUAS imaged from top and bottom, respectively

Some of the more pertinent characteristics are provided here:

- sUAS
 - Category: Rotary wing
 - Composition: Composite material
 - Measurements: Diagonal size = 590mm; Rotor blade diameter = 240mm.
 - Total UAV Weight: 1.280 kg (2.8 lbs) including batteries, rotor blades, gimbal & camera.
 - Propulsion System: Electric
 - Fuel/Energy System: Lithium-ion battery
 - Method of Take-off: Vertical take off
 - Method of Landing: Vertical landing
 - Navigation equipment/capability: GPS and visual positioning
 - Electronic surveillance equipment: N/A
 - Flight Sensors: GPS, GLONASS, and ultrasonic & visual level sensors.
 - Redundant Systems: Return-to-home feature brings UAV back to last home (take-off) location. Return to home feature is activated under the following circumstances: (1) Low battery; (2) Manual return to home command is initiated by pilot; or (3) Remote control signal is lost for more than 3 seconds.
 - Visual detection: Lights on the rotor supports indicate the UAV's orientation and direction of travel. White colour scheme gives the UAV high visibility.
- Performance:
 - Maximum ascent speed: 5 m/s
 - Maximum decent speed: 3 m/s
 - Maximum speed: 16 m/s
 - Maximum flight time: 23 minutes
 - Maximum altitude: 6000m
 - Max Distance (unobstructed, free of interference) when FCC compliant: 5km
 - Operating limitations: Cannot fly in snow, rain, fog and wind speeds greater than 10m/s.
- The Control System
 - Dedicated flight controller
 - Supervised autopilot is possible
 - Control method: manual flight, GPS and attitude assisted
 - Flight instrumentation: real-time location, altitude, distance from operator, and heading via digital display
 - System diagnostic and monitoring information: low battery, GPS strength and communication linkage
 - Environmental warnings: Not available on the machine.
 - Redundant systems: Return to home initiated if connection lost between sUAS and controller for > 3 seconds
 - Control station power source: rechargeable batteries in controller and digital display equipment
 - Equipment in control station: N/A for hand-held remote control.
 - Control station security: N/A

- Command and Control Links
 - Data bands and frequencies:
 - VHF
 - 2.4 GHz to 2.483 GHz operating frequency sUAS remote controller
 - GPS (1575.42 MHz & 1227.6 MHz) and GLONASS (1602.0 Mhz) – sUAS positioning control.
 - Radio range of control links: maximum of 5km.
 - Lost link indications:
 - Status LED solid red when controller is disconnected from the sUAS
 - GPS LED flashes yellow when GPS signal weak
 - Measures for preventing or mitigating radio frequency inference:
 - Maintain line of sight
 - Limit distance away from the remote control.
 - Operation of one (1) sUAS at one time
 - Single or dual redundant control links: single type control link. If communication is lost the UAV returns to the location where it took off from.
- Voice Communications
 - Primary method of contacting ATC or air users – VHF radio
 - Backup communication capability: cell phones
 - Communication latencies: none
 - Communication system for ground crew: verbal audio and/or walkie-talkie
- Payload(s)
 - Payload limitations: none
 - Dangerous payloads: none
 - Secondary purposes of payload: none
 - Increase to crew workload: none

6.2 DJI Phantom 4

The DJI Phantom 4 (P4) flight control system includes failsafe and Return-to-Home features that ensure the safe return of the aircraft if the control signal is lost. An advanced stereo Vision Positioning System (VPS) gives the DJI P4 precise hovering, even without satellite positioning support. Coupled with on-board sensing systems the P4 has the ability to stabilize itself and avoid objects while in flight (but will never be relied upon by the NPCA for sense and avoid of people, structures or other aircraft). The VPS also allows it to brake instantly and hover when joystick controls are released. The new core design has improved balance (making it more agile and precise to controller commands) and minimizes buffeting when flying in strong winds. All of the newly added features allow the DJI P4 to be easier and safer to fly. The complete specifications and operating limits for the DJI P4 can be found in the manufacturer supplied User Manual attached as an appendix to this document. Figure 4 shows the DJI Phantom 4 sUAS flight system and attached gimbal and camera.



Figure 2 The DJI Phantom 4 front (left) and top (right) view

Some of the more pertinent characteristics are provided here:

- sUAS
 - Weight: 3 pounds (including battery and propellers)
 - Max Flight Time: 28 minutes (approximate)
 - GPS Mode: GPS / GLONASS
 - Diagonal Size: 13.77 inches (excluding propellers)
 - Flight Battery

- Capacity: 5350 mAh
- Voltage: 15.2 V
- Battery Type: LiPo 4S
- Energy 81.3 Wh
- Net Weight: 1.0 pound
- Operating Temperature: 14° F to 104° F (-10° C to 104° C)
- Max Charging Power: 100 W
- Command and Control
 - Controllable range of gimbal: Pitch -90° to +30°
 - Stabilization: 3-axis (roll, pitch, yaw)
 - Operating Frequency: 2.400 GHz to 2.483 GHz
 - Max Transmission Distance: (unobstructed)
 - FCC Compliant: 2.69 nautical miles
 - CE Compliant: 1.91 nautical miles
 - Operating temperature: 32° F to 104° F (0° C to 40° C)
 - Battery: 6000 mAh LiPo 2S
 - Transmitter Power:
 - FCC 23 dBm
 - CE 17 dBm
 - Operating Voltage: 7.4V @ 1.2A
 - Redundant Systems: Return-to-home feature brings UAV back to last home (take-off) location. Return to home feature is activated under the following circumstances: (1) Low battery; (2) Manual return to home command is initiated by pilot; or (3) Remote control signal is lost.
 - Visual detection: Lights on the rotor supports indicate the UAV's orientation and direction of travel. White colour scheme gives the UAV high visibility.
- Performance
 - Max Ascent Speed: 11 knots
 - Max Descent Speed: 7.7 knots
 - Max Speed: 38.87 knots
 - Max Service Ceiling: 19685 (above sea level)
 - Hover Accuracy:
 - Vertical: +/- 0.328 feet (when visioning system active) or +/- 1.64 feet
 - Horizontal: +/- 0.984 feet (when visioning positioning is active) or +/- 4.92 feet
 - Obstacle Sensing System:
 - Obstacle Sensing Range: 2 – 49 feet
 - Operating environment: surface with clear pattern and adequate lighting (lux > 15)
 - Vision Positioning
 - Velocity Range: less than or equal to 2 meter above ground
 - Altitude Range: 0 – 33 feet
 - Operating Range: 0 – 33 feet
 - Operating Environment: Surface with clear pattern and adequate lighting (Lux > 15)
- Operation Limitations
 - Temperature: 32° F to 104° F (0° C to 40° C)

6.3 DJI Matrice 210

The DJI Matrice 210 is developed to offer professional operators an adaptable solution for industrial use cases such as surveying and emergency services. The M210 drones fold down in a snap and unfold just as quickly. Gimbal mounting plates and aircraft arms stay mounted during transportation so that you're ready to fly within minutes. High-performance motors paired with 17-inch propellers ensure stable flight in strong winds and an IP43 weatherproofing allows for flights in heavy rain. The M210 is flown with paired batteries in order to give the aircraft reliability with its flight and has a maximum flight time of up to 38 minutes. The dual-battery power system automatically heats batteries when flying in sub-zero temperatures, allowing for flights over a temperature range between -20° to 45° C.

The M210 has the DJI Cendence remote controller and a compatible 7.85-inch CrystalSky monitor which, offers modular and customizable control with supported 1080i50 and 720p60 broadcasting. The CrystalSky monitor offers a maximum brightness of 2000 cd/m², which is four times brighter than the standard mobile phone and can be used in direct sunshine. Dual SD card recording is also available as well as real-time decoding latency for minimal latency. An onboard SDK is included within the M210 which provides a system dedicated to communicating with the DJI Flight Controller over a direct serial connection. This allows full control over the M210's flight, camera, missions and subsystems

All configurations include redundant inertial measurement units (IMUs), barometers, compasses, and GPS systems. In addition to the forward-facing obstacle detection system, the aircraft also features downward obstacle avoidance and a top-mounted infrared sensor. Built in obstacle avoidance helps keep the aircraft safe and help the aircraft hover with precision. DJI AirSense includes a built in ADS-B receiver which is transmitted real-time information from nearby manned aircraft including their location, flight path, speed and altitude. Potential risks will then be assessed, and any appropriate warning messages sent to the operator if a plane or helicopter is approaching the area in which the drone is operating.

DJI's Intelligent Flight Modes are accessible with the M210 including TapFly, ActiveTrack, Tripod Mode and Spotlight Mode. There are also several options of gimbal mounts and cameras available for the M210. Gimbals can be mounted as a single downward facing gimbal, dual downward facing gimbal and upward facing single gimbal. The options given by the different gimbal and camera combinations open the M210 up for use in for more applications than any other drone. In addition to the cameras you can mount on the aircraft, an FPV camera is also featured on the front of the M210 that can be used when controlling the aircraft.

User Manual

[https://dl.djicdn.com/downloads/M200/20180213/Matrice+210_210+RTK+User+Manual_EN\(1\).pdf](https://dl.djicdn.com/downloads/M200/20180213/Matrice+210_210+RTK+User+Manual_EN(1).pdf)



- sUAS
 - Model M210
 - Package Dimensions: 31.1×15.4×11.4inch (790×390×290mm)
 - Dimensions (unfolded): 34.9×34.6×14.9 inch (887×880×378 mm)
 - Dimensions (folded): 28.2×8.7×9.3 inch (716×220×236 mm)
 - Diagonal Wheelbase: 25.3 inch (643 mm)
 - Number of Batteries: 2
 - Weight (TB50): Approx.3.84kg (with two standard batteries)
 - Weight (TB55): Approx.4.57kg (with two standard batteries)
 - Max Takeoff Weight: 6.14KG
 - Max Payload (2 TB50): Approx.2.3kg (with two standard batteries)
 - Max Payload (2 TB55): Approx.1.57kg (with two standard batteries)
- Performance
 - Hovering Accuracy (during safe flights):
 - Vertical: ±0.5, Downward Vision System enabled: ±0.1
 - Horizontal: ±1.5, Downward Vision System enabled: ±0.3
 - Max Angular Velocity: Pitch: 300° /s ; Yaw:150° /s
 - Max Pitch Angle (Dual Downward Gimbals):
 - P Mode: 25° (Forward Vision System enabled: 25°)
 - A Mode: 25°
 - S Mode: 30°
 - Max Pitch Angle (Single Upward/Downward Gimbal)
 - P Mode: 30° (Forward Vision System enabled: 25°)
 - A Mode: 30°
 - S Mode: 35°
 - Max Ascent Speed: 16.4 ft/s (5 m/s)
 - Max Descent Speed: Vertical: 9.8 ft/s (3 m/s)

- Max Speed (Dual Downward Gimbals):
 - S Mode: 40.3mph (64.8kph)
 - P Mode: 38mph (61.2kph)
 - A Mode: 38mph (61.2kph)
- Max Speed (Single Upward/Downward Gimbals)
 - S Mode: 51.4mph (82.8kph)
 - P Mode: 38mph (61.2kph)
 - A Mode: 51.4mph(82.8kph)
- Max Service Ceiling Above Sea Level: 1.86 miles (3000 m)
- Max Wind Resistance: 39.4 ft/s (12 m/s)
- Max Flight Time (No Payload, with TB50): 27min
- Max Flight Time (No Payload, with TB55): 38min
- Max Flight Time (Full Payload, with TB50): 13min
- Max Flight Time (Full Payload, with TB55): 24min
- Motor Model: DJI 3515
- Propeller Model: 1760S
- Operating Temperature : 4° to 113° F (-20° to 45° C)
- Forward Vision System
 - Obstacle Sensing Range 2.3-98.4 feet (0.7-30 m)
 - FOV
 - Horizontal 60°
 - Vertical 54°
 - Operating Environment Surfaces with clear patterns and adequate lighting (> 15 lux)
- Downward Vision System
 - Velocity Range: <32.8 ft/s (10 m/s) at height of 6.56 feet (2 m)
 - Altitude Range: <32.8 feet (10 m)
 - Operating Range: <32.8 feet (10 m)
 - Operating Environment Surfaces with clear patterns and adequate lighting (> 15 lux)
 - Ultrasonic Sensor Operating Range: 0.33-16.4 feet (10-500 cm)
 - Ultrasonic Sensor Operating Environment: Non-absorbing material, rigid surface (thick indoor carpeting will reduce performance)
- Battery
 - Model: TB50
 - Capacity: 4280 mAh
 - Voltage: 22.8V
 - Battery Type: LiPo 6S
 - Energy: 97.58 Wh
 - Net Weight: Approx. 520 g
 - Operating Temperature : 20°C to 45° C
 - Storage Temperature: Storage Temperature Less than 3 months: -4° to 113° F (-20° to 45° C)
 - More than 3 months: 72° to 82° F (22° to 28° C)
 - Charging Temperature: 41° to 104° F (5° to 40° C)
 - Max Charging Power: 180 W
 - Model: TB55
 - Capacity: 7660 mAh
 - Voltage: 22.8V
 - Battery Type: LiPo 6S
 - Energy: 176.93Wh
 - Net Weight: Approx. 885 g
 - Operating Temperature : 4° to 113° F (-20° to 45° C)
 - Storage Temperature: Less than 3 months: -20° C to 45° C
 - More than 3 months: 22° C to 28° C
 - Charging Temperature: 41° to 104° F (5° to 40° C)
 - Max Charging Power: 180 W
- Upward Infrared Sensor
 - Obstacle Sensing Range: 0-16.4 feet (0-5 m)
 - FOV: ±5°
 - Operating Environment Large, diffuse and reflective obstacles (reflectivity >10%)

- Cendence
 - Type: GL800A
 - Operating Frequency: 2.400-2.483 GHz; 5.725-5.825 GHz
 - Max Transmitting Distance (unobstructed, free of interference):
 - 2.4 GHz:
 - 4.3 miles (7 km, FCC);
 - 2.2 miles (3.5 km, CE);
 - 2.5 miles (4 km, SRRC)
 - 5.8 GHz:
 - 4.3 miles (7 km, FCC);
 - 1.2 miles (2 km, CE);
 - 3.1 miles (5 km, SRRC)
 - EIRP:
 - 2.4 GHz:
 - 26 dBm (FCC);
 - 17 dBm (CE);
 - 20 dBm (SRRC)
 - 5.8 GHz:
 - 28 dBm (FCC);
 - 14 dBm (CE);
 - 20 dBm (SRRC)
 - Power Supply: Extended Intelligent Battery (Model: WB37-4920mAh-7.6V)
 - Intelligent Battery: 4923 mAh LiPo
 - Charging: DJI charger
 - Output Power: 20 W (supplying power to DJI CS550 monitor)
 - 12 W (without supplying power to monitor)
 - Video Output Ports: USB, HDMI, SDI
 - USB Supply Power: iOS: 1 A, 5.2 V (Max); Android: 1.5 A, 5.2 V (Max)
 - Dual User Capability: Master-and-Slave connection
 - Operating Temperature : 4 ° to 104 °F (-20 ° to 40 °C)
 - Storage Temperature: Less than 3 months: -4 ° to 113 °F (-20 ° to 45 °C)
 - More than 3 months: 72 ° to 82 °F (22 ° to 28 °C)
 - Charging Temperature: 32 ° to 104 °F (0 ° to 40 °C)
 - Charging Time: About 2 hours and 24 minutes (using a 180 W charger)
 - Supply Power Time: About 4 hours (only Master remote controller function enabled and without supplying power to monitor)
 - Weight: 1041 g

7.0 Company Organization

7.1 Flight Department Management Structure

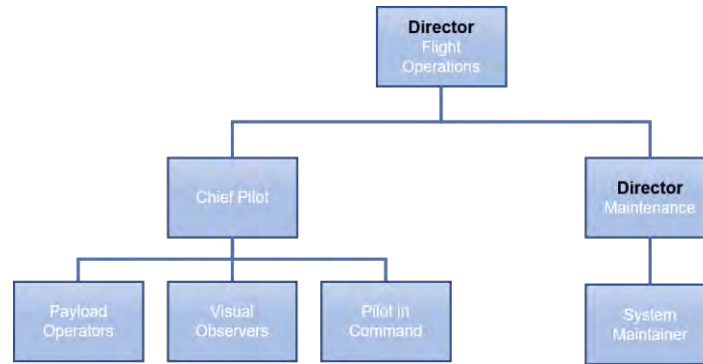


Figure 3 Organizational Structure for sUAS Flight Operations

7.2 Flight Department Personnel

7.2.1 Director of Flight Operations

Supervises: Chief Pilot, Director of Maintenance

7.2.1.1 *Qualifications*

Education: Minimum of a College Diploma or equivalent experience

Experience: Experience with small unmanned aerial systems and operations (commercial and/or research operations preferred)

Skills:

- Knowledge of:
 - Manned aviation flight and general operation
 - Air Traffic Control operations, procedures and policies
 - Safety management systems
 - Canadian Aircraft Regulations (CARs)
- Satisfactory completion of Transport Canada Compliant ground school as per TP 15263E
- Satisfactory completion of the NPCA sUAS Flight Training Program
- Thorough understanding of sUAS operation procedures, assets and limitations
- Radiotelephone Restricted Operator Certificate

7.2.1.2 *Position Description*

The Director of Flight Operations is responsible for managing the Flight Department to support the project-based mission objectives of the NPCA. This includes responsibility for carrying out all support of NPCA's missions and objectives while ensuring the highest level of safety to our crewmembers, the sUAS and the general public. Responsibilities include the overall management, operation and implementation of the Flight Department safety, maintenance and training programs, standard operating procedures and interfacing with Transport and NAV Canada and other regulatory bodies as needed.

7.2.1.3 *Duties and Responsibilities*

- Lead Flight Department in a manner that maintains a culture of safety and creates efficient procedures that support the needs of our customers
- Ensure that operations are conducted in accordance with Transport Canada as well as company operating policies
- Coordinate with Flight Crew, customers and other staff to schedule flights
- Prepare budgets and ensure financial efficiency and control
- Ensure that all Flight Department members are kept informed of any changes in regulations and/or operating standards
- Work with PIC and Director of Maintenance (DOM) to establish a policy regarding review of aircraft operational and maintenance accidents and incidents
- Develop and implement appropriate aircraft enhancements and modifications to keep aircraft at a high level of readiness and utility
- Liaises with external agencies and regulatory authorities
- Develop and maintain the Safety Management System, Training programs and COM

7.2.2 Chief Pilot

Reports to: Director, Flight Operations

Supervises: Pilots, Payload Operators and Visual Observers

7.2.2.1 *Qualifications*

Education: College Diploma or equivalent experience

Experience: small Unmanned Aerial Systems flight, management and coordination

Skills:

- Satisfactory completion of the NPCA sUAS Flight Training Program
- Thorough understanding of sUAS operational procedures, assets and limitations
- 20+ hours operating sUASs
- 10+ hours operating specific type
- Radiotelephone Restricted Operator Certificate

7.2.2.2 *Position Description*

The Chief Pilot is responsible for the safe and professional conduct of the flight crews under his/her authority. He/she ensures that operations, training and safety management goals are developed, communicated and implemented.

7.2.2.3 *Duties and Responsibilities*

- Provide leadership and direction for flight crew and support staff to maintain a culture of safety and efficient operations.
- Implement all required training programs for NPCA flight crews
- Issues directives and notices to the flight crews as required
- Coordinates accident, incident, and other occurrence reports
- Assumes responsibilities delegated by Director of Flight Operations.
- Ensures crew scheduling complies with Transport Canada and NPCA flight and duty time limitations.
- Maintain a current operations library
- Ensure that flight crew qualifications are current
- Ensure that air operations are conducted in accordance with Transport Canada regulations, as well as company operating procedures
- Operate sUAS in a safe and responsible manner at all times

7.2.3 Pilot in Command

Reports to: Chief Pilot

Supervises: Commercial and Research Pilots, Payload Operators and Visual Observers

7.2.3.1 *Qualifications*

Education: College Diploma or equivalent experience

Certification/Training:

- Satisfactory completion of Transport Canada Compliant ground school as per TP 15263E
- Satisfactory completion of NPCA sUAS Flight Training Program
- Radiotelephone Restricted Operator Certificate
- Thorough understanding of sUAS operational procedures, assets and limitations
- 15+ hours of operating sUASs
- 5+ hours on specific piloted sUAS

7.2.3.2 *Position Description*

The Pilot-in-Command is responsible for the safe and professional conduct of the flight crews under his/her authority while in operation phase. He/she ensures that operations, training and safety management goals are being carried out during operations and reports all deviations. Ensures that aerial operations are conducted in a manner consistent with details of SFOC and operations plan. Will lead and execute all aspects of aerial survey operations from on-site pre-flight coordination and checklist completion to briefing flight crew and orchestrating take-off, flight, landing and the completion of post flight activities.

7.2.3.3 *Duties and Responsibilities*

- Provide leadership and direction for flight crew and support staff to maintain a culture of safety in operations
- Issues directives and notices to the flight crews as required prior to operation
- Takes action on and distributes accident, incident, and other occurrence reports
- Assumes responsibilities delegated by the Chief Pilot

- Ensures crew scheduling complies with Transport Canada and NPCA flight and duty time limitations
- Carries out maintaining currency of flight crew qualifications
- Ensure that air operations are conducted in accordance with Transport Canada regulations, as well as company operating procedures
- Allocation and tracking of flight hours
- Operate sUAS in a safe and responsible manner at all times
- Takes action on and distributes accident, incident, and other occurrence reports

7.2.4 Visual Observer

Reports to: Pilot-In-Command

Supervises: Site crew

7.2.4.1 *Qualifications*

- Satisfactory completion of Transport Canada Compliant ground school as per TP 15263E knowledge requirements
- Satisfactory completion of NPCA sUAS Flight Training Program
- Radiotelephone Restricted Operator Certificate
- Proficient with requirements of CAR subsections 401.06(1) and 421.06(4)
- Thorough understanding of sUAS operation procedures, assets and limitations
- Proficient in visual scanning techniques

7.2.4.2 *Position Description*

The Visual Observer is responsible to perform the duties associated with sense and avoid. He/she must continuously monitor the sUAS and the airspace (e.g. for other traffic, clouds, obstructions and terrain) both around and sufficiently beyond the sUAS

7.2.4.3 *Duties and Responsibilities*

- Provide the PIC with information to maneuver the sUAS clear of any hazards and any potential collision with ground obstructions or air traffic
- Assist the sUAS Pilot to comply with applicable SFOC and VFR flight conditions such as visibility, cloud clearance requirements and keeping sUAS within VLOS
- Be able to determine the sUASs relative altitude, flight path, and proximity to all aviation activities and hazards (e.g. terrain, weather, wildlife, structures) sufficiently to prevent the aircraft from creating a hazardous situation.
- Perform observation duties for one (1) sUAS at a time
- Takes action on and assists accident, incident, and other occurrence reports
- Maintain constant communication with the sUAS pilot and communicate timely information to the sUAS pilot to avoid other aircraft or structures
- Must be able to
 - Perform visual scanning techniques
 - Facilitate inter-crew communications succinctly and clearly
 - Assess hazardous weather conditions
 - Take action in the event a risk of collision develops
 - Operate fire extinguisher
- Must understand, clearly communicate and enforce:
 - The vertical and horizontal boundaries of the operation
 - The class of airspace restrictions and determine adjacent classes of airspace
 - Right of way rules as specified in the CARs/SFOC
 - sUAS system limitations

7.2.5 Payload Engineer/Operator

Reports to: Pilot-in-Command

Supervises None (Generally addresses Flight crew on data collection and analysis requirements of mission)

7.2.5.1 *Qualifications*

- Must be trained to be thoroughly familiar with the sUAS payloads and ancillary systems being operated
- Satisfactory completion of Transport Canada Compliant ground school as per TP 15263E
- Satisfactory completion of NPCA sUAS Flight Training Program

7.2.5.2 Position Description

The Payload Engineer/Operator is responsible for planning, directing, scheduling and monitoring the data collection methods, strategies and the operation of sensors for research and other commercial projects.

7.2.5.3 Duties and Responsibilities

Works closely with the DFO, Chief Pilot and PIC to schedule research or other commercial flights as needed. Responsibilities include:

- Ensures camera, gimbal or other sensor systems are in working order prior to flight
- Performs routine tests to ensure payloads are in optimal working order and calibrated
- Confers with PIC to determine if conditions are suitable, from a data collection perspective, to schedule a mission and proceed
- Allocation and tracking of flight hours for payloads
- Discuss and confer with PIC to make minor changes in the aircraft's mission profile to meet the requirement of the project's data collection/analysis objectives
- Briefing pilots and research crew on mission objectives and methodologies
- Instructing flight crews on project specific data and record keeping requirements
- Preparing and pre-flight research equipment for the mission
- Potentially operating research equipment during the mission and advising flight crew of research equipment status as required
- Advising flight crew of the nature of data being captured so that the flight crew may best position flight tracks to investigate the phenomena targeted
- Takes action on and assists accident, incident, and other occurrence reports
- Administration of project specific records

7.2.6 Director of Maintenance

Reports to: Director, Flight Operations

Supervises: System Maintainer

7.2.6.1 Qualifications

- Satisfactory completion of Transport Canada Compliant ground school as per TP 15263E
- Satisfactory completion of NPCA sUAS Flight Training Program
- Working knowledge of sUAS maintenance requirements as per specific user manuals and applicable peripheral information such as manufacturer service bulletins (can be self-taught but must provide summary of the information and materials used to conduct the self-study)

7.2.6.2 Position Description

Responsible for maintaining airworthiness of each sUAS and tracking the appropriate information to remain satisfactory and compliant with transport Canada requirements, regulations and manufacturer service bulletins.

7.2.6.3 Duties and Responsibilities

Accountable for ensuring that all sUASs are maintained in accordance with regulatory requirements and that all maintenance related safety management goals are met. The duties of the position include:

- Planning and controlling all aircraft maintenance
- Ensuring that any and all alterations are properly documented, inspected and are in accordance with approved Transport Canada regulations and manufacturer specifications
- Ensuring that aircraft maintenance records as required by Transport Canada regulations, manufacturer and company policy are established and maintained
- Ensuring that Airworthiness Directives and Service Bulletins that affect Flight Department aircraft are complied with appropriately
- Removing from service any sUASs that are unsafe, or that do not comply with national regulatory requirements
- Solidifying Flight Department safety policies and procedures for flight operation

8.0 Safety Management System

Quality systems are the standard practice used in many industries to ensure that a process consistently produces a high quality product or service that meets customer expectations. The NPCA is committed to eliminating hazards and minimizing potential risks through the diligent practice of training and risk analysis. Hazards and incidents resulting from NPCA operations shall be identified at all levels.

The cornerstone of an effective safety program is an active accident prevention system. Conditions and acts posing unacceptable risk shall be eliminated, minimized or changed to prevent personnel injury and or property damage or loss.

The scope of the Safety Program applies to all sUAS related activities at the NPCA. The NPCA Flight Operations Safety Management System is composed of the elements in this chapter.

8.1 Safety Policy

Paramount to current and continued operations is creating, promoting and maintaining a culture of safety first throughout the organization. In pursuit of this goal, the NPCA incorporates and enforces a safety strategy into all flight operations and supporting activities. Safety is also an individual responsibility and must exist in our thinking, planning, and actions. All NPCA personnel will be held accountable for fulfilling their responsibilities under this safety program, which includes keeping up-to-date on current safety training programs.

Although a strict approach is adhered to, the NPCA realizes that situations often arise that are out of the vision of a documented strategy. As such, the NPCA will leave all final decisions for safety to individual operators as long as chain of command is maintained. When incidents occur, the NPCA will review the incident, generate the required documentation and incorporate the remedial actions into the documented safety plan moving forward. The safety program has a strong element of oversight of the decision making process so that any organizational roadblocks or blind spots can be identified and eliminated. Underlying all facets of the safety program is a need for open lines of communication and to sensitize all of the NPCA staff to safety principles and issues, in order to maximize the number of active participants in maintaining a safe operating environment. All staff are empowered to halt operations in the event safety may be compromised.

The NPCA realizes that the foundation of maintaining safe operations involves a proactive approach, documentation and communication. The NPCA is continually reviewing operations for risk identification and subsequent training to minimize or eliminate the identified hazard. The company will periodically review the SMS for applicability and make revisions as necessary.

Currently identified hazards and associated risks are documented in Section 8.3.1 of this document

8.1.1 Management Support

The NPCA staff will always have the full support of the Chief Administrative Officer (CAO) as long as they operate professionally and in accordance with company manuals and procedures. All company personnel have a duty to openly and honestly report events and hazards. The CAO undertakes a position, philosophy and approach to ensure that all such reports will be thoroughly investigated in a non-punitive manner.

8.1.2 Purpose

The purpose of the NPCA flight operations safety policy is to manage safety proactively and effectively. This is done by:

- Obtaining consistent and optimal aircraft and human performance
- Identifying and managing safety risks specific to the NPCA's flight operations
- Actively seeking feedback on and improving NPCA's safety management activities
- The SMS does not directly address Occupational Safety and Health (OSH)

8.1.3 Safety Responsibilities

The CAO of the NPCA is responsible for:

- Sustaining conditions that advance the safe operation of the NPCA sUAS
- Providing the resources (in time and money) to assure the safe operation of the NPCA's sUAS
- Actively supporting the Safety Management System

The Director of Flight Operations is responsible for:

- Ensuring that flight operations are conducted in compliance with all applicable regulations through proactive communication documentation/distribution of applicable safety information, issues and training
- Developing, maintaining, and administering the safety management system
- Validating and addressing safety-risk management deficiencies in an appropriate and timely manner

The PIC and Director of Maintenance are responsible for:

- Sustaining conditions that advance the safe operation of the NPCA sUAS
- Actively supporting the Flight Department's safety management system
- Ensuring that flights, maintenance, engineering and research operations are conducted in compliance with all applicable safety regulations
- Validating and addressing safety-risk management deficiencies in an appropriate and timely manner

The company personnel, who fly, crew, work on or with the sUAS are responsible for:

- Adhering to directions contained in flight operations-related manuals, and related procedures
- Participating proactively in the safety management system by:
 - Actively identifying, reporting and mitigating hazards and safety-risk management deficiencies
 - Providing timely input to management to ensure that the company's safety-risk profile is accurate and up-to-date
 - When appropriate, applying hazard checklists to make sound pre-flight and in-flight decisions
 - Completing the review of pertinent documentation and training in a timely manner

8.2 Description and Nature of the Operation

The NPCA flight program is a sUAS operation using Commercial-off-the-shelf systems that are not modified. The NPCA flight operations mimic standard aerial work in approach and execution. As per NPCA SOPs, flight operations involve a PIC and VO as a minimum but often include an additional pilot, payload operator and support staff as need dictates.

The Director of Flight Operations will review the risk profile at least annually, and any time the NPCA undertakes significant change in its operations, or the sUAS it operates. When the new risk profile is completed it will be reflected by amending the Safety Management System and the updated version will be appropriately recorded and distributed.

8.2.1 Safety Performance Objectives

Safety is paramount in all of the NPCA's operations and it is the joint responsibility of everyone connected with the operation. The objective of the NPCA's SMS is to achieve a zero level of preventable injury or damage situations. To accomplish that objective the NPCA has established a safety management strategy to reduce all identified hazards to as low a level as reasonably practical. In order to achieve the safety objective, the following safety management principles will be followed:

- Safety will be recognized by management and employees as an integral and vital part of the successful performance of any job
- Safety, being paramount to our operating practice, will be given priority at all times
- Direct responsibility for the safety of an operation rests with the supervisor of each operation – during flights the designated PIC is the supervisor of the operation and will seek to ensure that all operations are conducted without incident
- Each individual employee will perform their duties giving primary concern for their own safety as well as that of their fellow employees, their customers, and the property and equipment entrusted to their care
- The PIC is the final judge as to whether the aircraft shall take-off and where it shall land, taking into account all factors of equipment and weather conditions within the specifications of the COM, manufacturer specifications and standard operating procedures (SOP), the sUAS Flight Manual and specifications addressed and/or contained in the SFOC. He/she will exercise this responsibility effectively and will use all of the resources available to make appropriate and effective decisions
- The PIC has ultimate authority to refuse or discontinue a research mission or reposition flight that, for reasons of safety or security, he/she feels should not be attempted or continued. He/she will exercise this responsibility effectively and will use all of the resources available to make appropriate and effective decisions
- The NPCA SMS must be proactive, ongoing and fully integrated throughout the operation and all of its activities and is based on the following strategies:
 - All NPCA personnel will be involved in the flight department safety management system
 - Employee awareness, compliance, inspection, investigation and education programs will be Incorporated into all aspects of the operation
 - All personnel will endeavor to identify, report and eliminate hazardous conditions
 - All reported hazardous events will be investigated to determine underlying causes
 - All proposed new equipment acquisitions, facilities, operations and procedures will be reviewed with safety in mind

- All personnel will comply with all applicable laws and regulations
- Any member of the NPCA flight crew may put forth a safety concern at any time, under any circumstances and can expect non-punitive repercussions from the NPCA's management

8.2.2 Safety Management Goals

Based on the above Safety Performance Objectives, the following goals have been established. These are the achievable, measurable, policy-derived safety benchmarks of the Flight Department:

1. Demonstrate management commitment to safety by:
 - a. Creating and following our safety policy
 - b. Allocating sufficient money and resources in the pursuit of safety
 - c. Encouraging and enforcing safe behavior
 - d. Documentation and distribution of the Flight Department's safety policy
2. Conduct a safety meeting, chaired by the DFO, typically once per year (or more often as a need is perceived). Rather than a formal safety committee, such meetings shall be open to all interested or affected personnel. The DFO will report any issues identified in the meeting using the Safety Management Report (SMR) (Attachment A in this document). Issues evaluated as having an adverse risk will be tracked and mitigated as described in the SMS. Any risk judged as Medium or above shall cause the Safety Risk Profile to be updated.
3. Develop a clearly written and easily understood COM (including an SMS) that will be reviewed at least annually for accuracy and improvement. The Director of Flight Operations will maintain a list of personnel assigned COMs. Personnel will acknowledge receipt of, and familiarity with, the contents. When the COM is edited or updated, receipt of the new edition will be recorded.
4. Maintain a system of communications for collecting, analyzing and exchanging incident data related to safety. The NPCA will allow no retribution for submission of incident data. The SMR form will be collected and stored in a central repository.
5. The DFO will review the regulations and standards under which the NPCA operates on an annual basis. Any relevant changes will be addressed through the Safety Management Plan (SMP) (Attachment B in this document). Between these reviews, any known changes will be addressed through the regular safety meetings.
6. Retrain, without penalty or stigma, when safety is involved. The safety issue will be documented and the retraining conducted. Adherence to COM safety procedures is required.
7. Demonstrate acceptance of the concept that accidents are preventable. We will report, analyze, and rank all hazards and not ignore them. We will mitigate all situations that are deemed to be unacceptable. Meeting this objective will be shown by an annual safety review of the hazard identification and risk analysis and mitigation efforts.
8. Create and maintain acceptance of the fact that safety is part of the Flight Department's mission and culture by:
 - a. Stating it in all operation and training manuals
 - b. Empowering all employees to stop any activity they consider hazardous
 - c. Standing behind all employee decisions relating to safety

8.3 Hazard Identification and Tracking System

The hazard identification and tracking system is composed of two parts:

- Hazard identification program; and
- Hazard tracking system.

The purpose of the hazard identification program is to proactively identify and address potential deficiencies in safety management. All Flight Department employees and persons involved in NPCA flight operations are expected to participate in the hazard identification program. Reports/observations can be made to the Director of Flight Operations or Safety Officer verbally, but written reports are encouraged. Where verbal reports are provided, the Director shall prepare a report containing the information. Written reports can be made on the SMR form.

The Director of Flight Operations, or person to whom he/she delegates the task, will analyze all hazard reports and a response will be provided to the person making the report. If it is determined that a modification to a procedure or program is required, such information will be disseminated to all personnel until the remedial amendments to the COM have been completed. Written reports will be filed in the Company Safety Management filing repository and reviewed on an annual basis to determine the effectiveness of the remedial measures. Hazard identification and tracking will be an agenda item at each of the Flight Department yearly staff meetings.

8.3.1 Key Hazards, Risks and Mitigation

For all intents and purposes, hazards and risks are minimized by this organization through the establishment of a safety management system, checklists and standard operation procedures. If the aforementioned strategies are adhered to risk and hazards shall be

minimized. The following text outlines the major risks and hazards associated with sUAS operations and sets forth a mitigation strategy that the NPCA strictly adheres to.

Likelihood and severity are measured on a scale of 1 to 5 where 1 equates to rarely/low (likelihood/severity), 3 equates to sometimes/moderate (likelihood/severity) and 5 equates to always/high (likelihood/severity).

- Risk – Loss of command and control link (C2)
 - Likelihood: 1
 - Severity: 3
 - Risk Treatment
 - Keep sUAS within range of controller
 - Maintain batteries and charge
 - Maintain firmware of systems
 - Ensure all electronic systems are in proper working order and tested regularly
- Risk – Safety of ground station
 - Likelihood: 1
 - Severity: 1
 - Risk Treatment
 - Adequately mark ground station
 - Maintain flight crew personnel presence at ground station during operation
- Risk – Loss of GPS
 - Likelihood: 3
 - Severity: 1
 - Risk Treatment
 - All NPCA pilots are trained in manual (non-gps flight) to be able to control sUAS adequately without GPS
- Risk – Flight into controlled airspace
 - Likelihood: 1
 - Severity: 3
 - Risk Treatment
 - Always carry appropriate contact numbers for local ATC and aerodromes for alert purposes
 - Institute flight software controls to deny controlled airspace and other custom boundary incursions
- Risk – Severe Weather
 - Likelihood: 2
 - Severity: 5
 - Risk Treatment
 - Understand general weather patterns of survey location prior to commencing operations
 - Monitor weather and weather patterns leading up flight operations and at key points during operations, if possible
 - Make certain VOs are trained to observe and forecast severe weather approach and formation
- Risk – Fly away
 - Likelihood: 1
 - Severity: 5
 - Risk Treatment
 - Ensure all mechanical, electrical and command and control are maintained properly and tested regularly
 - Always carry appropriate contact numbers for local ATC and aerodromes for alert purposes
 - Ensure local GPS home point is set prior to take-off
 - Ensure up-to-date firmware is loaded

- Risk – Reduced pilot situational awareness
 - Likelihood: 2
 - Severity: 4
 - Risk Treatment
 - Add VOs to operation as necessary
 - Ensure flight planning takes situational awareness into account
- Risk – Safety margins for ground operations
 - Likelihood: 1
 - Severity: 3
 - Risk Treatment
 - Ensure proper site assessment and flight planning is completed
 - Ensure all flight crew understand role and responsibilities are briefed on the specific operation and remain focused and vigilant during operations
 - Ensure flight crew is properly trained and capable of their role and responsibility
- Risk – Battery (power/fuel) management
 - Likelihood: 2
 - Severity: 4
 - Risk Treatment
 - Ensure all batteries are charged prior to operation and that levels are routinely monitored during operations
 - Adequately record flight hours used and number of charges per battery
 - Discard batteries that appear damaged or have passed operation limits as set forth by the manufacturer
 - Only buy respectable manufactured batteries
 - Ensure batteries are properly stored and recharged between operations
- Risk – Additional ATC workload
 - Likelihood: 1
 - Severity: 3
 - Risk Treatment
 - Ensure proper coordination is carried out at acceptable intervals leading up to and during operation
 - Follow any and all directions as put forth by local ATC personnel
 - Remain in contact during operation

8.4 Change Management Process

Prior to undergoing any significant change that could impact the Flight Department; a change management process will be undertaken. Events that will indicate the need for such a process are:

1. The introduction of a new sUAS type
2. Significant change in the nature of the operation (e.g. new research project or significant reconfiguring of aircraft's equipment or structure)
3. Changes to organizational structure
4. Significant change in maintenance arrangements
5. Incident encountered in operations planning or operations in general

When information is received through a formal SMR or verbal communication, the DFO will review the information and in consultation with appropriate staff, will make a determination to modify a process or procedure based on the SMR. If the change is approved it will be implemented in accordance with the following procedures:

1. The change process including the risk assessment will be recorded
2. The amended process or procedure or information in the amended program will be distributed to all flight department personnel by e-mail from the DFO or person assigned the task
3. The operations manual and other associated documentation will be amended and distributed to all document holders

As soon as it has been determined that the change event will occur, the risks will be reviewed based upon procedures as part of SI-QUA-008. On the basis of that assessment, and any other available information, the DFO, or the person to whom the responsibility is delegated, will develop a Change Management Plan. The Change Management Plan will include:

1. A risk analysis of the change event and an assessment of the changes required to items such as:
 - a. Operating and maintenance procedures and processes
 - b. Personnel training and competency certification
 - c. Company Operations Manual
 - d. Maintenance Control Manual or Maintenance Procedures Manual if and when implemented
 - e. SOPs, checklists
2. A plan for development of the required changes

When the required changes have been developed, a comprehensive SMS review will be conducted before the change is implemented. After implementation of the change the DFO will review system performance at regular intervals. If there is any doubt of the effectiveness of the change management process, a more comprehensive post-implementation review or a SMS audit will be conducted.

8.5 Safety Assurance and SMS Evaluation

8.5.1 Safety Assurance

The ongoing monitoring of operational systems, processes and procedures to ensure that they are appropriate and effective is an integral part of an SMS. The NPCA's safety assurance activities are used to:

- Ensure that operational systems, process and procedures are appropriate and effective
- Ensure that identified problems have been resolved
- Assist in maximizing the effectiveness and efficiency of safety management activities

Safety assurance activities include:

- Conduct assessments of the appropriateness and effectiveness of operational processes once a year
- Using the forms and processes included in the operations manual to conduct safety evaluations
- Assessing the activities of contractors where their services may affect the safety of the operation
- Documenting the safety management assessment results, corrective actions and both positive and negative observations
- Categorizing findings to assist in prioritizing corrective actions
- Sharing the results and corrective actions with all personnel
- Holding regular safety meetings
- Keeping the CAO, DFO informed of safety issues
- Investigating incidents and providing feedback to management and staff

8.5.2 SMS Evaluation

Regular evaluation of safety performance is an integral part of an SMS. The NPCA will conduct internal evaluations of the SMS once per year or as the nature of operations change or new sUASs are added. A remedial action plan will be developed for any findings made during the internal evaluation will be tracked using an SMP form.

When the evaluation is completed it will be analyzed to ensure that the agreed acceptable level of risk, the safety objectives and goals and related SMS expectations are being achieved. The results of evaluations, safety surveys and summaries of employee feedback on safety management activities will be reviewed with the Accountable Executive. This information will also be shared with all employees.

8.5.3 Compliance Monitoring

In order to ensure compliance with all applicable regulations, standards, approvals and exemptions, the NPCA will conduct a compliance review at least once each year. The DFO, or his/her designee, will conduct the audit.

8.5.4 SMS Communication and Training

The NPCA will work diligently to ensure that a positive safety culture prevails throughout the organization. In order to achieve that objective, open communication up and down the organization chain will be encouraged and safety information will be shared. In order to ensure that all employees understand the importance of open communication training and the framework within which the company SMS functions, the following training will be included in the company orientation training for all flight department personnel and new hires:

- Introduction to SMS
- NPCA's SMS and Company Operations Manual
- Introduction to sUAS Flight Training Program

The NPCA's objective is to share data regarding hazards and safety deficiencies on a non-punitive basis. The goal is to have an open and complete safety culture that supersedes all other aspects of the business in importance. Any identified risk can be reported either through the formal process identified above or by confidential methods. To this end, a postage paid self-addressed envelope including a SMR form will be issued to all employees and be available within the NPCA COM.

9.0 Operational Control

9.1 Operational Control System

An operational control system is in place to initiate, continue, divert or terminate flight operations in the interest of safety of the sUAS and the regularity and efficiency of the flight. It also includes any provisions for following the sUAS flight during flight operations.

9.1.1 General Description

The majority of the NPCA flight operations are conducted with a set of clear goals, objectives and flight operation parameters. Prior to each flight operation the PIC, in conjunction with the Director of Flight Operations/Chief Pilot will allocate the required flight crew resources to satisfy project goals and objectives and maximize safe operations. Once a flight is authorized by the Director of Flight Operations NPCA uses a PIC self-dispatch system.

9.1.2 Responsibilities and Authorities

The Director of Flight Operations must authorize all flights or series of flights before departure from the home base. The operational coordination of the flight is the responsibility of the Chief Pilot and control of a flight is delegated to the PIC.

The NPCA uses a pilot self-dispatch system. A flight release is authorized when the DFO has determined that:

1. The flight may be conducted in accordance with the CARs
2. The validity of all required licenses, permits, certificates, has been verified and the required equipment, documents and manuals are compiled to accompany the sUAS. The following is a list of documents that are to be carried with the sUAS:
 - a. Maintenance manuals
 - b. sUAS operation/user manuals
 - c. Checklists
 - d. SOPs
 - e. Placards that enable operation in accordance with system flight manual, pilot operating handbook
 - f. Flight records
 - g. Total flight hours accumulated per aircraft
 - h. Pilots, flight hours
3. The appropriate forms have been reviewed to determine all required aircraft maintenance work has been completed and sufficient time remains on the sUAS before the next required maintenance to complete the mission for which the sUAS is being released.
4. The meteorological conditions are such that the flight can be conducted safely and in accordance with the CARs.
5. A company flight plan has been completed.

9.2 Flight Planning Requirements

As the NPCA uses a pilot self-dispatch system, it is the PIC's responsibility to ensure that all flight planning documents required by the NPCA COM have been prepared and filed prior to departure. The pilot shall also ensure that flight-planning requirements of the CARs have been met.

9.2.1 General

Before commencing a flight, the PIC shall be familiar with the available flight information that is appropriate to the intended flight. The PIC shall not commence a flight unless it has been ascertained that the resources available and directly required for such a flight and for the safe operation of the sUAS are adequate. This includes appropriate coordination with local ATC or aerodromes staff and personnel and a flight plan filed, if necessary. Additionally, the PIC shall be familiar with all available meteorological information appropriate to the intended flight.

9.2.2 VFR Flight

A flight to be conducted in accordance with visual flight rules shall not be commenced unless available weather information indicates that the meteorological conditions in the area of operation and surrounding area will permit flight under visual flight rules for the duration of the mission +/- 30 minutes. VFR charts for the route to be flown are carried with the sUAS support equipment.

9.2.3 Site Visits

Flying sUASs requires an assessment of the suitability of each site to be made, prior to conducting operations to ensure such operations can be conducted safely. Conducting a site visit and using aeronautical charts and other sources of information such as the CFS, digital imagery and the designated airspace handbook will help make such an assessment.

Typical elements of an assessment include but are not limited to:

- Defining the boundaries of the area where the actual operation will be carried out
- Class of airspace and specific provisions of the airspace
- Altitudes and routes used on the approach and departure to and from the area where the operation will be conducted
- Other aircraft operations
- Hazards nearby
- Areas of high intensity radio transmission or electromagnetic interference
- Limitations and restrictions of local by-laws
- Location and height of obstacles
- Airspace restrictions
- Built up areas, major roadways and recreation activity sites
- Security provision to limit public access
- Predominant weather conditions for the site and proposed operating areas
- Minimum separation from persons, vehicles and structures

9.3 Airworthiness

It is the responsibility of the PIC to ensure that the sUAS is airworthy before commencing a flight. The sUAS is not deemed airworthy unless the equipment, systems and instruments prescribed in the applicable airworthiness standard and all required equipment are functioning correctly.

The sUAS is also not considered airworthy if the sUAS has any malfunction or defect, unless the details of the malfunction or defect are recorded in the aircraft log and unmistakable warning is given at the flight crew station by removing, placarding or tagging the affected item. In the case of deferred defects, the PIC shall make certain that the affected equipment will still allow the flight to be completed safely. Flight crews shall ensure that all "Operations" and "Maintenance" (O and M) procedures are followed. All defects shall be recorded by the PIC in the aircraft log at the termination of the flight during which they were detected. The Director of Maintenance shall be notified of any defects as soon as practical after the flight lands.

An airworthy condition includes at a minimum:

- The sUAS system has been maintained in accordance with the manufacturer's specified maintenance program and schedule
- The requirements of any airworthiness directives (or equivalent) issued by the manufacturer for the sUAS, control station or other ancillary component have been completed
- All modifications and repairs to the sUAS system are carried out in accordance with the manufacturer's instructions and that no unapproved modification shall be carried out; and
- All sUAS system equipment for safe flight operations is serviceable

9.4 Distribution of Operational Information

The NPCA will disseminate operational information to pilots and other personnel through the use of company directives and bulletins. The DFO will ensure that any other NPCA personnel are aware of the latest information. Bulletins will be kept on file with a "signed as having read" signature block. Pilots will check the file before each flight, read new items and sign as having read.

The DFO will also notify pilots who are operating away from the main base of pertinent new information.

9.5 Deviations to Company Operations Manual Provisions

The DFO may approve temporary amendments to the COM or deviations to the provisions contained in it. Temporary amendments or deviations will be distributed in the same manner as other operational information as per Section 9.4. They will be also transmitted to all flight crew via e-mail or hardcopy along with information on the conditions related to the deviations.

10.0 Standard Operating Procedures

10.1 General

A Standard Operating Procedure (SOP) is an orderly plan for accomplishing a particular task and usually involves several steps. Standardization of crew duties is an absolute necessity to assure the high degree of safety, reliability, and efficiency that represent the goal of the NPCA. Standardization is not the substitute for sound judgment. Failure to apply knowledge of aircraft systems to prevent or minimize injury or damage is as serious as the failure to use standardized procedures. If there is any conflict in guidance with other procedural or regulatory directives, the more restrictive will apply.

These Standard Operating Procedures apply to all NPCA crewmembers.

10.2 The Unmanned Aerial Vehicle

10.2.1 Platform

- The sUAS platforms deployed weigh less than 25 kilograms
- All sUASs shall be used in accordance with their specific design parameters
- The platform and controller will comply with Industry Canada regulations
- The sUAS software and firmware shall be regularly updated with manufacturer's current versions
- Adequate liability coverage (i.e. greater than \$1,000,000) that applies to the operation of unmanned aircraft will be carried at all times to cover risks of public liability
- The sUAS will not, any time, transport hazardous goods
- Non-OEM payloads will be installed and operated per manufacturer's instructions

10.2.2 General

- The sUAS User Manual shall be available to the PIC and Visual Observer at all times
- The sUAS shall be appropriately stowed in a case, vehicle or structure when not in use with battery and propellers removed
- When not expected to be in operation in the near future (i.e. not on the way to, preparing for, or on the way back from a flight), the sUAS shall be stored with the battery removed in a locked location inaccessible to non-essential personnel
- The operator shall purchase lithium batteries from a reputable manufacturer and retailer and will seek proof that the batteries have been tested and meet the UN Manual of Tests and Criteria as necessary.
- When transporting sUASs that contain lithium batteries in a vehicle prior to operation the flight crew shall:
 - Prevent batteries from short circuiting or catching fire by keeping them isolated from metal objects or other conductive materials by enclosing in a fire proof safety bag
 - Insulate terminals with a non-conductive material
 - Pack batteries so they cannot shift during transport

10.3 Site Assessments

- Assessments for sUAS operation suitability will be conducted prior to operating to ensure operations can be conducted safely
- Assessments will be made by conducting a personal site visit and utilizing aeronautical charts or other sources of information such as Canada Flight Supplement, digital imagery (e.g. Google Earth, Bing, Google Maps), The designated Airspace handbook, etc.
- Site visits conducted for proposed night flight will be conducted by day
- Geographic information systems software will be used, where applicable, to characterize the area through spatial analysis and catalogue of various spatial data layers (this will serve as a visual and permanent but updateable record of the site where work is to be performed) so as to show site specific information in the context of manned and unmanned operations
- GPS-based data collection and mapping software will be used to perform real-time site characterization updates to base maps – mobile in-field data collection methodologies will be synced automatically to office map systems
- Site assessment and records will include at a minimum:
 - Operation boundary definition
 - Airspace class and specific provision identification and definition
 - Suitable take-off and landing site identification as well as contingency/emergency locations
 - Site characterization identification, location and record:
 - Aircraft operations (e.g. proximity of aerodromes, heliports, seaplane bases or other operating sites)
 - Industrial site hazards
 - High-intensity radio transmission or electromagnetic interference (e.g. radar sites)
 - General obstacles and heights (e.g. wires, masts, buildings, cell phone towers, wind turbines etc.)
 - Other airspace restrictions, if any (e.g. Nuclear facilities)
 - Built-up areas, major roadways and recreational activity sites

- Security provisions to limit public access
- Predominant weather conditions and trend identification
- Local by-law restrictions or limitations
- Minimum separation distances from persons, vehicles and structures

10.4 Aviation Personnel

10.4.1 Flight Crew

- A flight crew shall consist of a Pilot-in-Command and Visual Observer as a minimum
- When using a non-OEM payload in flight operations a payload operator will be considered as essential personnel to the flight crew
- Sufficient organizational control will be maintained that is capable of exercising supervision and operational control over persons participating in sUAS flight operations
- If adequate organizational control cannot be maintained the organization will ground flight operations until the organizational control mandate can be satisfied to ensure that the safety of persons and property is not jeopardized
- No person shall operate a sUAS in such a reckless or negligent manner as to endanger or be likely to endanger the life or property of any person
- No operator of a sUAS shall require any person to act as a flight crew member and no person shall act as a flight crew member, if either the person or the operator has any reason to believe, having regard to the circumstances of the particular flight to be undertaken, that the person:
 - (1) is suffering or is likely to suffer from fatigue; or
 - (2) is otherwise unfit to perform properly the person's duties as a flight crew member.
- No person shall act as a crew member of a sUAS
 - Within eight hours after consuming an alcoholic beverage;
 - While under the influence of alcohol; or
 - While using any drug that impairs the person's faculties to the extent that the safety of the aircraft or of persons on board the aircraft is endangered in any way.

10.4.2 The Pilot in Command

In addition to the requirements for all sUAS pilots listed above, Pilots-in-Command as a minimum:

- Shall have a VO for any sUAS flight operation
- Ensure a means of detecting hazardous environmental flight conditions (e.g. icing, thunderstorms, etc.) is operational and on site.
- Shall be identified before flight and shall identify the VO and any other essential personnel
- Shall be able to communicate verbally with the VO at all times during flight operations
- Shall ensure that the VO and other essential personnel are suitably trained to perform his/her necessary functions.
- Shall review a current aeronautical chart to be familiar with the area/airspace
- Shall have a minimum of 15 hours of total time as a sUAS rotorcraft pilot including 5 hours on the particular make and model
 - Operational experience and skill appropriate to the particular type of sUAS system shall include:
 - The ability to demonstrate competency in the ability to maintain situational awareness
 - The ability to perform normal and emergency maneuvers
 - The PIC shall identify possible alternate landing locations in case of emergency prior to the flight
 - The PIC will adequately brief personnel on emergency operation involving the sUAS (e.g. Lost Link)
- Shall have a means of determining if the sUAS has inadvertently entered controlled airspace, including but not limited to setting the proper controls and limits in the sUAS flight software prior to flight
- Shall formulate and brief the flight crew on the communication plan with the appropriate ATS Unit should the sUAS inadvertently fly into controlled airspace and cannot be immediately returned to the area of operation
- Shall have the ability to contact, and know who to contact, if the sUAS is no longer under control of the pilot and the sUAS flies away
- Shall assist in the publishing of NOTAMs as dictated by NavCanada, if applicable

10.4.3 sUAS Pilots

All sUAS Pilots at a minimum:

- Shall have completed compliant sUAS ground school (or the manned aircraft equivalent) and sUAS flight training
- Shall comply with the instructions of the PIC at-all-times, as appropriate.
- Shall have been trained and proficient in the following areas to assure safe integration within National airspace:
 - Must be medically fit to conduct their required duties
 - Must have a working knowledge of:
 - TC policies, guidance material and the applicable sUAS related regulations in the CARS;
 - The class of airspace in which they intend to operate including the vertical and horizontal airspace boundaries and determining adjacent classes of airspace;
 - Relevant aeronautical charts and the Canada Flight Supplement
 - Air Traffic Control procedures (where the operation is conducted in, or near, controlled airspace)
 - The effect of weather on sUAS performance and the ability to identify critical weather situations
 - The identification of hazardous in-flight situations and collision avoidance requirements and procedures; and
 - Type-specific sUAS systems, limitations, normal procedures and emergency procedures
 - Shall have a Radiotelephone Operator Restricted Certificate to comply with subsections 401.06(1) and 421.06(4) of the CARs as required.
 - Shall have performed at least 3 takeoffs and landings with the sUAS within the past 90 days to maintain currency
 - Shall have a minimum of 30 minutes flight time and 3 take-offs and landings at night within the past 90 days to maintain currency
 - Shall not operate the sUAS from any moving vehicle or device
 - Shall have a minimum of 20 hours of total time as a sUAS rotorcraft pilot including 5 hours on the particular make and model; and
 - Operational experience and skill appropriate to the particular type of sUAS system that includes:
 - The ability to demonstrate competency in the ability to maintain situational awareness
 - The ability to perform normal and emergency maneuvers
- Pilot Proficiency Check
 - All NPCA pilots will undergo a biannual competency check conducted by the Director of Flight Operations or the Chief pilot.

10.4.4 Visual Observers

- Shall perform observation duties for (1) sUAS at a time, which include the following:
 - Sense and avoid
 - Determination of sUAS relative altitude, flight path and proximity to all aviation activities and hazards
 - Assist PIC to comply with SFOC conditions
 - Provide clear communication to avoid hazards within and beyond immediate sUAS operation
- Shall maintain constant communication with sUAS pilot and be able to communicate in a timely manner
- Shall be trained to perform duties associated with the provision of sense and avoid
- Shall not be used on moving vehicles to extend the operating range of the sUAS system
- Shall have as a minimum set of requirements the following:
 - Have a valid Radiotelephone Operator Restricted Certificate to comply with subsections 401.06(1) and 421.06(4) of the CARs
 - For sUAS operations, a separate person from the PIC or Pilot responsible for communications is required unless a safety case can be provided that shows how the risks associated with the pilot conducting both the piloting duties and communications tasks can otherwise be mitigated.
 - Visual acuity sufficient to conduct their duties
 - A working knowledge of:
 - Visual scanning techniques
 - Inter-crew communication requirements
 - Hazardous in-flight weather conditions
 - Actions to be taken in the event a risk of collision develops
 - The vertical and horizontal boundaries of the area of operation
 - The class of airspace in which they intend to operate including the vertical and horizontal airspace boundaries and determining adjacent classes of airspace
 - Right-of-way rules as specific in the SFOC
 - The sUAS system limitations

10.4.5 Payload Operators

- Shall be trained to be thoroughly familiar with the sUAS payload being operated
- Shall identify any associated risks with the payload which may include using the pilot in a dual role to operate the payload and fly the sUAS

10.5 General Flight Operation

10.5.1 Standard Field Kit

The following items, at a minimum, will be included in the NPCA Flight Operations filed kit:

- Canada Flight Supplement
- Fire extinguisher
- Sports cones
- Landing pad
- Safety tape
- Air horn
- Safety Management Report with envelope and stamp
- High visibility clothing for essential personnel
- VFR Terminal area chart or VNC (operation site specific)
- Company Operations Plan
- Approved SFOC (application specific)
- Operation checklist
- Support materials for incident reporting
- VHF radios
- Batteries
- Flashlight
- Beacon light
- Charging cables (variety) with car kit
- Tools
- NPCA Log books and flight records
- Placards

10.5.2 Flight Environments

- The sUAS will be operated within the limits of CARs 602.114 and 602.115 at all times
- The sUAS is operated with visual reference to the surface
- The sUAS will not be flown at night, unless specifically authorized by the relevant SFOC
- The sUAS shall not be flown in precipitation or icing conditions
- The sUAS shall not be flown when steady winds or gusts exceeding the manufacturers' recommended limits
- The sUAS shall not be flown when ambient temperature is outside of the manufacturers' recommended limits
- The sUAS shall not be flown when visibility is less than the airspace appropriate VMC minimum
- The sUAS shall not be flown at altitudes higher than 400 feet AGL
- The sUAS shall not be flown farther than the manufacturers' range limit horizontally from PIC
- The sUAS shall not be operated at less distance than the airspace class minimum from clouds
- The sUAS shall not operate within a Class C, or D airport control zone without prior consent from ATC
- The sUAS shall not be operated over private or controlled-access property without permission from the land owner, owner's authorized representative or local official
- The sUAS shall not operate under 2,000 feet AGL over National, Provincial or Municipal Parks, Reserves and Refuges
- The sUAS shall not operate, unless at the request of the appropriate fire control authority, over any areas that is located within 5 nautical miles of a forest fire at an altitude of less than 3,000 feet AGL
- A fire extinguisher shall be available to the PIC in the event of an emergency

10.5.3 Operational Limits

- The PIC shall announce “CLEAR” before starting the propellers on the sUAS
- The sUAS shall only be flown with Visual-Line-of-Sight (VLOS) of the PIC and the VO
- The sUAS shall not be operated at an indicated airspeed in excess of 30 mph
- Any single sUAS flight shall not exceed 30 minutes in duration
- Any single sUAS flight shall not exceed the point where the battery reaches less than 30% capacity remaining
- Minimum stand-off distances to non-participating persons shall be no less than 100 feet from identified take-off and landing zone unless access restrictions or structures are present to protect from sUAS or debris
- Minimum stand-off distances to non-participating vessels, vehicles or structures shall be no less than 100 feet unless the owner/controller grants permission and the PIC determines closer operation does not present an undue risk
- The sUAS flight shall be aborted in the event of a flight emergency or malfunction that may affect flight
- The sUAS shall remain clear of, and yield the right-of-way to, all manned aviation operations

10.5.4 Operation in Controlled Airspace

- When operating in controlled airspace the sUAS Flight Crew shall perform the following or other procedures at the discretion of the appropriate ATC unit:
 - Well in advance of all operations the following information will be communicated in writing to the appropriate air traffic service provider(s):
 - Intended date, time and duration of operation;
 - Type of sUAS including its equipment capabilities and physical characteristics;
 - Weather limits stipulated in the SFOC;
 - Time of day;
 - Vertical and horizontal boundaries of the area of operation;
 - Route to access the area of operation, if necessary;
 - Proximity of the operation to approaches, departures and traffic patterns;
 - Means by which sense and avoid operations will be carried out;
 - Means by which two-way communications will be maintained;
 - Emergency contact information for the sUAS operator;
 - Proposed lost link procedures;
 - Procedures to be followed for emergency situations;
 - Process and time required to cease sUAS operations.
 - Prior to take-off/launch the sUAS operator or PIC shall provide any ATS unit involved in the operation of flight with the same information as required by an ICAO flight plan
 - Prior to commencing flight operations the Flight Crew will ensure the primary and back up ATS Unit communication devices are tested with the appropriate ATS unit and deemed functional
 - Allow only trained, licensed, and authorized sUAS crew members to communicate with the ATS Unit
 - Maintain direct two-way radio communication with the appropriate ATS Unit via handheld VHF or fixed ground station as required and coordinated— mobile phones will be used as back up devices
 - Comply with ATS Unit Instructions in a timely manner and in accordance with Section 602.31 of the CARS
 - Use a separate person responsible for communications with the appropriate ATS Unit if deemed necessary
 - Maintain constant monitoring of the ATS Unit frequency to improve situational/navigational awareness
 - Maintain constant and immediate Inter-crew communication to provide see-and-avoid assistance to the sUAS Pilot

10.5.5 Operation Indoors

- sUAS flight crew shall constrain those in attendance to only people directly participating in the sUAS operations
- Special considerations which include at a minimum the attendance of people not directly involved in the sUAS operations will be outlined in the specific SFOC application

10.5.6 On-site Operation Control

10.5.6.1 *Captain's Authority*

The Pilot in Command (PIC) assigned to a flight, shall have exclusive and final authority as to whether or not the aircraft shall undertake any flight. The Pilot in Command shall not be overruled by any flight crewmember or executive, nor disciplined for well-considered decisions having to do with weather, mechanical condition of the sUAS or other hazards. He/she should utilize all available resources in making decisions related to flight. The other crewmembers will, except when immediate action is required, be brought into discussions concerning the operation of the sUAS as it relates to weather, mechanical condition or other hazards. The PIC has the final authority on all decisions relating to the operation of the aircraft.

10.5.6.2 Transfer of Aircraft Control

If a transfer of sUAS control becomes necessary between PF and PM, the PF will state "Your control" and the PM will acknowledge by stating "My control." Prior to transfer, the sUAS should be flown to a clear area, if possible, set to hover and should remain in that position until control is transferred. One crewmember must be responsible and therefore devote his attention to sUAS control whenever the sUAS is in motion. Both pilots should never have their attention diverted or be "heads down" at the same time. Transfer of control will only occur in rare or emergency situations where landing is not feasible or safe prior to transferring control of the aircraft. Standard practice is to land, if possible, prior to transferring control of the sUAS.

10.5.6.3 Crew Resource Management

Fundamental to safe flight operations is "Crew Resource Management" or the "total crew concept." Each crewmember is trained to do his job, to demand that other crewmembers do theirs, with each monitoring the other, and to give assistance on demand or solicit assistance as necessary and with regards to maintaining utmost safety.

In this regard, it is worthy of consideration that no one is incapable of making a mistake in judgment. No one is master of all emergencies. Then, for no other reason than these, the crew must monitor everything that occurs during flight operations; they must speak up when dissent is necessary, and advise when advice is needed.

All NPCA crewmembers will operate as a coordinated and well-disciplined team, with the PIC responsible for team management. Crewmembers are not, however, required to comply with any procedure, technique, or other action that they believe is unauthorized or unsafe.

Studies have shown that a well-defined role structure during flight operations (pre and post) reduces ambiguity and enhances each crewmember's performance. Each PIC must attempt to strike a balance between a command role that is too overbearing and one that is too passive. It has also been found that a PIC who is overly passive in his command role tends to detract from crew efficiency by causing an inordinate workload on other crewmembers.

10.5.6.4 Minimum Flight Crew – Commercial and Research Operations

The minimum crew in commercial or research configurations shall consist of a PIC and a VO. Additionally, on research or commercial missions, the crew may also include a payload operator or one or two support staff as need or complexity of operations dictate. Only necessary flight crewmembers are allowed to participate on missions. As a secondary control option a PF and PM will be delegated for each mission with PIC and VO assuming PF and PM duties, respectively.

10.5.6.5 Flight Crew Qualifications

As part of their technical job qualifications, all pilots are expected to be knowledgeable in the provisions of the Canadian Aviation Regulations (CARs) as well as the procedures in the NPCA COM and manufacturer user manuals. To the extent possible, this section will not repeat information contained in those regulations and procedural documents.

It is the responsibility of each individual in coordination with the DFO to ensure that all required licenses, certificates and ratings are in force before acting as crew on NPCA Flight Operations. A copy of all pertinent information shall to be submitted to the DFO. Any suspected or known medical condition that might affect an assignment is to be brought to the attention of the Chief Pilot or the DFO immediately.

10.5.6.6 Use of Checklists

Checklists have been established for NPCA Flight Operations. Each checklist contains the date of the last revision. The checklists prescribe the normal and emergency procedures to be followed for each sUAS type. Every flight crewmember shall follow the checklist in the performance of their assigned duties. The complete NPCA checklist is found in Appendix C of this document.

The pilot flying (PF) will call for the appropriate checklist at the time it is required. If the PF does not ask for the checklist at the required phase of flight, the pilot monitoring (PM) will advise the PF that he is "standing by with the checklist." For the purposes of most flight operations it will be a shared responsibility of the PIC and VO to act as PF and PM, respectively.

10.5.6.7 Read and Do and Challenge and Response Procedures

The pilot running the checklist reads the item and takes action as required to assure the item has been accomplished.

Normally, the pilot monitoring (PM) will run the checklist by issuing a "challenge" for each action to be accomplished by reading aloud the checklist item. The pilot who performs the action will call out the appropriate "response" when the action has been completed. The PM, in some instances, may call out both the challenge and the response as items in the checklist are completed. By verbally covering every item in the checklist, both crewmembers will remain aware of the progress of checks. At the completion of each

checklist, whether performed verbally or silently, the PM will announce that "the (title) checklist is complete and the (title) checklist is next".

There may be times when checklist actions can be more efficiently performed before they are called for or those that can be accomplished in a flow pattern. Some checklist actions must be accomplished from memory when full attention is required by pilots to fly the sUAS. Critical emergency situations often require certain immediate actions to be accomplished without taking time to read from a checklist. Whenever actions are accomplished early or from memory, however, the checklist will be "cleaned up" by verbally completing the entire challenge-and-response sequence. This procedure serves as a double-check on all required actions and ensures that no items were missed.

10.5.6.8 Pilot Incapacitation

Flight crews will use the "two communication" rule as a means of detecting and responding to suspected subtle incapacitation. Any time the PF the aircraft does not respond appropriately to two communications associated with a significant deviation from a standard operating procedure or a standard flight profile, the PM will announce "My sUAS" and assume command of the flight. The PF will immediately relinquish the controls at the call by the PM.

Flight crews must understand the necessity for the communication rules to avoid difficulties in the transfer of command responsibilities, and that compliance is mandatory.

10.5.7 Preflight

10.5.7.1 Flight Crew Reporting Time

It is the responsibility of the DFO to notify specific members of the flight crew via email or telephone when they are required to report on-site prior to a scheduled operation time. All flight crewmembers that are assigned to a research mission must monitor email for 4 hours prior to the scheduled flight operation time. As good practice, the flight crew should report for duty a minimum of one hour prior to the scheduled flight operations time. Payload operators, maintenance and other operations support personnel may be required to report earlier than the one-hour minimum, which will be determined by the DFO.

10.5.7.2 Flight Crew Duties

The DFO/Chief Pilot prior to flight operations will brief the PIC. The PIC is directly responsible for and is the final authority as to the operation of the aircraft as well as the items listed in sections 7.2.3 and 11.2.

The other major responsibilities of the Pilot in Command during operations are as follows:

- Compliance with all CARs, and NPCA policies and regulations.
- The safe and orderly conduct of flight.
- Encouraging and using effective crew resources management in the management of the crew.
- Briefing crewmembers prior to a flight on all aspects of the flight, especially on information in the applicable flight information publications; on departure routes, altitudes, obstructions, weather and turbulence, and air traffic control (ATC) procedures; on normal and emergency communication procedures; and on special instructions or procedures.
- Supervision of crewmembers throughout operations including flight preparation and completion of flight documentation.
- Discussion with crewmembers regarding their duties and responsibilities.
- Monitoring the crew's professional behavior.
- Performing crewmember/passenger safety briefings.
- Communicating to crew members changes in weather, destinations and mission profile.
- Ensuring that maintenance service performed away from home base is coordinated with the Director of Maintenance (DOM). Informing the DOM of any aircraft write-ups.
- Ensuring all required records are maintained properly.

At the discretion of the PIC, the PF occupies the controller for the sUAS and operates the flight profile and maneuvering of the sUAS. The VO is stationed in close proximity to the PF and maintains an unobstructed visual on the sUAS at all times. In certain operation the Payload Operator will control the powering and operation of the sensors on-board the sUAS and may be responsible for commanding the first-person-view (FPV) module for data collection purposes and not to extend flight control.

10.5.7.3 Flight Crew Briefings

10.5.7.3.1 General

Prior to departure, the Pilot in Command is responsible for conducting a crew briefing (including research crew). This briefing may occur before or after completing safety checks and other cabin inspections. Items to be reviewed include but are not limited to the following:

- Take-off time (if appropriate)
- Unusual situations or hazards
- Operation time
- Weather
- Planned research mission profile
- Emergency procedures
- Site characteristics

10.5.7.3.2 Takeoff Briefing

The PF will give a complete take-off briefing prior to the first flight of the day. A typical take-off briefing will include, at a minimum, the following items.

1. Take-off procedures
2. Take-off location
3. Initial clearance: headings and altitudes
4. Operation Plan
5. sUAS and Payload status
6. Abort Procedures
 - a. Emergency procedures
 - b. Initial actions
 - c. Responsibility for checklists and radio calls
 - d. Sector altitudes
 - e. Approach procedure for immediate return
7. Additional information, questions and discussion

The briefing may include additional information depending on weather conditions, the familiarity of the crew, etc. Making reference to the original "standard briefing" and stating any necessary changes due to information specific to the flight may abbreviate subsequent briefings during the flight duty period.

10.5.7.3.3 Abort Briefing

During the Take-Off Briefing, abort procedures will be discussed. "Normal Abort Procedures" will be followed unless the PIC decides to make a change from "Normal Abort Procedures" based on, aircraft performance as determined by weather conditions, structures and people in the area.

The NPCA's "Normal Abort Procedures" are as follows:

- During takeoff - either the PF or the PM shall call "Abort, Abort, Abort" if they detect a condition that threatens the safety of the takeoff, or another aircraft, structure people or vehicle in the area of operation
- It is NPCA policy that the PF shall not question the "Abort" call of another flight crewmember but will immediately, retract the throttles to idle cutoff and safely land the sUAS in a safe area.
- During operation - any adverse flight condition shall be considered an in-flight emergency. The PF shall maintain directional control and hover, if possible, in a safe airspace. The PM will analyze the situation, inform the PF, run the appropriate checklists and contact ATC, if necessary. Specific corrective actions will be completed based upon the nature of the emergency and the state of operations at that specific time.

10.5.7.3.4 Pre-flight Inspections

It is the responsibility of the DM/SM to ensure maintenance inspections are completed as required. The PIC is responsible for ensuring that the aircraft is released for flight by maintenance. The PIC shall check to ensure there are no open write-ups and that there is adequate time available before an inspection is due prior to commencing flight operations.

The PIC will complete an initial exterior preflight equipment observation as specified in the COM and follow the applicable checklists. For subsequent legs of an operation (e.g. after changing a battery), the PF for the next operation leg will complete an abbreviated walk-around check of the aircraft.

The pre-flight inspections and completion of the appropriate checklists should be completed at least 30 minutes before the scheduled operation take-off time.

A complete list of inspections can be found in the checklist in Appendix C of this document. Inspections can include but are not limited to the following:

- The Pilot-in-Command (PIC) shall perform a pre-flight inspection to ensure the sUAS is safe for flight
- The pre-flight checklist shall include at least the following
 - Check of weather conditions and predictions
 - Check of aircraft (manned and unmanned) traffic in the area
 - Check of the area for location of potential obstacles (e.g. power lines, birds, trees, sun glare)
 - Check of battery levels and condition
 - Check of propellers and ground controller
 - Any conditions that may affect the safe operations of the sUAS shall be corrected before flight
- Only fully charged batteries shall be used for the start of the sUAS flight
- The PIC or VO shall record the field altitude, in feet, before flight
- A suitable area for take-off and landing will be identified and marked

10.5.7.4 Battery Life

It is the responsibility of the PIC to ensure the sUAS is properly outfitted with a charged battery adequate for the duration of operations.

10.5.8 Operations

10.5.8.1 Flight Crewmembers at Station

The PIC is responsible for the flight crew complying with company procedures, relevant CARs and specifications as outlined in the SFOC.

10.5.8.2 Weather Considerations

It is the PIC's responsibility to avoid dangerous weather conditions. The PIC will give serious consideration to aborting a mission due to inclement weather and will immediately stop operation should dangerous weather conditions arise during flight. In general, weather will be assessed on a case-by-case basis and at specific intervals leading up to and during flight.

The following weather conditions should be discussed prior to commencing flight operations, other weather events should be assessed as necessary

- Thunderstorms
 - Minimum distance of 25nm must be maintained
 - Flights will not be flown into areas of known thunderstorm activity
- Winds and wind shear
 - Wind shear creates severe hazard for aircraft operating at low altitudes
 - Flying through and in the vicinity of these intense down draughts, which on reaching the surface spread outward from the down flow center in all directions, the best defense is to avoid it altogether as it could be beyond you or your aircraft's capability.
 - Pilots should wait until the phenomena has passed prior to commencing operations
 - If wind shear is encountered, prompt action is required. In all aircraft, the recovery could require full power and pitch attitude consistent with the maximum angle of attack for the aircraft consistent with Flight Training and recommendations.
- Icing and Freezing Precipitation
 - The NPCA sUASs will not takeoff or commence operations in active icing and precipitation conditions
 - If during flight operations icing and precipitation is encountered the PIC will call for an immediate landing of the sUAS in a safe area and will remain grounded until the precipitation and/or icing has passed.
- Turbulence
 - The PIC should include any information about anticipated turbulence in the preflight briefing, using National Weather Service terminology (light chop, light turbulence, moderate chop, moderate turbulence, severe turbulence, and extreme turbulence).
 - Whenever possible, the PIC should advise the flight crew of the anticipated time until turbulence may be encountered and the expected duration. Flights shall not proceed through areas in which turbulence of more than moderate intensity exists unless the flight crew cannot avoid those areas by weather radar references.

10.5.8.3 Sterile Flight Deck

Flight crewmembers may not engage in, nor may any PIC permit, any activity during a critical phase of flight which could distract any flight crewmember from the performance of his duties or which could interfere with the proper conduct of those duties. Activities

such as eating meals, engaging in nonessential conversations and nonessential communications between crewmembers and reading publications or checking cell phones not related to the conduct of the flight are not permitted.

10.5.8.4 Situation Awareness

The PIC is responsible for maintaining situational awareness. Automatic altitude control (hover) shall be used during all phases of flight when in doubt or during phase transitions. The VO is responsible for ensuring the airspace, sUAS position and ground site are devoid of hazards and unnecessary personnel, animals and/or objects during operation.

10.5.8.5 Battery Management Awareness

The PIC is responsible for maintaining situational awareness. The PF shall not begin an operation with a battery below 85% charged and will cease operations immediately when an observed battery life remaining reaches 20%.

10.5.9 Approach and Landing

10.5.9.1 Approach

The PF in conjunction with the VO will ensure the identified landing zone is free and clear of objects, personnel and/or debris prior to commencing landing operations.

10.5.9.2 Requirements for Landing

The PF shall ensure that the sUAS is established on a stabilized approach to landing prior to commencing the landing sequence. When in close proximity to the landing zone the PF shall hover the sUAS and announce "Landing" prior to proceeding with touch down.

Missed Approaches - In the event a missed approach becomes necessary, the PF may initiate the go around at any time, as soon as a safety concern becomes evident. An immediate climb to a safe altitude or horizontal distance is required to prevent injury or damage to equipment and maintain safety to personnel on-site.

10.5.10 Post Flight

10.5.10.1 Flight Records

The PIC is responsible for completing the necessary forms, checklists, flight records and submitting it to the DFO/Chief Pilot.

10.5.10.2 Reporting Discrepancies

The Pilot in Command shall ensure that all mechanical discrepancies are recorded in the sUAS flight log. These discrepancy records will remain with the sUAS until the affected part is repaired or replaced and an entry to that effect is made in the aircraft permanent maintenance records. A repair technician or the designated maintenance officer is responsible for writing any corrective action, then signs and dates the block, and removes any inoperative stickers.

When a discrepancy is discovered during flight, the PIC may continue the flight in accordance with the policies and procedures of the SFOC and the NPCA COM. In the event of an unsafe condition or emergency, the sUAS shall be landed at the nearest suitable landing zone in a timely and safe manner.

10.5.10.3 Incident Reporting

The PIC shall make certain all incidents are completed and reported by and to the appropriate personnel based upon topic and severity. Such incidents include but are not limited to:

- Deviations from flight plan
- Deviations from specifications in SFOC
- Flying out-of-bounds
- Near misses/strikes with aircraft and objects
- Emergency procedures invoked

10.5.10.4 Securing the Aircraft

All crewmembers share responsibility for securing the sUAS and contents during all layovers and preparing for the next flight. The controller will remain in possession of the PIC at all times. In addition, the sUAS will be placed in locked case or vehicle to decrease the chances of inadvertent flight, theft or damage.

10.5.11 Aircraft Equipment

The NPCA sUAS will be maintained in a manner that is consistent with the rules and regulation of Transport Canada and in accordance with manufacturer specification and requirements. When not in use the sUAS will be stored in a locked area to prevent inadvertent damage and/or prevent potential tampering or theft. All aircraft and support flight operations equipment will be stored together and

clearly labeled to allow for ease of asset tracking and to ensure the proper equipment is available for all flight operations. Any lost, damaged or stolen items will be replaced immediately.

10.5.12 Flight and Duty Time Limitations

All aircraft crewmembers are expected to manage their personal time so as to be well rested when they report for work. NPCA pilots and flight crewmembers shall not work when fatigued.

10.5.13 Use of Alcohol and Other Psychoactive Substances

It is extremely important that all persons involved in flight operations not be impaired in any manner. Therefore, Flight Department personnel shall not at any time be under the influence of any psychoactive substance that might in any way limit their ability to perform their duties in a safe and effective manner.

Flight crewmembers and maintenance personnel shall not consume any alcoholic beverage within eight hours and no excessive consumption within 12 hours prior to reporting for duty and shall not use any substances that may impair the person's ability to perform their duties.

10.6 **Emergency Procedures and Equipment**

10.6.1 Emergencies/Contingencies

These procedures are to provide quick-reference in the event of an in-flight emergency during sUAS operations. The PIC and VO should become familiar with these procedures before flight operations begin. These guidelines provide suggestions only. In an actual flight emergency, the PIC should determine the best course of action with the highest priority being the safety of other aircraft and persons on the ground followed by the safety of vehicles, vessels and structures on the ground.

The sUAS PIC will be aware of, and act upon current legislation regarding reporting aviation incidents and accidents. The sUAS Pilot-in-Command will report, as soon as possible, all incidents and accidents to the Transportation Safety Board and/or Transport Canada, as applicable. The sUAS PIC will ground all sUAS and supporting systems after an incident or accident until the Regional Office has approved its further operation.

In all instances the appropriate organizations will be alerted including first responders (e.g. Fire, EMT)

To minimize the likelihood of flight emergencies the flight crew, led by the PIC, and other essential personnel:

- Shall follow the Standard Operating Procedures at all times
- Shall complete a Pre-flight checklist before every flight
- Shall survey the proposed flight area, note obstacles, and identify possible landing areas
- Shall refrain from conversation or dialogue that may distract him/her from flight operations
- Shall maintain and make available to all sUAS flight crew members an emergency procedure checklist for each sUAS system that is being operated (including lost link)
- Shall established pre-planned termination points

10.6.2 Airborne Emergencies

10.6.2.1 *Airborne Emergency Management*

In the event, perceived or real, of an airborne emergency or safety issue/concern flight operations will be halted immediately. The VO will sound an air horn and make a verbal call to "halt" operations either under his/her own direction or at the direction of the PIC. Once the auditory commands have sounded the PIC will hover the aircraft and await specific instructions from the VO as to the necessary remedial action. If operations can continue the air horn will be sounded once again, in combination with a verbal to "resume" and flight operations will begin in a safe and timely manner. If an emergency landing is required, the air horn will be sounded as a "double tap" and "emergency" being verbally announced with emergency landing procedures being executed in a safe and timely manner. All communications will be repeated between the PIC and VO to make certain commands are heard and understood.

Potential emergency situations include, but are not limited to:

- Either pilot or observers observe unusual or abnormal aircraft operation, and normal control cannot be immediately be restored.
 - Action: aircraft will be ditched in the nearest safe clear area away from structures and/or known hazards
- Unanticipated changes within the flight zone (e.g. severe weather, other aircraft, unauthorized personnel)
 - Action: aircraft will be immediately landed in the designated take-off/landing zone, if feasible, or at an established emergency landing zone and the operation aborted

10.6.2.2 Emergency Procedures

Suggested actions for various flight emergencies:

10.6.2.2.1 Landing Procedures

After the double horn sound to signal an emergency landing the VO will:

1. Scan the operation site to determine which emergency landing zone is the closest/safest for landing
2. Determine if the emergency landing zone is clear of objects, debris and suitable for landing
3. Call out to the PIC which emergency landing zone is to be used
4. Provide the PIC with situational awareness commands that provide the safest and most efficient flight path to the emergency landing zone

10.6.2.2.2 Fly-Aways

For the purposes of this document a fly-away is defined as an interruption or loss of the sUAS command and control link where the pilot is unable to affect control of the aircraft and/or where the aircraft is no longer following its preprogrammed procedures resulting in the sUAS not operating in a predictable or programmed manner. Prior to flight operation obtain contact information for appropriate Area Control Centre Shift Manager and nearest controlled aerodrome from the CFS and/or NAVCanada procedures will be replaced by local protocols and procedures should they be available for area of operation.

10.6.2.2.2.1 General Procedure

The NPCA general process and procedures to be adhered to in the event of a fly-away are as follows:

- Warning via air horn and vocally will be issued to people in the immediate area as to the issue.
- Issue will be broadcast to applicable ATS and aircraft in the area via VHF radio to warn them of the issue, location, and last known altitude as appropriate.
- The ATS will be informed by phone if they are unreachable by radio-in accordance with prior arrangements. One or all of the appropriate ATS units will be reached via phone. The ACC shift manager, TMU or the local ATS unit.
- Local emergency agencies will be notified of the issue as appropriate for the location
- Personnel will secure the take-off zone for a potential RTH sequence and start an immediate search for the aircraft
- Upon retrieval of the aircraft, or after the expiration of maximum flight time, a broadcast to ATS and aircraft in the area to give an all clear to the incident
- Appropriate emergency agencies will be informed of the recovery or failed recovery of the aircraft
- The incident will be adequately documented and a report will be made to Transport Canada on the occurrence in a suitable time frame

10.6.2.2.2.2 Vertical fly-aways

1. Contact the Area Control Center Shift Manager for the region as provided by NAV Canada
2. Contact the ATC for the nearest controlled aerodrome as provided by NAV Canada
3. Broadcast via VHF radio on applicable frequencies, if previously coordinated, required and initial attempts by phone fail

10.6.2.2.2.3 Horizontal fly-aways:

1. Contact the ATC for the nearest controlled aerodrome as provided by NAV Canada
2. Contact the nearest aerodrome as per the CFS
3. Contact the Area Control Center Shift Manager for the region as provided by NAV Canada
4. Broadcast via VHF on applicable frequencies if previously coordinated, required and initial attempts by phone fail

10.6.2.2.3 Wind gusts into trees:

- Increase altitude to clear the trees (remain < 400 AGL)
- Maneuver away from other obstacles
- Land the sUAS in an open area if wind gusts make control of the aircraft difficult.

10.6.2.2.4 Loss of communication link

- If possible, allow the sUAS to hover in place and attempt to automatically initiate the Return to Home sequence to return to the original takeoff location
 - Pushing the return-to-home button on the controller
 - Pushing the return-to-home on the control app and visual display device
 - Toggling the S2 switch back and forth at least twice

- If link can be reestablished the Return to Home Sequence can be interrupted to regain control by
 - Toggling the S1 button once
 - Flipping the flight mode button from right to left.

10.6.2.2.5 Loss of VLOS to sUAS

- Release control sticks to hover in place, if VLOS is maintained by VO or can be reestablished quickly
- If VLOS is not expected to be reestablished quickly Initiate the manual RTH sequence by
 - Pushing the return-to-home button on the controller
 - Pushing the return-to-home on the control app and visual display device
 - Toggling the S2 switch back and forth at least twice

10.6.2.2.6 Critically low battery

- The sUAS will initiate the Return to Home sequence automatically and return to the home position and descend
- The throttle stick may remain active during this phase to allow descent control or to avoid new obstacles that were not previously present, if not regain control by:
 - Toggling the S1 button once
 - Flipping the flight mode button from right to left.

10.6.2.2.7 Sudden low ceiling or precipitation

- Land the sUAS at the nearest ground location that doesn't present undue hazard

10.6.2.2.8 Battery Fire:

- Stand back from flames
- Allow the battery to burn out, battery will only burn for a few minutes and then go out
- Use a fire extinguisher to extinguish any fire that spread to nearby terrain, vegetation or structure

10.6.3 Accident – Incident Reporting

If an NPCA sUAS is involved in a reportable aviation occurrence, a report must be filed in a timely manner with the Transportation Safety Board. The owner, operator, pilot-in-command, any crew member of the aircraft or, where the accident or incident involves a loss of separation or a risk of collision, any air traffic controller having direct knowledge of the accident or incident may file the report.

For the purpose of this COM, reportable occurrences are as follows:

1. A person is killed or sustains a serious injury as a result of coming into direct contact with any part of the aircraft, including parts that have become detached from the aircraft, or
2. The aircraft comes into account with a building/structure
3. The aircraft sustains structural failure or damage that adversely affects the aircraft's structural strength, performance or flight characteristics and would normally require major repair or replacement of any affected component, except for
 1. Engine failure or damage, when the damage is limited to the engine, its cowlings or accessories, or
 2. Damage limited to propellers, wing tips, antennae, tires, brakes, fairings or small dents or puncture holes in the aircraft's skin, or
4. The aircraft is missing or inaccessible

The following report will be used in the event it is necessary:

<http://www.tsb.gc.ca/eng/incidents-occurrence/aviation/aviation-r.asp>

If further consultation is required or should questions arise the NPCA crew will use the following numbers and understands that a standby investigator is ready to take our call 24 hours a day, 7 days a week.

- Direct or collect: 819-994-3741
- Toll-free: 1-800-387-3557

10.6.4 Emergency Response Plan

If a non-aviation related emergency were to develop the appropriate local authorities would be contacted by calling 911 which handles all emergency requests in the area.

10.6.5 Emergency Equipment

Before commencing flight operations, the PIC shall ensure that a current fire extinguisher and first-aid kit are within close proximity to the intended Take-Off and landing area. Emergency equipment will also include an air horn, VHF radios and placards that contain contact information for the organizations that should be alerted if/when emergency should occur.

11.0 Training

11.1 General Training Program Requirements

11.1.1 Instructional Staff

Training instructors shall have appropriate relevant expertise in general flight regulations for unmanned vehicles as set forth by Transport Canada and adequate experience operating sUASs.

All instructional personnel shall have background and experience in the following areas:

- Teaching/learning process
- Instructional technique
- Student/instructor relationship
- Training in knowledge and skills related to human performance

11.1.2 Training Conducted on a Contract Basis

All individuals and training schools providing training to the NPCA personnel shall:

- Be conducted in accordance with the NPCA training programs
- Be conducted using any manuals, publications, checklists and other relevant documents used by NPCA
- Be given on the same type and model sUASs and/or approved simulator that is used by NPCA

Training is the responsibility of the DFO and Chief Pilot. He/she shall ensure that any person designated to conduct sUAS flight or simulator training is competent to do so.

11.2 Flight Crew Training

11.2.1 Initial

This training is required for all newly hired persons involved in conducting flight operations as appropriate to their assigned duties. The purpose of the training is to ensure that people have an adequate knowledge of unmanned aerial vehicle operation, the rules, regulations and requirements for unmanned vehicle flight by Transport Canada and the procedures unique to flight operations at the NPCA. The basic framework and focus of training is to comply with the requirements outlined in the NPCA COM, Transport Canada Staff Instruction 623-001 and the knowledge requirements for Pilots of Unmanned Air Vehicle Systems Operating in VLOS – TP15263. The training includes:

1. UAV Ground School Course
 - a. Includes written examination
 - b. Covers all topics found in the most current version of TP 15263E
 - i. UAV Operations and Regulations
 - ii. Pilot Decision Making and Human factors
 - iii. Basic Meteorology
 - iv. Advanced Meteorology
 - v. Weather Services
 - vi. Flight Planning
 - vii. Air Regulations
2. Canadian Restricted Operator Certificate - Aeronautical
3. sUAS Flight Training Course
 - a. Covers all topics, exercises and protocols as set forth in the most current version of the Transport Canada document TP 15395
 - b. Computer simulator training
 - i. Completion of modules based on:
 1. Controller familiarity
 2. Controlled take-off/landing
 3. General and advanced maneuverability
 - c. Hands-on flight practice (non-GPS)
 - i. Recreation of simulation models with small quadcopter
 - ii. Flight is non-GPS aided to learn essential command and control flight skills
 - d. Rotor vs. Fixed Wing vehicles
 - e. Radio Controllers, Components and Characteristics
 - f. Autonomous Flight

- g. Routine Maintenance
- h. Safety Best Practices
 - i. Operational Risks
 - ii. Rules of the Road
- i. Use of Checklists

4. NPCA Company Operation Manual

11.2.2 Currency

Flight crew will be given an annual flight simulator and hands-on training program to ensure that they continue to maintain a high level of competency. The annual training will cover selected items from the training syllabus. The recurrent training program will be conducted so as to ensure that all items are covered over a three-year period.

12.0 Security Procedures

The following security procedures are in place to

- Prevent unauthorized access to company aircraft and facilities
- Prevent the use of company aircraft to commit unlawful acts.
- Prevent accidental damage or harmful modification to the aircraft and its systems by third parties or unauthorized personnel
- Increase the visibility of operations to general public and/or uninvolved bystanders

In an effort to ensure security, company personal shall maintain positive control of all operational equipment. Operational equipment shall be properly stowed and locked while not in use in car or locked case in the field and at the NPCA main office when not in operations.

In addition, all company employees shall be readily identifiable to the public while conducting operations.

13.0 Manuals and Records

All manuals and records shall be kept at a central repository and will be audited and reviewed as necessary. Every person who makes an entry into a technical record shall:

- Make the entry accurately legibly and in a permanent manner
- Enter the person's name and signature
- Date the entry
- When starting a new volume carry over enough entries to ensure an unbroken chronological order

The following documentation will be maintained for each type of sUAS being operated:

- Company Operations Manuals;
- Maintenance manuals/Journey Logs;
- sUAS system flight manuals,
- Aircraft checklists
- Standard Operating Procedures
- sUAS operation and checklist placards that enable pilot operation in accordance with the sUAS System Flight Manual, Pilot Operating Handbook, or other equivalent documentation

sUAS operators will maintain records of their flight operations to include the following:

- Flight records (location, date, times, crew, sUAS type etc)
- Total flight hours accumulated per aircraft as per maintenance requirements
- Pilot(s) flight hours (day, month, year)

14.0 Maintenance

No person shall conduct takeoff in an aircraft that has been subjected to any abnormal occurrence unless the aircraft has been inspected for damage. Where the inspection does not involve disassembly, it may be performed by the PIC

- General
 - Maintenance on the sUAS shall be performed by the manufacturer or identified System Maintainer
 - Airworthiness checks shall be performed prior to every flight operation and after every maintenance activity. Airworthiness includes at a minimum:
 - The sUAS system shall be maintained in accordance with the manufacturer's specified maintenance program and schedule;
 - The requirements of any airworthiness directive (or equivalent) issued by the manufacturer of the sUAS, control station or other ancillary component have been completed;
 - All modifications and repairs to the sUAS system are carried out in accordance with the manufacturer's instructions and that no unapproved modifications have been carried out; and
 - All sUAS system equipment required for safe flight operations is serviceable
 - Maintenance shall be recorded in the sUAS Maintenance Log Book, or similar computer-based technology, and will include date, total flight hours, work that was completed and a signature of the person who completed or inspected the work (if performed by the manufacturer a detailed copy of the invoice or scope of work will be stapled to the maintenance log book)
 - Maintenance or repair that affects the sUAS operation or flight characteristics shall undergo a functional test flight before being returned to service. The PIC of that test flight shall sign the logbook confirming a successful flight test.
 - All equipment installed on any sUAS will be assessed and deemed functional in accordance with the limitations specified for the particular equipment periodically and always prior to flight
- System Maintainers
 - Must be trained on the maintenance of the sUAS system
 - Where the system maintainer is self-taught, a summary of the information and materials used to conduct the self-teaching will be provided and kept on file



SAFETY MANAGEMENT REPORT

ISSUE #

DD/MM/YYYY

REPORTED OCCURRENCE OR PROCEDURE.
PERCEIVED VULNERABILITY.
OBSERVATIONS.
LOCATION

CHANGE HISTORY

Issue	Date	Author	Notes

ACKNOWLEDGEMENT

SMR Acknowledgement Chain

Acknowledged by:

Print Name
(Director of Flight Operations)
Acknowledged by:

Signature

Date

Print Name
(Pilot-in-Command)
Acknowledged by:

Signature

Date

Print Name
(Reporting Party)

Signature

Date

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3.0 Safety Management.....	54
3.1 Hazard Identification.....	54
3.2 Other Safety Management Activities	54
3.3 Conclusion.....	54

1.0 Introduction

1.1 Purpose

The introductory paragraph shall include the purpose of the SMR. The reporter should consider all background information and observations material to the report and include such detail. The SMR would include the steps taken to ensure or attempt to ensure that safety was maintained, the results of those activities and the reasons why the activities were successful or unsuccessful in maintaining safety.

1.2 System Scale

The scope section should describe the desired change in detail. The proposal must be readily understood by all stakeholders. In an effort to facilitate the desired level of understanding, the SMR must encompass as complete a description as possible, including but not limited to such topics as procedures, training and manuals. All affected aspects of NPCA and its affiliates or suppliers should be informed of possible changes to past practices.

Internal Stakeholder	External Stakeholder

Table 1 List of the internal and external stakeholders involved in the safety management process

1.3 Reference Documents

Applicable reference documents might include the Company Operations Manual, Check Lists, Insurance documentation or even manufacturer supplied Flight Manuals. Any reference documents should be listed with revision number and effective date.

2.0 Change Definition

The change definition should encompass a characterization of how the system will be changed. Listing factors logically will assist in ensuring a categorical safety enhancement. The SMR should consider factors in relation to the individual, the interaction between individuals, the equipment in use, task analysis, and the operating environment. All affected parties should be subjected to this test. A description of the negative influence any or all of these factors incurs, provides context for the ensuing SMP.

3.0 Safety Management

3.1 Hazard Identification

Describe the hazard identified and associated threats. This description should be an overview of the weakness and the perceived risks. An attempt to identify any limitations to the assumptions made in proposing the system change should be made.

3.2 Other Safety Management Activities

Provide a chain of custody description for the SMR. Name the SMR author if available, and all subsequent recipients.

3.3 Conclusion

The conclusion should summarize the proposed system change. Any further recommendations may be included.



SAFETY MANAGEMENT PLAN

ISSUE ~ #

DD/MM/YYYY

REPORTED OCCURRENCE OR PROCEDURE.
PERCEIVED VULNERABILITY.
OBSERVATIONS.
LOCATION

CHANGE HISTORY

Issue	Date	Author	Notes

ACKNOWLEDGEMENT

SMP Acknowledgement Chain

Acknowledged by:

 Print Name
 (Director of Flight Operations)
 Acknowledged by:

 Signature

 Date

 Print Name
 (Pilot-in-Command)
 Acknowledged by:

 Signature

 Date

 Print Name
 (Reporting Party)

 Signature

 Date

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 3.2 Other Safety Management Activities 61

 3.3 Conclusion..... 61

1.0 Introduction

1.1 Purpose

The introductory paragraph shall include the purpose of the SMP. The plan should consider all background information and observations material in the preceding SMR, and therefore include such detail. The SMP should document the outcome following the associated SMR, the explained system changes and reasons why the activities were successful or unsuccessful in improving safety.

1.2 System Scale

The scale section should describe the desired change and expected results in great detail. All stakeholders must readily understand the proposal. In an effort to facilitate the desired level of understanding, the SMP must encompass as complete a description as possible, including but not limited to such topics as procedures, training and manuals. Part of this description should address which agencies undertook what activities and the results. All affected aspects of NPCA and its affiliates or suppliers should be informed of possible changes to past practices.

Internal Stakeholder	External Stakeholder

Table 1 List of internal and external stakeholders involved in the safety management process

1.3 Reference Documents

Applicable reference documents might include the Company Operations Manual, Check Lists, Insurance documentation or even manufacturer supplied Flight Manuals. Any reference documents should be listed with revision number and effective date.

2.0 Change Definition

The change definition should encompass a characterization of how the system has been changed. Listing factors logically will assist in ensuring a categorical safety enhancement. The SMP should consider factors in relation to the individual, the interaction between individuals, the equipment in use, task analysis, SOPs and the operating environment. A detailed analysis of how all parties were affected should be subject to the previous list. Include a description of the negative influence of any of the implemented system changes.

3.0 Safety Management

3.1 Hazard Identification

Describe the original hazard identified and associated threats. This description should be an overview of the weakness and the perceived risks. Explain the mitigation process engaged and any unanticipated resultant hazards.

3.2 Other Safety Management Activities

Provide a chain of custody description for the SMR and associated SMP. Name the SMR author if available, and all subsequent recipients.

3.3 Conclusion

The conclusion should summarize the proposed system change. Any further recommendations may be included.

Appendix C. Operation Checklist



PAGE 1 OF 2

LOCATION: _____
UAV FLIGHT HOURS START: _____
UAV FLIGHT HOURS END: _____
UAV HOURS TO MAINTENANCE: _____

- ☐ Non-commercial
- ☐ NOTAM Filed
- ☐ Flight Operation form submitted to NAVCANADA
- ☐ Contact Flight Information Region Shift Manager

AREA CHECKS

- ☐ Record Date and Time: Su M T W Th F S _____, 20____ at _____
- ☐ Record class of airspace from VNC, VTA or vfrmap.com: Class: _____ (no operations in Class A, B)
- ☐ Note the proximity of the nearest aerodrome(s) from VNC or vfrmap.com: _____ nautical miles
- ☐ Visually survey the flight area, note any obstructions that could be hazardous during flight:
 - | | | |
|------------------------------------|---|--|
| <input type="radio"/> Trees | <input type="radio"/> Low Clouds | <input type="radio"/> Cell Towers |
| <input type="radio"/> Power Lines | <input type="radio"/> Flags / Light Posts | <input type="radio"/> High Voltage Lines |
| <input type="radio"/> Birds | <input type="radio"/> Sun Glare | <input type="radio"/> Wind turbines |
| <input type="radio"/> Other: _____ | | |
- ☐ Check current weather conditions, visually and via radar, to confirm that no adverse weather is imminent and they match expected forecast.
- ☐ Record current weather conditions to best estimate:
 - Rain in area? YES or NO
 - Current temperature = _____ F/C (must be between 20° F and 95° F)
 - Current wind conditions = _____ mph/kph (must not exceed 20 mph)
 - Current wind gusts = _____ mph/kph (must not exceed 25 mph)
 - Current visibility = _____ statute miles (per airspace class/min 2 statute miles)
- ☐ Confirm that no other UAVs are flying in the area
- ☐ Is area densely populated, or an area over an open-air assembly of persons? YES or NO (operations cease, if yes)
- ☐ Complete SFOC specific checks – consult documentation, if necessary
- ☐ Delineate and mark primary take-off and landing zone
- ☐ Delineate and mark emergency landing zones
- ☐ Deploy warning signs, if required

PRE-FLIGHT BRIEF

- ☐ Review operations plan, security and emergency procedures
- ☐ Review obstructions or hazards in the area
- ☐ Review active and future weather
- ☐ Set clear roles, responsibilities and expectations of flight crew
- ☐ Report any other pertinent information about the UAV, flight crew personnel or operations scenario

sUAS CHECKS

- ☐ Place UAV on take-off zone, ensure spot is flat and level with battery facing PIC
- ☐ Inspect battery for signs of damage or leakage. Is battery considered satisfactory for flight? YES or NO
- ☐ Check UAV battery level – do not use if less than 4 bars (88% charge). Number of bars = _____
- ☐ Verify that the flight battery is correctly installed
- ☐ Place display device in Remote Control clamp or final location for flight – connect command and control cable
- ☐ Ensure transmit antennas are oriented toward the sky and not obstructed by phone or other objects
- ☐ Remove gimbal clamp from UAV
- ☐ Inspect the vibration dampers for cracks or splits
- ☐ Verify that the micro SD card has been properly installed into memory slot
- ☐ Inspect all four propellers to look for signs of damage (e.g. cracks, chips, etc) that could jeopardize flight

POWERING UP

- ☐ Power on Remote Control – listen for audible confirmation signal
- ☐ Power up the UAV - listen for audible confirmation signal
- ☐ Check gimbal for proper operation: Rotate UAV and ensure gimbal remain steady

CALIBRATIONS

- ☐ Ensure the UAV is placed on level ground away from metal objects or power lines
- ☐ Quickly switch flight mode lever from left to right a total of 5-7 times. This enters in compass calibration mode. LED flight indicator light should turn solid yellow to indicate ready for calibration.
- ☐ Rotate UAV around the gravity vector 360° for horizontal calibration. LED flight indicator light should then turn solid green to indicate ready for start of vertical calibration
- ☐ Keeping the nose pointed along the gravity vector, rotate the UAV 360 °degrees around the gravity vector
- ☐ LED flight indicator light should return to normal operation to indicate successful calibration

CONNECTING AND TELEMETRY

- ☐ Run the DJI Go 4 application on the flight control viewing device, confirm a good link has been established (green indicator)
- ☐ Verify:
 - Wifi signal intensity: _____ (≥3 bars)
 - GPS satellite locks: _____
 - Flight battery level: _____ (≥ 85%)
 - Remaining flight control viewing device battery: _____ (≥ 85%)
- ☐ Verify system hardware operating status normal (i.e. Compass, IMU, ESC, Vision Sensors, Gimbal)
- ☐ Confirm home point set (rear LED indicators slow flashing green)
- ☐ Start flight control application if not DJI Go 4(e.g. DJI GS, Pix4D Capture, Litchi)

STARTING MOTORS

- ☐ Announce “CLEAR!” and make sure no one is within 5 ft of UAV before it is powered up
- ☐ Push both sticks to lower inside corner to start the motors for flight (manual) initiate flight button in application (auto)
- ☐ Confirm all 4 props are spinning smoothly and at approximately the same rotational speed
- ☐ Is UAV deemed safe for flight by PIC? YES or NO (operations cease if “no”)
- ☐ Record colour of flashing lights: Green (w/GPS) or Yellow (no GPS)

END OF FLIGHT

- ☐ Land UAV and lower left stick to stop motors immediately after touchdown
- ☐ Turn off power on UAV
- ☐ Turn off power to remote control and range extender
- ☐ Place gimbal clamp lock back onto camera
- ☐ Check propellers and aircraft for damage
- ☐ Record time that motors were turned off on UAV
- ☐ Record maximum height during operation: feet AGL
- ☐ Secure the UAV in a case, vehicle or structure

POST FLIGHT BRIEF

- ☐ Discuss issues encountered during operations
- ☐ Develop root cause analysis for issues and initiate lesson learned process

Mission Logs

	Checklist completed	Rotors On	Rotors Off	Flight Type	Altitude	Issues
Flight 1	YES / NO	_____	_____	_____	_____	YES / NO
Flight 2	YES / NO	_____	_____	_____	_____	YES / NO
Flight 3	YES / NO	_____	_____	_____	_____	YES / NO
Flight 4	YES / NO	_____	_____	_____	_____	YES / NO
Flight 5	YES / NO	_____	_____	_____	_____	YES / NO
Flight 6	YES / NO	_____	_____	_____	_____	YES / NO
Flight 7	YES / NO	_____	_____	_____	_____	YES / NO
Flight 8	YES / NO	_____	_____	_____	_____	YES / NO
Flight 9	YES / NO	_____	_____	_____	_____	YES / NO
Flight 10	YES / NO	_____	_____	_____	_____	YES / NO

PILOT IN COMMAND: _____

VISUAL OBSERVER: _____

Appendix D. User Manuals

DJI Phantom 3 User Manual

DJI Phantom 4 User Manual

DJI Matric 210 User Manual

(attached as separate documents)

Report To: Board of Directors

Subject: NPCA Workplace Harassment Policy

Report No: FA-67-19

Date: June 19, 2019

Recommendation:

1. That Report No. FA-67-19 RE: NPCA Workplace Harassment Policy **BE APPROVED**.
2. That the existing Workplace Harassment Policy dated September 16, 2016 be **REPEALED** and **REPLACED** with the NPCA Workplace Harassment Policy attached hereto as Appendix 1.

Purpose:

The purpose of this report is to seek Board approval for the updated NPCA Workplace Harassment Policy, which provides clarity on complaint procedures as they relate to Workplace Harassment.

Background:

In September 2016, NPCA updated its Harassment Policy and trained all staff. Based on recommendations within the Auditor General of Ontario's Special Audit of the NPCA, in February 2019, amendments were made to the Policy clarifying reporting and investigator guidelines and in April 2019, the Joint Occupational Health & Safety Committee reviewed and endorsed the updated Workplace Harassment Policy.

Discussion:

Further updates to the NPCA Workplace Harassment Policy are outlined in Appendix 1.

Financial Implications:

There are no financial implications associated with this report.

Related Reports and Appendices:

Appendix 1: NPCA Workplace Harassment Policy

Authored by:

Misti Ferrusi, CHRL
Human Resources Manager

Submitted by:

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

Appendix 1: NPCA Workplace Harassment Policy

Workplace Harassment			3-6
Developed by:	Human Resources		
Policy Applies To:	All Employees/Board Members/Volunteers		
Date Created:	Sept 16, 2016	Approved By:	
Version #:	2016-2	Last Review Date:	June 2019

PURPOSE:

It is the policy of the Niagara Peninsula Conservation Authority to prevent and resolve any employment-related incidents of harassment. Every reasonable effort shall be made to ensure that no employee/board member or volunteer is subjected to any form of harassment. The Conservation Authority also endorses that all employees have the right to be treated fairly in the workplace in an environment totally free of harassment. This includes harassment from other NPCA employees, customers, clients, board and committee members as well as members of the public.

This policy applies to all employees, students, volunteers and board members working with the NPCA.

For the purposes of this policy, harassment can occur:

- At the workplace, which includes any location where the business of the Conservation Authority is being conducted including vehicles, project sites etc.
- At employment-related social functions
- During work-related travel
- Over the telephone, if the conversation is work-related
- Elsewhere, if the person is there as a result of work-related responsibilities or a work-related relationship

3-6.1: Definitions

Discrimination means unfair or differential treatment of an individual or group, whether intentional or unintentional, on the basis of one or more of the prohibited grounds contained in the Ontario Human Rights Code.

Workplace Sexual Harassment is defined by the OHSA as:

- Engaging in a course of vexatious comment or conduct against a worker in a workplace because of sex, sexual orientation, gender identity or gender expression, where the course of comment or conduct is known or ought reasonably to be known to be unwelcome;

- Making a sexual solicitation or advance where the person making the solicitation or advance is in a position to confer, grant or deny a benefit or advancement to the worker and the person knows or ought reasonably to know that the solicitation or advance is unwelcome.

Workplace Harassment is defined by the OHSA as:

- Engaging in a course of vexatious comment or conduct against a worker in a workplace that is known or ought reasonably to be known to be unwelcome

Workplace Harassment behaviour does not include:

- Expressing differences of opinion in a civil and respectful manner
- Offering constructive feedback, guidance, or advice about work-related behaviour
- Action taken by an employer or supervisor relating to the management and direction of workers, or the place of employment (e.g. managing a worker's performance, taking disciplinary action, assigning work)

This policy has been developed to address harassment in the Niagara Peninsula Conservation Authority workplace. This policy does not affect an individual's right to access other avenues available under the Ontario Human Rights Code or any other law. Questions regarding the Ontario Human Rights Code should be directed to the Ontario Human Rights Commission.

Where staff are unsure about how to address a particular situation, they are reminded that they can contact their supervisor, the Conservation Authority's Joint Health and Safety Committee, a Union Representative, if applicable and/or the Employee Assistance Program provider. The Employee Assistance Program provides an opportunity to discuss, in a fully confidential forum, concerns and issues, and make suggestions for consideration.

3-6.2: Procedure Guidelines

Role of Supervisor

- Ensure that the right of freedom from harassment for all employees is respected;
- Ensure employees are fully aware of the policy;
- Make every effort to prevent any form of behaviour which may be construed as harassment;
- Investigate promptly and take the appropriate corrective action should they become aware of such behaviour;
- Recommend the imposition of preventive and corrective measures upon the offenders in accordance with the seriousness of the misconduct and the applicable disciplinary policy;
- Co-operate in the investigation and in the implementation of any remedial action undertaken by the employer.

Role of Complainant

- Notify offender that the behaviour is considered an affront and will not be tolerated.
- Keep a written record of:
 - Dates
 - Times
 - Places
 - Nature of behavior
 - Witnesses, if any

- *If the offensive behaviour continues, make a report to the appropriate party as defined in the chart below.*

3-8.3: Reporting Harassment

Managers, supervisors, workers, board members and volunteers are expected to adhere to this policy and will be held responsible by the employer for not following it. Individuals are not to be penalized or disciplined for reporting an incident or for participating in an investigation involving workplace harassment.

Upon becoming aware of any incident which may fall under the definition of harassment or discrimination, nothing precludes the NPCA from determining whether it is necessary to take appropriate action even if the complainant does not wish the matter to proceed.

Complaints that are deemed frivolous, vexatious or not made in good faith will not be investigated. This includes complaints that are:

- Lacking in reasonable purpose
- Made with the intent to harass or annoy
- Made with the intent to deceive or mislead
- Made with an improper use or ulterior motive.

After an employee has attempted to deal with a matter directly with the alleged offender and has not been successful, or if the employee is not reasonably comfortable dealing directly with the matter, the employee shall report the incident in accordance with the chart below. Complaints may also be facilitated through a union representative where applicable, who will assist in making the complaint known to the appropriate party.

Respondent to the Complaint	Party Responsible to Receive the Complaint	Lead Investigator
Board Member	The CAO and/or Human Resources	External investigator
CAO	Human Resources who will contact Board Chair	External investigator
Human Resources	CAO	External investigator
Directors	Human Resources	Human Resources
Managers, Supervisors and other Non-Union Employees	Direct Manager who will advise department Director and Human Resources	Human Resources
Unionized Employees	Direct Manager who will advise department Director and Human Resources	Human Resources
Customer/Venue/Public/Others	Direct Manager who will advise department Director and Human Resources	Human Resources

In the case of a board member reporting a harassment complaint; in accordance with NPCA Administrative by-law #1, all complaints shall be reported to the Board Chair or if unavailable or the alleged offender is the Board Chair, to the Board Vice-Chair. The Chair/Vice-Chair will then liaise with the appropriate staff member (CAO, or in the case the CAO is the alleged offender; HR) to coordinate further procedures in accordance with this policy.

3-8.4: Informal Investigation/Resolution

Prior to launching an investigation process, the employer will attempt to proceed with an informal resolution with the intent of stopping the alleged behaviour and/or preventing further incidents from occurring. If a resolution is not possible or successful, or if the nature of the complaint warrants it, the investigation procedure as outlined in 3-8.5 shall proceed.

3-8.5: Investigation Process

Steps in the investigation of a complaint shall include the following procedure and be conducted in a fair and timely manner.

- Interview the complainant;
- Interview the alleged offender;
- Interview any witnesses;
- Document the situation accurately and completely;
- Decide if the complainant has grounds;
- Following the most appropriate process to resolve the complaint which may include one or more of the following measures;
 - Counseling one or both parties to attempt to conciliate and arrive at a solution to the problem;
 - Review the complaint with next level of supervisor;
- Follow up to ensure corrective action is taken;
- Prepare a summary report upon completion of the investigation.

The investigator shall be appointed by Human Resources and/or the CAO. The investigator may be an internal employee or an external third party.

3-8.6: Corrective Action

If an investigation determines that harassment or discrimination has occurred, disciplinary action may be taken. Consideration will be given to the nature and impact of the violations and may include, but not limited to:

- Requiring educational programs or counseling for the respondent
- Verbal or Written reprimand
- Suspension (with or without pay)
- Dismissal (with or without notice)

Where a complaint of harassment or discrimination is substantiated, there will be a formal record of the action taken in the respondent's personnel file.

Upon completion of the investigation, Niagara Peninsula Conservation Authority will inform both the complainant and respondent in writing a summary of the findings of the investigation and any corrective action that has been or will be taken as a result of the investigation.

3-8.7: Confidentiality

Complaints shall be conscientiously investigated and will be processed in a confidential manner. The name of a complainant and the circumstances related to the complaint will not be disclosed except to the alleged offender and where disclosure is necessary for the purposes of investigating the complaint, taking disciplinary measures, or is otherwise required by law.

The employer will keep records of the investigation for five (5) years following the conclusion of the investigation including:

- A copy of the complaint or details about the incident
- A record of the investigation
- A copy of the investigation report
- A summary of the results of the investigation that was provided to the complainant and respondent
- A copy of any corrective action taken to address the complaint or incident.

Report To: Board of Directors

Subject: NPCA Recruitment and Selection Policy

Report No: FA-68-19

Date: June 19, 2019

Recommendation:

1. That Report No. FA-68-19 RE: NPCA Recruitment and Selection Policy **BE APPROVED**.
2. That the Recruitment Policy dated May 16, 2016 **BE REPEALED AND REPLACED** with the NPCA Recruitment & Selection Policy attached hereto as Appendix 1.

Purpose:

The purpose of this Report is to seek the Board's approval of the updated NPCA Recruitment Policy to ensure a consistent, diverse and objective hiring process.

Background:

In April 2016, the NPCA updated its recruitment policy. Based on recommendations within the Auditor General of Ontario's Special Audit of the NPCA, in May 2019, amendments were made to the policy documenting our recruitment and selection procedures to be followed to ensure a consistent process including documentation and support for hiring decisions. The policy was also updated to assist in identifying and eliminating situations of real or perceived conflict of interest.

Discussion:

The updated NPCA Recruitment and Selection Policy is outlined in Appendix 1.

Financial Implications:

There are no financial implications associated with this Report

Related Reports and Appendices:

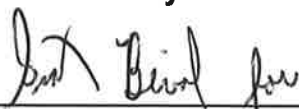
Appendix 1– NPCA Recruitment and Selection Policy

Authored by:



Misti Ferrusi, CHRL
Human Resources Manager

Submitted by:



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

Recruitment & Selection			1-4
Developed by:	Human Resources		
Policy Applies To:	All Employees		
Date Created:	April 13, 2016	Approved By:	CAO
Version #:	2016-3	Last Review Date:	May 2019

PURPOSE:

Ensuring a consistent, diverse and objective hiring process that is non-discriminatory in nature, and compliant with the Employment Standards Act, Human Rights Code, Occupational Health & Safety, Accessibility for Ontarians with Disability Act as well as any other related legislation ensuring equal employment opportunities.

1-4.1: General Recruitment & Selection Practices

The NPCA is committed to recruiting and selecting individuals who are the most qualified to perform the requirements of each position available. Candidates may be from existing staff or from outside sources. Any recruitment for bargaining unit positions will be as described in the Collective Agreement between the NPCA and OPSEU – Local 212.

The NPCA does not condone or tolerate discrimination on the basis of citizenship, race, place of origin, ethnic origin, colour, ancestry, disability, age, creed, sex, gender identity, gender expression, family status, marital status, sexual orientation, or record of offence.

The appointment of the Chief Administrative Officer shall be subject to the approval of the Board of Directors.

The appointment of all other employees shall be subject to the approval of the Chief Administrative Officer or his/her designate.

Any posted vacant permanent positions will be evaluated by a Hiring Committee recommend by the Hiring Manager and consisting of a minimum of:

- Hiring Manager (direct supervisor)
- Human Resources representative

**In the event the Human Resources representative is unavailable, and the position is time sensitive, the HR representative can be replaced by another management team member with approval of the CAO*

1-4.2: Employment of Relatives

The NPCA will not favour nor prohibit the hiring of relatives. All candidates will be given equal opportunity for employment based on qualifications, skills and work experience regardless of relationship to either an employee or appointed official.

It is the responsibility of the employees and/or candidates to declare any current employee relationships. Relatives of current employees may be employed, provided that no immediate family members* are employed within the same division**.

1-4.3: Conflicts of Interest

If a member of the hiring committee determines that they are related to a candidate for employment, they shall immediately notify Human Resources and shall not be involved in any aspect of the recruitment process. In any situation where an individual may derive personal benefits, whether direct or indirect, from their involvement in the recruitment and selection process, they shall immediately notify Human Resources and shall not be involved in any aspect of the recruitment and selection process. This does not limit involvement if a member of the hiring committee is acquaintances with, has worked with prior (either directly or indirectly), or has had other professional or personal dealings with a candidate for employment, provided the hiring of the such candidate would not generate a personal benefit or perceived personal benefit for the hiring committee member.

Examples of conflicts of interest:

- Family or friendship relationship with an applicant
- Close working relationship with an (external) applicant
- Financial or political interests (either in relation to an applicant or the outcome)
- An acrimonious relationship with an applicant

If at any time during the recruitment and selection process, a hiring committee member becomes aware of a conflict or perceived conflict of interest, they are obligated to report the conflict to human resources. Human Resources, in consultation with the hiring manager and/or CAO shall make any necessary adjustments to the recruitment and selection process while still ensuring the integrity of the process and policy is followed.

1-4.4: Postings

Any vacant positions may be filled temporarily in an Acting capacity by an employee appointed at the discretion of the CAO, however any permanent positions shall be posted either internally or both internally and externally for a minimum of five (5) business days.

All externally posted vacancies shall be advertised on the NPCA website, Conservation Ontario website and any other sources deemed appropriate by Human Resources in consultation with the Hiring Manager and with consideration to the budget requirements.

1-4.5: Application Process

All candidates are required to submit an application form (if applicable) and a current resume in application of any job posting prior to the posted deadline. The NPCA will review all submissions received before the closing date and time.

1-4.6: Screening Process

The screening process will consist of the following steps:

- 1) Pre-Screening
- 2) Interview

Pre-Screening

Pre-screening shall be completed by Human Resources in consultation with the Hiring Manager. All candidates will initially be screened for the minimum education and the main experience component of the position as per the current job description. At the discretion of the Hiring Manager, additional qualifications as outlined in the job description may be evaluated as part of the pre-screening process.

All candidates that meet the pre-screening requirements will be short-listed for review by the hiring committee. In the event of an excessive number of applications meeting the pre-screening requirements, the hiring committee may request to view a reasonable number of the highest ranked candidates.

The hiring committee shall review all successfully pre-screened applications making recommendations to the hiring manager on the top candidates, considering the required and preferred qualifications for the position as per the current job description.

Interview

Candidate interviews will be conducted by the Hiring Committee and each candidate granted an interview will be asked the same set of interview questions and provided with the same organizational information. Each member of the hiring committee will take notes during the interview process documenting the candidate's answers.

Interview questions will be generated by Human Resources in consultation with the Hiring Manager to assess knowledge, skills, competencies and fit as they relate to the position and the organization. All interview questions will ensure legal compliance and be free from discrimination.

1-4.7: Selection Process

Prior to any interviews occurring, Human Resources and the Hiring Manager will apply weighting to each of the interview questions based on their importance within the role.

At the conclusion of the interview process, each hiring committee member will independently score each interviewed candidate on each question. All documents will be returned to Human Resources, who will average all committee member scores and apply the question weightings. The candidate with the highest score shall be deemed the successful candidate.

In the event 2 or more candidates score relatively the same on the interview process, the hiring manager and human resources shall meet to discuss any additional information that would assist in determining the best candidate which may include a second interview, employment assessments or reference checks on all candidates to determine the successful applicant.

Reference Checks

Reference checks, if deemed necessary, will be completed by Human Resources and shall be conducted only for candidates who have been selected through the selection process as described in section 1-4.5. All questions shall pertain to the candidate's knowledge, skills, abilities and competencies and will not pertain to any prohibited ground.

All recruitment and selection files shall be returned to Human Resources. Human Resources shall keep all files in a secure location in accordance with the NPCA Records Retention Policy.

1-4.8: Offers of Employment

The hiring manager shall take the input from all committee members as well as any of the selection tools used in recommending the successful candidate to human resources. Human Resources shall compile all relevant information and provide the recommendation to the CAO for approval.

Once approved, human resources will notify the hiring manager and generate an offer letter. Once the successful applicant has been offered and accepted the position, any candidates that received an interview but were not selected shall receive notification from Human Resources of the closure of the position.

1-4.9: Accommodation

The NPCA will provide accommodation for a disability in all employment activities. If an applicant requires accommodation, they may contact Human Resources.

**Immediate family members are defined as spouse, mother, father, child, sister, brother, legal guardian, mother-in-law or father-in-law;*

***Exception: seasonal park staff may be employed within the same division as immediate family members, provided they are employed in different locations and there is no direct reporting relationship.*

Report To: Board of Directors

Subject: Annual Work Plan – June-December, 2019

Report No: FA-72-19

Date: June 19, 2019

Recommendation:

That Report No. FA-72-19 RE: Annual Work Plan – June-December, 2019 **BE RECEIVED** and **APPROVED**.

Purpose:

The purpose of this Report is to apprise the Board of the anticipated timelines and priority initiatives of NPCA departments for the remainder of the 2019 calendar year.

Background:

The annual work plan is based on the NPCA Strategic Plan, recommendations identified in the Special Audit of the Niagara Peninsula Conservation Authority and responsibilities otherwise prescribed by the Conservation Authorities Act and provincial regulations.

Discussion:

Annual work plans are a fundamental component of the business planning process. Staff will draft its 2020 work plan throughout the fall of 2019 and present a final plan for Board approval by the end of this year.

Financial Implications:

Funding for initiatives and activities as identified in Appendix 1 were approved in the 2019 budget. No new funding allocations are anticipated or required as a result of the activities identified therein.

Related Reports and Appendices:

Appendix 1: Annual Work Plan

Authored by:



Grant Bivol
Interim Clerk

Submitted by:



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

ANNUAL WORK PLAN

DEPARTMENT: Office of the CAO / Secretary -Treasurer				YEAR: June – Dec. 2019
AREA OF STRATEGIC FOCUS:				
Governance and Leadership (CAO / Secretary -Treasurer)				
OBJECTIVES:				
<ul style="list-style-type: none"> • Work with the NPCA Staff Team to ensure effective, efficient customer driven services • Establish Working Relationships with the Chair, Vice Chair and Board of Directors • Enhance Working Relationship with Municipalities/MPP's • Improve Community and Media Relations • Respond to the Auditor General's Report on the NPCA 				
OUTCOMES:				
TASK	DATE TBC	LEADER	COST/RESOURCES	EVALUATION
CAO / Secretary -Treasurer				
NPCA Staff Team Development				
A. Meet individually with all staff to discuss their programs in relation to the organizational realignment.	Q2	CAO	Staff participation	Feedback from staff Report to the Board Fulfillment of AG Recommendations
B. Conduct regular Executive Management and Management Team meetings.	Q2 Q3 Q4	CAO	Executive Team Management Team	2 Performance Feedback Surveys from team members
C. Introduce a CAO newsletter.	Q3	CAO	Input from Communications	Feedback from staff
D. Hold monthly staff meetings.	Q2 Q3 Q4	CAO	All staff involvement	Verbal, email and unanimous feedback from staff

ANNUAL WORK PLAN

TASK	DATE TBC	LEADER	COST/RESOURCES	EVALUATION
Board of Directors				
E. Establish communication protocols with Chair, Vice Chair and Board.	Q2 Q3 Q4	CAO	Input from Communications	Feedback from Board Q4 Board Survey in response to recommendations from the AG
F. Introduce a one-page Board Meeting Highlights for the Board Members and their municipalities.	Q3	CAO	Input from Communications	Feedback from board members and municipalities
G. Complete Board Orientation for new Board Members	Q2 Q3 Q4	Clerk /CAO	CAO Communications staff	Feedback from new Board Members
Work with Municipalities and MPPs				
H. Establish contacts with all municipal CAO's to discuss priorities and concerns.	Q2 Q3 Q4	CAO	None	Meetings with municipalities, as required Attendance at CAO roundtable meetings
I. Present 2020 Budget Submissions to municipal staff and Councils	Q2 Q3 Q4	CAO	Director, Corporate Services Staff Directors Communications	Successful budget negotiations Feedback from municipal Commissioners of Finance on new NPCA budget process
J. Attend Council meetings as requested.	Ongoing	CAO	Communications support for presentations	Feedback from board members and public regarding presentations

ANNUAL WORK PLAN

TASK	DATE TBC	LEADER	COST/RESOURCES	EVALUATION
K. Contact MPP's for meetings to discuss current priorities and proposed provincial legislative changes.	Q2 Q3 Q4	CAO	Conservation Ontario messaging Communications support for presentations	Feedback from MPP's
Community and Media Relations				
L. Identify community groups and attend meetings and establish partnerships.	Ongoing	CAO		Feedback from community groups
M. Continue a periodic "CAO Meet and Greet" with the Community in advance of Board meetings.	Ongoing	CAO	Communications	Community feedback
N. Engage and respond to media – TV, radio and print regarding NPCA	Ongoing	CAO	Communications	Monthly reporting to Board regarding media coverage
Response to the Auditor General				
O. Initial meeting with the Auditor General	Q2	CAO Board of Directors	Executive Management Team	Response from the Board and AG regarding progress on recommendations
P. Monthly Updates to Board	Q2 Q3 Q4	CAO	Executive Management Team	Successful completion of recommendations contained in the AG report

ANNUAL WORK PLAN

DEPARTMENT: Office of the CAO / Secretary -Treasurer				YEAR: June – Dec. 2019
AREA OF STRATEGIC FOCUS:				
Governance and Leadership (Clerk to the Authority / Executive Co-ordinator to the C.A.O. and Board)				
OBJECTIVES:				
<ul style="list-style-type: none"> • Implement systems, processes and procedures to streamline, modernize and make administrative functions more effective and efficient • Provide a structure and processes that reflect standard public sector board governance model for both meetings and other functions • Update Records Retention Schedule and ensure corporate records are maintained and updated • Provide administrative support and co-ordination to the CAO and Board with emphasis on the secretariat functions for the organization • Ensure administrative functions of the organization comply with relevant legislation 				
OUTCOMES:				
TASK	DATE TBC	LEADER	COST/RESOURCES	EVALUATION
Clerk to the Authority / Executive Co-ordinator to the C.A.O. and Board				
A. Implement a meeting management system (SharePoint Site).	Q4	Clerk	Requires support and resources from Information Management and Technology Systems and Administrative Assistant	Feedback from staff

ANNUAL WORK PLAN

TASK	DATE TBC	LEADER	COST/RESOURCES	EVALUATION
B. Organize corporate records, digitize and investigate. Implementation of an electronic records management system.	Ongoing throughout 2019 and beyond	Clerk	To be undertaken in conjunction with Information Management and Technology Systems; costs as of yet undetermined; will require additional Staff Resources	Report to the Board regarding purchase of a new system
C. Assume FOI Co-ordinator role.	Q3	Clerk	None	Report to the Board approved
D. Privacy compliance review	Q4 and 2020	Clerk	Corporate wide participation required	Report to the Board approved
E. Re-integrate administrative assistants under the Clerk and align their roles and structure to best serve the business needs of the organization.	Q4	Clerk	None	Year-end formal feedback and evaluation from Administrative Assistants and the staff they support.
F. Board orientation, onboarding and training and establish schedule in conjunction with CAO.	Q3	Clerk	With CAO participation	Report and feedback from the Board; Board orientation session completed
G. By-law review and update (eg: administrative by-law).	Q3	Clerk	In conjunction with CAO	Adoption of final by-law(s) by the Board
H. Investigate retention of an Integrity Commissioner.	Q3	Clerk	With CAO input	Report to Board
I. Ensure all Committee and Board Agendas and Minutes are posted to the website	Q2 Q3 Q4	Clerk	Communications	Agendas and Minutes are posted

ANNUAL WORK PLAN

DEPARTMENT: Office of the CAO				YEAR: June – Dec. 2019
AREA OF STRATEGIC FOCUS:				
Governance and Leadership (Human Resources)				
OBJECTIVES:				
<ul style="list-style-type: none"> • To ensure that HR Policies are updated • To ensure best practices in HR are applied in a fair and equitable manner • To improve employee and union relations including resolving and minimizing legal and/or union issues • To provide resources and systems to assist in managing performance and development • To assist in determining the appropriate staff compliment and staffing position with qualified individuals. 				
OUTCOMES:				
TASK	DATE TBC	LEADER	COST/RESOURCES	EVALUATION
Human Resources				
A. Implement Performance Management process including: Goal Setting, Performance Reviews, Training Plans	Q3	HR	Staff support	100% of employees due for reviews completed
B. Negotiate Collective Agreement Renewal	Q2	HR	Staff support Facility Rental	Board Report to Ratify Collective Agreement

ANNUAL WORK PLAN

TASK	DATE TBC	LEADER	COST/RESOURCES	EVALUATION
C. Policy Updates - Recruitment - Harassment - Promotion - Staff Appraisals (Performance Management) - Training & Development - Whistleblower - Sick Leave	Q2 Q2 Q3 Q3 Q3 Q3 Q4	HR	Staff input	CAO Approval Corporate Implementation
D. Resolve outstanding legal issues	Q2 Q3 Q4	CAO HR	Unknown	Confidential Board Report as required
E. Facilitate improved employer-union relations	Q2 Q3 Q4	HR	Staff support	Reduced number of employee/union grievances
F. Staffing - Permanent Planner - Contract Planner - Park Superintendent - Contract Program Assistant - Capital Assets Specialist - Clerk/Executive Coordinator to the Board/CAO - Thanksgiving Casual Staff	Q2 Q2 Q2 Q2 Q3 Q3 Q3	HR Various Hiring Managers	Up to \$1500 for advertising Staff salaries are included in the approved 2019 budget	Vacancies filled
G. Phase 1 HR Plan identifying staffing needs as they relate to the 2020 budget submission	Q2 Q3	HR	Staffing costs will be addressed in 2020 budget	Board Report
H. Develop and Implement an action plan to address workplace concerns	Q3	HR/CAO	Management Support	Board Report with ongoing progress reporting

DEPARTMENT: Corporate Services

YEAR: June – Dec. 2019

AREA OF STRATEGIC FOCUS:

**Sustainable Asset Management & Meeting Public Demand for Park Services
Evidence Based Watershed Resource Management**

OBJECTIVES:

- **Financial Services & Management**

- Provide centralized support services, including financial oversight, budget prep, performance monitoring, periodic and ad hoc reporting, year end audit and contract management.
- Work in Collaboration with other Government Bodies as well as internal and external stakeholders
- Report Progress to the Board of Directors

- **Capital and Fixed Assets**

- Development of Strategic Asset Management Plan, including 10-year Capital Plan
- Increase the amount of lands that are conserved
- Create self-sufficient and sustainable funding models

- **Procurement**

- Provide centralized purchasing support
- Ensure good and services are competitively procured
- Review and implement procurement policies and procedures

- **Integrated Watershed Planning and Information Management**

- Support Initiatives that lead to improved Water Quality (Restoration, IWP, RAP)
- Support Watershed Planning as vehicle for local natural resources management
- Build Community Coalitions on Specific Watercourses
- Work in Collaboration with other Government Bodies
- Report Progress to the Board of Directors on an Annual Basis

OUTCOMES:

- **Financial Services & Management**

- Meet all deadlines for completion and submission of reporting requirements
- Deliver 2020 Operating and Capital budgets
- Negotiated OPSEU Local 217 Collective Agreement
- Revised Finance Policies and Procedures

- **Capital and Fixed Assets**

- Deliver financial considerations for Land Acquisition Plan
- Revised Capital and Fixed Asset Policies and Procedures
- Hire Capital Asset Specialist
- Deliver Strategic Asset Management Plan

- **Procurement**

- Revised Procurement Policies and Procedures
- Establish procurement KPI's to measure performance and effectiveness

- **Integrated Watershed Planning and Information Management**

- Affirm Authority identity as local watershed management and planning agency
- Develop partnered integrated watershed planning framework for Niagara watershed
- Secure and flexible Information Technology working environment
- Information management considerations in department workplans and management team table
- Hire GIS Administrator
- Develop robust restoration program with clear ecological objectives (priorities and targets)
- Complete de-listing criteria and workplan for the Niagara River Rap
- Identify natural resources management cycle (inventory-assess-mgmt recommendations) objectives
- Deliver Q2, Q3 and Q4 updates for the Board of Directors from the Corporate Resources Department
- Complete ArcGIS Enterprise implementation with Open Data presence

ANNUAL WORK PLAN

TASK	DATE TBC	LEADER	COST/RESOURCES	EVALUATION
Financial Services & Management				
A. BOD Financial Reporting	Q2, Q3, Q4	Lise Gagnon	Staff Resources	Submission – Operating and Capital Financial Results
B. MNRF Section 39 Reporting				
a. Annual Proposed Budget – 2019-2020	Q2	Lise Gagnon	Staff Resources	Submission – Annual Proposed Budget 2019-2020
b. In Year Progress Report – 2019-2020	Q4	Lise Gagnon	Staff Resources	Submission – In Year Progress Report 2019-2020
C. Collective Bargaining – OPSEU Local 217	Q2	Lise Gagnon	Staff Resources	New Collective Agreement
D. OPG – new MOU and quarterly meetings	Q2	Lise Gagnon	Staff Resources	Executed MOU with completed Schedule D
E. Land Acquisition Plan – Financial Considerations	Q4	Lise Gagnon	Staff Resources	Land Acquisition Plan and Criteria
F. Audit and Budget Committee	Q2, Q3	Lise Gagnon	Staff Resources	Meeting 26-JUN-2019 – Parameters and assumptions for 2020 fiscal year approved
G. 2020 Operating Budget		Lise Gagnon	Staff Resources	
I. Consultation with municipalities, draft budget assumptions	Q2, Q3			Municipal meetings Budget assumptions finalized and approved by BOD
II. Draft operating budget to A & BC & consult with municipal staff	Q3			Draft 2020 operating budget and report on

ANNUAL WORK PLAN

III. Final budget to BOD for approval, and Municipal Council presentations.	Q4			municipal discussions to A & BC 2020 Operating Budget approved by BOD. Council presentations on file.
H. Policy Gap Analysis	Q3	Lise Gagnon	Staff Resources	Identification and work plan to address Financial, Procurement and Fixed Asset policy gaps.
Capital and Fixed Assets				
A. Staffing	Q2	Lise Gagnon	Staff Resources	Recruitment of Capital Asset Specialist
B. Asset Management Plan	Q4	Lise Gagnon	Staff Resources	Asset Management Plan approved by BOD
I. Replacement Cost Estimates				
II. Asset Condition Assessments				
III. Prioritization and Classification Protocols				
IV. Equipment Sustainment Schedules				
V. Capital and Fixed Asset Policies and Procedures				
VI. Funding Sources				
C. 2020 Capital Budget	Q4	Lise Gagnon	Staff Resources	2020 Capital Budget approved by BOD
D. 10-Year Capital Plan	Q4	Lise Gagnon	Staff Resources	10-Year Capital Plan approved by BOD

ANNUAL WORK PLAN

TASK	DATE TBC	LEADER	COST/RESOURCES	EVALUATION
Procurement				
A. Continue planned procurement of goods and services in accordance with Procurement Policies	Q2, Q3, Q4	Lise Gagnon/ Eric Gervais	Staff Resources	Contract awards
B. Review of Purchasing and Procurement Policies: I. Unsolicited Proposals II. Legal Services III. Vendor of Record IV. Competitive Bids V. Contract Management VI. Cooperative Purchasing VII. Consultant Services VIII. Capital Acquisitions	Q2, Q3, Q4	Lise Gagnon/ Eric Gervais	Staff Resources	Revised Purchasing and Procurement Policies
Integrated Watershed Planning (IWP)				
A. Continued Response to the Niagara Region on the Natural Environment Workplan for the New Official Plan	Q2	Geoff Verkade	Staff Resources	Report to the BOD June
i) DRAFT Mapping Discussion Paper	Q2	Geoff Verkade	Staff Resources	
ii) DRAFT Watershed Planning Discussion Paper	Q2	Geoff Verkade	Staff Resources	
iii) DRAFT Natural Environment Work Program	Q2	Geoff Verkade	Staff Resources	

ANNUAL WORK PLAN

TASK	DATE TBC	LEADER	COST/RESOURCES	EVALUATION
A. Negotiate Partnership and Framework with Niagara Region to Perform Integrated Watershed Planning	Q4	Geoff Verkade/CAO	Staff Resources	MOU for IWP with Region Approved by BOD December
B. Establish Base Funding for IWP	Q3	Geoff Verkade/Lise Gagnon	\$100,000	IWP included in DRAFT2020 Budget for Board approval
C. Natural Areas Inventory Update Capital Business Case	Q3	Geoff Verkade	Staff Resources	Draft approval in 2020 Capital Budget
D. IWP Presence on Website	Q4	Geoff Verkade/Comms	Staff Resources	Existing NAI, Nature for Niagara's Future, and Watershed Plans published on page in context of IWP cycle
Geographic Information Systems (GIS)				
A. Complete Migration to ArcGIS Enterprise				Old enterprise environment decommissioned, all staff accessing and utilizing new environment to consume GIS data services and products.
i) Populate new databases	Q3	Brian Lee	Staff Resources	
ii) Publish data services	Q3	Brian Lee	Staff Resources	
iii) Update existing apps	Q4	Brian Lee	Staff Resources	
iv) End user training	Q4	Brian Lee	Staff Resources	
B. Hire GIS Administrator	Q3	Geoff Verkade/HR	Staff Resources	Recruitment to fill GIS Analyst vacancy once maternity contract is up.
C. SWOOP 2020 Partnership with LIO	Q3	Geoff Verkade	Staff Resources	Letter of Intent signed for province, approval in DRAFT 2020 Capital Budget.
D. Continue to comment on the Conservation Ontario ESRI ELA renegotiation	Q4	Brian Lee	Staff Resources	CO ELA meets NPCA's GIS technology needs

ANNUAL WORK PLAN

TASK	DATE TBC	LEADER	COST/RESOURCES	EVALUATION
E. Support CityView continuous improvement with respect to GIS integration	Q3	Brian Lee	Staff Resources	Updated map services published for CityView endpoints (Workspace & Portal).
F. Support Planning and Regulations with scope for natural hazard inventory mapping improvements	Q4	Geoff Verkade	Staff Resources	Business case and workplan/draft approval in 2020 capital budget
Restoration				
A. Complete 2019 Workplan				
i) Project Types	Q2	Steve	Staff Resources	Report to the BOD (June)
ii) Eligibility Criteria	Q2	Gillis/Stuart	Staff Resources	Report to the BOD (June)
iii) Selection Committee ToR	Q2	McPherson	Staff Resources	Report to the BOD (June)
iv) Procedures Documentation	Q3		Staff Resources	CityView workflow
v) Program Advertisement	Q4		Staff Resources/4K	Comms products
vi) Prioritization/Targeting	Q2, Q3, Q4		Staff Resources	Priority Mapping
vii) Implementation				Completed Projects
B. 2020 Workplan	Q4	Steve Gillis/ Stuart McPherson	Staff Resources	Priority areas and funding allocated for 2020
C. Develop OPG Restoration Strategy	Q3, Q4	Steve Gillis/Stuart McPherson	Staff Resources	OPG approval to address prescribed targets with funding
D. Actualize 2020 Funding for 2 nd Restoration Project Lead	Q3	Geoff Verkade	Staff Resources	Draft approval for second position in 2020 budget
E. Continue and Define Trout Unlimited Partnership	Q3	Steve Gillis/Stuart McPherson	Staff Resources	MOU with TUC
F. Continue and Define Ducks Unlimited Partnership	Q3	Steve Gillis/Stuart McPherson	Staff Resources	MOU with DUC

ANNUAL WORK PLAN

TASK	DATE TBC	LEADER	COST/RESOURCES	EVALUATION
Niagara River Remedial Action Plan (RAP)				
A. Validate RAP Sponsorship i) Review Project Charter ii) Governance Agreements iii) Funding	Q3, Q4	Natalie Green/Geoff Verkade/Lise Gagnon	Staff Resources	Report to BOD Funding from partners clarified/secured Draft approval in 2020 budget
B. Complete De-listing Workplan i) Delisting Criteria Review ii) Fish Consumption Survey iii) BUI Assessment Reports iv) Long-term monitoring plan	Q3, Q4	Natalie Green	Staff Resources	Approval by funding partners and steering committee
C. Continue with project management/secretariat services and oversight of RAP Implementation i) Finances/Reporting ii) Administrative Support iii) Document Library iv) Foster partnerships	Q2, Q3, Q4	Natalie Green	Staff Resources	Quarterly updates to BOD
Information Management				
A. Perform IT policy gap analysis i. Security focus	Q3, Q4	Geoff Verkade	Staff Resources/IT Service Provider	Workplan to address IT policy gaps
B. Secure IT managed services	Q4	Geoff Verkade	Staff Resources	Procure and award contract through existing RFP
C. Continue to implement Agenda Management solution using Sharepoint	Q2, Q3, Q4	Brian Lee	Staff Resources	Business area's needs are addressed and staff are using without issue.
D. Develop Mobile Device Strategy i) Optimization of Voice and Data Services Review ii) CYOD Program	Q4	Geoff Verkade	Staff Resources	Mobile Device Policy

ANNUAL WORK PLAN

TASK	DATE TBC	LEADER	COST/RESOURCE	EVALUATION
E. Define Print Service technology needs	Q4	Geoff Verkade/Eric Gervais	Staff Resources	Procure and award contract
F. Electronic Document Management Needs Analysis	Q4	Geoff Verkade	Staff Resources	Identify preferred solution and high-level implementation strategy
G. CityView Continuous Improvements	Q2, Q3, Q4	Geoff Verkade	Staff Resources	CityView migrated to 'Workspace' interface, and portal launched, 18mo workplan developed
H. Continue Information Technology oversight i) Refine and document SOPs ii) Information Architecture Diagrams iii) Asset Inventories	Q2, Q3, Q4	Geoff Verkade	Staff Resources/Skycomp	Quarterly business meetings with services provider

ANNUAL WORK PLAN

DEPARTMENT: Operations / Land Management				YEAR: June – Dec. 2019
AREA OF STRATEGIC FOCUS: Operations / Strategic Initiatives / Programming				
<p>OBJECTIVES: - Maintain high quality, diverse Conservation Areas that promote outdoor recreation, health and well being and strengthen public awareness of the importance of being in Conservation Areas. Provide educational and environmental awareness through experiences for students, teachers and the community, increasing knowledge and awareness of the value of our environment and heritage.</p> <p>OUTCOMES:</p> <ul style="list-style-type: none"> - Maintain passive and active Conservation Areas - Complete all carried over 2018 capital projects and 2019 capital projects - Exceed revenue / expenses goal on all active Conservation Areas - Create, develop and ensure a variety of quality recreational use for all types of people to experience - Create, implement and coordinate environmental and cultural education programs 				
TASK	DATE TBC	LEADER	COST/RESOURCES	EVALUATION
Operations				
A. Oversee the implementations of land management programs such as security, maintenance and enforcement of section 29 regulations of the Conservation Authority Act	Ongoing	Adam Christie, Superintendents and Park Assistants	Staff resources	Report to the BOD quarterly
B. Complete remaining 2018 and 2019 capital projects and forecast multi year capital project plan	Q4	Adam Christie / Rob Shoalts	2019 budget = \$1,265,306.00	Report to BOD quarterly
C. Provide knowledge and advice on 2020 operating and capital budgets	Q2	Adam Christie	Staff Resources	Report to BOD
D. Monitor revenues and expenditures of active parks against budget forecasts	Ongoing	Adam Christie	Staff resources	Report to BOD quarterly

ANNUAL WORK PLAN

TASK	DATE TBC	LEADER	COST/RESOURCES	EVALUATION
E. Update Land Acquisition Strategy document	Q3	Adam Christie	Staff resources	Report to BOD
F. Update all land assets and depreciation and input them into asset program (SAJE)	Q2	Adam Christie	Staff Resources	N/A
G. Deliver quality customer service for all 3 rd party stakeholders (Treetop Trekking, DSBN, NCDSB etc.)	Ongoing	Adam Christie	Staff Resources	N/A
H. Negotiate and finalize land acquisition property	Q2	Adam Christie	confidential	Report to BOD
Strategic Initiatives / Conservation Area Services				
A. Monitor revenues and expenses for services at all active parks (facility rentals, programming, events, day use fees, camping etc)	Ongoing	Adam Christie / Alicia Powell / all Superintendents		Report to BOD quarterly
B. Promote and book filming projects on NPCA properties	Ongoing	Adam Christie / Alicia Powell	Goal of reaching \$20,000 in revenue	Report to BOD quarterly
C. Plan and coordinate the 2019 Ball's Falls Thanksgiving Festival	Q4	Adam Christie / Alicia Powell / Catherine Ursini / Rob Kuret	Goals Expenses - \$109,000 Revenues - \$200,000	Report to BOD November 2019
Programming				
A. Oversee educational program delivery and bookings	Ongoing	Alicia Powell / Program Assistant	Staff resources Goal of reaching over 2000 students	Report to the BOD quarterly

ANNUAL WORK PLAN

TASK	DATE TBC	LEADER	COST/RESOURCES	EVALUATION
B. Complete Ball's Falls Historic Village Sign Capital Project	Q2	Alicia Powell / Program Assistant		Report to BOD
C. Complete Forest Playscape Capital Project	Q3	Alicia Powell	Staff Resources NPCF donations of \$8,000	Report to BOD
D. Deliver Ball's Falls Summer Adventure Day Camp and Mini-Adventure Day Camp	Q3	Alicia Powell / Program Assistant	Staff Resources Goal of reaching 200 unique campers	Report to BOD
E. Deliver Overnight Adventure Camp for DSBN	Q3-Q4	Alicia Powell / Program Assistant	Staff Resources Goal of reaching \$40,000 in revenue	Report to BOD
F. Deliver Historic Village Programming at Ball's Falls Thanksgiving Festival	Q4	Alicia Powell / Program Assistant	Staff Resources	Report to BOD
G. Deliver Christmas Village programming	Q4	Alicia Powell / Program Assistant	Staff Resources Projected expenses: \$2,000	Report to BOD

ANNUAL WORK PLAN

DEPARTMENT: Operations / Land Management				YEAR: June – Dec. 2019
AREA OF STRATEGIC FOCUS: Ecology				
<p>OBJECTIVES: - Maintain or enhance wildlife habitat and populations; promote, support and enhance environmental health through biodiversity, ecological community representation and ecological linkages across the landscape through the Conservation Areas of the Niagara Peninsula Conservation Authority, assistance in NPCA educational program development/ signage and CA promotion, NPCA policies, land acquisition strategy, comment/advise on other matters in the watershed. increasing knowledge and awareness of the value of our environment and heritage.</p> <p>OUTCOMES: - Help maintain biodiversity, ecological representation and healthy environments in NPCA Conservation Areas</p> <ul style="list-style-type: none"> - Complete all carried over 2018 ecological projects - Monitor Conservation Area Restoration Plan, Branthaven (Smith-Ness) Prairie Habitat Species at Risk, assess health and determine needed measures to ensure restoration objectives are being met and maintenance/enhancement of SAR populations - Create restoration plans as needed for Conservation Area matters 				
TASK	DATE TBC	LEADER	COST/RESOURCES	EVALUATION
Operations				
A. Establish and monitor Binbrook Treetop Trekking area for potential negative impacts as outlined by the City of Hamilton	Ongoing	Kim Frohlich	Staff resources	Report to the City 1 st year and then bi-annually Report to BOD annually
B. Monitor establishment of Smith-Ness prairies as per the Branthaven-NPCA agreement.- 50-50% of habitat (0.61 ha) to be covered with at least 3 different grass species and the remainder to be covered with forbs or legumes.. Of the grass species referred to, at least one will grow greater than 50cm high under normal growing conditions	Q3	Kim Frohlich	2019 budget = \$12,000	Report to BOD annually

ANNUAL WORK PLAN

TASK	DATE TBC	LEADER	COST/RESOURCES	EVALUATION
C. Conduct Gypsy Moth Monitoring for Forest Health needs on 7 Conservation Area, and make recommendations/implementation of forest needs	Ongoing Q2, Q4	Kim Frohlich	Staff Resources, + needed	Report to Supervisor, BOD
D. St.Johns CA Pond stocking	Q2	Kim Frohlich	Staff Resources. \$5000	Report to BOD
E. Wainfleet Bog Well Replacement- 7 wells with new data loggers	Q4	Kim Frohlich	Staff resources, \$7500	Report to Supervisor and BOD
F. Conservation Area Resource Inventories (Lake Erie shore areas)- for intent of subsequent years to determine restoration needs	Ongoing	Kim Frohlich	Staff resources	Report to BOD quarterly
G. Update Land Acquisition Strategy document as deemed necessary	Ongoing	Kim Frohlich	Staff resources	Report to BOD
H. Species at Risk Monitoring on CA lands (ie. Red Mulberry, Spoon leaved moss, Eastern Flowering Dogwood, Hoptree, American Chestnut, Paw paw, American Ginseng, Giant Swallowtail, Massasauga, Spotted Turtle, Blandings Turtle, etc); evaluate information and make restoration plan design as needed	Ongoing	Kim Frohlich,	Staff resources	Report to BOD
I. Monitor CA Restoration Plan Recovery and make modifications as deemed necessary (i.e. Wainfleet Bog, Mud Lake CA, Chippawa Creek shore stabilization work etc)	Ongoing		Staff Resources and \$ per work needed	Report to BOD

ANNUAL WORK PLAN

TASK	DATE TBC	LEADER	COST/RESOURCES	EVALUATION
J. Deliver continued to customer service for ecological matters (public and NPCA staff)	Ongoing	Kim Frohlich	Staff Resources	
K. Ecological Assessments of proposed land acquisition property	Ongoing	Kim Frohlich	confidential	Report to Supervisor
L. St. Johns Perched Culvert Project	Q3 (pending restoration program finalization)	Kim Frohlich	\$12,000	Report to BOD
M. Bat Monitoring -Ontario Migration Corridor	Q4	Kim Frohlich, OMNRF Mark Browning	Staff Resources	Report to BOD
N. Implementation of NPCA Waterfowl Hunting Program and Lottery	Q3	Kim Frohlich	Staff Resources	Report to BOD
O. NPCA Hunting Policy Update	Q3	Kim Frohlich	Staff Resources	Report to Supervisor
P. Woodend Forest Restoration Plan design an implementation	Q4	Kim Frohlich	Staff resources, \$4,000	
Q. Invasive Species Management Plan- establish goals for invasive species management on CA properties; inventory 3 CA for invasives (species and extent)	Q4	Kim Frohlich	Staff Resources	Report to BOD
R. NPCA Native Plant Supplier List update	Q4	Kim Frohlich	Staff Resources	Report to BOD

ANNUAL WORK PLAN

DEPARTMENT: Watershed Management				YEAR: June – Dec. 2019
AREA OF STRATEGIC FOCUS: Evidence Based Watershed Resource Management				
OBJECTIVES: - Support Initiatives that lead to improved Water Quality - Support Continued Source Water Protection Responsibilities - Build Community Coalitions on Specific Watercourses - Work in Collaboration with other Government Bodies - Report Progress to the Board of Directors on an Annual Basis OUTCOMES: - Complete response to provincial ERO postings through Conservation Ontario - Complete Customer Service Standards update, staff training, and customer surveys - Meet all deadlines for response time for applications under The Planning Act - Complete Fee Schedule Update - Complete MOU update with Hamilton and Haldimand - Hire 4 th compliance officer and complete Level 1 training - Adopt Conservation Ontario Manual on Compliance - Deliver Q2, Q3 and Q4 updates for the Board of Directors from the Watershed Management Department - Complete Welland River floodplain - Develop Risk Based Assessment Plan for floodplain mapping - Develop 5 year floodplain mapping priorities to be linked with budget submissions				
TASK	DATE TBC	LEADER	COST/RESOURCES	EVALUATION
Planning and Regulations				
A. Continued Response to the ERO Posting on Legislative Review	Q4	David Deluce	Staff Resources	Report to the BOD
B. Continue Response to CO Initiated Review	Q4	David Deluce	Staff Resources	Report to BOD
C. Refine our Customer Service Standards	Q3	David Deluce	\$2,000. for customer service training	New standards, training and survey complete
D. Continue to meet response deadlines for Planning Act Applications	Ongoing	David Deluce	Staff Resources	Quarterly reports to BOD
E. Update Planning and Regulations Fee Schedule	Q3	David Deluce	Staff Resources	Fee schedule approved by BOD

ANNUAL WORK PLAN

TASK	DATE TBC	LEADER	COST/RESOURCES	EVALUATION
F. Continue to work on Finalizing MOU with City of Hamilton	Q4	David Deluce	Staff Resources	Municipal meetings and MOU's finalized
G. Continue to work on Finalizing MOU with County of Haldimand	Q4	David Deluce	Staff Resources	Municipal meetings and MOU's finalized
Permits & Compliance				
A. Ensure proper staffing levels	Q2	Jason Culp	Staff Resources	recruitment of compliance officer
B. Hire a 3 rd Compliance Officer	Q2	Jason Culp	Staff Resources	recruitment of compliance officer
C. Ensure all Officers have a minimum Level 1 Training	Q2	Jason Culp	Training costs - \$1,400.	Completion of Level 1 training
D. Formally adopt the Conservation Ontario's Compliance Manual	Q3	Jason Culp	Staff Resources	Formal adoption of the Manual by the BOD
E. Continue quarterly updates on permits and violations statistics with the Board	Q2, Q3, Q4	Jason Culp	Staff Resources	Q2, Q3 and Q4 review of updates by the BOD
F. Review and finalize internal documentation, notifications and storage with respect to compliance and enforcement activities	Q4	Jason Culp	Staff Resources	Documentation and storage files update to date
G. Continue to the meet response deadlines for issuance of work permits	Ongoing	Jason Culp	Staff Resources	Quarterly updates to the BOD
H. Finalize Risk based plan to ensure compliance with conditions	Q2	Jason Culp	Staff Resources	Plan finalized and approved by BOD

ANNUAL WORK PLAN

TASK	DATE TBC	LEADER	COST/RESOURCES	EVALUATION
Water Resources				
A. Welland River Floodplain Mapping		Steve Miller		
I. Review final draft lines and report with Floodplain Committee	Q2		Staff Resources	Review of lines with the Floodplain Committee for comment
II. Arrange for Public Consultation on the updated mapping	Q3		\$2,000 per consultation meeting for the venue (\$400) and consultant (\$1,200) Four meetings will occur.	Completion of 4 open houses
III. Obtain Board Approval for adopting the new floodlines	Q4		Staff Resources and consultant attendance at board - \$1,500.	Report to the BOD on open house feedback and approval of the floodlines
B. Grimsby/Lincoln Floodplain Mapping		Steve Miller		
I. Review draft lines and report	Q3		Staff Resources	
II. Populate Advisory Committee	Q2		Staff Resources	
III. Review final draft of floodlines with Advisory Committee	Q2/3	Steve Miller		

ANNUAL WORK PLAN

IV. Arrange for Public Consultation on the updated mapping	Q4		\$2,000 for one public meeting	
V. Have consultant provide final draft of Report	Q4		Included in project costs	
VI. Obtain Board Approval for adopting the new floodlines	Q4		Staff Resources	
C. St. Catharines Floodplain Mapping		Steve Miller		
I. Review draft lines and report	Q2		Staff Resources	
II. Populate Advisory Committee	Q2		Staff Resources	
III. Review draft of floodlines with Advisory Committee	Q3		Staff Resources	
IV. Arrange for Public Consultation on the updated mapping	Q3		Possible two meeting - \$4,000	
V. Have consultant provide final draft of Report	Q3	Steve Miller	Included in project study	
VI. Obtain Board Approval for adopting the new floodlines	Q4			

ANNUAL WORK PLAN

TASK	DATE TBC	LEADER	COST/RESOURCES	EVALUATION
D. Develop a risk-based assessment for remaining floodplain mapping	Q2	Steve Miller	Staff Resources develop list of floodplain mapping priorities	Approval by the BOD
E. Develop a 5 year forecast for remaining floodplain mapping	Q2	Steve Miller	\$200,000/year for 5 years	Presentation of capital project to participating municipalities as part of the 2020 budget submission
F. Continue to work on Source Protection and update information as required (Subject to provincial funding approval)	Q2, Q3, Q4	Steve Miller	Staff Resources and work according to approved provincial SP funding	1 SPA Meeting 3 SPC Meetings Technical review of water treatment plant upgrades Section 36 update to the Source Protection Plan

ANNUAL WORK PLAN

DEPARTMENT: Communications, Engagement, Community Outreach & Volunteers	YEAR: June – Dec. 2019
AREA OF STRATEGIC FOCUS: Supporting All Four Areas of Focus	
<p>OBJECTIVES: - Maintain a high-level of customer service when working with the public, stakeholders and media</p> <ul style="list-style-type: none"> - Manage all internal and external corporate communication - Promote core mandate and refine organizational messaging - Re-engage the Public Advisory Committee, fill vacancies and update Terms of Reference - Implement an NPCA Engagement Strategy to maintain ABCD best practices for identified gaps in outreach - Schedule and produce marketing campaigns for 2019 - Complete Auditor General recommendations re: Website and Public Access to Information - Collaborate with partners on all 2019 conservation/stewardship project commitments - Support NPCA corporate festivals and off-site events with communications, outreach and volunteer services - Provide Office of the CAO with communication support for Board of Directors meetings and Orientation - Work with individual departments to meet specific corporate communications and/or outreach needs - <p>OUTCOMES: - Improved relations with the public, municipal partners, media and staff</p> <ul style="list-style-type: none"> - Implemented marketing strategy and calendar with historical records, budgets and analytics - Completed website that meets basic departmental needs, added content, functionality and search capabilities - Effective Public Advisory Committee with additional members and First Nations representative - Developed sponsorship package and outreach strategy for the 45th Ball's Falls Thanksgiving Festival - Fall NPCA 60th Anniversary Celebration - Completed Phase 1 of the Comfort Maple Legacy project in partnership with Niagara Parks Commission - OPG projects recognition signage designed and installed - Completed Indigenous Awareness Canada Training for two staff - Ongoing event management for the 2020 Conservation Biennial Tour - Deliver 2018 Annual Report, and Q1, Q2, Q3, Q4 Status Updates to the Board of Directors - Support public outreach and logistics for 6 Open Houses for Welland River/St. Catharines floodplain - Develop Engagement Portal project tiles to support outreach initiatives - Updated NPCA Communications, Media and Social Media Policies 	

ANNUAL WORK PLAN

TASK	DATE TBC	LEADER	COST/RESOURCES	EVALUATION
Corporate Communications				
A. Maintain a high-level of customer service with the public and stakeholders	Ongoing	Renee Bisson	Staff Resources	Public satisfaction survey, and prompt issues management strategies
B. Manage internal and external corporate communications and approve all collateral (Print and digital)	Ongoing	Renee Bisson	Staff Resources	Quarterly report to the BOD
C. Rebuild corporate brand, promote core mandate and refine organizational key messaging	Ongoing	Renee Bisson	Allotted marketing and advertising budget	Status updates to BOD
D. Set department budgets for 2020 and develop staffing needs	June-Sept	Renee Bisson	Staff Resources	Report to CAO and BOD
E. Update corporate communications, social media and media relations policies	Q3	Renee Bisson	Staff Resources	Report to the BOD
F. Support Flood Plain Mapping Outreach Communications	Q2-Q3	Erika Navarro	Staff Resources and Watershed Resources budget	Report to the BOD
G. Develop a comprehensive annual marketing calendar with budgets and analytics	Q3	Renee Bisson	Staff Resources and marketing budget	Report to CAO
H. Manage corporate sponsorships and develop kits	Ongoing	Renee Bisson	Staff Resources and printing budget	Report to CAO
I. Work with Communication Specialist, Office of the CAO and Clerk to facilitate Board Meetings and Orientation	Ongoing	Renee Bisson	Staff Resources	Report to CAO
J. Attend Conservation Authorities University Management training	Sept, Dec	Renee Bisson	\$1,500 of NPCA training budget	Report to CAO and BOD

ANNUAL WORK PLAN

TASK	DATE TBC	LEADER	COST/RESOURCES	EVALUATION
K. Support daily corporate communications and all collateral including key messaging, media releases and advisories	Ongoing	Erika Navarro	Staff Resources	Report to BOD
L. Respond to media requests, coordinate interviews, and provide appropriate digital content	Ongoing	Erika Navarro	Staff Resources	Report to BOD
M. Monitor media hits, and provide media reports on a regular basis	Ongoing	Erika Navarro	Staff Resources	Report to BOD
N. Work with graphic designers to produce print publications in support of NPCA marketing strategies for all outreach, parks and educational programs	Ongoing	Erika Navarro	Allotted marketing budget	Report to BOD
O. Produce graphic collateral on an as-need basis	Ongoing	Erika Navarro	Staff Resources	Quarterly reports to BOD
P. Produce annual/quarterly reports, corporate PowerPoints and contact mailing lists	Ongoing	Erika Navarro	Staff Resources	Reports to BOD
Q. Attend NPCA events, festivals and project launches to coordinate communication logistics	Ongoing	Erika Navarro	Staff Resources	Report to Senior Manager of Communications
R. Event management of 2020 Conservation Authorities Biennial Tour	Ongoing	Renee Bisson, Erika Navarro	Approved 2019 budget	Report to BOD
S. Provide communications support to Source Water Protection Authority/Project Manager/Committee Including: Newsletter, brochure, attending meetings, finding volunteers, and graphic design	Ongoing (One day a week)	Erika Navarro	Staff Resources	Report to SWP Committee and NPCA BOD

ANNUAL WORK PLAN

TASK	DATE TBC	LEADER	COST/RESOURCES	EVALUATION
T. Respond to daily service ticket requests for website content edits from the corporation	Ongoing	Erika Navarro	Staff Resources	Report to Senior Manager of Communications
U. Work with web developer to update NPCA website in order to keep content accurate, current, while maintaining AOAD standards.	Q4	Erika Navarro	Communications budget	Report to BOD and AG
V. Manage all social media platforms (Facebook, Twitter, Instagram, YouTube) online announcements, advertising and content curation.	Ongoing	Erika Navarro	Staff Resources and allotted advertising budget	Quarterly report to BOD
W. Plan an NPCA 60 th Anniversary Celebration	Q3	Renee Bisson	No budget allotted at this time	Report to CAO
X. Complete Indigenous Awareness Canada Training	Q3	Renee Bisson, Erika Navarro	2018 Training budget	Report to CAO
Y. Design and install three OPG project recognition signs for E.C. Brown, Ball's Falls, Lake Niapenco in collaboration with Operations	Q4	Erika Navarro	Watershed Resources Budget	Report to Director of Watershed Resources
Community Engagement				
A. Implement an NPCA Engagement Strategy	Q4	Renee Bisson	Staff Resources	Report to CAO and BOD
B. Attend meetings, events and speaking engagements on behalf of the NPCA in an official capacity	Ongoing	Renee Bisson	Community Engagement Budget	Quarterly report to BOD
C. Develop Engagement Portal project tiles for upcoming outreach initiatives	Q3-Q4	Renee Bisson	Communications Budget	Report to BOD

ANNUAL WORK PLAN

TASK	DATE TBC	LEADER	COST/RESOURCES	EVALUATION
D. Finalize Comfort Maple Legacy Project with Niagara Parks Commission	Q3	Renee Bisson	Staff Resources	Report to CAO
E. Manage partnership with 2021 Canada Summer Games Host Society and wetland projects	Ongoing	Renee Bisson	Staff Resources	Report to CAO and BOD
F. Manage Pathstone Mental Health partnership: Natural Playground and Healing Garden	Ongoing	Renee Bisson	Staff Resources	Report to CAO
G. Manage Niagara Region partnership: International Civic Square/Pollinator Garden	Ongoing	Renee Bisson	Staff Resources	Report to CAO
H. Manage partnership with WEARTH/Carbon Farmer for planting of 100,000 trees & native plants. Find planting locations.	Ongoing	Renee Bisson	Staff Resources	Report to CAO and BOD
I. Support Flood Plain Mapping public engagement	Q2-Q3	Renee Bisson	Staff Resources	Report to Director of Watershed Resources
J. Coordinate outdoor education sessions with Niagara Children's Centre	Q3-Q4	Renee Bisson	Staff Resources	Report to CAO
K. Develop NPCA outreach presentation opportunities and workshop schedule for the corporation and Source Water Protection	Ongoing	Renee Bisson	Staff Resources, SWP budget	Report to SWP Committee and NPCA BOD

ANNUAL WORK PLAN

TASK	DATE TBC	LEADER	COST/RESOURCES	EVALUATION
Community Outreach & Volunteers				
A. Represent the NPCA on the Ohnia'kara Aspiring Global Geopark Steering Committee and manage the partnership	Ongoing	Kerry Royer	Staff Resources, Community Engagement budget	Report to CAO and BOD
B. Plan a two-day Geopark Summit at Ball's Falls C.A.	Q2	Kerry Royer	Staff Resources, Community Engagement Budget	Report to Community Engagement Manager
C. Work with Clerk to re-engage Public Advisory Committee (PAC), fill vacancies and update the Terms of Reference	Q3	Kerry Royer	Staff Resources	Report to Clerk and BOD
D. Collaborate with partners on all 2019 conservation/stewardship project commitments in alignment with the Strategic Plan	Ongoing	Kerry Royer	Staff Resources, Community Engagement budget	Report to Community Engagement Manager
E. Assist with the development and implementation of the NPCA Engagement Strategy	Q4	Kerry Royer	Staff Resources	Report to Community Engagement Manager
F. Coordinate logistics for Niagara Region International Civic Square community planting days, volunteer call-out, and post-planting maintenance schedule	Q3	Kerry Royer	Staff Resources	Report to Community Engagement Manager
G. Support Ball's Falls educational programming and Thanksgiving Festival with volunteer call-outs, community partner invitations and related event logistics such as set-up and tear down	Ongoing	Kerry Royer	Staff Resources	Report to Community Engagement Manager, and Manager of Strategic Initiatives
H. Complete Yellow Fish Road year-end report	Q4	Kerry Royer	Staff Resources	Report to SWP and BOD

ANNUAL WORK PLAN

TASK	DATE TBC	LEADER	COST/RESOURCES	EVALUATION
I. Manage story walk project and partnership with NCDSB, Brock University, Soaring Eagles at St Johns Valley Centre	Q3	Kerry Royer	Staff Resources	Report to Community Engagement Manager
J. Provide outreach support to Flood Plain Mapping Public Open Houses	Q3-Q4	Kerry Royer	Staff Resources, Watershed Resources budget	Report to Director of Watershed Resources
K. Prepare and present NPCA presentations at local libraries, schools and community groups etc.	Ongoing	Kerry Royer	Staff Resources	Report to Community Engagement Manager
L. Develop program and schedule for Mickey Difruscio & Family Pollinator Garden Legacy Project	Q4	Kerry Royer	No budget allotted at this time	Report to BOD
M. Manage Indigenous partnerships, foster new relationships and research opportunities	Ongoing	Kerry Royer	Staff Resources	Report to Community Engagement Manager
N. Manage partnership with GM and World Environment Day planting	Q3	Kerry Royer	Staff Resources	Report to Community Engagement Manager
O. Prepare and present outdoor learning workshops at Pathstone Healing Garden and Natural Playground	Q2-Q3	Kerry Royer	Staff Resources	Report to Community Engagement Manager
P. Represent the NPCA on various committees, i.e. Port Colborne Environmental Advisory Committee, Niagara Birding Strategy	Ongoing	Kerry Royer	Staff Resources	Report to Community Engagement Manager
Q. Update volunteer database to maintain accurate records (Volgistics)	Ongoing	Kerry Royer	Staff Resources, Outreach budget	Report to Community Engagement Manager



ANNUAL WORK PLAN

TASK	DATE TBC	LEADER	COST/RESOURCES	EVALUATION
R. Continue to be Point of Contact for "Friends of" groups and Nature Clubs	Ongoing	Kerry Royer	Staff Resources	Report to Community Engagement Manager
S. Facilitate restoration of damaged Woodend understory in collaboration with NPCA staff Ecologist	Q3	Kerry Royer	Ecology budget	Report to BOD

Climate Emergency and the NPCA

WHEREAS climate change is a threat to the citizens of the NPCA watershed, and

WHEREAS climate change is a threat to the natural environment of our watershed, and

WHEREAS climate change is a threat to the built environment of our watershed, and

WHEREAS Canada and 194 other nations signed the Paris Climate Accord in 2015: and

WHEREAS the United Nations and many other scientific agencies report that human activity is the main cause of global climate change; and

WHEREAS the Conservation Authorities Act states “an authority shall provide...Programs and services related to the risk of natural hazards”

WHEREAS recommendations 7 and 8 of the Auditor General of Ontario’s Special Audit of the Niagara Peninsula Conservation Authority speak directly to recommendations related to flood risks and natural hazards

WHEREAS the NPCA is a lead environmental institution for the people of our watershed, and

WHEREAS action is needed to develop climate risk mitigation and climate risk adaptation strategies, policies, and procedures

WHEREAS there is no Planet B

THEREFORE BE IT RESOLVED that the Niagara Peninsula Conservation Authority declares a climate emergency and recognizes the need to take action that will contribute to the mitigation and adaptation of the effects of climate change throughout our watershed;and

BE IT FURTHER RESOLVED that the NPCA will create a climate change emergency charette with the aim of identifying a proposed plan of action for the NPCA: and

BE IT FURTHER RESOLVED that the charette will include subject matter experts drawn from NPCA resources as well as community institutions in order to realize the best possible results.