

**FULL AUTHORITY MEETING  
February 28, 2018  
9:30 a.m.**

**Ball's Falls Centre for Conservation  
Glen Elgin Room  
3292 Sixth Avenue, Jordan, ON**

**A G E N D A**

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**1. ADOPTION OF AGENDA**

- 1.1 Addition of items
- 1.2 Change in order of items

**2. DECLARATION OF CONFLICT OF INTEREST**

**3. PRESENTATIONS (and/or Delegations)**

- 3.1 Presentations

None.

- 3.2 Delegations

None.

**4. ADMINISTRATIVE BUSINESS**

- 4.1 Approval of Draft Minutes

4.1.1 Full Authority Meeting – January 24, 2018

- 4.2 Business Arising from Minutes

- 4.3 Correspondence

None.

- 4.4 Chairman's Remarks

- 4.5 Chief Administrative Officer Comments

## 5. BUSINESS FOR INFORMATION

### 5.1 Binbrook Fish Study 2017 Report No. 27-18

- Presentation by Christopher Bunt, Biotactic Inc. to precede the discussion of this report.

### 5.2 Watershed Floodplain Committee Clarification Report No. 20-18

### 5.3 Employee Feedback Survey Report No. 18-18

## 6. BUSINESS FOR CONSIDERATION

### 6.1 Committee Reports

None.

### 6.2 Reports

#### 6.2.1 Mining & Lands Commissioner Decision - City of Hamilton Apportionment Appeal of the 2015 NPCA Levy ***Updated - Report No. 01-18***

\*The original Report No. 01-18 was deferred at the Full Authority meeting held on January 17, 2018.

#### 6.2.3 Board Member Per Diem & Honorarium- Annual Report Report No. 25-18

#### 6.2.4 NPCA Policy Handbook Regulations #1 and #2 Review and Suggested Revisions Report No. 24-18

#### 6.2.5 Annual Policy Resolutions 2018 Report No. 22-18

#### 6.2.6 Freedom of Information (FOI) Annual Statistics Report & Designation Report No. 21-18

#### 6.2.7 Niagara Peninsula Conservation Authority (NPCA) 2018 Watershed Report Card Report No. 16-18

- 6.2.8 Niagara Peninsula Conservation Authority (NPCA) 2017 Q4 Quarterly Report  
Report No. 17-18
- 6.2.9 Niagara Peninsula Conservation Authority (NPCA)  
Advisory Committee Appointments  
Report No. 19-18
- 6.2.10 Greenbelt and Greater Golden Horseshoe  
Conservation Authorities Collaborative  
Report No. 28-18
- 6.2.11 Meeting and Agenda Management Solution  
Report No. 23-18
- 6.2.12 Hannon School House Update  
Report No. 29-18
- 6.2.13 PT Watersports Inc – Facility Use Agreement  
Report No. 30-18
- 6.2.14 Financial Report – 2017 Completed & Carry-over Capital Projects  
Report No. 26-18

## 7. BUSINESS – In Camera

### 7.1 Motion to move in to Closed Session:

That the NPCA Full Authority meeting **DO NOW MOVE** in to Closed Session for the purposes of receiving information of a confidential manner respecting:

7.1.1 Personnel matters about an identifiable individual including Authority employees – Confidential Appendix 1 to Report No. 19-18

7.1.2 A Proposed or Pending Acquisition of Land

\*To be Distributed

7.1.3 Solicitor-Client Privilege – Confidential Appendix 4 to **UPDATED Report No. 01-18**

### 7.2 Motion to reconvene in Open Session:

That the NPCA Full Authority meeting **RECONVENE** in Open Session.

### 7.3 Business Arising from Closed Session

- 8. NOTICE OF MOTION**
- 9. NEW BUSINESS**
- 10. ADJOURNMENT**





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

Wednesday, January 24, 2018  
9:30 a.m. \*immediately following the Source Protection Authority Meeting  
Ball's Falls  
Centre for Conservation – Glen Elgin Room  
3292 Sixth Avenue, Jordan, ON

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**MEMBERS PRESENT:**

S. Annunziata (Chair)  
B. Baty  
S. Beattie  
F. Campion (arrived at 10:09 a.m.)  
P. Darté  
D. DiFruscio  
J. Diodati (left at 12:00 noon)  
A. Jeffs (left at 11:30 a.m.)  
D. Joyner (arrived at 11:19 a.m.)  
J. Kaspersetz (Vice-Chair)  
P. MacPherson  
J. Maloney  
T. Quirk  
R. Shirton  
B. Timms

**MEMBERS ABSENT:**

P. Darté

**STAFF PRESENT:**

M. Brickell, Chief Administrative Officer/Secretary-Treasurer  
D. Barrick, Senior Director, Corporate Services  
G. Furtney, Acting Director, Watershed Management  
L. McManus, Clerk/ Executive Coordinator

**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 Board of Directors Policy Handbook Regulation #2, Meeting Procedures Sec.16.0*

The Board Chair called the meeting to order at 9:52 a.m. and welcomed those Board, staff and community members present.

# 1. ADOPTION OF AGENDA

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## 1.1 Addition of Items

### Resolution No. FA-20-18

Moved by Board Member Quirk

Seconded by Board Member Baty

That the Agenda **BE AMENDED to add Information Report No. 14-18 respecting 2017 Q4 Capital Projects Update and Report No. 15-18 respecting Corporate Resources Q4 2017 Project Status Report, to be dealt with immediately following Agenda Item 5.5.**

CARRIED

### Resolution No. FA-21-18

Moved by Board Member Baty

Seconded by Board Member Quirk

That the Agenda **BE AMENDED to add a discussion item under New Business respecting the Brock University bee population at reclaimed landfill sites.**

CARRIED

### Resolution No. FA-22-18

Moved by Board Member Diodati

Seconded by Board Member Kaspersetz

That the Agenda **BE AMENDED to add an In-Camera item respecting Solicitor-Client Privilege – Legal Costs.**

CARRIED

## 1.2 Change in Order of Items

### Resolution No. FA-23-18

Moved by Board Member MacPherson

Seconded by Board Member Quirk

That Agenda **BE AMENDED to change Agenda Item 5.6 respecting the Memorandum of Understanding (MOU) Update to be dealt with under Business for Consideration, immediately following Agenda Item 6.2.4.**

CARRIED

## 1.3 Motion to Approve the agenda

### Resolution No. FA-24-18

Moved by Board Member Beattie

Seconded by Board Member Kaspersetz

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

CARRIED

## 2. DECLARATION OF INTEREST

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See Minute Item 9.2.

## 3. PRESENTATIONS (and/or Delegations)

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### 3.1 Presentations

There were no presentations.

### 3.2 Delegations

There were no delegations.

## 4. ADMINISTRATIVE BUSINESS

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### 4.1 Approval of Draft Minutes

#### 4.1.1 Full Authority Board Minutes – December 12, 2017

##### Resolution No. FA-25-18

Moved by Board Member Shirton

Seconded by Board Member Jeffs

That the Full Authority Board minutes of the meeting held on December 12, 2108 **BE APPROVED** as presented.

**CARRIED**

#### 4.1.2 Full Authority Annual General Meeting Minutes – January 17, 2018

##### Resolution No. FA-26-18

Moved by Board Member MacPherson

Seconded by Board Member DiFruscio

That the Full Authority Annual General Board minutes of the meeting held on January 17, 2108 **BE APPROVED** as presented.

**CARRIED**

### 4.2 Business Arising from Minutes

##### Resolution No. FA-27-18

Moved by Board Member Quirk

Seconded by Board Member Baty

That the Strategic Planning Committee Terms of Reference **BE AMENDED** to note the following under membership:

The Committee will have **a minimum of** Five (5) Members and will include the NPCA Chair, Vice-Chair ~~and three (3) Board Members~~ appointed by the Full Authority Board.

**CARRIED**

#### 4.3 Correspondence

- 4.3.1 A letter, dated January 2, 2018, from the City of St. Catharine's to Premier Kathleen Wynne, respecting Niagara Peninsula Conservation Authority – Appointment of Supervisor

Resolution No. FA-28-18

Moved by Board Member Timms

Seconded by Board Member Diodati

That the Correspondence Item respecting Niagara Peninsula Conservation Authority – Appointment of Supervisor **BE RECEIVED** for information.

**CARRIED**

#### 4.4 Chairman's Remarks

Sandy Annunziata, NPCA Board Chair, expressed his gratitude to Board Members for their continued support and confidence in him as Chair. The Chair spoke briefly about having attended, along with NPCA staff, the City of Hamilton Committee meeting held on Tuesday, January 23, 2018 to present the NPCA 2018 Budget.

#### 4.5 Chief Administrative Officer (CAO) Comments

Mr. Brickell also spoke respecting the NPCA Budget presentation at the City of Hamilton, he stated that it had been well received and that Councillors had acknowledged NPCA positive advancements in processes and systems.

The CAO also advised Board Members that on Monday, January 22<sup>nd</sup> he had met with the Friends of Fort Erie's Creeks to discuss their recent award from the Ontario Trillium Foundation for a \$213,000 grant to support a new reforestation and environmental education project at the Stevensville Conservation Area.

### 5. BUSINESS FOR INFORMATION

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#### 5.1 Resolution No. FA-29-18

Moved by Board Member Quirk

Seconded by Board Member Kaspersetz

That the following items listed under Business for Information **BE RECEIVED** for information:

Financial and Reserve Report – Month ending November 2017

Report No. 04-18

Watershed Management Status Report Q4

Report No. 05-18

Niagara Peninsula Conservation Authority (NPCA) Forestry and Tree and Forest Conservation By-law Status Q4 2017

Report No. 06-18

**CARRIED**

5.2 Q4 Capital Projects Update  
Report No. 14-18

Resolution No. FA-30-18  
Moved by Board Member Quirk  
Seconded by Board Member Kaspersetz

1. That Report No. 14-18 respecting the Q4 Capital Projects Update **BE RECEIVED** for information.

**CARRIED**

5.3 Corporate Resources Q4 2017 Project Status Report  
Report No. 15-18

Resolution No. FA-31-18  
Moved by Board Member Quirk  
Seconded by Board Member Kaspersetz

2. That Report No. 15-18 respecting the Corporate Resources Q4 2017 Project Status Report **BE RECEIVED** for information.

**CARRIED**

## 6. BUSINESS FOR CONSIDERATION

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6.1 Committee Reports

6.1.1 Audit Committee  
Minutes – December 12, 2017

Resolution No. FA-32-18  
Moved by Board Member Diodati  
Seconded by Board Member Jeffs

1. That the Audit Committee minutes of the meeting held on December 12, 2017 **BE APPROVED** as presented.

**CARRIED**

6.1.2 Niagara Peninsula Conservation Authority Advisory Committee  
Minutes – November 30, 2017

Resolution No. FA-33-18

Moved by Board Member Diodati

Seconded by Board Member Baty

1. That the Niagara Peninsula Conservation Authority Advisory Committee minutes of the meeting held on November 30, 2017 **BE APPROVED** as presented.

**CARRIED**

6.2 Reports

6.2.1 Annual Bank Borrowing Resolution  
Report No. 10-18

Resolution No. FA-34-18

Moved by Board Member Quirk

Seconded by Board Member Diodati

1. That Report No. 10-18 respecting the Annual Bank Borrowing Resolution 2018 **BE RECEIVED**; and

WHEREAS Section 3(5) of *The Conservation Authorities Act* authorizes Conservation Authorities to borrow such monies as may be required until the payment of any grants and levies; and

WHEREAS the Niagara Peninsula Conservation Authority deems it appropriate to borrow such sums, with the total borrowed amount not to exceed \$800,000 at any one time in the year of 2018 to meet approved administration, maintenance and capital expenditures;

NOW THEREFORE BE IT RESOLVED:

2. That the Niagara Peninsula Conservation Authority **BE AUTHORIZED** to borrow from time to time from a Financial Institution by way of an overdraft agreement executed and signed by the Chair and the Secretary-Treasurer of the Niagara Peninsula Conservation Authority, with the total amount not exceeding \$800,000 at any one time in 2018 to meet approved administration, maintenance and capital expenditures.

**CARRIED**

6.2.2 Floodplain Mapping Project Update in the City of St. Catharines  
(Supported by the National Disaster Mitigation Program)  
Report No. 11-18

Resolution No. FA-35-18

Moved by Board Member Timms

Seconded by Board Member Diodati

1. That Report No. 11-18 respecting the Floodplain Mapping Update in the City of St. Catharines (Walker Creek and Beamer Creek) (Supported by the National Disaster Mitigation Program) **BE RECEIVED**;
2. That NPCA Staff **BE DIRECTED** to commence a Floodplain Mapping Project to update Floodplain Mapping in the City of St. Catharines (Walker Creek and Beamer Creek);
3. That the NPCA Board **AUTHORIZE** the CAO to enter into an agreement with the Province of Ontario (through the National Disaster Mitigation Program – NDMP) for 50% or up to \$50,000 of matching funds to undertake the above project; and
4. That the NPCA Board **DIRECT** staff to utilize the Flood Protection Services Capital Reserve account to cover the remaining portion of the cost associated with the project.

**CARRIED**

6.2.3 Non-Union Compensation Report  
Report No. 12-18

Resolution No. FA-36-18

Moved by Board Member Quirk

Seconded by Board Member Beattie

1. That Report No. 12-18 respecting the Non-Union Compensation **BE RECEIVED**; and
2. That the Niagara Peninsula Conservation Authority (NPCA) Board **APPROVE** the recommended Cost of Living Adjustment (COLA) increase of 2.25% for Non-Union staff.

Resolution No. FA-37-18

Moved by Board Member Beattie

Seconded by Board Member Quirk

That Resolution FA-36-18(2.) **BE AMENDED** by striking *recommended Cost of Living Adjustment (COLA)*.

**CARRIED**

Resolution No. FA-38-18

Moved by Board Member Timms

Seconded by Board Member Diodati

That Resolution FA-36-18 **BE AMENDED** to read:

2. That the Niagara Peninsula Conservation Authority (NPCA) Board **APPROVE** the recommended Cost of Living Adjustment (COLA) increase of **2.0%** for Non-Union staff.

**DEFEATED**

The Chair called the vote on the Resolution FA-36-18 as amended, as follows:

1. That Report No. 12-18 respecting the Non-Union Compensation **BE RECEIVED**; and
2. That the Niagara Peninsula Conservation Authority (NPCA) Board **APPROVE** the increase of 2.25% for Non-Union staff.

**CARRIED**

6.2.4 Burlington Beach Rentals – Facility Use Agreement Renewal  
Report No. 13-18

Resolution No. FA-39-18

Moved by Board Member Kaspersetz  
Seconded by Board Member Shirton

1. That Report No. 13-18 respecting the Burlington Beach Rentals – Facility Use Agreement Renewal **BE RECEIVED**; and
2. The NPCA Board of Directors **AUTHORIZE** the CAO to enter into a one (1) year Facility Use Agreement, attached as Appendix 1, with Burlington Beach Rentals to operate at Binbrook Conservation Authority.

**CARRIED**

6.2.5 Protocol for Planning Services Between the  
Niagara Peninsula Conservation Authority (NPCA)  
and Regional Municipality of Niagara (RMON)  
Report No. 09-18

Resolution No. FA-40-18

Moved by Board Member Kaspersetz  
Seconded by Board Member Quirk

1. That Report No. 09-18 respecting the Protocol for Planning Services Between the Niagara Peninsula Conservation Authority (NPCA) and Regional Municipality of Niagara (RMON) **BE RECEIVED**;
2. That the Board **APPROVE** the draft Protocol for Plan Review and Technical Clearance between the Niagara Peninsula Conservation Authority and Regional Municipality of Niagara attached to Report No. 09-18 as Appendix 1; and
3. That the NPCA Chief Administrative Officer **BE AUTHORIZED** to sign the Protocol for Plan Review and Technical Clearance between the Niagara Peninsula Conservation Authority and Regional Municipality of Niagara attached to Report No. 09-18 as Appendix 1.

**CARRIED**

## 7. BUSINESS – IN CAMERA



7.1 Motion to Move in to Closed Session

The Board moved in to Closed Session at 11:13 a.m. with the following resolution:

Resolution No. FA-41-18

Moved by Board Member Kaspersetz

Seconded by Board Member Shirton

That the Niagara Peninsula Conservation Full Authority Board meeting **DO NOW MOVE** in to Closed Session for the purposes of receiving information of a confidential manner respecting A Matter regarding Solicitor-Client – Legal Costs:

**CARRIED**

7.2 Motion to Reconvene in Open Session

The Board reconvened in Open Session at 12:08 p.m. with the following resolution:

Resolution No. FA-42-18

Moved by Board Member Quirk

Seconded by Board Member Campion

That the Niagara Peninsula Conservation Full Authority Board meeting **RECONVENE** in Open Session.

**CARRIED**

7.3 Business Arising from Closed Session

Resolution No. FA-43-18

Moved by Board Member Campion

Seconded by Board Member Quirk

That staff **BE DIRECTED** to verify the NPCA legal costs related to the Justice Ramsey Court Case and then publicly release that information by end of business day Wednesday, January 24, 2018.

**CARRIED UNANIMOUSLY**

## 8. NOTICE OF MOTION

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There were no Notices of Motion.

## 9. NEW BUSINESS

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### 9.1 Brock University re: Bee Populations at Reclaimed Landfill Sites

Board Member Baty requested that Dr. Miriam Richards, Brock University, be invited to a future Full Authority Board meeting respecting her presentation on the potential project to create prairie wild flower and grasses to enhance and promote the bee population growth.

### 9.2 Niagara Entrepreneur of the Year Awards (NEYA)

Board Member Quirk declared an interest with respect to this item as he is involved in the selection of the Niagara Entrepreneur of the Year Award recipient.

#### Resolution No. FA-44-18

Moved by Board Member Kaspersetz

Seconded by Board Member Beattie

That staff **BE DIRECTED** to acquire a table for the Niagara Entrepreneur of the Year Awards (NEYA) being held on Friday, February 23, 2018 on behalf of the Niagara Peninsula Conservation Authority – Full Authority Board.

**CARRIED**

### 9.3 Niagara Peninsula Conservation Authority Permit Fees

Board Member Kaspersetz requested that staff prepare a report which reviews a range of all permit fees and whether there is an opportunity for cost recovery.

### 9.4 2018 Rainbow Trout Fishing – St. John's Pond Conservation Area

#### Resolution No. FA-45-18

Moved by Board Member DiFruscio

Seconded by Board Member Baty

WHEREAS I, Domenic DiFruscio am celebrating my 24<sup>th</sup> year as a Board Member of the Niagara Peninsula Conservation Authority (NPCA);

WHEREAS the Annual Opening of the 2018 Rainbow Trout Fishing at St. John's Pond Conservation Area is fast approaching; and

WHEREAS we want to encourage our youth of either gender between the ages of 8 to 14 years old with proof to participate in our conservation areas.

THEREFORE, BE IT RESOLVED:

That I, Domenic DiFruscio, wish to **DONATE** up to \$75.00 for 3 years (being 2018, 2019, 2020) and \$25.00 for each year for the Angler who catches a trout that has been tagged and dated by NPCA or Niagara Peninsula Conservation Foundation (NPCF);

That if there are no successful winner in 2018, the \$50.00 in the second year 2019 and up to \$75.00 in the third year 2020; and

That if still no successful winner in 2018, 2019 or 2020, a \$75.00 donation will be made to NPCA or NPCF.

**CARRIED (by two-thirds majority)**

## 10. ADJOURNMENT

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There being no further business, the Full Authority meeting adjourned at 12:20 p.m. with the following resolution;

Resolution No. FA-46-18

Moved by Board Member Shirton

Seconded by Board Member Kaspersetz

That the Full Authority Meeting **BE NOW ADJOURNED.**

**CARRIED**

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Sandy Annunziata  
Board Chair,  
Niagara Peninsula Conservation Authority

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Lisa McManus  
Clerk,  
Niagara Peninsula Conservation Authority

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**Report To:** Board of Directors

**Subject:** Binbrook Fish Study 2017

**Report No:** 27-18

**Date:** February 28, 2018

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**RECOMMENDATION:**

1. That Report No. 27-18 respecting the Binbrook Fish Study 2017 **BE RECEIVED** for information.

**PURPOSE:**

To update the Board on the results of the Binbrook Fish Study that was conducted in 2017.

**BACKGROUND:**

The Binbrook Conservation Area (CA) was obtained by the Conservation Authority in 1968, with the construction of a dam and reservoir in 1971. While this reservoir provides a water supply for the Welland River, Binbrook CA also provides a multi-use of the natural resources, including fish and wildlife habitat, and related public opportunities of recreation and nature experiences. In achieving these goals, a variety of habitat projects and improvements have been made at the site with the assistance of the Glanbrook Conservation Committee (GCC) and other groups, resulting in: a reservoir and site of wetland and forested vegetative communities, increasingly diverse aquatic habitat and associated benefits of water quality functions.

Further, fishery resource management of: fish stocking, a 'catch and release' policy for sport fish, and ongoing fish population studies, continues at the site to ensure sustainable fish populations, and provide recreational fishing and other nature opportunities at the site.

As part of the site fishery management, a Study of the Fishery Resources was approved by the Board in 2016 to determine the fishery community population, abundance and distribution of the Binbrook CA's Lake Niapenco, for continued efforts in maintaining a healthy, self-sustaining fishery and to enhance sport fishing opportunities.

## **DISCUSSION:**

The Binbrook Fish Study, conducted by Biotactic Fisheries Research and Monitoring, was completed in 2017 (Appendix 1). This study is pursuant to a 2006 Fish Study on fishery resources, and public concerns of crappie fish populations. The 2017 results identify a self-sustaining fishery population with a variety of fish species. Moreover, management of a bass and crappie fishery is identified; as is regular species/population monitoring to assess seasonal and annual patterns and trends; increased netting surveys of deeper waters; habitat improvements of shoreline vegetation; and efforts required to decrease nutrients and sedimentation from surrounding land use. Specific components for implementation include: annual monitoring of crappie population for 5-10 years; identifications/protection of bass critical habitat; Ducks Unlimited (DU) weir fish passage/frequency study; carp exclusion/ migration prevention and recruitment suppression; continuance of catch and release policy; increase education on fish population awareness; increased data from fishing events; increased inlet in water planting/vegetative cover.

## **FINANCIAL IMPLICATIONS:**

The cost to conduct the fisheries research, monitoring, report and presentation has already been approved and paid in 2017 at \$33,270.12.

Further, estimated costs of the associated fishery management activities stemming from the study range from \$5,000 (carp work) to \$25,000-35,000 fish telemetry/ annually. This continued fishery resource monitoring will assist in assessing populations and ensure the existing site policies and uses are modified as needed. Staff will be placing this item in the 2019 budget process for Board consideration to ensure site resources are sustained for the future.

## **RELATED REPORTS AND APPENDICES:**

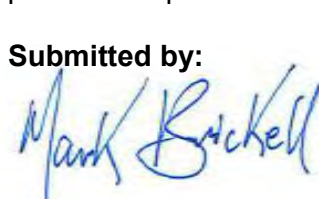
Appendix 1 Biotactic Report on Lake Niapenco Sport Fish Population Estimates

**Prepared by:**



**David Barrick**  
Senior Director, Corporate Resources

**Submitted by:**



**Mark Brickell**  
CAO/Secretary-Treasurer

*This report was prepared in consultation with Kim Frohlich, Ecologist.*



**LAKE NIAPENCO SPORT FISH POPULATION ESTIMATES: LARGEMOUTH BASS, SMALLMOUTH BASS, WHITE CRAPPIE, BLACK CRAPPIE, PIKE AND WALLEYE**



*Prepared by:*

Biotactic Inc.  
691 Hidden Valley Road  
Kitchener, ON  
N2C2S4

*Prepared for:* The Niagara Peninsula Conservation Authority - November 28 2017

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## INTRODUCTION

The Niagara Peninsula Conservation Authority (NPCA) contracted Biotactic Incorporated to conduct a fish community and population study at the Binbrook Conservation Area, (Lake Niapenco), Binbrook, Ontario in 2017. The purpose of this study was to gather existing fisheries data by performing a literature review of all relevant information including historical data and published reports. In addition, extensive fish sampling was performed to examine the current species inventory and determine ratios of fish species within the reservoir. Statistically valid population estimates were also calculated using mark-recapture techniques to estimate current fish populations, relative abundance and community structure, with a focus on the sport fish community (e.g., Largemouth Bass, Smallmouth Bass, White Crappie, Black Crappie, Northern Pike and Walleye). This report describes the standardized sampling protocol employed to monitor and describe fish population sizes and trends, as well as providing recommendations for future fisheries management in Lake Niapenco. The information in this document can be used to supplement and complement existing fisheries management plans (e.g., Biotactic 2005) in order to sustain a healthy fishery and enhance recreational fishing opportunities for future generations.

## RESERVOIR HISTORY

The Binbrook reservoir, also known as Lake Niapenco, was created by the damming of the upper catchment of the Welland River in 1971 to provide flood protection, water storage and flow augmentation while providing increased wildlife habitat and recreational land use for local residents. It is divided into two segments (east and west) by a weir built at the eastern end in 1981 which provides a constant wetland area for staging waterfowl and may provide water quality protection by acting as a sedimentation basin for the remainder of the reservoir. Both segments are connected via a drainage pipe, however, regular fish movement does not occur unless water levels breach the weir (i.e., during Spring flooding, Andy Fevez *pers. comm.*). In

addition, upstream fish passage from the Welland River is also prevented by the Binbrook dam located at the lower end of the reservoir (Yagi and Blott 2012).

The reservoir was designed for a maximum surface area of 174 hectares and stretches 5.4 km with a maximum depth of 6.3 m (20.7 ft). The majority of the depths in the reservoir range from 4 to 5.5 m (14 to 18 ft). The outlet structure includes a “morning glory” overflow that is regulated to maintain 5 cfs summer discharge to meet minimum downstream flow requirements. Previously, water levels in the winter were lowered by 2 to 3.5 m, however in recent years winter water levels have been maintained to stabilize shoreline vegetation and overwintering habitat.

The reservoir catchment drains an area of approximately 43 km<sup>2</sup> from the upper Welland River watershed. Land use within this area is primarily agricultural, but also includes rural and urban residential, with some forest and shrubland. The Binbrook reservoir is generally turbid which is likely due to the predominance of clay or silt substrate, land use practices that liberate silt, and the lack of riparian buffer zones.

## Water Quality

Historically, assessment of water quality at the Binbrook reservoir has been limited. The Ministry of the Environment (MOE) reported elevated turbidity levels (mean annual water clarity of less than 1.0 m), nutrient loading (total phosphorus and ammonium concentrations exceeding provincial guidelines), hypolimnetic anoxia, nuisance blooms of blue-green algae and high bacteria levels resulting in beach closures based on data from water samples collected in 1988 and 1989 (Gezma 1994). Similar water quality trends have been observed throughout the years. The NPCA has been monitoring the Welland River upstream and downstream of the Binbrook Reservoir at Tyneside Road and Harrison Road, respectively, since 2002. Findings indicate an improvement in water quality, including decreases in total phosphorus and *E.coli* levels as water passes through Lake Niapenco.

In 2010, Environment Canada (EC) incidentally discovered higher than expected amounts of perfluorooctane sulfonate (PFOS) during a study of Snapping Turtles conducted in the reservoir (De Solla *et al.* 2012). PFOS averaged  $2223 \pm 247.1$  ng/g (mean  $\pm$  SE) from turtle plasma,  $518.1 \pm 83.8$  ng/g in amphipods and  $130.3 \pm 43.6$  ng/L in water in the reservoir, compared to 9.0 to 171.4,  $19.1 \pm 2.7$  ng/g, and  $6.8 \pm 0.5$  ng/L at nearby references sites, respectively (De Solla *et al.* 2012). PFOS is a man-made compound that does not readily break down and therefore leads to bioaccumulation. It is most likely that PFOS in the reservoir and reservoir fishes originated from unreported spills at the Hamilton Airport (De Solla *et al.* 2012). There are few epidemiological studies of PFOS in humans; however, animal studies have shown repeated exposure to PFOS can affect the liver and thyroid, resulting in slow growth and evidence of cancer (Han and Fang 2010). Fish were later harvested and it was found that PFOS levels in fish exceeded the fish consumption advisory levels. As such, the sport fish and consumption advisory for Binbrook reservoir was revised for the 2011-2012 Guideline to Eating Ontario Sport Fish (NPCA 2011).

Since 2014, the NPCA conducts annual monitoring of Lake Niapenco for perfluorinated chemicals (PFCs) and results are summarized in technical memos. The City of Hamilton Public Health has evaluated PFC data and determined that the concentrations detected would not adversely affect consumers of the drinking water supply; this division also monitors Lake Niapenco for bacteria and blue green algae during the operating season. Furthermore, in the winters of 2015-2016 the NPCA installed a YSI multimeter to monitor dissolved oxygen (DO) to ensure concentrations are sufficient to support fish populations. These data have been summarized in technical memos and indicate adequate winter DO concentrations. Lastly in 2017, Lake Niapenco was added to the NPCA Water Quality Monitoring Program which includes regular quarterly monitoring of general chemistry, nutrients, metals and bacteria. Continued detailed water quality monitoring within the Binbrook reservoir will determine any changes or trends, as well as assess the effectiveness of best management practices within the watershed.

## Macrophytes

Prior macrophyte habitat assessments revealed a very limited community of aquatic vegetation, and this trend continued into 2017. Sparse vegetation included pondweed, duckweed, cattails and *Scirpus spp.* patches. The wetland area upstream of the Ducks Unlimited (DU) weir had a more diverse vegetation community which included water lilies, soft stemmed bulrush, cattails, duckweed and ribbon pondweed.

Limited plantings have been done in the reservoir but appear to have largely failed based on existing vegetation. Plantings in the 1990's included soft stemmed bulrush, sago pondweed, water lilies, river rush, pickerel weed, 3-sided bulrush, water plantain, hard stem bulrush and burred. Historically, habitat enhancement projects focused on improving forage fish habitat and walleye spawning areas. Plants with small rootstock or small tubers may not survive well in the Binbrook reservoir due to disturbance by Common Carp, waterfowl, wave and wind action, as well as the predominance of unsuitable clay substrate. Poor light penetration may also negatively affect photosynthetic efficiency particularly for submergent vegetation. Attempts to protect new plantings from disturbance from carp, for example, have been met with limited long-term success.

Severe erosion of the riparian habitat and sedimentation continue to be evident along the shoreline (Figure 1). Since the revision of dam operations in 1997 to reduce water level fluctuations (i.e., drawdowns - NPCA 2006), it is unknown if riparian habitat and sedimentation rates have improved. Recommendations to identify existing erosion-prone areas, to determine the rate and extent of erosion and to prioritize areas for riparian restoration/stabilization have been suggested (NPCA 2006).



Figure 1. Sedimentation within the Binbrook reservoir.

## Bathymetric Mapping

A bathymetric survey of the Binbrook reservoir was completed by Biotactic Incorporated in 2005 (Biotactic 2006). Although, a current bathymetric map was not completed it is believed water depths are still consistent with those outlined in 2005 (Figure 2).

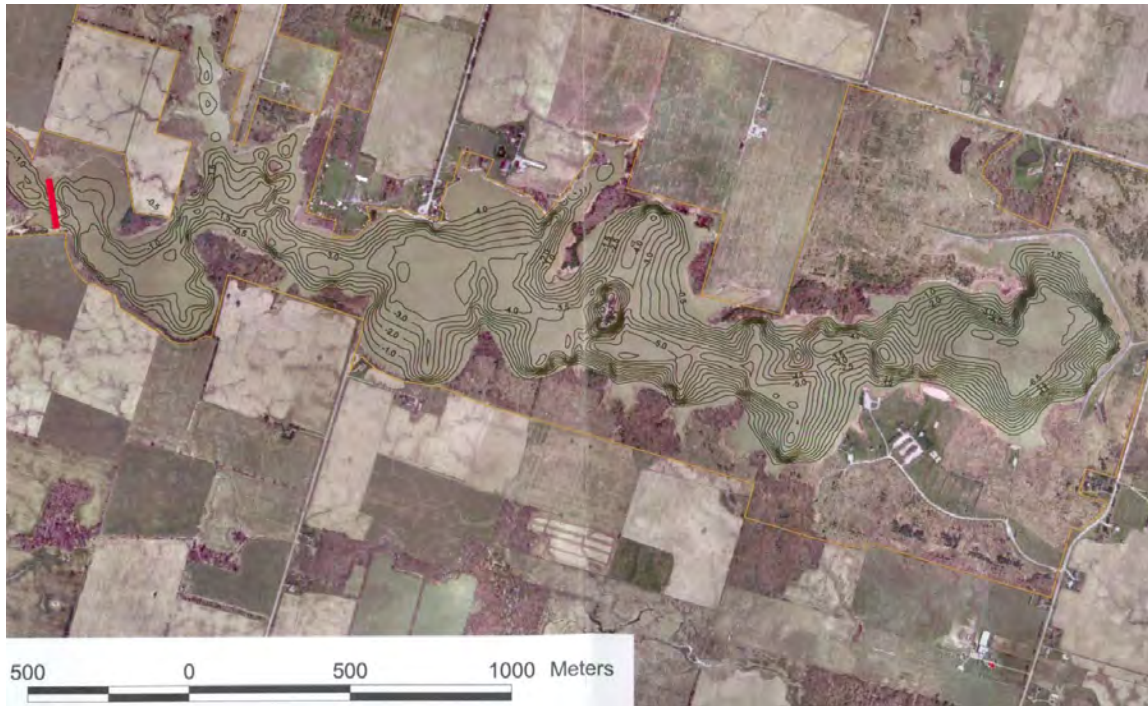


Figure 2. 2005 Bathymetric map of Binbrook reservoir scanned from Biotactic (2006). Lines are depth contours and the red bar denotes the location of the Ducks Unlimited weir.

## Fish Community

Fish community information for the Binbrook reservoir was compiled based on data collected from the early 1980's to 2017. Active fisheries management began with the stocking of Largemouth Bass (*Micropterus salmoides*) in the 1970's and Walleye (*Stizostedion vitreum*) in the 1980's (NPCA *pers. comm.*; Yagi and Blott 2012). Fish surveys using trap nets began in the 1990's as local residents became concerned about poor habitat quality and a perceived overpopulation of Common Carp (*Cyprinus carpio*). These surveys showed an abundance of White Crappie (*Pomoxis annularis*) and limited numbers of Walleye (NPCA 1996 *unpub. data*). Further stocking efforts included suckers, minnows, and Northern Pike (NPCA *pers. comm.*; Yagi and Blott 2012). Specifically, 35 adult Northern Pike were stocked in 1992 and 1993, 600 adult Largemouth Bass were stocked in 1997 and 1999 and 40 adult Walleye were stocked from the Bay of Quinte in 1997 to 1998 by the Ontario Ministry of Natural Resources (OMNR)



(NPCA *pers. comm.*; GCC and NPCA 2003). The last stocking efforts within the Binbrook reservoir occurred in 2008 with 700 Walleye fingerlings obtained from adult fish captured in the Bay of Quinte in 2001 and raised at the OMNR Lake White Fish Culture Station (NPCA *pers. comm.*; Yagi and Blott 2012). Only three adult Walleye were captured in surveys conducted from 1993 to 2003 and only two adult Walleye were captured in 2012 during the Binbrook Crappie Derby (NPCA *unpub. data*). Adult Walleye, however, continue to be occasionally caught by anglers (A. Fevez, *pers. com.*). No juvenile Walleye have been observed or captured in the reservoir which may indicate that stocking efforts are ineffective and no natural reproduction is occurring. Therefore the population does not appear to be self-sustainable under current conditions. In comparison, Largemouth Bass have established well within the reservoir as indicated by consistent catches of both young-of-the-year (YOY), juveniles, subadults as well as some very large adult fish.

In 1992, sampling using trap nets captured 14181 fish, of which 13511 were Crappie (Gemza 1994). Specifically, Black Crappie (*Pomoxis nigromaculatus*) was the dominant species (95%), followed by Common Carp and Brown Bullhead (*Ictalurus nebulosus*) (1 to 3%). Northern Pike (*Esox lucius*), Walleye, Smallmouth Bass (*Micropterus dolomieu*) and Largemouth Bass represented less than 1% of the total catch (Gemza 1994).

While fish sampling conducted prior to 1997 was designed to survey the fish community before habitat and water management changes were made, sampling conducted in 2003 details the fish community approximately five years after these initiatives (Yagi and Blott 2012). Detailed sampling using trap nets, hoop nets, minnow traps and electrofishing gear was conducted in 2002 and 2003 by members of the Glanbrook Conservation Committee and the NPCA (GCC and NPCA 2003). Results from this work were compared to data collected during fish surveys conducted from June to September 1992 to 1994. Sampling data yielded 14 species with both Walleye and Largemouth Bass having increased from 1992 to 2002, whereas Crappie species decreased from 1993 to 2002. Tables 1-3 show basic comparative information for each of the sampling years.

Table 1. Trends in the fish community from trap net, hoop net, box trap and gillnet samples upstream from the DU weir

Species	1993	Fish/day	% of pop	1994	Fish/day	% of pop	2003	Fish/day	% of pop	2003 Box trap only (A,D,E,H)	Fish/day	% of pop	2005 Gillnet (2hr set)	Fish/day	% of pop
Black Crappie															
Black/White Crappie	388	47.75	76.8	762	19.05	82.8	882	128.40	56.89	502	65.9	57.06			
White Crappie							356	52.10	23.08	194	26.5	22.94			
Northern Pike							10	1.10	0.49	4	0.5	0.43			
Walleye															
Largemouth Bass	1	0.14	0.2				6	1.30	0.58	3	0.6	0.52			
Smallmouth Bass															
Rock Bass				5	0.13	0.5									
Yellow Perch	2	0.29	0.5												
White Sucker				1	0.03	0.1									
Pumpkinseed	2	0.29	0.5	8	0.20	0.9	48	10.00	4.43	24	4.9	4.24			
Bluegill	4	0.57	0.9	2	0.05	0.2	3	0.60	0.27	3	0.6				
Common Carp	13	1.14	1.8	13	0.33	1.4	7	1.30	0.58	3	0.5	0.43	1	8	50
Brown Bullhead							207	30.30	13.42	131	16.0	13.85	1	8	50
Bullhead/Catfish	88	12.04	19.3	130	3.25	14									
Channel Catfish							2	0.20	0.09						
Other							2	0.40	0.18						
Total	498			921			1523			864			2		
Total Number of Netting Days	19			40			43			22			1		
Number of fish per netting day	62			23				226			116			16	

Table 2. Trends in the fish community of the Binbrook Reservoir as indicated from trap net (1992-2003), and gill nets (2005) samples below the DU weir

Species	1992	Fish/day	% of pop	1993	Fish/day	% of pop	1994	Fish/day	% of pop	2002	Fish/day	% of pop	2005	Fish/day	% of pop
Black Crappie															
Black/White Crappie	5970	177.88	92.7	6881	619.45	89.9	5251	165.52	94.48	1516	288.70	62.8			
White Crappie										801	146.63	31.9	15	87	60
Northern Pike	6	0.18	0.09	3	0.40	0.1				17	2.64	0.6	1	3	4
Walleye										2	0.29	0.1			
Largemouth Bass	2	0.06	0.03	3	1.04	0.2	2	0.04	0.02	21	3.78	0.8	1	4	4
Smallmouth Bass	1	0.03	0.02	2	0.31		1	0.02	0.01						
Rock Bass				15	1.14	0.2	4	0.17	0.10	1	0.33	0.1			
Yellow Perch	56	1.70	0.88	75	6.92	1.0	37	1.13	0.65	12	2.33	0.5	3	9	12
White Sucker	1	0.03	0.02	9	1.07	0.2	5	0.11	0.06	12	1.97	0.4			
Pumpkinseed	9	0.27	0.14	125	8.7	1.3	9	0.28	0.16	13	2.98	0.6			
Bluegill				3	0.11					2	0.29	0.1			
Common Carp	99	3.00	1.56	32	3.64	0.5	5	0.22	0.12	1	0.50	0.1	2	10	8
Brown Bullhead										40	6.60	1.4	1	12	4
Bullhead/Catfish	285	8.64	4.50	324	46.02	6.7	207	7.69	4.39						
Channel Catfish										12	2.49	0.5	1	3	4
Other	1	0.03	0.02							1	0.20	0.04	1	3	4
Total	6330			7472			5621			2451			25		
Total Number of Netting Days	132			94			69			74			1		
Number of fish per netting day	192	192		688	689		175	175		460	460			131	

Table 3. Species presence and relative abundance data of 22 species sampled in the Binbrook reservoir (+ indicates species presence) from Yagi and Blott (2012)

Common Name	Scientific Name	MNR (2003)	MNR (1997)	NPCA (2002)	1993 GCCC Trap netting
White Sucker	<i>Catostomus commersoni</i>	1.01%		+	+
Golden Shiner	<i>Notemigonus crysoleucas</i>	9.6%	8.2%		
Emerald Shiner	<i>Notropis atherinoides</i>	0.5%			
Common Shiner	<i>Luxilus cornutus</i>	3.5%			
Spottail Shiner	<i>Notropis hudsonius</i>	2.5%	2.0%	+	
Bluntnose Minnow	<i>Pimephales notatus</i>		7.5%		
Yellow Bullhead	<i>Ameiurus natalis</i>	2.0%	8.2%		
Brown Bullhead	<i>Ameiurus nebulosus</i>			+	
Channel Catfish	<i>Ictalurus punctatus</i>			+	+
Rock Bass	<i>Ambloplites rupestris</i>				+
Green Sunfish	<i>Lepomis cyanellus</i>	2.0%	2.0%	+	
Pumpkinseed	<i>Lepomis gibbosus</i>	8.1%	17.8%	+	
Bluegill	<i>Lepomis macrochirus</i>	2.0%		+	
Hybrid sunfish	<i>Lepomis X</i>		0.7%		
Largemouth Bass	<i>Micropterus salmoides</i>	9.1%	8.9%	+	+
Smallmouth Bass	<i>Micropterus dolomieu</i>		0.7%		+
White Crappie	<i>Pomoxis annularis</i>	14.6%	8.2%	+	
Black Crappie	<i>Pomoxis nigromaculatus</i>	27.8%	8.2%	+	
Pomoxis Species	<i>Pomoxis sp.</i>				+
Yellow Perch	<i>Perca flavescens</i>	8.1%	3.4%	+	+
Northern Pike	<i>Esox lucius</i>		1.4%	+	+
Walleye	<i>Stizostedion vitreum</i>			+	+
Common Carp	<i>Cyprinus carpio</i>	8.1%	15.7%	+	+

Fish sampling in 2005 was conducted at seven sites by Biotactic Incorporated on November 2<sup>nd</sup> and 3<sup>rd</sup> using a boat electrofisher (5 sites) and gill nets (7 sites) (Biotactic 2006). Each site was sampled by electrofishing for 1000 seconds along shoreline transects and sampled by net sets

lasting between 95 and 146 minutes (Biotactic 2006). A total of 14 fish species and 940 individuals were captured (Biotactic 2006).

In 2012, 107 fish were captured, tagged and released during the Crappie Derby. The total catch consisted of 100 Crappie (6 White Crappie, 94 Black Crappie), 3 Largemouth Bass, 2 Walleye, 1 Northern Pike and 1 Smallmouth Bass (Biotactic *unpub. data*).

In summary, there were at least 21 fish species found within the Binbrook reservoir (prior to 2017) including White Sucker, Yellow Bullhead, Brown Bullhead, Channel Catfish, Golden Shiner, Emerald Shiner, Common Shiner, Spottail Shiner, Bluntnose Minnow, Rock Bass, Green Sunfish, Pumpkinseed, Bluegill, Northern Pike, Largemouth Bass, Smallmouth Bass, White Crappie, Black Crappie, Walleye, Yellow Perch and Common Carp (NPCA 2011). Some hybridization is evident among the *Lepomis* genus. Black and White Crappie were shown to be the most centrarchids within the reservoir.

#### **List of Secondary Source Information:**

Background information reviewed for development of the 2017 Binbrook Fish Management Plan includes:

NPCA Binbrook Fisheries Management Plan 2006, by Biotactic

Bathymetry data for Lake Niapenco, 2006 by Biotactic

Habitat rehabilitation data 1990 to 2005

Binbrook Conservation Area Fishery Resource Assessment by NPCA, 2003

Binbrook Reservoir by A. Gemza, 1983

Historic site air photos

2015 site ortho-imagery

NPCA Fisheries Management Plan 1997

Shoreline habitat data of Lake Niapenco, 2004

Fish Data (1986-2003) and Harvest Reports (2000-2004)

## POPULATION ESTIMATES

There are many techniques used to estimate the size of fish populations by means of mark-recapture studies including the Petersen (Ricker 1975), Schnabel (1938) and Jolly-Seber (1982) methods, and their derivatives. In general, each method involves sampling a portion of individuals in a population, which are then marked with a unique identifier (e.g., external anchor tag) and released near the location of capture. A subsequent sampling event (or events) is performed in which all marked and unmarked individuals are documented and counted. Each method has its own set of underlying assumptions with Petersen and Schnabel estimates applicable to closed populations (i.e., those that do not change in size; short sampling time-frame) and Jolly-Seber estimates applicable to open populations (those that change in size due to births/deaths and/or emigration/immigration; long-term sampling). Estimates from multiple models obtained from different sampling schemes can be combined to provide a comprehensive insight into population size, with the incorporation of both closed and open estimates considered a “robust method” (Krebs 1999).

### Petersen Method

The Petersen Method (also known as the Lincoln-Petersen method) is based on a single marking survey and a single recapture survey, where individuals need not be uniquely marked. Original Petersen estimates are computed for each species following the equation:

$$N=CM/R$$

For these formulae, N is an estimate of the population size at the time of marking, M is the number of individuals marked in the first sample, C is the number of individuals captured in the

second sampling (i.e., examined for marks) and R is the number of individuals in the second sample that were marked (i.e., recaptured) (Krebs 1999).

While widely used this formula tends to overestimate the true population size, particularly if sample sizes are small (Krebs 1999). A derivation to account for small sample sizes, called the Chapman estimator, is considered to be a nearly unbiased version of Petersen if  $R > 7$  and is calculated as:

$$N = [(M+1)(C+1)/(R+1)] - 1$$

In both Petersen and Chapman estimators individuals are sampled without replacement (each individual can be counted only once during the recapture survey). If individuals are sampled with replacement, such as if sampling takes place over multiple days or individuals are only observed, not captured, then the accurate estimator is the Bailey estimate which is also unbiased if  $R > 7$  and is calculated as:

$$N = M(C+1)/(R+1)$$

Confidence intervals can be computed for each estimate, with appropriate methodology (binomial, normal approximation or poisson) determined based on the ratio of  $C/R$  and  $R$  as per Krebs (1999).

#### *Underlying Assumptions*

- (1) The population is closed such that N is constant
- (2) Marked and unmarked fish are equally vulnerable to capture
- (3) Marks are retained during the sampling period
- (4) Marked fish randomly mix with unmarked fish
- (5) All marks are recorded during recapture

## Schnabel Method

The Schnabel method takes into account multiple marking and recapture surveys and does not require that the time interval between samples be constant, or that individuals be uniquely marked. For this method, information for each sampling session regarding the number of individuals captured, the number captured that were already marked, the number captured that are newly marked and the number of marked individuals in the population at large is arranged in a table of the form of Figure 3.

Sampling Event (t)	# Individuals Caught ( $C_t$ )	# Individuals Recaptured ( $R_t$ )	# Individuals Newly Marked	# Individuals at Large Marked ( $M_t$ )
1	13	0	13	0
2	35	0	35	13
3	26	3	23	48
4	42	1	41	71
Totals	116	4	112	132

Figure 3. Example table of data organized for Schnabel calculations (adapted from Krebs 1999).

From the above, original Schnabel estimates are computed following the equation:

$$N = \sum_t C_t M_t / \sum_t R$$

A derivation (*re* correction) of Schnabel to account for small sample sizes is also available and calculated as:

$$N = \sum_t C_t M_t / (\sum_t R + 1)$$

With N, C, M and R as defined, and confidence intervals computed, as above.

An additional estimator, the Schumacher and Eschmeyer Method, is calculated as:

$$N = \sum_{t=1}^s (C_t M_t^2) / \sum_{t=1}^s (R_t M_t)$$



Where  $s$  is the total number of sampling events and confidence intervals are computed using a normal approximation and standard error calculations, irrespective of the number of  $R$  (Krebs 1999).

#### *Underlying Assumptions*

As per Petersen:

- (1) The population is closed such that  $N$  is constant
- (2) Marked and unmarked fish are equally vulnerable to capture
- (3) Marks are retained during the sampling period
- (4) Marked fish randomly mix with unmarked fish
- (5) All marks are recorded during recapture

#### **Jolly-Seber Method**

The Jolly-Seber method (also known as the Cormack-Jolly-Seber (CJS) method) also includes multiple marking and recapture surveys and requires that the period of time between sampling sessions be significantly longer than the duration of each sampling session itself (e.g., each sampling session lasts 2 days with a time between of 2 weeks) (Krebs 1999). Information for each session again is organized into a table (termed a Method B table), this time including information regarding when recaptured individuals were last observed (captured; individuals uniquely marked), as shown in Figure 4.

Time of Last Capture	Time of Capture			
	1	2	3	4
1		0	1	0
2			2	0
3				1
4				
Total Marked ( $m_t$ )	0	0	3	1
Total Unmarked ( $u_t$ )	13	35	23	41
Total Caught ( $n_t$ )	13	35	26	42
Total Released ( $s_t$ )	13	35	26	42

Figure 4. Example Method B table for Jolly-Seber calculations (adapted from Krebs 1999). Note the example data shown here are the same as in Figure 3.

From this, an estimate of population size just before time  $t$  can be calculated as:

$$N_t = M_t / \alpha_t$$

Where  $\alpha_t$  including a small sample size correction:

$$\alpha_t = m_t + 1/n_t + 1$$

and:

$$M_t = [(s_t + 1)Z_t/R_t + 1] + m_t$$

Where  $Z_t$  is the number of individuals marked before sample  $t$ , not caught in  $t$ , but caught in samples after and  $R_t$  is the number of  $s_t$  individuals released at  $t$  and caught in samples after, as per the Method B table composed for calculations. Confidence limits are computed based on a function of the variance of transformed population estimates (see Krebs 1999).

#### *Underlying Assumptions*

- (1) Marked individuals have the same probability of surviving between samples
- (2) Marked and unmarked fish are equally vulnerable to capture
- (3) Marks are retained during the sampling period and recorded during capture
- (4) Sampling time is small in comparison to periods between samples

## METHODOLOGY

### Fish Sampling

Fish sampling was conducted in the summer of 2017 from June 12 to 22, and in the fall from September 11 to 22, (OMNRF collection permit # 1086814), using a boat electrofisher, traps nets (i.e., fyke nets and box net), and trammel nets, as well as a backpack electrofisher during a testing session.

Just over 31000 seconds of boat electrofishing surveys were conducted along the shoreline in June and 22000 electrofishing seconds were used in September.

Ten sites were sampled with fyke nets and seven sites were sampled with trammel nets in June (Figure 5) with an additional 10 fyke net locations, 5 trammel net locations and 1 box net location sampled in September (Figure 6).

### Boat Electrofishing

Sampling was conducted along the shoreline and was standardized so that each site was sampled for 1000 seconds. All fish of interest (i.e., sport fish) were collected and each individual was measured, weighed and tagged with numeric floy tags on the right lateral side, at the appropriate tissue depth near the posterior of the dorsal fin. Only fish with a total length (TL) larger than 150 mm were tagged to minimize impairment of behaviour of smaller fish. All fish less than 150 mm were measured and weighed (note there was a minimum weight detection of 50g). After processing, all fish were released near the location of capture.

## Trap Nets

Trap nets including fyke nets and a box net were used to capture fish within the Binbrook reservoir. Fyke nets consist of a cylindrical net mounted around multiple hoops. Two wings are set perpendicular to the hoops and a leader is set which extends outwards to passively guide the fish towards the entrance. Two fyke nets were used, one with a ½” and the other with a ¼” mesh size. A box net was used in one location, which was provided courtesy of Andy Fevez, Glanbrook Conservation Committee. Box nets are very similar to fyke nets as they consist of a net mounted around square or rectangular hoops, with a leader and two wings. The nets were deployed along the shoreline in various randomly selected locations, ensuring only that effort was distributed around the reservoir and were set for a soak time of approximately 24 hours within each location. As above, all fish collected were measured and weighed with individuals >150 mm TL tagged with a numeric anchor tag on the right lateral side. After processing, all fish were released near the location of capture.

## Trammel Nets

Trammel nets consist of three layers of netting, which trap and entangle the fish and have the benefit of being effective in deeper waters where boat electrofishing and fyke nets cannot be used effectively. The net used was composed of a 12” mesh outer layer and a 2” mesh inner layer. Trammel nets were set for two hours in various locations within the Binbrook reservoir (Figure 5 and 6). All fish collected were measured and weighed with individuals > 150 mm TL tagged with a numeric anchor tag on the right lateral side. After processing, all fish were released near the location of capture.



Figure 5. Trap net sampling locations in the Binbrook reservoir in June 2017. Red circles indicate locations of Fyke nets and blue circles denote trammel net set locations.

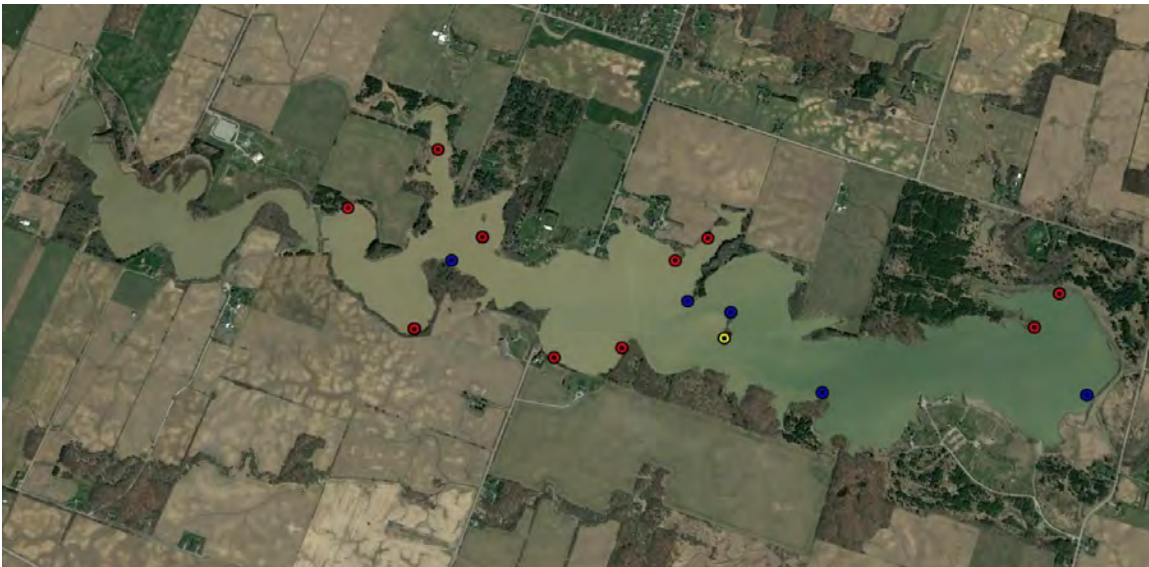


Figure 6. Trap net sampling locations in the Binbrook reservoir in September 2017. Fyke net locations are indicated by red circles, trammel nets are indicated by blue circles and box net locations are indicated by yellow circles.

## Calculations

Collected data were grouped for each fish species and used to calculate abundance, mean length, mean weight, catch-per-unit-effort and condition factor. Population size estimates were also produced for the catchable proportion of the populations sampled (adults; individuals >150 mm).

### Fulton's Condition Factor

Fulton's condition factor ( $K$ ) is commonly used in fisheries management to evaluate the health of individual fish, populations, and communities. It uses the relationship between length ( $L$ ; cm) and weight ( $W$ ; g) as a measure of individual fish health and is calculated as:

$$K=100(W/L^3)$$

Generally, high values of  $K > 1$  are considered an indicator of good health and may indicate favourable environmental conditions (i.e., suitable and available habitat, prey abundance), whereas low values ( $K < 1$ ) are characteristic of poor health and may be indicative of less favourable conditions and stress.

### Catch-per-unit-effort

Catch-per-unit-effort (CPUE) is also used in fisheries management as an indirect measure of relative fish abundance. Changes in the catch-per-unit-effort may be indicative of changes in population size. A decreasing CPUE, for example, can indicate a declining population, while an increasing CPUE may indicate a population which is productive and is showing signs of good recruitment.

## Population Estimates

A total of 6 closed-population estimates (plus derivations) were calculated for each species (Figure 7). Petersen estimates (including original, Chapman and Bailey estimators) were computed using data from the first (June) and second (September) phase of sampling independently. For both, week 1 was considered to be the marking session and week 2 the recapture period, with individuals marked and recaptured during week 1 counted only once. Individuals captured in September which were marked in June were counted as newly marked in week 1 and considered recaptures if captured again in week 2. Likewise, Schnabel estimates (including original, small size and Schumacher-Eschmeyer) were computed using data from the first (June week 1 and 2 combined) and second (September week 1 and 2 combined) phase of sampling independently; individuals captured in September marked in June were counted as newly marked upon first capture and as recaptures subsequently. Note that confidence intervals provided for Schumacher-Eschmeyer estimates were calculated using a consistent value for the sampling event variable  $s$  to avoid subjectivity associated with decisions regarding which species were targeted with different sampling gear employed on various days.

While populations can undoubtedly be considered closed over the 2 week sampling periods used above, populations might also be considered closed over the entire 4 month period within which sampling was conducted. A closed population is defined as one in which the population size does not change- births, deaths and immigration/emigration are negligible. Births that occur in a population proposed to be closed cause an issue as they may inflate the population estimate if individuals add to the catchable population (Krebs 1999). Since the catchable population used in Binbrook estimates is individuals >150mm, births do not affect the population size. Note that the size may be affected to a small degree by growth over the sampling period which may have added individuals too small to be considered in June into the catchable population in September (see Discussion). Deaths can occur within a closed population without violating the assumption, given that they are equally likely to occur in marked and unmarked individuals (Krebs 1999), which is upheld within the Binbrook system. Finally, as the Binbrook reservoir is an isolated

lake with no fish passage through connected waterways, there is no immigration/emigration into/out of the system. Given, then, that assumptions are all (or largely) upheld, additional Petersen and Schnabel estimates were produced using the entire dataset (June and September together), thereby providing a greater resolution of the data than separate monthly estimates. Here, for dataset-level Petersen estimates, June was considered the period of tagging, September the period of recapture and individuals tagged in September and recaptured were counted only once.

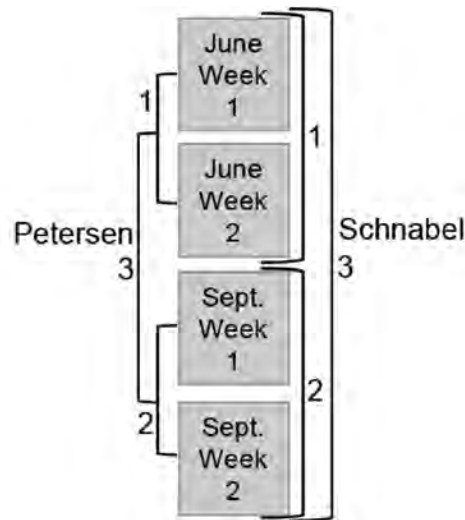


Figure 7. Scheme of sampling used for three Petersen and three Schnabel population estimates in the Binbrook reservoir with separate June, September and dataset-level estimates.

Also considering the dataset as a whole, a Cormack-Jolly-Seber estimate (an open-population method) was calculated for each species with data grouped into 4 sampling events: June week 1, June week 2, September week 1 and September week 2. Population size at the time of sampling event 3 was estimated, as it is not possible to determine an estimate for size at the time of last sampling with this method. Note that while the sampling included in this estimate covered the complete time-frame of this study, the data collection scheme used in the field violates the CJS framework, wherein the period of sampling is negligible relative to the time period between events.



Note again that for all estimates, the numbers of individuals used in captures (i.e., fish examined for marks) includes only those individuals of a taggable size (adults; >150mm TL); thus estimates of population size are of this subset of the population only. All of the above estimates were calculated for each species individually, as well as combining White Crappie and Black Crappie, and Largemouth and Smallmouth Bass due to small sample sizes.

## RESULTS AND DISCUSSION

### Population Characteristics

#### Sampling Summary

During the fish sampling in June 2017, 17 fish species and 601 individuals were captured (Table 4). Of the 601 individuals captured, 589 were unique fish, 211 of which were marked and 12 of which were recaptured. A total of 48 fish were captured with Fyke nets, 41 with trammel nets and 512 with boat electrofishing. Of the 211 marked fish, 97 were Largemouth Bass, 31 Smallmouth Bass, 64 White Crappie, 17 Black Crappie and 2 Northern Pike.

In September 2017, 17 fish species and 1385 individuals were captured (Table 4); 1364 unique and 21 recaptures. While no Emerald Shiner nor Spottail Shiner were captured in the September sampling period, two different species, Johnny Darter and Rock Bass, were captured. Fifty fish were captured with fyke nets, 20 with trammel nets, 1262 with boat electrofishing, 48 fish with a box net and 5 fish with a backpack electrofisher (during testing). Of the 1364 fish captured 341 were marked; 217 anchor (Floy) tagged, 100 upper caudal fin clip and 24 lower caudal fin clip. Six of the 21 fish recaptured were marked in June. Of the 341 marked fish, 105 were Largemouth Bass, 11 Smallmouth Bass, 169 White Crappie, 54 Black Crappie and 2 were Northern Pike.

Overall, 1986 fish (1953 unique individuals) were captured with a combination of boat electrofishing, fyke nets, trammel nets and a box net in June (601 fish) and September (1385 fish, Table 4). A total of 33 fish were recaptured during this period; 12 recaptures in June and 21 recaptures in September, with an additional 2 Largemouth Bass recaptured by anglers (one in July, one in October). A total of nineteen species were captured: Black Crappie, Bluegill, Bluntnose Minnow, Brown Bullhead, Channel Catfish, Emerald Shiner, Golden Shiner, Green Sunfish, Largemouth Bass, Northern Pike, Pumpkinseed, Smallmouth Bass, Spotfin Shiner, Spottail Shiner, White Crappie, Yellow Perch, Common Carp, Johnny Darter and Rock Bass. Based on previous studies, some of the species collected had not been documented in the Binbrook reservoir, including Spotfin Shiner and Johnny Darter. In contrast, White Sucker, Yellow Bullhead, Common Shiner and Walleye, while captured in previous studies, were not detected in 2017. The most dominant species observed was Common Carp, however numbers were not quantified because individuals were not actively netted during electrofishing. Based on observations it appears that the population size of Common Carp is in the tens of thousands. Bluegill (25.04%) was the most abundant species captured, followed by Yellow Perch (17.26%). Note however that boat electrofishing is generally biased towards catching large bodied fish (and individuals) and it is likely that cyprinids are the most abundant family in the reservoir. Crappie consisted of 17.4% of the total catch and bass totalled 14.8% while Northern Pike consisted of less than one percent of the total catch.

Data from a temperature logger installed for the study duration is shown in Figure 8. Water temperatures ranged from 18.87-28.52°C over the 4 month study duration. The average temperature during the 2 week June sampling period was 24.02°C (range: 22.56-25.60°C, SD: 0.80) and the average over the September sampling period was 23.07°C (range: 19.56-26.48°C, SD: 1.40).

Table 4. Summary of fish species captured during the June and September 2017 sampling survey. Numbers caught are of unique individuals only and do not include recaptures.

Species	Total Caught In June	Total Caught In September	Total Captured	% of Total	Avg Length $\pm$ SD (range)			Avg. Weight $\pm$ SD (range)		
					June	September	Overall	June	September	Overall
Black Crappie	22	61	83	4.25	174.3 $\pm$ 61.0 (118-244)	175.4 $\pm$ 26.6 (82-226)	175.1 $\pm$ 26.9	0.09 $\pm$ 0.16 (0.05-0.17)	0.09 $\pm$ 0.03 (0.05-0.17)	0.09 $\pm$ 0.03
Bluegill	99	390	489	25.04	135.6 $\pm$ 33.7 (47-186)	125.2 $\pm$ 28.3 (77-176)	131.4 $\pm$ 32.0	0.09 $\pm$ 0.02 (0.05-0.15)	0.10 $\pm$ 0.02 (0.06-0.12)	0.09 $\pm$ 0.02
Bluntnose Minnow	1	3	4	0.20	82.0	46.7 $\pm$ 8.0	55.5 $\pm$ 18.8	-	-	-
Brown Bullhead	28	1	29	1.48	253.2 $\pm$ 38.7 (178-321)	285.0	254.3 $\pm$ 38.5	0.23 $\pm$ 0.10 (0.70-0.46)	0.32	0.23 $\pm$ 0.10
Channel Catfish	9	8	18	0.92	279.6 $\pm$ 163.3 (154-549)	503.4 $\pm$ 82.8 (378-605)	423.1 $\pm$ 163.3	0.84 $\pm$ 0.74 (0.31-1.36)	1.52 $\pm$ 0.91 (0.49-2.19)	1.25 $\pm$ 0.83
Emerald Shiner	3	-	3	0.15	73.0 $\pm$ 2.6	-	73.0 $\pm$ 2.6	-	-	-
Golden Shiner	3	102	105	5.38	132.3 $\pm$ 19.0	87.3 $\pm$ 22.0 (53-166)	91.23 $\pm$ 25.07	-	-	-
Green Sunfish	24	18	42	2.15	108.1 $\pm$ 32.5 (58-177)	93.0 $\pm$ 37.1 (11-151)	101.85 $\pm$ 34.9	0.10 $\pm$ 0.02 (0.09-0.13)	0.10	0.10 $\pm$ 0.02
Largemouth Bass	113	126	239	12.24	361.8 $\pm$ 95.9 (94-510)	286.2 $\pm$ 117.8 (71-450)	325.5 $\pm$ 130.5	0.91 $\pm$ 0.48 (0.05-2.13)	0.63 $\pm$ 0.51 (0.05-1.73)	0.77 $\pm$ 0.51
Northern Pike	3	2	5	0.26	687.7 $\pm$ 108.2 (601-809)	669.0 $\pm$ 37.7 (638-711)	682.4 $\pm$ 81.1	2.22 $\pm$ 1.19 (1.32-3.57)	1.80 $\pm$ 0.21 (1.57-1.96)	2.04 $\pm$ 0.89
Pumpkinseed	49	142	191	9.78	117.3 $\pm$ 17.0	115.8 $\pm$ 24.2 (52-213)	116.6 $\pm$ 20.49	0.08	0.09 $\pm$ 0.44 (0.06-0.14)	0.09 $\pm$ 0.04
Smallmouth Bass	35	14	49	2.51	366.1 $\pm$ 99.3 (165-516)	282.0 $\pm$ 86.9 (194-419)	344.6 $\pm$ 102.3	0.80 $\pm$ 0.49 (0.05-1.89)	0.40 $\pm$ 0.33 (0.11-1.04)	0.07 $\pm$ 0.48
Sportin Shiner	9	1	10	0.51	85.2 $\pm$ 14.3 (57-102)	76.0	84.3 $\pm$ 14.6	-	-	-
Sportin Shiner	3	-	3	0.15	79.7 $\pm$ 17.1 (56-96)	-	79.7 $\pm$ 17.1	-	-	-
White Crappie	72	184	256	13.11	202.5 $\pm$ 57.9 (111-404)	203.9 $\pm$ 43.4 (11-371)	203.6 $\pm$ 48.0	0.16 $\pm$ 0.20 (0.05-1.1)	0.13 $\pm$ 0.09 (0.01-0.73)	0.13 $\pm$ 0.13
Yellow Perch	104	233	334	17.26	142.7 $\pm$ 16.1 (41-171)	146.0 $\pm$ 30.6 (11-174)	144.6 $\pm$ 18.4	0.07 $\pm$ 0.01 (0.50-0.09)	0.06 $\pm$ 0.02 (0.50-0.80)	0.07 $\pm$ 0.01
Common Carp	12	7	19	0.97	-	-	-	-	-	-
Crappie Spp	-	15	15	0.77	-	-	11.0	-	-	-
Cyprinidae	-	4	4	0.20	-	-	32.3 $\pm$ 6.2	-	-	-
Lepomis spp.	-	50	50	2.56	-	-	39.1 $\pm$ 6.2	-	-	-
Johnny Darter	-	1	1	0.05	-	49.0	49.0	-	-	-
Rock Bass	-	1	1	0.05	-	145.0	145.0	-	0.07	0.07

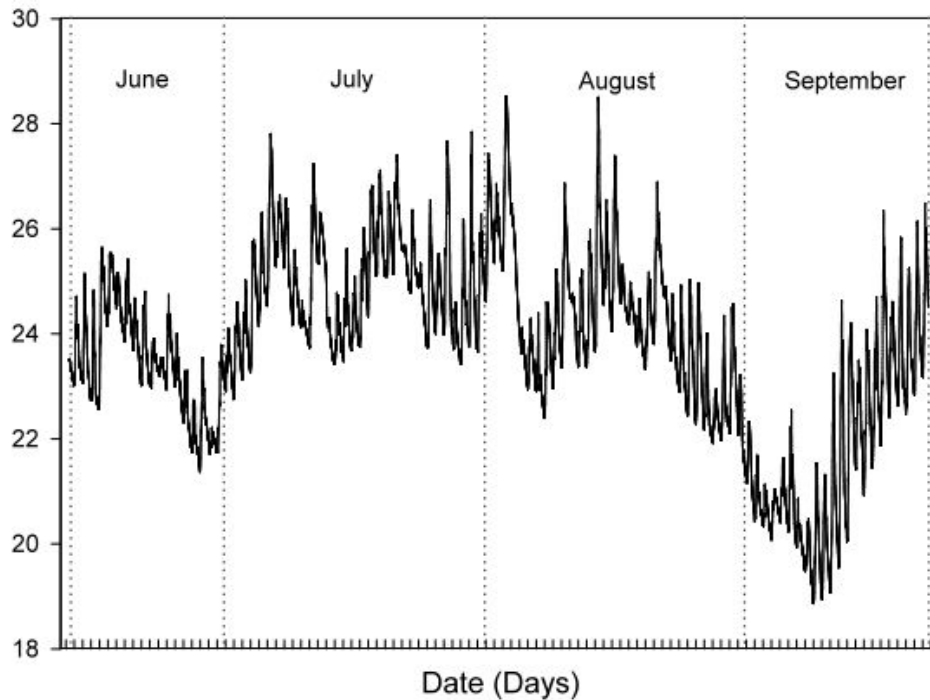


Figure 8. Water temperatures from June 12<sup>th</sup> to September 22<sup>nd</sup> 2017 measured at Trinity Church Road.

Of the 1953 unique fish captured throughout the study 90.8% were captured by electrofishing. Electrofishing is most effective at sampling fish from a depth of no more than 2 m, and although fish may detect the electromagnetic current and swim away undetected, it is the best method to sample fish from complex areas where traps nets and seines are impractical. Most target fishes were captured while electrofishing: 96.2%, 66%, 90.8% and 84.5% for Largemouth Bass, Smallmouth Bass, White Crappie and Black Crappie, respectively. In comparison 100% of Northern Pike were captured with trammel nets.

### **Catch-per-unit-effort**

CPUE of Largemouth Bass, Smallmouth Bass, White Crappie and Black Crappie was calculated from fish captured with electrofishing in June and September. In general CPUE was higher in

September (Table 5). In June Largemouth Bass had the highest CPUE compared to other species, whereas in September White Crappie had the highest CPUE.

Table 5. CPUE (mean  $\pm$  st.dev) for target species caught with boat electrofishing in June and September. Unit of effort = 1000 electrofishing seconds.

<b>Species</b>	<b>June CPUE</b>	<b>September CPUE</b>
Largemouth Bass	3.74 $\pm$ 2.03	6.18 $\pm$ 2.17
Smallmouth Bass	0.68 $\pm$ 0.79	0.55 $\pm$ 0.74
White Crappie	1.81 $\pm$ 2.69	8.27 $\pm$ 5.16
Black Crappie	0.42 $\pm$ 0.81	2.64 $\pm$ 3.06

## Recaptures

Thirty-three fish were recaptured; 12 during the June sampling survey and 21 in September which included 23 Largemouth Bass, 1 Smallmouth Bass, 6 White Crappie, 1 Black Crappie and 1 Northern Pike. Only 6 of the fish tagged in June were subsequently recaptured in September. From these 6 individuals growth over the study duration was determined to be 1.35 cm for Largemouth Bass (n=5) and 0.05 cm for Northern Pike.

## Population Structure and Condition

### Target Species

Northern Pike ranged in size from 60 to 80 cm in total length, which corresponds to an estimated age range of 3 to 10 years old (Clark and Steinbach 1959). While the vast majority of fish captured appeared healthy and in good condition ( $K > 1$ ), the Northern Pike captured appeared to be in poor condition ( $K = 0.6$  in both June and September) (Table 6).

Figure 9. Total length (mm) and age class distribution of A) Largemouth Bass, B) Smallmouth Bass, C) White Crappie and D) Black Crappie in the Binbrook reservoir

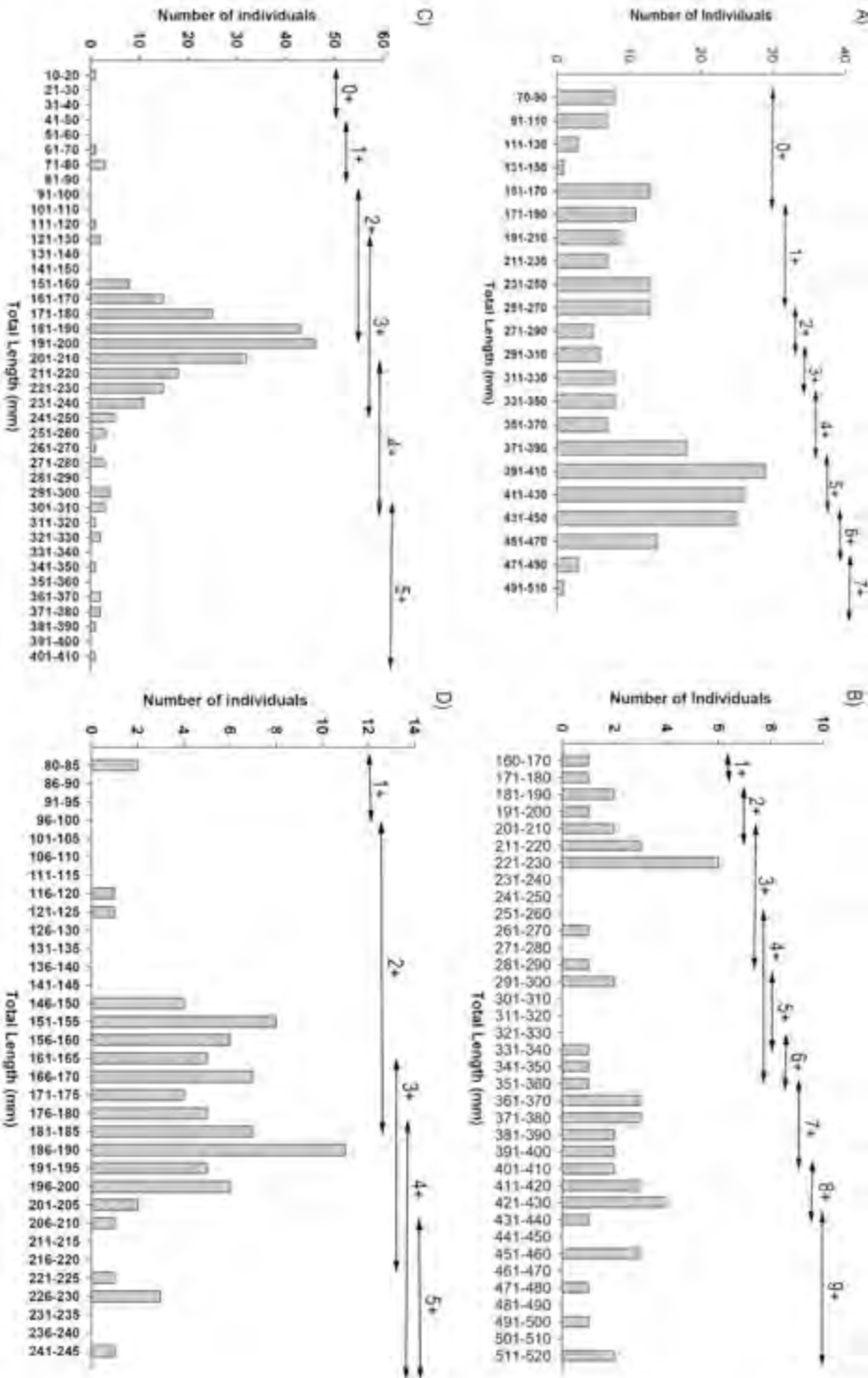
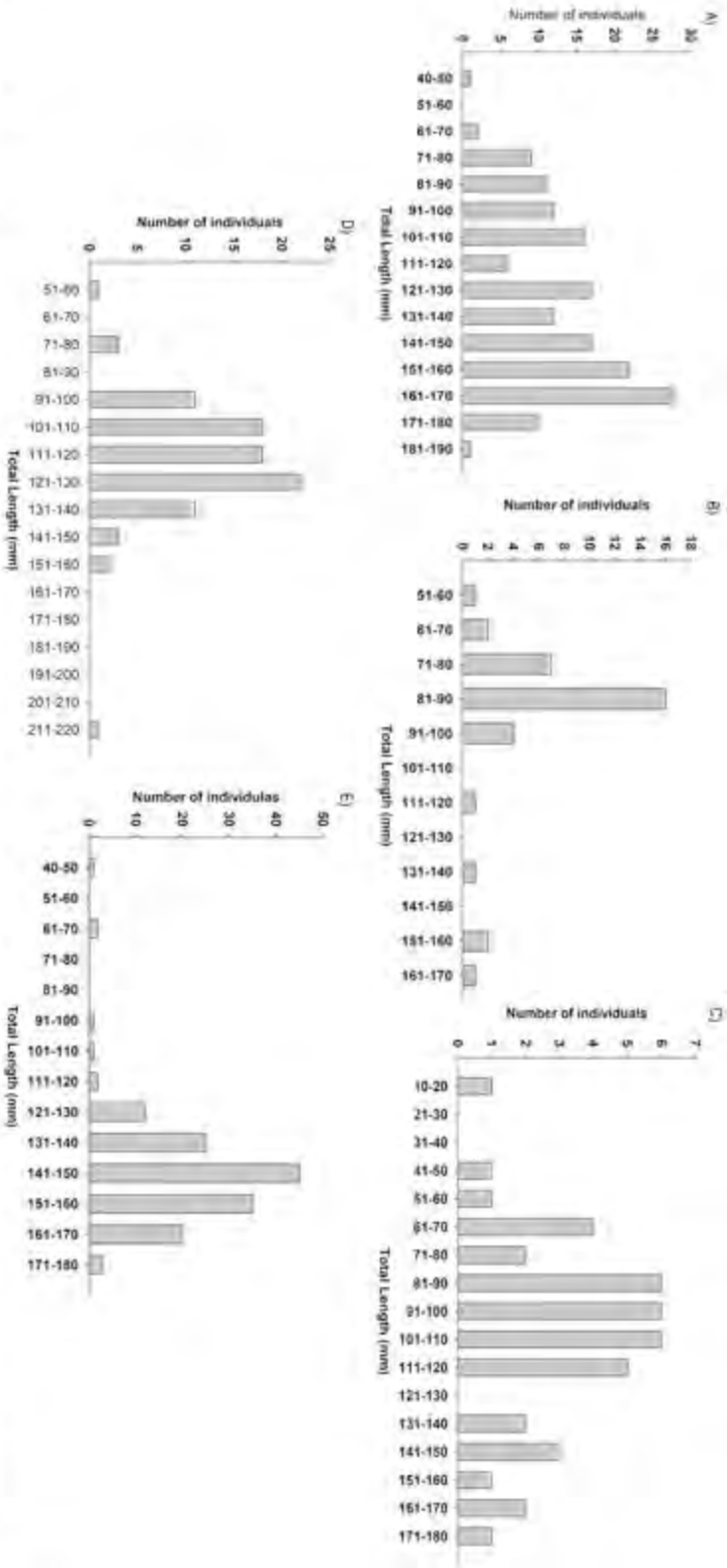


Table 6. Average condition factors of fish in the Binbrook reservoir in June and September 2017

Species	Condition (K)	
	June	September
Black Crappie	$1.6 \pm 0.41$	$1.6 \pm 0.39$
Brown Bullhead	$1.3 \pm 0.23$	1.4
Channel Catfish	$0.9 \pm 0.09$	$1.0 \pm 0.44$
Largemouth Bass	$1.5 \pm 0.31$	$1.5 \pm 0.24$
Smallmouth Bass	$1.3 \pm 0.16$	$1.4 \pm 0.32$
Northern Pike	$0.6 \pm 0.03$	$0.6 \pm 0.6$
Pumpkinseed	2.1	$3.7 \pm 1.0$
White Crappie	$1.4 \pm 0.26$	$1.3 \pm 0.27$
Yellow Perch	$1.7 \pm 0.44$	$1.6 \pm 0.39$
Bluegill	$2.2 \pm 0.42$	$2.3 \pm 0.16$
Green Sunfish	$2.1 \pm 0.23$	2.9
Rock Bass	n/a	1.0

Non-Target Species

Figure 10. Summary of the total length (mm) of A) Bluegill, B) Golden Shiner, C) Green Sunfish, D) Pumpkinseed and E) Yellow Perch captured in the Binbrook reservoir





## **Predator-Prey Ratios**

With respect to predator-prey ratios, fish that generally eat other fish as adults and were greater than 150 mm TL such as Northern Pike, Largemouth Bass, Smallmouth Bass, White Crappie and Black Crappie were considered predators. All other captured fish less than 150 mm TL were considered prey. Fish larger than 150 mm that are not considered highly piscivorous (e.g., Bluegill, Channel Catfish, Golden Shiner, Green Sunfish, Pumpkinseed and Yellow Perch) were excluded from the ratio calculations. As such, the ratio between predatory fish and all other species within the Binbrook reservoir is 1:4. The optimum predator-prey ratio ranges between 1:4 and 1:6 (Biotactic 2005). It should be noted that large Largemouth Bass occasionally regurgitated adult Crappie during electrofishing and the range of prey sizes for Largemouth Bass may exceed 150 mm.

## **Population Size Estimates**

95% confidence intervals (CI) for each of the population estimates below were calculated by substituting values for R from a Poisson distribution. This was because within each of the recapture periods considered (i.e., 1 week or 2 week sampling) the number of recaptures (R) was less than 50, and the ratio of recaptures to captures (R/C) was less than 0.1 (Krebs 1999). Confidence intervals for the Schumacher-Eschmeyer and CJS methods followed a different methodology as described above.

## **Largemouth Bass**

Closed population estimates are presented in Table 7. In June, a total of 44 individuals were marked during week 1 with 57 captures (without replacement) in week 2, 4 of which were recaptures (these values were used in Petersen estimates). Over the June sampling period, a total of 97 individuals were marked and 7 individuals were recaptured (values used in Schnabel

estimates). In September, 41 individuals were marked during week 1 and 5 were recaptured in week 2 (Petersen) with a total of 112 marked and 6 recaptured over the September period (Schnabel). Considering the dataset as a whole, 96 were tagged and 7 recaptured for Petersen and 202 were marked and 20 recaptured for Schnabel estimates. Note there was one angler recapture in July which removed tag 6213 from the population, and this removal is incorporated in estimates. Another angler recapture (tag 0122) occurred after the study was completed and the fish was released with the tag, this recapture was not factored into the following estimates.

Table 7. Population size estimates for adult Largemouth Bass in the Binbrook reservoir

	<b>Original</b>	<b>Petersen Chapman</b>	<b>Bailey</b>	<b>Original</b>	<b>Schnabel Small-Size</b>	<b>Shumacher</b>
<b>June</b>						
Estimated Size	627	521	528	599	524	557
95% CI	261-1836	245-1102	249-1116	305-1276	284-978	431-784
<b>Sept</b>						
Estimated Size	623	538	547	921	790	1069
95% CI	279-1582	265-1088	269-1104	431-2116	400-1530	601-4851
<b>Dataset</b>						
Estimated Size	1536	1369	1452	1039	989	1110
95% CI	781-3273	741-2557	787-2711	692-1621	670-1504	879-1504

Population size at the time of CJS sample 3 (September week 1) was 326 individuals (95% CI: 102-2266).

In both June and September  $R \leq 7$ , therefore original Petersen calculations likely overestimated the population size and the Chapman estimator should be used as the best approximation.

Likewise with the small-size estimator for Schnabel, since the original calculation may have overestimated the population due to the relatively small percentage (<10%) of the estimated population caught and/or marked (Krebs 1999). Note that Schumacher estimates fell below the 25% marked population decision threshold used by Gammon and Hasler (1965) and were therefore disregarded in favour of other Schnabel estimates.

More accurate approximations of true population size, however, are estimates calculated from the complete dataset, derived from data collected within a larger observation window (e.g.,

monthly Petersen = 1 week marking 1 week recapture, dataset Petersen= 2 week marking 2 week recapture). Here, since both Petersen and CJS methods are calculated using grouped data, the finest resolution of the data is provided by dataset-level Schnabel estimates. For these estimates each day is considered a separate sampling event and thus recaptures are able to be incorporated into calculations irrespective of what month or week they occurred; rather than having to count 2 recaptures of the same individual in the same week or month as only 1 (or potentially 0). Despite this finer resolution, however, there is little reason to select small-size Schnabel over Chapman estimates (since Chapman used  $R=7$ ). Averaging these two estimates (as per Gammon and Hasler 1965) the adult population size of Largemouth Bass in the Binbrook reservoir as of September 22, 2017 is best estimated as containing 1179 individuals (95% CI: 701-2041). Based on data collected in 56 lakes in Florida (Hoyer and Canfield 1996), the average proportion of adult Largemouth Bass within a population is 36% (range: 1-100%, SD: 29%). Extrapolating from estimated adult population sizes, the total number of Largemouth Bass in Binbrook reservoir is approximately 3275 (extrapolated CI: 1947-11606).

### **Smallmouth Bass**

Closed population estimates are presented in Table 8. In June, a total of 14 individuals were marked during week 1 with 18 captures in week 2, only 1 of which was a recapture (these values were used in Petersen estimates). Over the June sampling period, a total of 31 individuals were marked and again only 1 individual was recaptured (values used in Schnabel estimates). In September, there was a dramatic catch reduction for this species (see below). Only 5 individuals were captured and marked during week 1 with 0 recaptures in week 2 (Petersen) with a total of only 11 marked and zero recaptured over the September period (Schnabel). Considering the dataset as a whole, 31 were tagged and 0 recaptured for Petersen and 42 were marked and the 1 recaptured for Schnabel estimates.

Table 8. Population size estimates for adult Smallmouth Bass in the Binbrook reservoir

	<b>Petersen</b>			<b>Schnabel</b>		
	<b>Original</b>	<b>Chapman</b>	<b>Bailey</b>	<b>Original</b>	<b>Small-Size</b>	<b>Shumacher</b>
<b>June</b>						
Estimated Size	252	142	133	420	210	292
95% CI	47-4941	44-270	42-253	79-8235	66-400	undefined
<b>Sept</b>						
Estimated Size	undefined	41	35	undefined	45	undefined
95% CI	-	9-41	8-35	-	11-45	-
<b>Dataset</b>						
Estimated Size	undefined	383	372	806	403	798
95% CI	-	89-383	87-372	151-15804	127-767	undefined

Population size at the time of CJS sample 3 (September week 1) could not be calculated due to an undefined variable input calculated from the Method B table.

While Largemouth Bass generally prefer more shallow areas (<3.5m) with vegetation (both adults and juveniles; Olson *et al.* 2003), and have been found to remain in this zone even in lakes lacking vegetation (Colle *et al.* 1989), Smallmouth Bass prefer deeper areas and cobble substrate (both adults and juveniles) (Olson *et al.* 2003). More specifically, in a radiotelemetry study by Hubert and Lackey (1980) in a Tennessee reservoir, Smallmouth Bass preferred to use drop-off sections (slopes 30-45°) where the flooded area met the original channel, using depths of >10m during warmer seasons and moving to shallow flooded areas (less than 5m) in colder seasons. At such depths trammel netting is the most effective sampling gear employed, and electrofishing loses effectiveness at depths >2m. In June our net sets were located in areas with movement around drop-offs and where nets extending out from the shoreline sampled across a greater depth profile (Figure 5 and Bathymetric map Figure 2); 14 of the 31 marked individuals were captured by this method. In September, however, our sets were located in shallower areas (Figure 6 and Bathymetric map Figure 2) and no individuals were captured with this method or by electrofishing. Thus the derived estimates for September should be disregarded as they do not reflect true population sizes but are probably an artefact of sampling gear bias. For June, then, due to an  $R \leq 7$  and small percentage of the estimated population caught and/or marked, the Chapman and small-size are considered the best approximations for monthly Petersen and Schnabel estimates, respectively (Krebs 1999).

While no additional recaptures were factored in the dataset as a whole, the larger observation window still allowed for a greater amount of the collected data to be included in calculations, thereby increasing size estimates towards a closer approximation of the expected true values. The adult population size of Smallmouth Bass as of September 22, 2017 is therefore considered to be best represented by the small-size dataset Schnabel estimator of 403 individuals (95% CI: 127-767). Due to the limited data collected in September this number may be expected to change (*re* increase), given that in June the average percent proportion of the catch which was recaptured was 5%, compared to 8% for Largemouth Bass, indicating a relatively larger than estimated population. In a study by Paragamian (1989) that examined the relative effectiveness of day and night time electrofishing for catching Smallmouth Bass in a river, the average proportion of the population that was adult >180mm was 16.4% (daytime) and 28.9% (night time). Extrapolating from estimated adult population sizes using night values (when catches for all age classes were higher), the total number of Smallmouth Bass in the Binbrook reservoir is approximately 1394 (extrapolated CI: 439-2654).

### Bass Combined

Closed population estimates for combined Largemouth Bass and Smallmouth Bass populations are presented in Table 9. Overall a total of 244 Bass were tagged over the 4 months and 21 were recaptured.

Table 9. Population size estimates for combined adult Largemouth Bass and Smallmouth Bass in the Binbrook reservoir

	Original	Petersen Chapman	Bailey	Original	Schnabel Small-Size	Shumacher
<b>June</b>						
Estimated Size	870	746	754	916	814	811
95% CI	389-2208	367-1509	372-1523	491-2230	460-1710	590-1293
<b>Sept</b>						
Estimated Size	754	649	659	1106	948	1269
95% CI	337-1915	319-1312	325-1332	518-2540	480-1837	718-5474
<b>Dataset</b>						
Estimated Size	2232	1983	2096	1431	1366	1488
95% CI	1135-4755	1074-3703	1135-3912	949-2345	920-2175	1157-2086

Population size at the time of CJS sample 3 (September week 1) was 403 individuals (95% CI: 53-19284).

Note that the above table is not simply the addition of separate Largemouth Bass and Smallmouth Bass population estimates. Values were computed using marking, captures and recaptures from the two species combined. For the dataset-level Chapman estimator, for example, this resulted in the “Bass” population having an additional 231 individuals than if the values for this estimate had been added from Tables 7 and 8.

We found that Largemouth Bass were numerically dominant over Smallmouth Bass. While this may be in part based on differences in catchability, similar relative abundances between the two species have been reported elsewhere. Largemouth Bass were on average 3.98 times (range: 0.20-16.44, SD: 4.82) more abundant than sympatric Smallmouth Bass in 16 New York lakes (Olson and Young 2003). Smallmouth Bass were dominant over Largemouth Bass in 7 of the 16 lakes, and in all 16 lakes neither species was the numerically dominant species. The dominant species were Bluegill in 9 lakes, Pumpkinseed in 4 lakes and Yellow perch in 3 lakes (Olson and Young 2003).

### **White Crappie**

Closed population estimates are presented in Table 10. In June, a total of 38 individuals were marked during week 1 with 27 captures in week 2, only 1 of which was a recapture (these values used in Petersen estimates). Over the June sampling period, a total of 64 individuals were marked and only 1 individual was recaptured (values used in Schnabel estimates). In September, 53 individuals were marked during week 1 and 117 were captured and examined for marks in week 2, with 0 recaptures (Petersen); over the September period a total of 170 were marked and 3 recaptured (Schnabel). Considering the dataset as a whole, 64 White Crappie were tagged and 1 was recaptured for Petersen and 233 were marked and 5 recaptured for Schnabel estimates.

Table 10. Population size estimates for adult White Crappie in the Binbrook reservoir

	<b>Original</b>	<b>Petersen Chapman</b>	<b>Bailey</b>	<b>Original</b>	<b>Schnabel Small-Size</b>	<b>Shumacher</b>
<b>June</b>						
Estimated Size	1026	545	532	1589	795	1237
95% CI	193-20118	172-1038	168-1012	299-31157	251-1512	720-4375
<b>Sept</b>						
Estimated Size	<i>undefined</i>	6371	6413	4082	3062	2904
95% CI	-	1486-6371	1497-6413	1512-14972	1346-6737	<i>undefined</i>
<b>Dataset</b>						
Estimated Size	10880	5557	5568	4966	4138	4507
95% CI	2044-213333	1757-10575	1761-10596	2222-12604	2039-8360	2697-13703

Population size at the time of CJS sample 3 (September week 1) was 1936 individuals (95% CI: 107-208856).

As with estimates of the Bass population, due to  $R \leq 7$  and small percentage of the estimated White Crappie population caught and/or marked each month, the Chapman and small-size are considered the best approximations for Petersen and Schnabel estimates, respectively (Krebs 1999); Schumacher estimates fell below the 25% marked population threshold (Gammon and Hasler 1965). In contrast to Smallmouth Bass, White Crappie catch increased dramatically from June (64 individuals total) to September (170 individuals total) and September estimates should be considered closer to true population values. This was likely due in part to the movement of individuals back into shoreline habitats in the fall after moving to deeper water in the summer (Pope and Willis 1996), making them more susceptible to electrofishing capture. While the average water temperature during the June and September fishing period differed by only 0.95°C (see above and Figure 8), the first half of September had much cooler temperatures (average 20.58°C, range 18.87-23.16°C, SD: 0.81), potentially triggering the shift in habitat use. Note that the increased number of captured and marked individuals in September was not considered to be due to recruitment (i.e., growth) of individuals into the catchable population. Very few individuals under the 150mm catchable threshold were ever captured as shown in Figure 9C.

Use of the data set as a whole allowed for the incorporation of 2 additional recaptures that were not factored into monthly estimates due to data grouping. This method therefore provided the greatest resolution of the collected data and the size of the adult population in the Binbrook reservoir is best based on the small-size Schnabel estimate of 4138 individuals (95% CI 2039-8360). Based on a trap net study conducted in a turbid Oklahoma reservoir by Muoneke *et al.* (1992), 80% of the White Crappie population was <130mm. Since no individuals measuring 130-150mm were collected in this study (Figure 9C) 20% was used as the proportion of the total population represented by adult population size estimates. By extrapolation, the size of the total White Crappie population in the Binbrook reservoir is 20690 individuals (extrapolated CI: 10195-41800). Note that in Muoneke *et al.* (1992) sampling was conducted monthly from June to September. An additional study was conducted with net sampling from late September to October within 8 Oklahoma impoundments and the average proportion of the White Crappie population which was <130mm was 20.81% (Boxrucker 1987); this extrapolates to a much lower (and less probable) 5217 total individuals (extrapolated CI: 2575-10557).

### **Black Crappie**

Closed population estimates are presented in Table 11. In June, a total of 12 individuals were marked during week 1 with only 5 captures in week 2, none of which was a recapture (these values used in Petersen estimates); a total of 17 individuals were marked and none recaptured over the June period (values used in Schnabel estimates). In September 12 individuals were again considered marked during week 1 and 43 captured and examined for marks in week 2, with again 0 recaptures (Petersen). Over the September period a total of 55 were marked with none recaptured (Schnabel). Considering the dataset as a whole, 17 were tagged and 1 recaptured for Petersen and 71 were marked and 1 recaptured for Schnabel estimates.



Table 11. Population size estimates for adult Black Crappie in the Binbrook reservoir

	<b>Original</b>	<b>Petersen Chapman</b>	<b>Bailey</b>	<b>Original</b>	<b>Schnabel Small-Size</b>	<b>Shumacher</b>
<b>June</b>						
Estimated Size	undefined	77	72	undefined	111	undefined
95% CI	-	17-77	17-72	-	26-111	-
<b>Sept</b>						
Estimated Size	undefined	571	528	undefined	1225	undefined
95% CI	-	132-571	123-528	-	286-1225	-
<b>Dataset</b>						
Estimated Size	935	503	476	2225	1113	5206
95% CI	176-18333	158-958	151-906	418-43627	352-2117	undefined

Population size at the time of CJS sample 3 (September week 1) could not be calculated due to an undefined variable calculated from the Method B table.

As with White Crappie, Black Crappie catch increased from June (17 individuals total) to September (55 individuals total). This was likely also due to movement into shoreline habitats. In a study by Pope and Willis (1996) CPUE from trap nets was 31 and 48 Black Crappie ( $\geq 25$  cm), and proportional stock density increased from 2% to 100% from June to September, respectively. Note that again the increased number of captured and marked individuals in September was not considered to be due to recruitment (i.e., growth) of individuals into the catchable population. As per Figure 9D and Table 4, only 2 individuals were captured in June which measured  $<150$ mm (the additional 2 were captured in September). September estimates should then be selected as more close approximations of true population sizes for monthly values than estimates produced using June data. For both months, due to an  $R \leq 7$  and small percentage of the estimated population caught and/or marked, the Chapman and small-size are considered the best approximations for Petersen and Schnabel estimates, respectively (Krebs 1999).

While no additional recaptures were factored in the dataset as a whole, the larger observation window still allowed for a greater amount of the collected data to be included in the calculations. The adult population size of Black Crappie as of September 22, 2017 is therefore considered to be best represented by the small-size dataset Schnabel estimator of 1113 individuals (95% CI: 352-2117). Due to the limited data collected in June this number may be expected to change (*re*

increase), given that in September there were zero recaptures compared to an average percent proportion of recaptured catch of 1% for White Crappie, indicating a relatively larger than estimated population. In a trap netting study of the trophic dynamics of Crappie populations in an isolated turbid Nebraska lake (with much the same species composition as Binbrook), the proportion of the total Black Crappie population which was <150mm TL was shown to be 37.66%. By extrapolation, the size of the total Black Crappie population in the Binbrook reservoir is approximately 1785 individuals (extrapolated CI: 565-3396).

### Crappie Combined

Closed population estimates for combined White Crappie and Black Crappie populations are presented in Table 12. Overall a total of 304 crappie individuals were tagged over the 4 months and 6 were recaptured.

Table 12. Population size estimates for combined adult White Crappie and Black Crappie in the Binbrook reservoir

	Original	Petersen Chapman	Bailey	Original	Schnabel Small-Size	Shumacher
<b>June</b>						
Estimated Size	1600	841	825	2635	1318	2039
95% CI	301-31373	265-1600	261-1570	495-51667	417-2507	1132-10296
<b>Sept</b>						
Estimated Size	undefined	10625	10660	7156	5367	5318
95% CI	-	2479-10625	2488-10660	2650-26246	2359-11809	2954-26594
<b>Dataset</b>						
Estimated Size	9113	6176	6183	7048	6041	7239
95% CI	2726-51338	2410-13676	2413-13689	3300-16184	3061-11705	4839-14358

Population size at the time of CJS sample 3 (September week 1) was 1596 individuals (95% CI: 135-88770).

Note that as before, the above table is not simply the addition of separate White Crappie and Black Crappie population estimates. Values were computed using marking, captures and recaptures from the two species combined. Crappie data have been combined in analyses of other

studies due to the dominance of one species over the other (e.g., Boxrucker 1987). While in Binbrook, White Crappie were numerically dominant over Black Crappie, as is generally the case in turbid lakes (Ellison 1984), relative abundances between the species have been found to change over the years (McDonough and Buchanan 1991) and relationships should be considered variable rather than stable.

### Northern Pike and Walleye

Only 2 Northern Pike were captured and subsequently marked in June, both in week 2. In September, 3 individuals were captured, 1 of which was a recapture that had been tagged in June. While all closed population estimates can be found in Table 13, note that only those for the dataset as a whole should be considered valid. Others, which while defined, give population sizes lower than expected values (e.g., September small-size Schnabel of 2, while 3 were captured in this period).

Table 13. Population size estimates for adult Northern Pike in the Binbrook reservoir

	<b>Original</b>	<b>Petersen Chapman</b>	<b>Bailey</b>	<b>Original</b>	<b>Schnabel Small-Size</b>	<b>Shumacher</b>
<b>June</b>						
Estimated Size	<i>undefined</i>	2	0	<i>undefined</i>	1	<i>undefined</i>
95% CI	-	<i>undefined</i>	0-0	-	0-1	-
<b>Sept</b>						
Estimated Size	<i>undefined</i>	3	0	<i>undefined</i>	2	<i>undefined</i>
95% CI	-	<i>undefined</i>	0-0	-	0-2	-
<b>Dataset</b>						
Estimated Size	6	5	4	9	5	8
95% CI	1-118	1-10	1-8	2-176	1-9	6-11

Population size at the time of CJS sample 3 (September week 1) was calculated to be 2 individuals; confidence intervals were not computed as this estimate is below known population numbers.

Since 0 Walleye were captured (or observed) over the duration of this study the estimated population size of this species in the Binbrook reservoir is 0 based on collected data; however see Fish Community information in the Reservoir History section above.

## MANAGEMENT CONSIDERATIONS

In order to accurately determine trends and patterns in the fish population, standardized continuous yearly fisheries sampling should be conducted within the Binbrook reservoir. Considering that Crappie populations naturally fluctuate, and undergo a boom-and-bust cycle every 2 to 4 years, it would be useful to monitor populations every year for 5 to 10 years. This type of sampling would provide insight as to how other species' populations respond to/dictate these cycles (e.g., predator-prey and/or competitive interactions between Crappie, Largemouth Bass and Bluegill; Boxrucker 1987) and the influence of specific environmental variation on year class strength and survival (e.g., water quality and water temperatures at time of spawning; McDonough and Buchanan 1991). Findings would provide a clearer picture from which to make accurate management decisions. Yearly monitoring should take the form of a standardized mark-recapture study conducted over a two-week period every September from which population size estimates can be produced and compared/correlated to explore temporal patterns and trends. A comprehensive sampling program involving electrofishing, trap netting and trammel netting during both day and night time should be utilized. The cost for execution of a standardized sampling protocol and conducting yearly mark-recapture fish surveys typically ranges from \$15000-\$20000 per year.

Similarly, more accurate management decisions could be developed regarding critical habitat and potential areas for restoration through a movement study using radio telemetry. The movements of Largemouth Bass and Smallmouth Bass within the Binbrook reservoir should be tracked over multiple seasons to determine habitat utilization during the spawning, post-spawning and overwintering periods. Development of this study should involve the capture and tagging of at

least 30 Largemouth/Smallmouth Bass with radio tags in the Spring (i.e., March/April). If ample numbers of Northern Pike (i.e.,  $n \geq 10$ ) can be captured, a radio tracking study should also be done with this species. Information provided from such a study would increase our understanding of the fish movement patterns within the reservoir, assisting in the evaluation of the impact of fish migration barriers including the DU weir and ‘morning glory’ structure. The cost for a telemetry study would typically range from \$25000-\$35000.

Regarding the DU weir, further work should be conducted upstream, examining habitat availability and investigating the characteristics of the fish community (i.e., species composition, population size/structure). This is particularly important in relation to native species and collected data would be useful for determining the net benefit of the weir. Indeed, while barrier removal may improve upstream/downstream fish passage between sections of the Binbrook reservoir, the weir currently reduces sedimentation spread across the reservoir (Figure 1) and may limit the spread/abundance of invasive species, such as Common Carp. The design and implementation of a typical habitat assessment and fish community study would range from \$5000-\$10000. Considerations and assessments involving the DU weir and the management of upstream/downstream fish migration barriers within the Binbrook reservoir, however, may require more extensive study. Investigation into structures which allow for fish movement/passage would be beneficial in restoring fish connectivity in the Welland River with the use of fish-friendly culverts, fishways or other common practices designed to increase barrier permeability (e.g., opening and closing grates or screens to allow fish passage). This type of study, including the design and implementation of fish-friendly structures, may range in cost upwards of \$50000-\$100000.

The management of Common Carp populations within the reservoir should be of high priority and acceptable methods for the removal and disposal of Common Carp should be discussed and/or developed in conjunction with OMNRF. Note however that previous efforts have shown that the removal of Common Carp has little impact on populations long-term, and may result in negative public opinions and perceptions. Biological control techniques are currently being

developed that may help control populations in the future. Current techniques including carp exclusion barriers may be beneficial to reduce spawning and the further establishment of Common Carp and management should take the form of the implementation of a combination of control methods that act to remove adults from the population, suppress recruitment (i.e., spawning) and prevent further immigration (i.e., movement) into the reservoir. Cost estimates for Carp control within the Binbrook reservoir are approximately \$5000 per year.

Despite the presence of known pollutants (i.e., PFOS) within the system, there are fish that are safe for human consumption within Lake Niapenco according to the Ontario Fish Consumption Advisory. Revenues may be increased if promotional material is developed to inform the public and change the stigma regarding contamination of fish within the reservoir. However, it must be noted that educational information outlining how to read the Ontario Fish Consumption Guidelines should be written in layman's terms ensuring easy interpretation for people from various cultures and language backgrounds. Until further research can be done regarding catch and maximum size limits, the current catch and release policy should remain in effect in the Binbrook reservoir. Predator-prey ratios within the reservoir are currently 1:4 which is considered optimal and therefore no management is required in this respect.

Population estimates, predator-prey ratios and condition factors all indicate that fish populations within Binbrook are healthy, however a significant factor for determining population health (regarding size and structure) is CPUE. Burnley *et al.* (2005), for example, suggested that good Crappie populations have a high density of desirable sized (i.e., medium to large) fish and that optimal density is achieved when catch rates of age +1 and older fish range between 20-30 fish per trap, per night. In the case of the Binbrook reservoir, Crappie population structure meets the criteria of having a large proportion of medium to large fish, however catch rates using trap nets were extremely low (nets considered ineffective), potentially indicating sub-optimal density levels. CPUE was higher with respect to electrofishing, however 3000-11000 seconds of electrofishing would be required to catch the targeted 20-30 fish. Therefore, although Crappie population densities appear high in the Binbrook reservoir, optimal levels may not be present.

This suggests that there are opportunities that may be discussed and developed to enhance the Crappie population and any such decisions would be facilitated with information collected from the longer-term mark-recapture study outlined above. In addition to providing a community outreach and educational component, important information regarding CPUE and condition factors for fish species within the reservoir can be collected during fishing derbies. As such, derbies should be continued and their expansion to other species (i.e., Bass, Bluegill) or dates/times to attract more individuals (i.e., Summer/early Fall) should be considered.

One significant factor identified as affecting fish populations in the Binbrook reservoir is the lack of aquatic vegetation. Biotactic (2005) identified areas where planting should be done which include wind-sheltered bays adjacent to deeper water, such as the southwesterly edge of Hyslop Bay, the Young Inlet, the southwestern edge of Spiegelaar Bay, the area northwest of Pickerel Island, the western lee of Pickerel Island and the sheltered bay area west of the viewing platform near the boat launch. Several species can be considered for planting which are known to provide general habitat and spawning habitat for species of interest in the reservoir, although some experimentation may be required to determine which species will respond best given the specific environmental properties of the lake. With respect to Largemouth Bass, white water lily (*Nymphae*) or yellow water lily (*Nuphar*) are commonly used as habitat. These species have the benefit of not typically being affected by high turbidity due to photosynthesis occurring in the leaves at the water's surface and should be planted in shallow water along the shoreline or in backwater habitat. With respect to Northern Pike, preferred vegetative species are Canadian waterweed (*Elodea canadensis*), Coontail (*Ceratophyllum demersum*) and various species of *Potamogeton* (Cook and Bergersen 1988), the first two of which can be propagated by cuttings. Note that for Northern Pike vegetation is not only important for spawning but is also selected by adults as preferred habitats for both sexes throughout the year. Additional species to consider include floating macrophytes such as leaved burreed (*Sparganium fluctuans*), water shield (*Brasenia schreberi*), water smartweed (*Polygonum amphibium*) and floating-leaved pondweed (*Potamogeton natans*). Pickerel weed (*Pontederia cordata*), large fruited burreed (*Sparganium eurycarpium*), arrowhead (*Sagittaria spp.*), rushes (*Juncus spp.*) and cattails (*Typha spp.*) may

also be planted to compliment other restoration activities. Deep water macrophytes, although beneficial, may be unsuccessful within the reservoir due to high turbidity. Transplanting and/or propagating species is typically straightforward and may take as little as one day to accomplish leading to minimal cost requiring only labour wages. Planting should be done following the spawning season to prevent disturbance and afterwards focus should be placed on protection from/exclusion of Carp to help ensure successful establishment. In addition to plantings, woody debris also serves as important habitat for many fish species within the reservoir. Log piles, Christmas trees and other large woody debris may be added or created anywhere within the reservoir to improve habitat availability.

## CONCLUSIONS

The status of the fish community in the Binbrook reservoir was examined based on historical data, previously published and unpublished reports, as well as a multi-species mark-recapture study. From this information it was determined that the lake supports healthy self-sustaining populations of sport fish including Largemouth Bass, Smallmouth Bass, White Crappie and Black Crappie, as well as an adequate amount of forage fish including Yellow Perch, centrarchids (Pumpkinseed, Bluegill and Green Sunfish) and cyprinids (Golden Shiner, Emerald Shiner, Bluntnose Minnow, Spottail Shiner and Spotfin Shiner). Northern Pike and Walleye population numbers are low in the reservoir and to date no juveniles have been captured. It is therefore unknown if the reservoir can support self-sustaining populations of either of these two species (especially Walleye).

Seven population estimates were produced for the catchable (i.e., adult) portion of each sport fish species using data collected during the 4 month study period. During this time the Binbrook reservoir closely followed the assumptions of a closed system. Monthly estimates for Crappie and Smallmouth Bass were influenced by seasonal shifts in habitat use or sampling gear limitations. Dataset-level Schnabel estimates were considered to be the most accurate



approximation of population sizes, and were produced by factoring in the greatest amount of the mark-recapture data. Based on these estimates Largemouth Bass within the Binbrook reservoir numerically dominate Smallmouth Bass, and White Crappie numerically dominate Black Crappie, as well as both species of Bass. Extrapolating adult population estimates to total population size, based on published size class structure information for each species, the total number of sport fish individuals within the Binbrook reservoir is 27149 (summed 95% CI: 13147-59465): 76% White Crappie, 12% Largemouth Bass, 7% Black Crappie, 5% Smallmouth Bass and 0% Northern Pike. These relationships, however, should be considered temporally variable and will change through time as a function of environmental variability and interspecific competition.

Regular sampling of the Binbrook reservoir fish community should be conducted to monitor patterns and trends, both seasonally and annually. Specifically, a standardized sampling protocol should be developed and performed to ensure accurate yearly comparisons across sampling events, including increased targeted netting surveys for fish in deeper habitats (e.g., Northern Pike, Walleye). Studying the cyclical trends in the fish community related to Crappie population fluctuations over multiple years is recommended. Various management techniques (e.g., Gablehouse 1984, Boxrucker 1987, Muoenke *et al.* 1992) are available for Crappie and Bass populations and can be evaluated in the light of continued monitoring. The Binbrook reservoir should continue to be actively managed with a focus on Bass and Crappie.

Limitations affecting fish populations within the Binbrook reservoir may include lack of baseflow, high sedimentation rates, limited riparian habitat and reduced water quality (i.e., phosphorus, nitrogen, blue-green algae, PFOS). Benthic surveys, aquatic habitat surveys and continued water quality surveys should be implemented within the reservoir and focus should be on improving water quality and aquatic vegetation. Greater land stewardship efforts should be developed and implemented with local landowners adjacent to the reservoir, as well as landowners upstream of the reservoir, to control sedimentation and nutrient inputs.

The flow control structures within the Binbrook reservoir may also limit fish populations, acting as a barrier for fish passage and potentially preventing fish species from accessing suitable spawning habitat. However, the barriers may also help protect against the spread of invasive species (e.g., Round Goby) into or out of the reservoir. The DU weir is beneficial by providing moderate sedimentation control for the remaining downstream section of the reservoir.

Based on qualitative data, Common Carp appear to be the dominant species within the Binbrook system, however population estimates were not assessed. Common Carp degrade water quality and interfere with establishment of aquatic macrophyte habitat for fish, waterfowl, and amphibians. Various methods should be developed to reduce/limit Carp populations, such as active removal, barriers/exclusion fences, or use of species-specific virus or biocontrol methods.

Unlike the species mentioned thus far, self-sustaining populations of Walleye have not successfully established within the Binbrook reservoir. Population size appears to be extremely low and to date no juveniles have been captured, indicating limited or no reproduction and total recruitment failure. Although angler reports continue to trickle in about Walleye, the last scientific documentation of this species was in 2012, when two individuals were captured and tagged during the Binbrook Crappie Derby. It is unclear if these individuals are residual individuals from stocked populations or may have entered the reservoir another way. Many factors may be contributing to low Walleye population abundance in the reservoir including the warmwater thermal regime, competition from other species, lack of suitable spawning areas, poor water quality and barriers to movement. Walleye can tolerate a wide array of thermal regimes ranging from coolwater to warmwater habitats in lakes and rivers with high turbidity (Bozek *et al.* 2011). However, it is believed that optimal temperature conditions fall between warmer thermal regimes as seen in centrarchid dominated systems and colder thermal regimes as seen with salmonids (Bozek *et al.* 2011). In smaller lakes (i.e., less than 100 ha), Walleye may not establish at high densities with Northern Pike, Largemouth Bass, Smallmouth Bass and other centrarchids due to competition (Bozek *et al.* 2011). As Walleye spawn along shorelines and prefer cobble and gravel substrates, less favourable shoreline habitat may have been available

prior to 1997 due to water level drawdown, affecting egg survival rates through sedimentation and low dissolved oxygen levels. Targeted surveys may be performed to determine specific reasons to explain why Walleye populations have not established in the reservoir and to provide further habitat restoration recommendations to enhance future populations. Specifically, night surveys during the spawning period in March to April when temperatures range from 5 to 10°C may be the best time to accurately survey Walleye populations in terms of presence, abundance and spawning locations.

Northern Pike spawn in shallow water over vegetation with water temperatures ranging from 8 to 12°C, typically and migrate up tributaries to flooded wetlands and sheltered vegetated shorelines consisting of grasses, sedges and other aquatic vegetative species. The sparse vegetation present in the Binbrook reservoir appears to be one of the primary explanations for low population numbers. Interference by Common Carp and restricted movement to suitable spawning areas may also have a significant impact on Northern Pike production.

In summary, the Binbrook reservoir contains healthy sport fish populations including Largemouth Bass, Smallmouth Bass, White Crappie and Black Crappie. Regular fish monitoring should be continued to determine trends and patterns. From this information a revised management plan can be developed which should currently focus on Bass and Crappie. Water quality, sedimentation/erosion control and the establishment of aquatic vegetation, as well as the removal/limitation of Common Carp should also be priorities to improve the health of the Binbrook reservoir and to enhance recreational opportunities.

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**Report To: Board of Directors**

**Subject: Watershed Floodplain Committee Clarification**

**Report No: No. 20-18**

**Date: February 28, 2018**

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**RECOMMENDATION:**

1. That Report No. 20-18 respecting the Watershed Floodplain Committee Clarification Report **BE RECEIVED** for information.

**PURPOSE:**

As per Resolution No. FA-11-18 of the January 17, 2018 Full Authority Meeting, staff were directed to verify the Committee name and Terms of Reference respecting membership (i.e. citizen representatives, Board Members, etc.) and mandate of the Watershed Floodplain Committee.

**BACKGROUND:**

At the January 17<sup>th</sup>, 2018 Full Authority Meeting, staff was directed to verify the Committee name and Terms of Reference respecting membership (i.e. citizen representatives, Board Members, etc.) and mandate of the Watershed Floodplain Committee.

The Watershed Floodplain Committee is also known as the Welland River Floodplain Review & Implementation Committee. The committee last met in January of 2017 and will be re-engaged in 2018 to review the completed project works of the Welland River Floodplain project.

The responsibilities of the Committee are to review and make appropriate recommendations to the Full Authority Board with respect to implementation of the revised Flood Plain Mapping for the Welland River.

Current Membership (2017) Includes:

- Board Chair, Sandy Annunziata (Fort Erie)
- Board Vice Chair, James Kaspersetz (Hamilton)
- Member Brian Baty (Pelham)
- Member Stewart Beattie (Hamilton)
- Member Frank Campion (Welland)
- Member Jim Diodati (Niagara Falls)
- Member April Jeffs (Wainfleet)
- Member Doug Joyner (West Lincoln)
- Member Robert Shirton (Haldimand County)
- Member Bruce Timms (St. Catharines)
- 5 Citizen members
- 1 (Voting Member) and 2 (Non-Voting) for the Welland River Floodplain Association

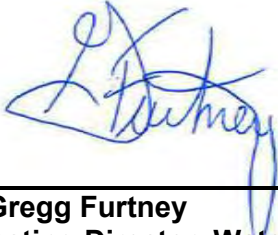
**RELATED REPORTS AND APPENDICES:**

Appendix 1 Welland River Floodplain Review & Implementation Committee Terms of Reference (Amended July 16, 2014 – Resolution No. FA-147-14)

**FINANCIAL IMPLICATIONS:**

None.

**Prepared by:**



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**Gregg Furtney**  
**Acting Director, Watershed Management**

**Submitted by:**



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**Mark Brickell**  
**CAO/Secretary-Treasurer**

# **WELLAND RIVER FLOODPLAIN REVIEW & IMPLEMENTATION COMMITTEE TERMS OF REFERENCE**

## **INTRODUCTION**

The Niagara Peninsula Conservation Authority's legislative mandate as set out in Section 20 of the Conservation Authorities Act is to establish and undertake programs designed to further the conservation, restoration, development and management of natural resources. The NPCA fulfills this mandate by advocating and implementing programs that improve the quality of lands and waters within its jurisdiction; contribute to public safety from flooding and erosion; provide for the management of conservation and hazard lands; enhance the quality of life in its watershed by using its lands for regional recreation, heritage preservation and conservation education.

In keeping with its mandate, through its Watershed Management programs the NPCA regulates development in flood susceptible lands, valley lands, wetlands and Great Lakes shoreline. As part of this work, it is also necessary from time to time to review the status of technical information and policies in order to ensure that information is up-to-date and reflects current standards and conditions.

## **BACKGROUND TO WELLAND RIVER FLOODPLAIN MAPPING PROJECT**

Over the past 6 years, the Authority has been updating floodplain mapping including reanalyzing previously completed floodplain mapping projects within its area of jurisdiction. In 2010, work began to update the Welland River Watershed, the first phase extending from the siphon under the new Welland Canal in the City of Welland to the Port Davidson Weir in West Lincoln. Following this, remapping on the Upper Welland, extending from Port Davidson in West Lincoln to Westbrook Road in the City of Hamilton, and also on the Lower Welland River, extending from the Niagara River to the new siphon was completed. The results to this updated mapping showed significant in 100 year levels in many areas, relative to the previous levels which were generated 20 years ago. (1985)

Following public feedback, NPCA in the Fall of 2011, held a number of in order Public Information Sessions, and decided to adopt transitional policies to provide a measure of relief to those impacted by the updated floodlines. Since then a number of concerns by affected landowners have been brought forward and at the January 10, 2012 meeting the Board formed an Implementation Committee to determine a strategy and timeline for implementing the new mapping.

## **COMMITTEE STRUCTURE**

Representation on the committee was determined at a meeting of the Full Authority and includes board members from the affected municipalities.

Committee membership will be comprised of:

- A. Jeffs-Vice Chair
- D. Joyner-Township of West Lincoln
- B. Sharpe-City of Welland
- B. Baty-Town of Pelham
- B. Maves-City of Niagara Falls
- D.B. Timms, Chair
- C. D'Angelo, CAO
- P. Graham, Director of Watershed Management
- Two (2) non-voting members of Welland River Floodplain Association

The Authority Board adopted a resolution that allows for Citizen Members to be included at the discretion of the committee.

## **RESPONSIBILITIES OF COMMITTEE**

**Make appropriate recommendations to the Full Authority Board with respect to implementation of the revised Flood Plain Mapping for the Welland River through:**

- Attend strategy meetings as required
- Set out a process to allow for transparent public input
- Review peer opinions, technical and other information as appropriate to validate the accuracy and applicability of the new mapping in accordance with provincially approved Technical Guidelines
- Review policies with respect to implementation of the Welland River Floodplain Mapping
- Develop a process to disseminate the floodplain mapping lines and information

**Report To:** Board of Directors

**Subject:** Employee Feedback Survey

**Report No:** 18-18

**Date:** February 28, 2018

---

**RECOMMENDATION:**

1. That Report No. 18-18 respecting the Employee Feedback Survey **BE RECEIVED** for information.

**DISCUSSION:**

As part of the 2014-2017 Strategic Plan: Transparent Governance & Enhanced Accountability (Phase 4); NPCA developed and conducted an Employee Feedback Survey. The survey results provide a snapshot of employees' workplace experiences over the last six months. The survey establishes a clear baseline that can be used for comparative purposes, when conducted on an annual basis.

The Corporate Leadership Team will work with Human Resources to analyze the insights gathered within the survey and develop an actionable plan resulting in focused efforts to further enhance a positive employee experience.

**METHOD:**

The survey was comprised of a total of 60 questions assessing employee feedback on the categories of:

- Communication
- Customer Service
- Growth & Development
- Organization & Culture
- Employment Conditions
- Health & Safety
- Engagement

Each topic asked employees to rate the specific question on a 5-point scale from Strongly Agree to Strongly Disagree and also offered the opportunity for open-ended comments at the end of each section. Each topic also contained one reverse worded question in an effort to increase the validity of the results.

The survey was provided to all full-time permanent and contract employees and was administered through a third-party provider (HR Downloads). Each invitee was issued a unique password and was only permitted to complete the survey one time. Survey responses were completely anonymous with only overall results being reported.

The survey allows for filtering of results by Department, Status and Length of Service.

Appendix 1 attached to Report No. 18-18 provides a summary of the unfiltered employee data. This information will be used by the Corporate Leadership Team to assist in creating strategies to address each of the feedback categories.

**RELATED REPORTS AND APPENDICES:**

Appendix 1 Employee Feedback Summary

**Prepared by:**



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**Misti Ferrusi**  
**Human Resource Consultant**

**Submitted by:**



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**Mark Brickell**  
**CAO/Secretary-Treasurer**



# 2018 Employee Feedback

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# NPCA Employee Feedback

Time Period	Nov 23 – Dec 7, 2017
Number of surveys completed	40
Number of surveys administered	48
Response Rate	83.3%

<b>27</b>	Questions identified as strengths (70% positive)	<b>1</b>	Question identified as a challenge (30% negative)
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Highest Positive Score		
Engagement	My work is meaningful	98%
Employment Conditions	The benefits package is fair and competitive	98%
Engagement	I give my best effort every day	95%

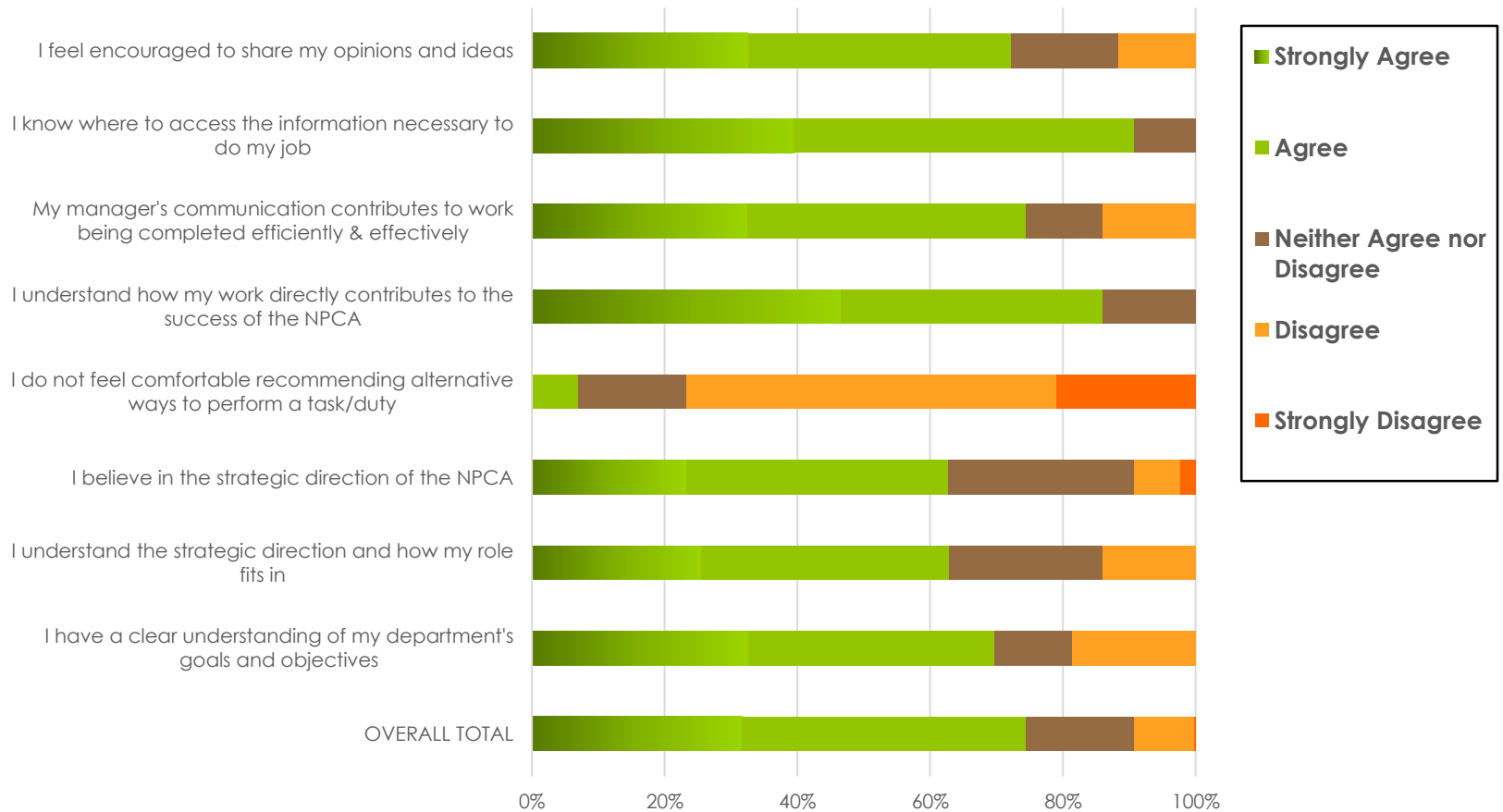
Department			
Watershed	Corporate Resources (excluding Parks)	Corporate Resources (Park Operations)	Office of the CAO
41.7%	16.7%	22.2%	19.4%

Status		Length of Service		
Union	Non-Union	0-3 years	4-10 years	11 + years
58.3%	41.7%	33.3%	33.3%	33.3%

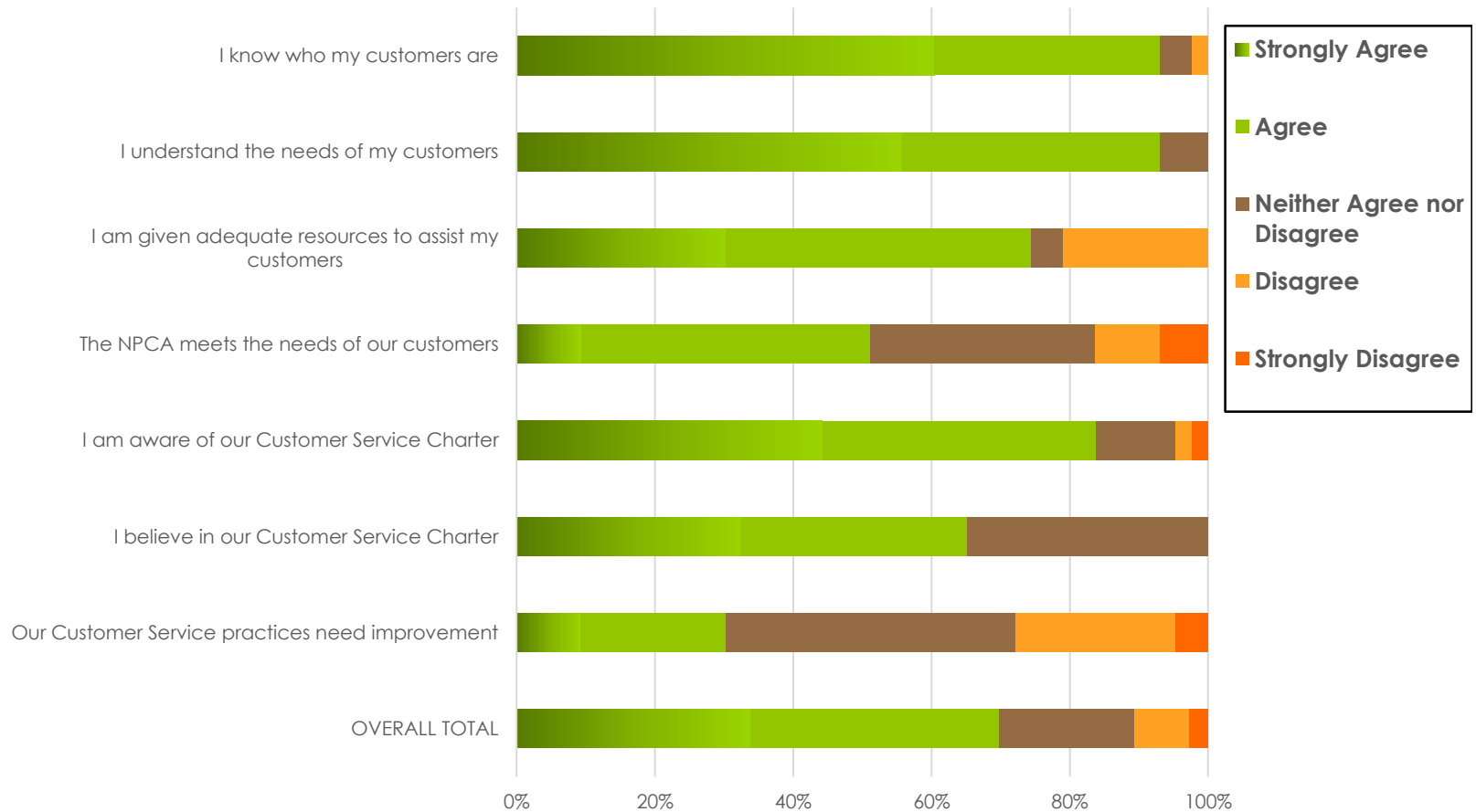
Highest Negative Score		
Employment Conditions	I often feel like work is my life	31%
Customer Service	Our Customer Service practices need improvement	30%
Growth & Development	My skills are underutilized at work	26%



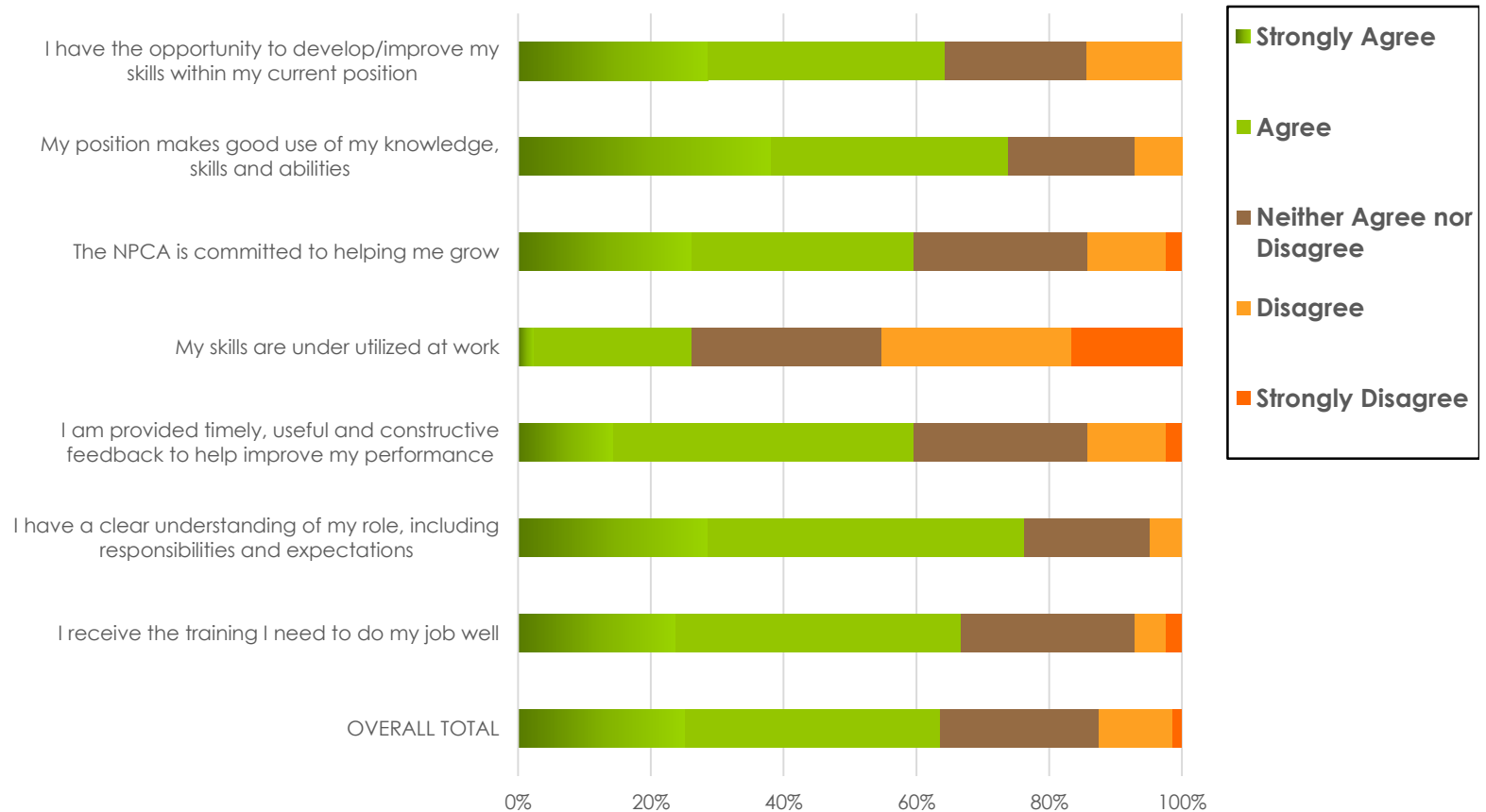
# Communications



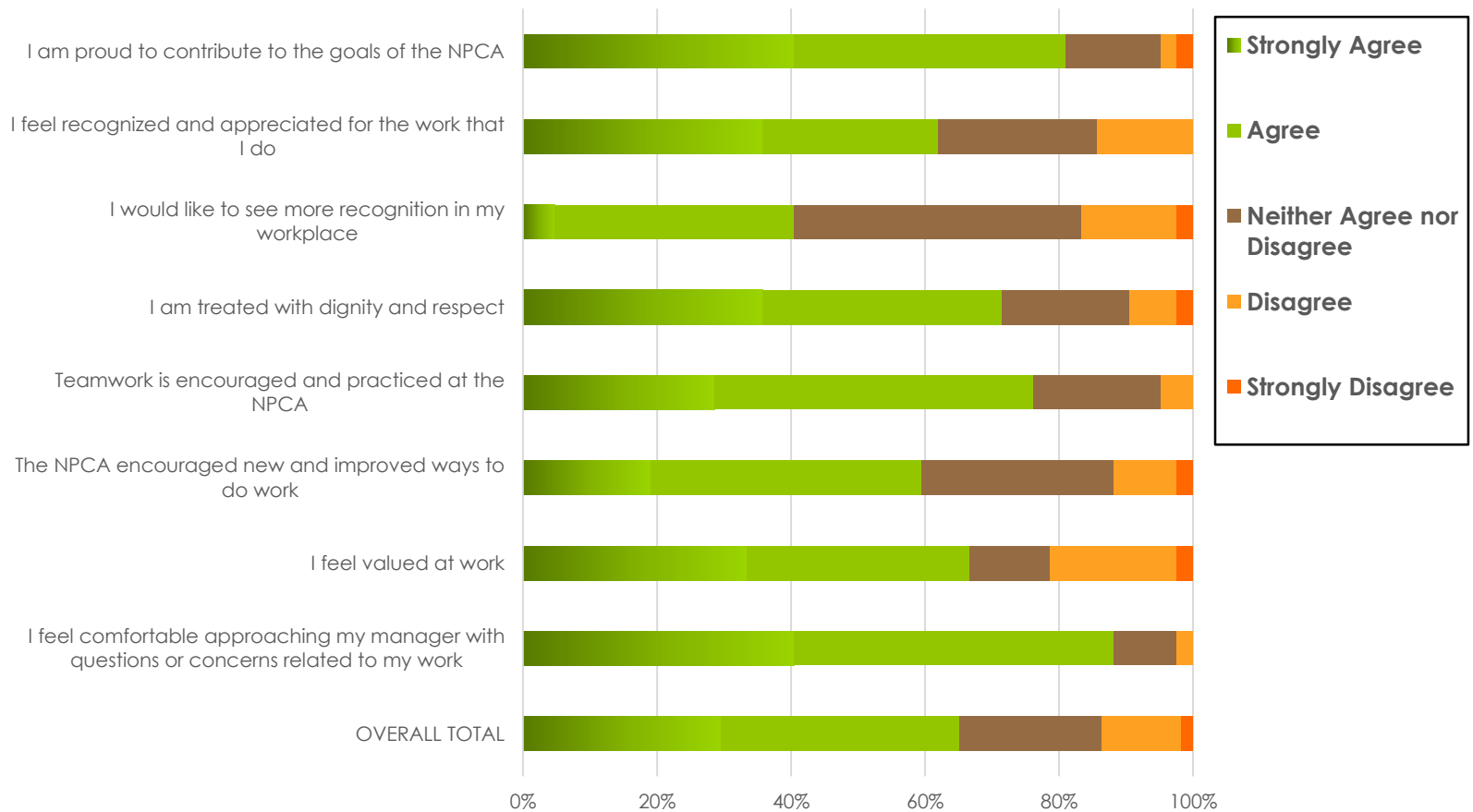
# Customer Service



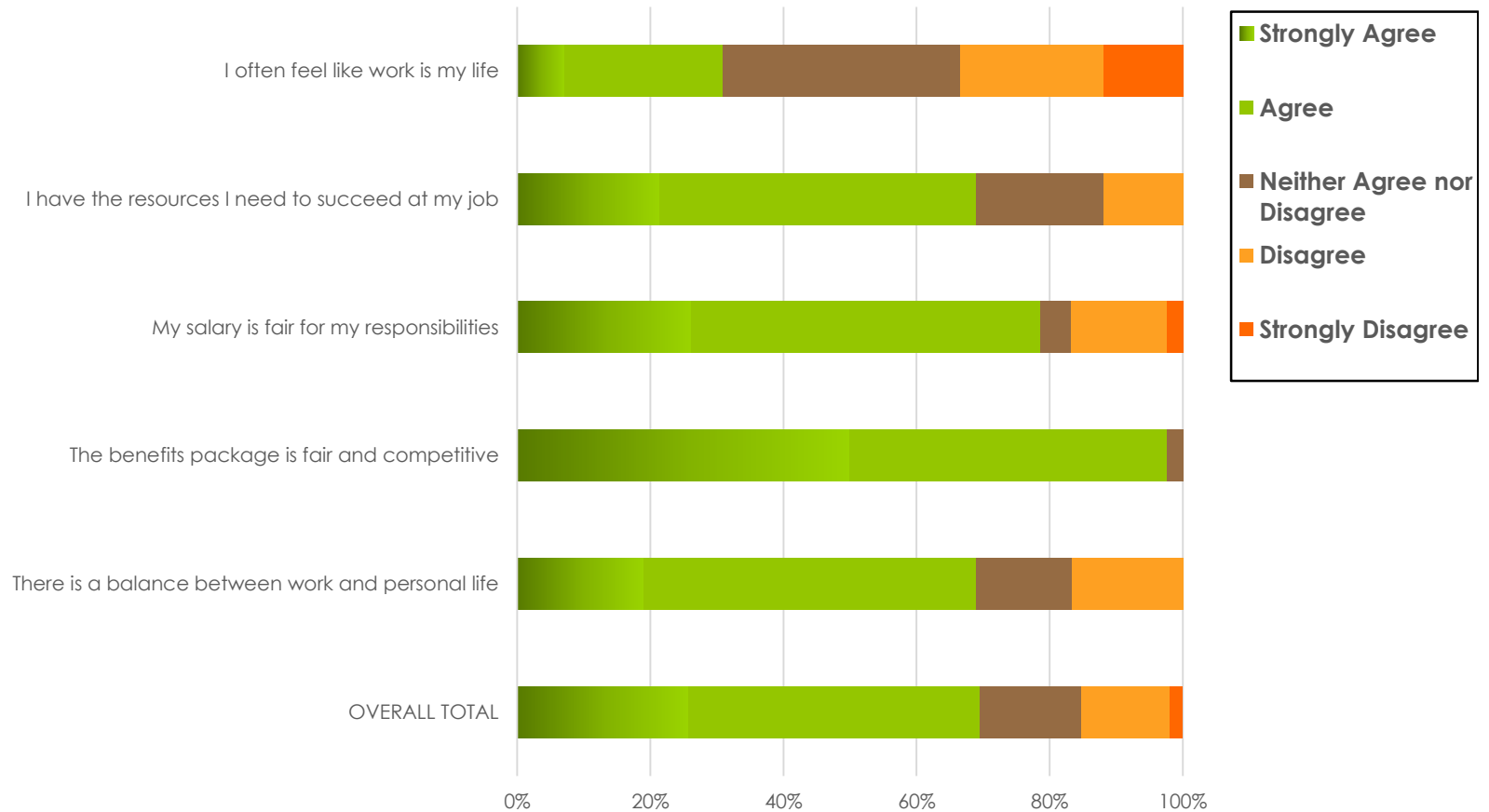
# Growth & Development



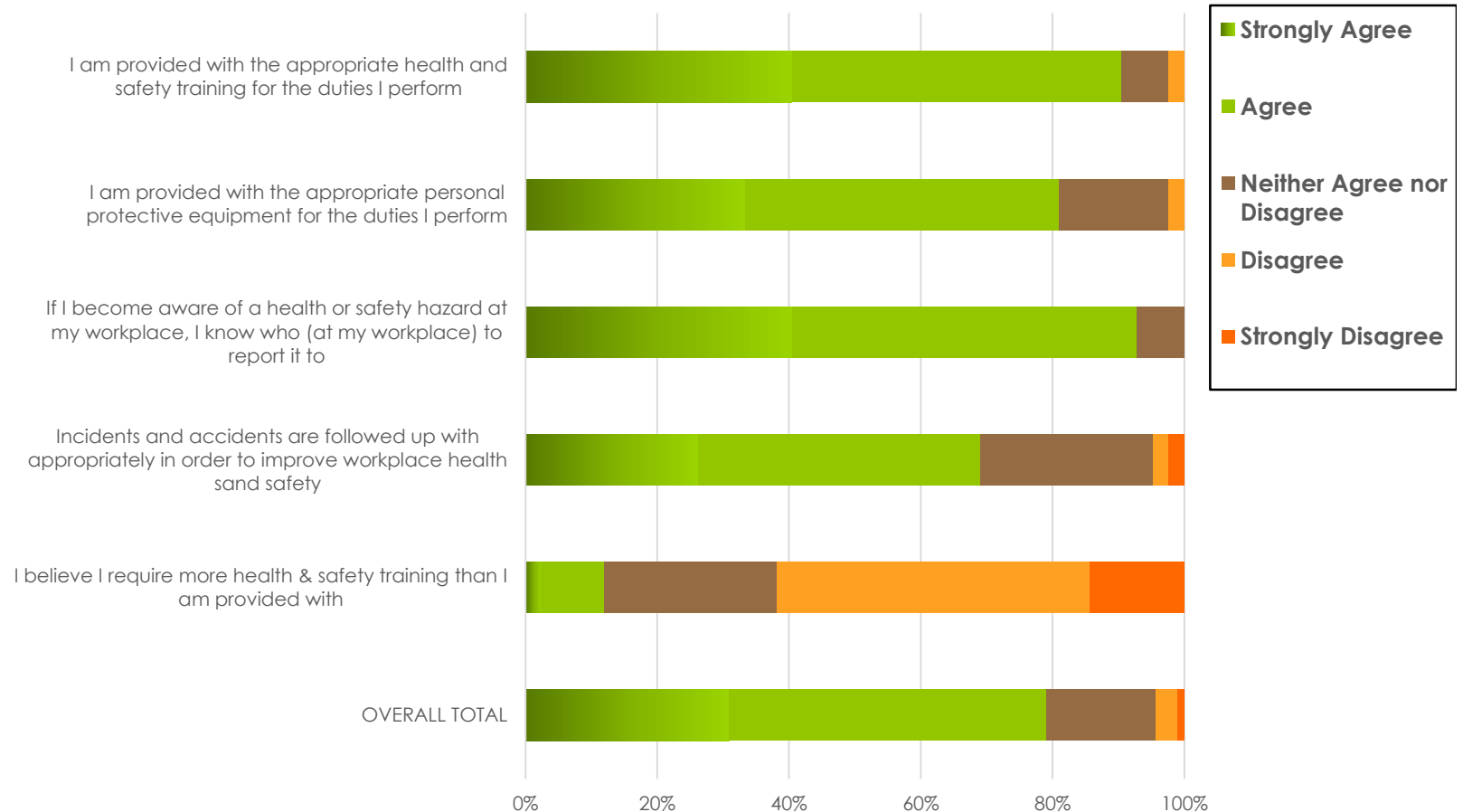
# Organization & Culture



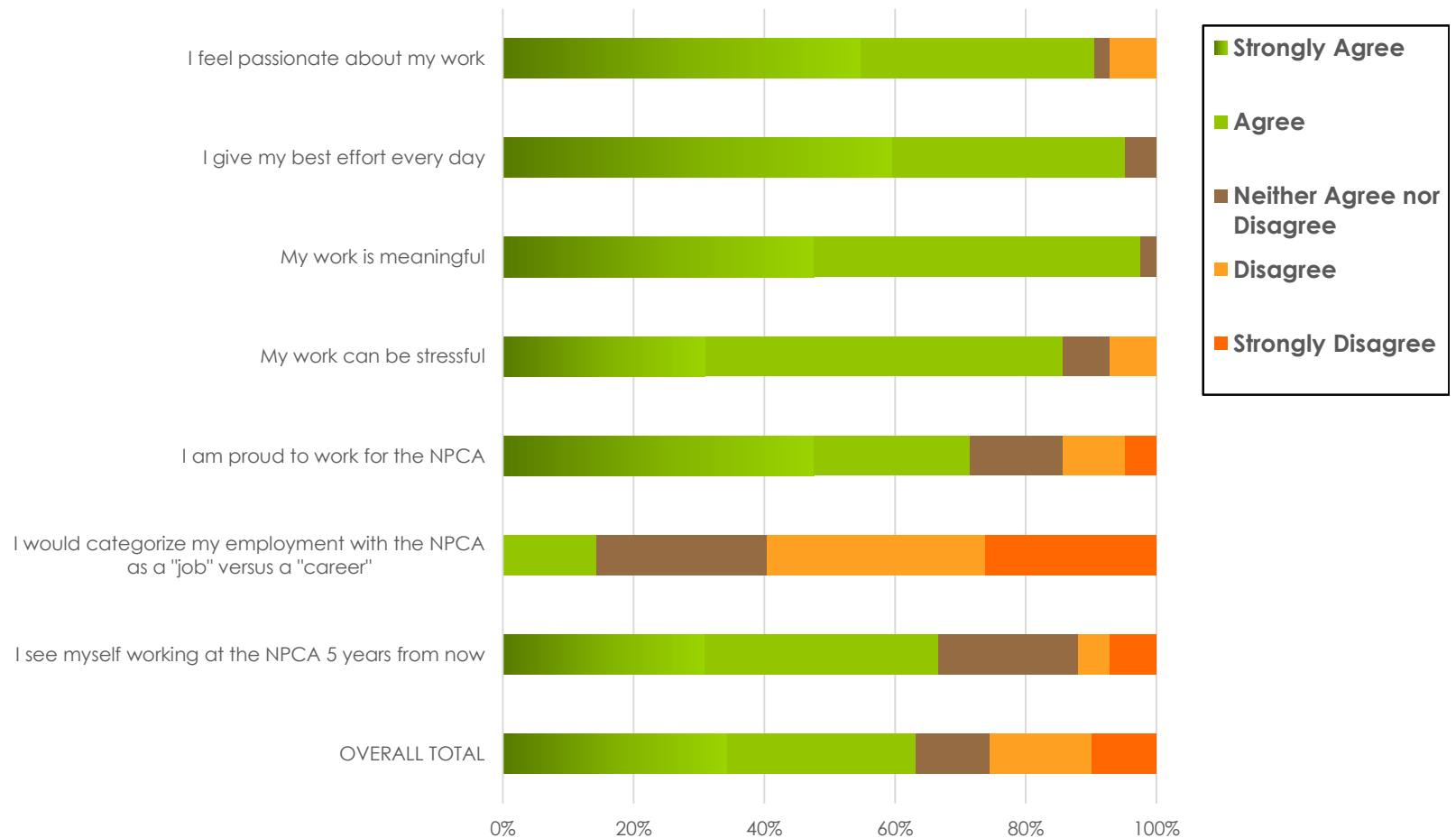
# Employment Conditions



# Health & Safety



# Engagement



# What is the biggest challenge the NPCA needs to overcome?

## COMMENTS

- Public perception
- Public education on what the NPCA does and does not do



# What do you enjoy most about working at the NPCA?

## COMMENTS

- Meaningful work with a purpose
- Talented and supportive co-workers
- The work environment

# I  NPCA

**Report To:** Board of Directors

**Subject:** Mining & Lands Commissioner Decision- City of Hamilton Apportionment Appeal of the 2015 NPCA Levy

**Report No:** *UPDATED Report No. 01-18*

**Date:** February 28, 2018

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**RECOMMENDATION:**

1. That ***UPDATED Report No. 01-18*** respecting the Mining & Lands Commissioner Decision – City of Hamilton Apportionment Appeal of the 2015 NPCA Levy **BE RECEIVED**; and
2. ***That the NPCA reserves, identified in Appendix 2 of UPDATED Report No. 01-18, BE RETURNED to the taxpayers of the Watershed via the NPCA Municipal partners pending any final legal decision or process.***

**PURPOSE:**

The purpose of this report is to inform the NPCA Board of the Mining & Lands Commissioner's decision regarding the City of Hamilton's Apportionment Appeal of the NPCA's 2015 Levy.

This report aligns with the 2014-2017 Strategic Plan under, 'Transparent Governance & Enhanced Accountability.'

**BACKGROUND:**

The City of Hamilton filed an appeal to the Mining and Lands Commissioner Tribunal March 13<sup>th</sup>, 2015 regarding the NPCA's 2015 levy apportionment. The hearing occurred in May 2017 and the Mining and Lands Commissioner publicly issued its full decision Dec. 21<sup>st</sup>, 2017. The Mining and Lands Commissioner has ordered that the Hamilton appeal 'be and is hereby dismissed' and further ordered, 'that no costs shall be payable by any party to this appeal.' The full decision is attached as Appendix 1.

***At its January 17, 2018 Annual General Meeting, the Board deliberated this item as Resolution No. FA-13-18:***

***Moved by Board Member Quirk  
Seconded by Board Member Kaspersetz***

1. ***That Report 01-18 respecting the Mining & Lands Commissioner Decision – City of Hamilton BE RECEIVED; and***

2. *That the NPCA reserves, identified in Appendix 2 of Report No. 01-18, BE RETURNED to the taxpayers of the Watershed via the NPCA Municipal partners pending any final legal decision or process.*

*The motion was separated with part one (to receive) being approved and part two being deferred 'for a period of one month.' NPCA staff are bringing this report forward now as per the Board's direction. The Board further requested a list of 'conservation projects not included due to budget constraints,' which has been included as Appendix 3 of this report.*

*Finally, regarding the launch of a judicial review of the Appeal decision by the City of Hamilton, staff has obtained preliminary legal advice attached as a CONFIDENTIAL MEMO to this report.*

#### **FINANCIAL IMPLICATIONS:**

The current balance of all NPCA reserves is attached as Appendix 2. Specifically, the 'Niagara Differential Reserve' balance for the period 2015 – 2018 is:

Niagara 1,284,237

Hamilton 331,095

Haldimand 31,259

**TOTAL \$1,646,591**

#### **RELATED REPORTS AND APPENDICES:**

Appendix 1 Mining & Lands Commissioner Decision- City of Hamilton Apportionment Appeal of the 2015 NPCA Levy

Appendix 2 2018 NPCA Reserve Forecast

**Appendix 3 Capital projects deferred during the 2018 Budget approval process**

**Confidential Appendix 4 Memorandum – Kagan Shastri LLP**

Prepared by:

Submitted by:



David Barrick  
Senior Director of Corporate Resources



Mark Brickell  
CAO/Secretary Treasurer

**Mining and Lands  
Commissioner**

Box 330  
24th Floor  
700 Bay Street  
Toronto, Ontario  
M5G 1Z6

Tel. No.: (416) 314-2320  
Fax No.: (416) 314-2327

**Commissaire aux mines et  
aux terres**

C.P. 330  
700, rue Bay  
24<sup>e</sup> étage  
Toronto (Ontario)  
M5G 1Z6

Téléphone : (416) 314-2320  
Télécopieur : (416) 314-2327



RECEIVED DEC 28 2017

REFER OUR FILE CA 002-15

**REGULAR MAIL**

December 21, 2017

Ms. Byrdena M. MacNeil  
Legal Services Division  
City of Hamilton  
71 Main Street West  
Hamilton, Ontario L8P 4Y5

Mr. Kenneth C. Hill  
Hill Hunter Losell Law Firm LLP  
17360 Yonge St., Suite 200  
P.O. Box 324  
Newmarket, Ontario L3Y 4X7

Mr. Paul DeMelo  
Kagan Shastri LLP  
188 Avenue Road  
Toronto, Ontario M5R 2J1

Mr. Woodward B. McKaig  
Sullivan Mahoney LLP  
40 Queen Street, P.O. Box 1360  
St. Catharines, Ontario L2R 6Z2

Dear Madam and Sirs:

Re: Hamilton, Niagara & Haldimand County v. NPCA

Enclosed please find the Order of the Deputy Mining and Lands Commissioner in the above-noted matter.

If you have any questions, I can be reached at (416) 314-2324.

Yours very truly,

A handwritten signature in blue ink, appearing to read "Daniel E. Pascoe".

Daniel E. Pascoe  
Registrar

DEP/my

Encl.



Box 330  
C.P. 330  
24th Floor, 700 Bay Street  
24<sup>e</sup> étage, 700, rue Bay  
Toronto, Ontario  
Toronto (Ontario)  
M5G 1Z8

# **The Mining and Lands Commissioner Le Commissaire aux mines et aux terres**

File No. CA 002-15

M. Orr  
Deputy Mining and Lands Commissioner

)  
)

Thursday, the 21st day  
of December, 2017.

## **THE CONSERVATION AUTHORITIES ACT**

### **IN THE MATTER OF**

An appeal to the Mining and Lands Commissioner pursuant to subsection 27(8) of the **Conservation Authorities Act** by the City of Hamilton, against the 2015 General Levy Assessment of the Niagara Peninsula Conservation Authority, dated the 19th day of February, 2015;

### **BETWEEN:**

CITY OF HAMILTON

Appellant of the First Part

- and -

THE REGIONAL MUNICIPALITY OF NIAGARA  
AND HALDIMAND COUNTY

Appellants of the Second Part

- and -

NIAGARA PENINSULA CONSERVATION AUTHORITY

Respondent

## **ORDER**

**WHEREAS THIS APPEAL** was received by this tribunal on the 13th day of March, 2015 and an Order To File documentation was issued by this tribunal on the 16th day of March, 2016, to the initial two parties, being the appellant, the City of Hamilton and the respondent, the Niagara Peninsula Conservation Authority;

**AND WHEREAS** the tribunal heard a motion for party status in writing (the application having been filed on the 8th day of July, 2016) and issued a Procedural Order On Party Status on the 28th day of November, 2016, adding the Regional Municipality of Niagara and Haldimand County as parties to this matter;

**AND WHEREAS** a hearing was held in this matter on the 29th, 30th and 31st days of May, 2017 in the courtroom of the tribunal, in the City of Toronto, Province of Ontario;

1. **IT IS ORDERED** that this appeal be and is hereby dismissed.
2. **IT IS FURTHER ORDERED** that no costs shall be payable by any party to this appeal.

**DATED** this 21st day of December, 2017.

A handwritten signature in black ink, appearing to read "Marianne Orr", is written over a faint circular official stamp.

M. Orr  
DEPUTY MINING AND LANDS COMMISSIONER



Box 330  
C.P. 330  
24th Floor, 700 Bay Street  
24<sup>e</sup> étage, 700, rue Bay  
Toronto, Ontario  
Toronto (Ontario)  
M5G 1Z6

**The Mining and Lands Commissioner**  
**Le Commissaire aux mines et aux terres**  
File No. CA 002-15

M. Orr  
Deputy Mining and Lands Commissioner

)  
)

Thursday, the 21st day  
of December, 2017.

**THE CONSERVATION AUTHORITIES ACT**

**IN THE MATTER OF**

An appeal to the Mining and Lands Commissioner pursuant to subsection 27(8) of the **Conservation Authorities Act** by the City of Hamilton, against the 2015 General Levy Assessment of the Niagara Peninsula Conservation Authority, dated the 19th day of February, 2015;

**BETWEEN:**

CITY OF HAMILTON

Appellant of the First Part

- and -

THE REGIONAL MUNICIPALITY OF NIAGARA  
AND HALDIMAND COUNTY

Appellants of the Second Part

- and -

NIAGARA PENINSULA CONSERVATION AUTHORITY

Respondent

**REASONS AND FINDINGS**

The matter was heard in the courtroom of the Mining and Lands Commissioner, 700 Bay Street, 24th Floor, in the City of Toronto, in the Province of Ontario on the 29th, 30th and 31st days of May, 2017.

**Appearances**

Ms. Byrdena MacNeil

Mr. Ken Hill

Mr. Paul DeMelo

Mr. Woodward McKaig

Counsel for the City of Hamilton

Counsel for the Niagara Peninsula Conservation Authority

Counsel for the Regional Municipality of Niagara

Counsel for Haldimand County



## Introduction

[1] The Niagara Peninsula Conservation Authority (the “NPCA”), has, within its jurisdiction, three participating municipalities. They are the Region of Niagara (the “Region”); the City of Hamilton (the “City”), and Haldimand County (“Haldimand”). The City is the product of an amalgamation with the municipalities of Stoney Creek, Ancaster, Dundas, Flamborough and Glanbrook which took place on January 1, 2001. Prior to amalgamation the old City of Hamilton<sup>1</sup> was a lower tier municipality within the Region of Hamilton-Wentworth and was not included in the NPCA’s group of participating municipalities as it lay outside the NPCA’s watershed. It came under the jurisdiction of one authority – Hamilton Conservation Authority. Also prior to amalgamation the NPCA collected levies from Glanbrook, Ancaster the Region and Haldimand. After amalgamation and with its new expanded municipal boundaries, the City came under the jurisdiction of four conservation authorities including the NPCA.

[2] In late fall of 2000, the NPCA, in response to the City’s plea that amalgamation would substantially increase its apportionment share under the **Conservation Authority Act** (the “Act”) and its new Regulation 670/00, (the “Regulation”) agreed with the new City’s three other conservation authorities to set a pre-amalgamation levy rate. This rate was slightly amended in 2004. In 2014, in preparation for its upcoming budget, the NPCA re-visited the apportionment share. In a letter dated February 26, 2015, the NPCA notified the City that the levy for 2015 amounted to \$1,317,020.00. This represented an increase of \$803,550.00 over the levy amount for 2014 which was \$513,470.00. The NPCA’s reason for the increase was that Regulation 670/00 called for an agreement between an authority and its participating municipalities to deal with apportionment values and that no such agreement could be found. Without an agreement in place, the Regulation stipulated that the formula set out in the Regulation had to be used. The NPCA had therefore used the formula to set the apportionment rate for 2015.

[3] Of the total levy amount for 2015, \$1,162,559.00 represented the levy portion for administrative and maintenance costs.

[4] The City objected to the increased levy for 2015, claiming that a long-standing agreement was in place and that its purpose was to keep the City’s apportionment costs at a certain level. The City claims that the levy does not comply with the act and Regulation and that it is not otherwise appropriate. Finally, the City also takes issue with the length of time it was given to deal with the change to the levy amount.

[5] The NPCA, the Region and Haldimand all argued that there was no agreement and that as a result, the formula in the Regulation must be used for the levy calculation. They all argue that the levy complies with the legislation and that it is otherwise appropriate.

[6] The Region and Haldimand had requested and were granted party status to the appeal earlier in the year.

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<sup>1</sup> For the sake of clarity, use of the phrase “the old City of Hamilton” will signify its pre-amalgamation status.

## Issues

1. With respect to the 2015 levy payable for **maintenance** costs, is there agreement among the NPCA and its participating municipalities as required by Subsection 2 (1) (a) of Ontario Regulation 670/00?
2. If there is no agreement, does the levy for 2015 comply with Section 27 of the **Act** and Ontario Regulation 670/00? Is it otherwise appropriate?
3. With respect to the 2015 levy payable for **administration** costs, does it comply with the **Act** and Ontario Regulation 670/00? Is it otherwise appropriate?

## Witnesses for the City of Hamilton

The City called three witnesses.

### Andrew Burt

[7] Mr. Burt appeared under subpoena. He had retired from the NPCA in 2008 having been employed there since 1984. His position as chief executive officer meant that he was responsible for staff, preparation and submission of reports (including budget reports) to the NPCA boards and dealing with municipalities.

[8] Mr. Burt's testimony covered the following points:

1. Having municipal councillors on the authority's board was beneficial in that they had knowledge of budget processes and budget needs on both sides of the table.
2. He described the budget process that he oversaw during his tenure and the role of staff in that process.
3. Preliminary estimates were formulated during the summer months and a preliminary budget went to the board in the early fall. Participating municipalities were provided with the board approved budget in late October, early November. Comments regarding the preliminary budget usually came in the form of verbal communication from senior municipal staff and by board members' direct communications back to Mr. Burt. Presentations would be made to councils and committees or perhaps to regional chairs. Municipalities had 30 days to comment and final approval came the following February.
4. Levy notices were then sent out.
5. Prior to amalgamation, the Authority, area-wise, took in approximately 97% of the Township of Glanbrook, about half of Stoney Creek and a "significant portion" of the Town of Ancaster. It did not take in the old City of Hamilton.

6. Levy calculations utilized a methodology provided by the then Ministry of Natural Resources (the "MNR") using assessment information obtained the Municipal Property Assessment Corporation ("MPAC").<sup>2</sup> Mr. Burt described the information as "discounted equalized assessment".<sup>3</sup> The MNR method was fairly simple in nature and was described by Mr. Burt as "the broad-brush approach to assigning assessment".
7. The percentage of geographical area of a municipality that was located within the NPCA watershed had a bearing on the tabulation of assessment values. If 80 percent of geographical area was located within the watershed and the assessment figure provided to the Authority was \$100 million, then 80 percent of that \$100 million would be considered to be within the watershed. The assessment for each of the aforementioned three municipalities was totaled and that constituted the total assessment allocated back to the Region of Hamilton-Wentworth. Using the MNR method, this resulted in the three aforementioned municipalities contributing about 6.7 percent to the levy and the remainder was covered by the Region of Niagara.
8. With amalgamation on January 1, 2001, the new City's assessment value would increase from 6.7 percent to 19 percent. This was due to the fact that Hamilton's urban core would be factored into the calculation. He reported as much to his board on October 19, 2000. He also met on October 23<sup>rd</sup> with officials from the new City of Hamilton, the Hamilton Conservation Authority and the Grand River Conservation Authority (the "GRCA"). They decided to go back to their individual boards with the recommendation that levy apportionments be held at pre-amalgamation levels.
9. In effect, the apportionment level would be "frozen" and would be based on the same area percentages of the former area municipalities. Staff could not rationalize the reason for including the urban core in the calculation since there had not been a change in watershed boundaries.
10. This was how the 2001 levy apportionment levels were set in the authority's budget. The preliminary budget was sent to the participating municipalities and the Ministry of Natural Resources (the "MNR").

[9] On November 6, 2000, Mr. Burt wrote to Mr. Ron Running, Manager, Water Resources at the Ministry of Natural Resources, asking the Ministry to support the freeze. Mr. Burt also advised Mr. Running of the October meeting held between representatives of the NPCA, Hamilton Region, Halton Region and the Grand River Conservation Authorities as well as the City of Hamilton. They had agreed to ask the Minister to "*make specific reference in the regulation requiring that the municipal assessment apportionments for each of the 4 C.A.'s remain the same as has been historically used....*" He described this as a "reasonable compromise" pending resolution of "the question of geo-referencing".<sup>4</sup>

<sup>2</sup> Exhibit 2a for the City of Hamilton provided additional information regarding the levy calculations.

<sup>3</sup> "Equalized assessment" is defined in subsection 27(1) of the Conservation Authorities Act, R.S.O 1990, c C. 27 as "the assessment upon which taxes are levied in the year preceding the year in which the proportion will be payable as adjusted by the application of the equalization factor based on the assessment provided by the Ministry of Revenue."

<sup>4</sup> Geo-referencing was used in a 2002 pilot study that involved overlaying the watershed boundary of the NPCA on municipal assessment maps containing roll numbers. Where 51 percent of a property was located in a particular authority's jurisdiction, then the assessment value of that property would be assigned to that authority. Using this method, it was determined that 3.93 percent of the new City of Hamilton's assessment value actually fell within the

[10] Resolutions (attached to the letter sent to the aforementioned Mr. Running) were passed by the authority's board on October 20, 2000, regarding the assessment levies for then Haldimand-Norfolk and Hamilton-Wentworth. Both resolutions referred to the fact that the two municipalities would be the subject of amalgamation; that historically the annual conservation authority levy had been calculated on the basis of the geographical area of the area municipalities within the watershed jurisdiction of the NPCA; that the watershed boundaries would remain the same, and that *"the percentages of municipal area assessment used for [these municipalities] within the watershed of the NPCA [would] be continued for the purposes of apportioning levy costs of general benefitting projects and programs."*

[11] The Town of Haldimand was informed of the 2001 budget particulars (including the current value assessment calculation) by letter. The notice also included a chart entitled "2001 Levy Apportionment – Preliminary Budget" setting out a ratio that indicated the percentage that each municipality's current value assessment vis-à-vis the total current value assessment within the NPCA's watershed. The chart shows that the percentage of the Town of Haldimand's CVA within the NPCA watershed was 1.9376 %; the City of Hamilton's percentage was 6.9088 %, and the Region of Niagara's was 91.1536 %.

[12] According to Mr. Burt, these percentages were refined through geo-referencing which involved laying a watershed boundary map over top of a municipal assessment map, and then having staff from the NPCA and MPAC review same and assign roll numbers back to a specific watershed. The resulting percentage figures were Niagara Region 95.29 %; Town of Haldimand 0.78% and the City of Hamilton 3.93%. These percentages then made their way into Mr. Burt's 2003 report to the Board which dealt with the 2004 general levy apportionment formula. The report was approved by the Board and submitted to the participating municipalities, as well as to the MNR. According to Mr. Burt, all three participating municipalities paid their levies under the 2004 formula – until at least 2008, which is when he retired.

[13] Under cross-examination, Mr. Burt was insistent that the NPCA had always done its apportionment in accordance with the Act. In terms of the Regulation, his response as to how apportionment was calculated was "...the regulation says by calculating the ratio that each participating municipality's modified assessment bears to the total modified assessment of the authority." In his view, while the authority's board did not ignore the legislation, there "was some latitude for discretion on the part of the board."

[14] Mr. Burt also indicated that a "staff level agreement" existed amongst the various conservation authorities dealing with the Hamilton amalgamation as to how to apportion levy assessments. His testimony was that he and staff had a better understanding of assessment values within the watershed because of the pilot study information and that was information that they could not ignore. He also indicated that staff at the NPCA had agreed that the levy apportionment for all their municipalities be held at "basically the same level prior to amalgamation, or restructuring...." This would affect Haldimand and Hamilton. He was repeatedly asked if an agreement existed between the NPCA and its participating municipalities.

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NPCA boundary. The participants in this study included Conservation Ontario, MPAC, and the MNRF. The source for this information is an exhibit submitted in the motion for party status heard prior to this hearing.

[15] He replied that no formal agreement was signed. There was agreement of members on the NPCA board regarding levy apportionment and these members were municipal representatives. In Mr. Burt's words, "[t]here's no formal agreement in a document. There's agreement by the board members that represent those municipalities at our board in terms of how the levy is to be apportioned."

[16] Mr. Burt was questioned as to his understanding of Section 3 clause 1 in the Regulation. He testified that the NPCA did not base the levy on the total assessment within the new City of Hamilton. He stated, "...what we did is we looked at the lands within the municipality's area within the NPCA watershed." In response to the observation from counsel that the regulation did not say that, Mr. Burt responded by saying that "[w]e continued to do it the way we had done it historically because we thought that was fair and equitable."

[17] He was also questioned about the fact that he never advised the board through a report of the existence of the Regulation or the fact that it prescribed how to determine the apportionment. As he put it, "[w]e continued to do it consistent with the previous legislation, members understood...." Nor did he advise the participating municipalities about the Regulation. When questioned about his interpretation of the Regulation, he admitted that no agreement existed between the NPCA and its participating municipalities regarding apportionment.

[18] He admitted under cross examination by counsel for the NPCA that staff from various conservation authorities met with the new City of Hamilton but that other "member" municipalities (from the NPCA) were not present nor were they copied on the letter he sent to Mr. Running at the MNR.

[19] In re-examination, Mr. Burt was asked questions regarding a letter from the then Minister of the MNR<sup>5</sup> and his interpretation of the wording in that letter. He was of the view that the wording did not lead him or staff to believe that a written agreement was required and they did not approach it on that basis. As for the words "with the mutual agreement of all affected parties", the approach they took was a product of the process they followed in creating a budget and making the participating municipalities aware of the dollar figures involved. For example, the 2004 budget process made use of the pilot study information which identified assessment values that lay specifically within the NPCA watershed. Mr. Burt and staff communicated that to the authority's board of directors and subsequently to the municipalities. He "assumed that there was consensus and agreement" on the part of the municipalities if he heard nothing to the contrary. When asked if he thought there was any significance to the phrase "all or part of which" found in section 3(1) of the regulation, he replied in the negative.

[20] Mr. Burt was asked by me about his involvement in the consultation process leading up to the creation of the Regulation. He stated that he participated because of his interest in creating a more accurate means of determining assessment values. This was connected to using geo-referencing. He was not privy to any draft of the Regulation itself.

<sup>5</sup> The letter is addressed to the Chair of the Grand River Conservation Authority; is dated December 5, 2000, and is in response to a letter from that authority to the Minister dated November 2, 2000 "regarding the new City of Hamilton and the Grand River Conservation Authority (GRCA) levy apportionment for 2001." The letter is copied to the GRCA, the NPCA and the Halton Region Conservation Authority.

Joseph Rinaldo

[21] Mr. Rinaldo was the general manager of finance and corporate services for seven years with the City of Hamilton and retired in 2008. His evidence covered the following points:

1. He was hired by the transition board overlooking the creation of the new City of Hamilton in July 2000. His duties included financial services amongst a host of others. His work brought him into contact with boards and agencies that looked to municipal funding, including conservation authorities. For the New City of Hamilton that meant he was dealing with four authorities including the NPCA.
2. Mr. Burt advised him in the fall of 2000 of the expected levy increase resulting from amalgamation. A meeting took place between the City and its four authorities to discuss this issue. The pre-amalgamation levy apportionment percentage should be maintained based on the fact that the watershed boundaries for the NPCA had not changed. There was no basis to assume a greater levy. He testified that all three of the NPCA's participating municipalities would have been told about the City's apportionment issues, and he understood that the MNR was apprised as well and that the ministry was "in support". The pre-amalgamation rate or formula as put in place and was maintained with a slight modification in 2004. This would avoid "over-taxation" of the City's residents.
3. He testified as to the pilot project and the use that it was put to in refining assessment information as well as the affect it had on lowering the City's apportionment value from 6.8 percent to 3.9 percent. Haldimand's value dropped slightly and the Region's increased by 5 percent. The City and its four conservation authorities agreed to use these refined values.
4. He referred to two charts (included in a report to council) depicting various percentages as being the "agreement" reached by the City and its four conservation authorities (including the NPCA).
5. He met with the Region's staff as well as with Haldimand's staff to discuss apportionment issues and that he would have referred to the compromise reached by the City with its four authorities.

[22] Under cross-examination he indicated as follows:

1. Approving a budget that "uses a certain apportionment - to me that's actually approving it." It was the same as approving an action.
2. When questioned about the report to City council dated February 24, 2004, and the fact that the agreement being referred to in that document consisted of charts setting out levy amounts pertaining to the City and its four authorities, he admitted that while there was no written agreement as such "[w]hat we had is an agreement that we had reached together with the conservation authority which was submitted to all of the participating municipalities." There was no reference to the Region or Haldimand.
3. He could not point to a resolution on the part of participating municipalities that indicated agreement with the refined 2004 apportionment values.
4. In response to questions concerning the lack of a reference to the regulation 670/00 in his report to council he admitted there was no reference, "because we actually came up with an agreement that we thought ... everybody had agreed to."

5. When asked how this information would make its way to the other municipalities, he stated that it would be presented by the conservation authorities but that he never went to the other participating municipalities to confirm that it had happened. It was his understanding that the NPCA did so through Mr. Burt.
6. He referred to a need for clarification in terms of the wording of subsection 27(6) of the **Act** and the wording of the Regulation.

[23] Mr. Rinaldo was questioned regarding the phrase “by agreement among the authority and participating municipalities” and agreed that one had to have the agreement of the participating municipalities. However he believed that they did have agreement from the municipalities. Through Mr. Burt he was advised that the other municipalities were aware of things. He agreed that the regulation set out two options regarding apportionments – by agreement or by formula.

Mile Zegarac

[24] Mr. Zegarac, general manager of finance and corporate services for the City since January 7, 2013, stated that his department was responsible for compiling the City of Hamilton’s budgets including the processing of conservation authority levies. His evidence covered the following points:

1. Timelines for the City’s budget process were described. A budget guideline is presented to city departments, boards and agencies including conservation authorities. The authorities usually receive this information in August/September. The budget guideline has historically been zero or close to it, inflation sometimes being a factor. The city goes through a “Christmas shutdown” each December. A supplementary document is provided to council in December, late January to keep it apprised of upcoming issues including apportionment issues.
2. He was made aware of a “potential material change” to the City’s apportionment. A committee of council members was informed in January 2015 and the authority’s staff made their budget presentation that same month. The apportionment change would have resulted in a 350 percent increase in the City’s share of the NPCA levy.
3. The ability to pay should reflect current, not future growth. Apportionment percentages should reflect assessment values that were actually occurring within the NPCA’s watershed and should not draw on the entire municipal assessment base which would include Hamilton’s urban core. The urban core was not included in the pre-amalgamation values and it should not be included now.
4. Reference was made to two charts and he was cross-examined on them by counsel for the Region. The charts came from the MNR. Mr. Zegarac agreed that the first chart or table which gave Hamilton’s CVA apportionment percentage as 4.1997 per cent was done in accordance with part (a) of the Regulation. He also agreed that the second chart which stated that the percentage share was 19.921 per cent was done in accordance with the formula set out in part (b) of the Regulation. He agreed that under part (b) of the Regulation <sup>6</sup> one took into account the assessment value for the entire municipality when making the calculation.

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<sup>6</sup> Ontario Regulation 670/00, clause 2(1) (a) and (b).

5. Under cross-examination he explained his understanding of subsection 27(6) of the Act and the Regulation. He agreed that the regulation describes the method used for determining apportionment. However, he testified that the regulation lacked clarity and that “the ratio could be better defined as it relates to derived benefits.” He also testified that it was not clear that the intention of the formula was to “dictate” derived formula; that the formula was not consistent with the legislation, and that those sections in the Act that spoke to “derived benefit” were not consistent with section 3 of the Regulation.
6. As for subsection 27(6), his view was that the legislation was reflecting a “beneficiary pay approach” and that a municipality could spread the costs across its tax base or focus the cost on taxpayers found within the area under an authority’s jurisdiction.
7. He agreed that subsection 27(6) had nothing to do with determining apportionment but with how to collect the charge itself.
8. In response to a question as to how Hamilton deals with administration and maintenance costs vis-à-vis taxes, he indicated that the costs are spread across all the taxpayers in the City. In fact, the City spreads the costs for all four conservation authorities across the general levy.

#### **Witnesses for the NPCA**

##### Peter Graham

[25] Mr. Graham has been employed by the NPCA as Director of Watershed Management since 2014. He canvassed his counterparts in other conservation authorities as to whether they used the “default” formula as per clause 2(1)(b) of the regulation using figures provided by the ministry or if they determine their apportionment some other way. Thirty-six authorities were canvassed, twenty-one responded, and twenty indicated that they used the formula. The Grand River Conservation Authority indicated that maintenance, administrative and capital costs are rolled into one and then apportioned in a general levy using the formula. In response to a question as to a watershed that took in a large city, he responded that the Mississippi Valley Conservation Authority took in the City of Ottawa.<sup>7</sup>

[26] In cross-examination by counsel for the City, Mr. Graham was taken to the Grand River Conservation Authority’s response which indicated that “... the modified CVA numbers that we use are the ones provided by the MNR which reflect the lower assessment for the City of Hamilton that was estimated in 2003 as a result of a watershed geo-referencing study undertaken by NPCA.”

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<sup>7</sup> A search by me of a map compiled by the Province and Conservation Ontario indicates (for accuracy’s sake) that the City of Ottawa lies within the watersheds of three authorities - Rideau Conservation Authority CA, the Mississippi Valley CA and South Nation CA. <http://conservationontario.ca/library?view=document&id=302:map-of-conservation-authorities&catid=65:corporate-documents>.



Douglas Bruce Timms

[27] He has been a Regional Councillor with the Region of Niagara since 1991. He is appointed by the Region as a member of the NPCA and served on the board of the NPCA from 2004 for various terms but has been there continuously since 2011 (and is still a member). He has served off and on as Chair and Vice Chair of the board. As such he served on the budget committee. He did not recall being involved in any discussion dealing with the process pertaining to apportionment and the participating municipalities. His evidence covered the following points:

1. He became aware of the apportionment issue in 2015 through a discussion with the NPCA's new CAO, Mr. Carmen D'Angelo.
2. "provincial numbers" received by the authority seemed to indicate a drop in the City's apportionment percentage.
3. He instructed Mr. D'Angelo to investigate and that led to a review of the act and the Regulation. He was also asked to determine if a deal or documentation involving the participating municipalities.
4. He was never advised at regional council level of any agreement among participating municipalities and the NPCA, nor was he aware of anything while serving on the board at the NPCA. In his words, "[w]e simply relied on, or assumed as a councillor that there was legislation to be followed and that the conservation authority was following that."
5. A regional councillor sitting on the authority's board could not bind the municipality.
6. In cross-examination Mr. Timms advised that as councillor, he was made aware of matters (such as municipal budget guidelines) through staff reports, committee meeting minutes, and presentations by boards and agencies and so on. Likewise with his membership on the board for the NPCA. When asked if staff brought specific legislation to council's attention, he said if it was "relevant", "but that's rare".
7. He had worked with Mr. Burt for his first term with the authority – 2004 – 2006. In terms of keeping himself informed, he relied on staff recommendations when dealing with legislation. He admitted that he did not spend much time in reading the Act. It was made available to them, but he thought he could rely on staff expertise. This approach applied to staff recommendations and reports. He admitted that he might not understand every aspect of a report, but he relied on the staff recommendation and their expertise. He did not think it to be his role to be an expert on recommendations. On the issue of wearing two "hats" (regional councillor and NPCA member), he understood the need to keep certain matters confidential. However, the authority was obligated to provide budget information to council. He responded to a number of questions regarding his dual roles and was clear that he had not experienced a conflict in carrying out both roles.
8. When asked about his understanding of the Regulation and levy apportionments, he responded by saying that he understood that the apportionment levies issued against Hamilton and others complies with the Regulation and that he relied on staff's interpretation.

9. When asked when he became aware of the Regulation, he stated that it was when the question of the levy portion and the population growth in Hamilton was raised. The levy did not match growth. The Regulation called for an agreement or use of a formula. They could not find a written agreement, a resolution, nor minutes of council. That was when he read the Regulation (September 2014). Up to that point, he had never read it. In all his years as a board member, he never pursued an understanding of how the levy was apportioned - not until the 2015 budget was being prepared in September of 2014.
10. When asked about his understanding of the phrase "the new apportionment formula" found in the 2004 NPCA preliminary budget report he replied that he "took it at face value". He did not ask staff about it either. Questions related to similar budget-related reports that contained the reference to a formula generated similar replies – he took things at face value and trusted the presenters of the information.
11. A report dealing with the 2011 operating budget made reference to the Regulation and a "four-year levy implementation plan". He could not recall what the plan was. He was also taken to a report entitled "General levy apportionment report No. 63-09", which dealt with the basis for implementing a four-year phased plan and asked a number of questions related to his understanding of the information in the document. He could not recall details beyond what was set out in the report. He assumed the information was correct and took it at face value. He voted "yes" to pass the proposed operating budget.
12. Questions were asked concerning the preliminary 2012 operating budget report for the NPCA (report no. 43-11) and the reference in the report to slight changes in the apportionment percentages for the participating municipalities. As he put it "I understood and relied on Mr. DiMario's presentation of the facts...." Mr. DiMario was CAO at the time.
13. He was asked about a 2015 draft operating and capital budget report presented to the board in January 2015. It drew the board's attention to the previous levy apportionment history including reference to an "agreement" between the City of Hamilton and neighbouring conservation authorities. The report stated that the NPCA had no evidence to indicate that either the Region of Niagara or Haldimand County had supported such an "agreement". Having said that, the report indicated that Regulation 670/00 offered two options – levy apportionments could be reached by agreement or through use of the formula set out in the regulation itself. The report went on to say that if no agreement was reached by February 18, 2015, the NPCA must use the formula. The report set out the apportionment levies based on the formula. As a result, the levy for Hamilton rose to 19.9201% - up from 4.1997 per cent set in 2014. Levies for Niagara and Haldimand went down. For example, the Region of Niagara levy in 2014 was 93.5639 per cent and through use of the formula it dropped to 78.1543 per cent.
14. Mr. Timms testified that this was the first time that the board had been alerted to an issue with the apportionment formula. When asked what it was they had been looking for in terms of an "agreement", he indicated a written document signed by all three municipalities; a resolution, a motion – something that explained and then asked for council's endorsement. The wording of the Act led him and others to believe that this was required. Mr. Timms testified that he had relied on Mr. D'Angelo's advice on this point.

15. Mr. Timms was questioned about his past acceptance of the contents of various budget reports and various figures therein (e.g. 2004 report) that referred to basing apportionments on the 2000 current value assessment. His replies indicated that he relied on the advice of the experts and that he accepted the contents at face value. Mr. Timms described the Region's angry reaction to the NPCA budget report and the adjusted levy apportionments.

Carmelo D'Angelo

[28] Mr. D'Angelo was CAO at the NPCA from May, 2014 to November, 2016, when he took up the post of CAO at the Region of Niagara. Prior to his role as CAO at the NPCA, he was on the board having been appointed by the City of Hamilton in 2007. He testified that as a board member, the issue of levy apportionment and references to the legislation did not come to his attention. Nor could he recall the regulation ever being explained to him. His evidence covered the following points:

1. Budget preparation starting in 2014 included the review of two charts received from the MNR which generated questions. One chart had a lower apportionment percentage for the City (3.7 percent). The other had a higher percentage (21.01 percent). The charts set out the apportionment data for all three participating municipalities. He believed that the 21 per cent was the correct percentage.
2. When he queried the ministry about the reason for the 3.7 percent he was told this represented a geographical percentage showing that 3.7 percent of the City was in the NPCA watershed.
3. Further enquiries on his part led to his receiving the copy (through his ministry contact) of an email sent by the Assistant CAO Grand River Conservation Authority to an official at the City of Hamilton in 2012 describing the history of the levy apportionment value he was now questioning. It referred to a "local agreement for levy apportionment".
4. In very simple terms, the conservation authorities whose watersheds were located in the new City of Hamilton basically agreed not to use the provincial formula because it was "inadequate" and "didn't provide an accurate allocation of the City's assessment to each of the four Conservation Authorities." For example, since 19 percent of the amalgamated City of Hamilton was in the GRCA watershed, then the formula would allocate 19 percent of the City entire assessment to the authority. The consensus amongst the authorities and Hamilton was that this was "unfair". In the email, the Assistant CAO states "[w]e felt this was unfair to the City, so we asked the province enact a Regulation that would allow for local agreement between Conservation Authorities and participating municipalities to use more accurate percentage for allocating CVA. The request was granted by the province and Levy Regulation 670/2000 came into effect, allowing this." An agreement was reached to allocate a lower percentage to the City. This was "confirmed through Resolutions by all parties and then we wrote to the Minister of Natural Resources requesting his support in writing, which he gave us."

5. He took this information to the Chairman (Mr. Timms) and from there tried to determine if there was a written agreement by asking his counterparts at Niagara and Haldimand. He explained to them that what he had before him did not comply with the regulation and did they have an agreement in their possession. They responded in the negative.
6. Mr. D'Angelo understood the Regulation to say that agreement was permitted but that it had to be amongst the participating municipalities and the NPCA. In Hamilton's case the agreement was between the City and the four conservation authorities whose watersheds it lay within.
7. In December of 2014, he informed the participating municipalities including the City of Hamilton of his concerns. He relayed his intention to use the formula set out in the Regulation unless the parties could reach an agreement to allocate levies through some other methodology. It was his belief also, that the other conservation authorities would need to know the outcome as they could be affected by any agreement reached amongst the NPCA and its participating municipalities.<sup>8</sup>
8. No agreement was reached. He also obtained a legal opinion regarding on the issue of whether an agreement could be reached by way of a conservation authority member voting on behalf of his or her municipality. No one at the ministry was available to provide an opinion so it was sought privately. The opinion was that a member's vote could not bind a municipality.
9. The NPCA budget was presented to Hamilton in January 2015. He attempted to find a solution that would be acceptable to Hamilton.
10. In cross examination when asked about his understanding of what was presented in various staff reports dating back to the time of Mr. Burt, he said that he relied on staff expertise in terms of the information being relayed to him and that he had "no information that there's an actual regulation asking for an agreement." He relied on staff to present information, including such things as the Act, the Regulation and so on. Without that information he did not know how to ask the question. When he was confronted with a report that did mention the Regulation (2010 Operating Budget) he acknowledged that it was mentioned but said that it was not explained.
11. His approach to the word "agreement" in the Regulation was that it would be a written document or a council motion indicating agreement.
12. It was the responsibility of staff to provide "the appropriate information" that would allow him as a member to make an informed decision. He was not aware of any ministry chart indicating assessment information nor whether the information was being applied correctly. He admitted it would have been easy to obtain a copy of the Regulation from staff. He did not go beyond the acceptance of staff information. Now, as a CAO he would know there should have been more information included in the reports.

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<sup>8</sup> For example, Haldimand County has within its boundaries, the GRCA watershed.

13. In re-examination he repeated the fact that as a member on the authority's board, it was never explained to him by staff that the Regulation required either agreement or use of the formula in determining levy apportionments. In his words "they never explained it". Now he realized that the information was "inaccurate" meaning that his research as CAO revealed that Niagara and Haldimand had never participated in the "agreement discussion".

## **Final Submissions of the Parties**

### **City of Hamilton**

[29] The City listed three main issues to be determined.

1. Whether the 2015 levy ought to have been based on apportionment ratios set out in a long-standing agreement between the City, the NPCA, the Region of Niagara and Haldimand.
2. In the alternative, whether the NPCA acted in excess of its jurisdiction in calculating the 2015 levy.
3. In the further alternative, whether the 2015 levy is not appropriate in the circumstances.

[30] The City is seeking an order to have the 2015 levy in the amount of \$1,162,559.00 be rescinded; that the 2015 levy be calculated on the basis of the 2014 rate applied by the NPCA; that in the alternative, the 2015 levy be calculated on the basis of the 6.4 percent ratio being the actual proportion of the modified current value assessment of the City's NPCA watershed lands and not on the City's entire modified current value assessment; that the NPCA be ordered to repay overpayments made by the City plus interest and the costs of the proceeding. The City made the following arguments in support of its position on appeal:

1. The City claims that there is an agreement or that the parties agreed that a pre-amalgamation percentage would be used to calculate the levy for the City. Use of this percentage, because it was based on the assessment values of only those lands located within the watershed boundaries of the NPCA, avoided the inclusion of the City's urban core in the calculation.
2. The City had reached such an agreement with its four conservation authorities (including the NPCA) prior to amalgamation.

3. There is no need for a formal agreement amongst the NPCA and its participating municipalities because when the respective councils were approving the NPCA budget for payment, they knew what they were doing. Municipally-appointed board members were also sitting on council and would be aware of what was going on. They would have “actual knowledge” of the budget and levy information based on their board attendance and this knowledge carried over to their work on council. The respective councils would be agreeing to allow the City a discount in terms of the apportionment value used to calculate its levy. They would be “deemed” to have had effective notice of the levy apportionment information. The City reviewed the budget processes followed by the NPCA as well as the participating municipalities. There is no need for a formal agreement nor council resolutions. Niagara and Haldimand are bound by the actions of their respective councils in approving payment of the NPCA levy amounts. Approval and payment through their municipal processes constitutes agreement with the levy apportionment terms.
4. This process went on for ten years (2004-2014). (In 2004, the percentage had been lowered still further when a geo-referencing study produced further refinements in terms of assessment information for those lands located with the NPCA watershed.) The parties cannot claim that they did not agree to the discount.
5. Section 24 of the **Municipal Act**, S.O. 2001, c. 25 was cited as well as common law in support of its submission that councilors have a duty to keep themselves informed. This duty goes beyond that of the ordinary citizen in that it requires elected officials to engage in some degree of study and information gathering, and may require consultation with experts. They must “superintend and inform themselves about municipal works; inform themselves about the important details of municipal government, and disclose information that could affect the proper administration of public affairs.”
6. In response to the opposing parties’ claim that information provided to their councils (and the board itself) was lacking in clarity, the City argued that they were obligated to address any lack of clarity in terms of understanding the budget information presented to them. A party cannot rely on willful blindness or on ignorance of its own making. Hamilton also made submissions dealing with the word “agreement” as found in the Regulation.

[31] The City also made submissions directed at Mr. D’Angelo’s testimony. Mr. D’Angelo’s conclusion that there was no valid agreement was incorrect for three reasons.

1. It ignored past dealings of the NPCA board during the period 2004-2014. All of the dealings, including formal board minutes, resolutions and so on dealing with the budgets, the levy rate of 3.9 percent and so on show that those involved knew what they were doing. Even the documents sent by the MNR to the NPCA setting out the yearly assessment data (including the chart used for 2015 which was questioned by Mr. D’Angelo) all used the 3.9 percent, or the amended 3.7 percent rate.

2. “Mr. D’Angelo’s conclusion ignores the fact that where the Legislature requires an agreement and council resolution confirming that agreement in order for something to be valid, it expressly states so.” In support of this point, the City drew attention to and compared the wording in sections 14. (2.1) of the **Act** and 2. (1) of the **Regulation**. The latter reference does not contain the word “an” before “agreement” nor does it require a council resolution. The word “agreement” is not defined in the legislation. The City referenced the definition for the word in Black’s Law Dictionary (Tenth Edition). There was, amongst other things, a mutual understanding between the parties as to their rights and duties regarding the levy apportionment and payments.

3. Mr. D’Angelo’s conclusion misconstrues the levy process. The City referenced subsection 1 (1) of Ontario Regulation 139/96 – Municipal Levies made under the **Conservation Authorities Act**, a publication entitled “Joint Protocol Pertaining to Non-Matching (Discretionary) Municipal Funding of Watershed Programs” that relates to the power that a municipality has to direct how their appointed members vote, the 30-day notice period to review the proposed budget and the right to appeal to the Mining and Lands Commissioner as support for its submission that “the formality of a signed agreement and council resolution are not necessary and would unduly complicate a process that happens every year.”

[32] The City also took issue with the notice given to it advising of the 2015 levy amount. It contends that the earliest it could be said to be put on notice was as of the February 19, 2015 board meeting but more properly when it actually received the levy notice following the board meeting.

[33] The City claims that a “rolling” levy apportionment agreement was in place since 2004 and that it was reasonable for the City to assume that things would stay the same and that the NPCA would notify the City in a timely manner of a change. Six months’ notice would have been reasonable given what the City would want to do – make inquiries, investigate, make submissions, negotiate and make changes to its own budget. Because notice that the agreement would be terminated was not given, the City has asked that the 2014 rate be applied and not the 2015 rate.

[34] The City also argued that the NPCA acted in excess of its jurisdiction. This argument essentially focused on the subsection 27(6) of the **Act** and subsection 3(1) of the **Regulation**. The City submitted that subsection 27(6) limits the assessment value to be used in subsection 3(1) to those lands within the watershed and does not allow the authority to draw on a municipality’s entire assessment value. (The City’s witness Mr. Burt acknowledged in cross-examination that the **Regulation** did indeed work this way). Such an interpretation would be unfair in law. The City supported its point by referring to the historical practice of assessing only those lands within the NPCA watershed prior to amalgamation. The Legislature did not intend that authorities would be able to calculate levies using an assessment base greater than the rateable property over which they had jurisdiction.

[35] With respect to the Regulation, it being subordinate legislation, the Legislature intended for it to be interpreted in such a way as to not be in conflict with the Act. Should the City be wrong on this point, then it posits that the Regulation is actually in conflict with the Act and ignoring that fact leads to an “absurd” result.

[36] In hard numbers, the NPCA’s approach results in \$14.8 billion (the City’s entire assessment value) being used to calculate a levy apportionment rate of 19 percent. The City on the other hand claims to have demonstrated that only 6.4 percent of its entire assessment value (amounting to \$4,478,054,911.00) is located within the NPCA watershed.

[37] The City relied on authorities that stand for the proposition that taxing laws are to be strictly construed. The NPCA cannot levy outside its jurisdiction; likewise it cannot assess as against lands outside its jurisdiction. Subsections 27(2), (3) and (6) of the Act contain the NPCA’s only authority to levy for maintenance and administration costs and subsection 27(6) limits the authority to charging the levy on rateable property located within the NPCA’s watershed.

[38] The City further contends that the 2015 levy is not appropriate in the circumstances. A dictionary definition for the word “appropriate” led in turn to the City’s argument that even if I agreed that the NPCA’s position on how to calculate the levy was correct, that the 2015 levy apportionment was not otherwise appropriate. The dictionary definition (using the phrases “suitability for a particular purpose” and “something that is fit and proper in the circumstances”, were worked in to an argument that the City’s actual calculations for lands located within the watershed should be accepted. They were not challenged and the City’s figures represented the most accurate information available for calculating the actual assessment values. To use the old “ball-parking” method (as many authorities do) was wrong in law, given the intent of subsection 27(6) of the Act. In addition, authorities must act in good faith and in a reasonable manner.

[39] As for the NPCA’s witnesses, the City argued that Mr. Timms’ and Mr. D’Angelo’s testimony should be given no weight. They did not practice due diligence either in reviewing and/or understanding the information they were called to vote on.

[40] The testimony of Messrs. Burt and Rinaldo (City witnesses) should be given “great weight” as should that of Mr. Zegarac. Cross-examination of Mr. Zegarac dealing with his interpretation of the legislation should be disregarded as he is not a lawyer and therefore not qualified to answer a strictly legal question.

[41] Finally, the City asked for interest on monies that would be re-paid by the NPCA. Subsection 27(13) provided the required power to do this. In addition, case law was provided in support of the request.



### **The Regional Municipality of Niagara**

[42] The Region argued that there was no agreement amongst the participating municipalities and that as a result, the so-called “default” formula in the Regulation must be applied. The Regulation does not authorize geo-referencing “but rather requires that the total assessed value of all lands within a municipality all or part of which are within an authority’s jurisdiction, be included in the calculation and then modified by the percentage of the area of the participating municipality within the authority’s jurisdiction by its total area and multiplying that ratio by the modified current assessment for the participating municipality.”

[43] The Region also submits that the NPCA has not acted in excess of its jurisdiction and that there is no basis on which to conclude that the levy is not appropriate in the circumstances.

[44] Reference was made to Section 27 of the Act as well as the Regulation. The Region noted that the NPCA is required to comply with the Regulation and pointed out that there was no dispute from the City’s witness Mr. Burt regarding this point.

[45] The Region reviewed the evidence of Mr. D’Angelo and his testimony that he could not find any written document or council resolution or any authorizing document that would support the existence of an agreement. The Region drew attention to Mr. Burt’s testimony that a staff level agreement existed between the City and its four conservation authorities (the NPCA, the GRCA, Halton and Hamilton). As for the word “agreement”, the Region noted that the Regulation “does not require that there simply be a levy agreement but rather that there is “agreement amongst the participating municipalities.”

[46] The Region took issue with Mr. Burt’s testimony that there was no “formal agreement” but that agreement existed amongst the authority’s board members as to the levy apportionment; that these members represent the interests of their municipality; that they make the decision regarding the levy. The authority then levies the municipalities, who in turn can register a concern of disagreement by appealing to the Commissioner as was done here. The Region cross-examined Mr. Burt extensively on the fact that no resolution was found; no signed agreement existed, and that “there’s nothing in terms of an agreement other than an agreement by the board of the conservation authority agreeing with your recommendation.” Mr. Burt’s response was “Right. The board appointed by those municipalities.” The Region argued that this was confirmation of a “staff agreement”, and not what was required by the Regulation.

[47] When the City’s witness Mr. Rinaldo was questioned as to the existence of an agreement, he relied on charts that depicted the percentages applied by Hamilton and its four conservation authorities. There was no mention made of Niagara and Haldimand in the charts. Niagara Region’s counsel also noted that the City acknowledged at the time that such an agreement had to be endorsed by Council.

[48] In terms of what signifies “agreement” according to the Regulation, the Region argued that the only way to bind the municipalities was to have Council endorse an agreement by resolution and confirming by-law. Reference was made to Section 5 of the **Municipal Act** and case law to support this argument.<sup>9</sup> Being simply aware of the alleged agreement between 2000 and 2014 does not impute one and in any event, there was no evidence of any terms – only apportionment calculations based on an established percentage for a given year.

[49] The Region also dealt with the City’s definition of the word “agreement” (Black’s). The Region argued that there was no “mutual understanding or even an understanding of the rights and obligations under the legislation. Rather, what was presented to the Board of Directors of the NPCA was incorrect, missing and incomplete information and that what was then presented to Councils for Niagara and Haldimand was in fact an assumption that an agreement did in fact exist in the years between 2000-2014 when one did not.”

[50] Under cross-examination Mr. Burt admitted that for the period 2000-2008 his board was never advised of the fact that his recommendation regarding the apportionment calculation was not in accord with the Regulation. The NPCA’s witnesses Messrs. Timms and D’Angelo both testified that they were never advised by staff of the implications of the Regulation or that the recommended apportionment was not in accord with that legislation.

[51] The Region also argued that the existence of an agreement cannot be “deemed” by the municipal approvals of the municipal budgets that included the NPCA’s 2000-2014 budgets. The respective councils in 2000-2014 (not just the NPCA board) were working with incomplete and inaccurate information and could not be said to be in mutual agreement with anything other than approving budgets on a year by year basis. Even if the Commissioner was prepared to accept the City’s argument that an agreement existed at one time, it is clear that in 2015, there was none.

[52] The Region also disputed the City’s argument that reasonable notice of a change had not been given. The Commissioner does not have the jurisdiction to exercise what amounts to an equitable remedy – that is, reading a term into an alleged agreement. Equitable relief is restricted by the **Courts of Justice Act** to the Court of Appeal and the Superior Court of Justice. Nor does the relief requested by the City fall within subsection 27(13) of the **Act**.

[53] The City’s interpretation of the Regulation with respect to the assessment area to be considered was also disputed by the Region. The value of the entire City of Hamilton must be taken into consideration in the calculation as this is what the Regulation required – indeed, all witnesses who testified on this point agreed that this was the correct approach. The City’s request amounts to an attempt to circumvent the Regulation at the expense of the other participating municipalities.

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<sup>9</sup> *Adams Pizzeria (Prescott) Ltd. v. Prescott (Town)*, 2017 ONSC 3034.

[54] Furthermore, there is no conflict between subsection 27(6) of the **Act** and the Regulation. Neither the reading of the legislation nor the City's evidence supports such an interpretation. Subsection 27(6) refers to the manner in which a municipality may charge for the collection of the levy and not the manner in which the apportionment is to be calculated. The City's witness Mr. Zegarac agreed under cross-examination. In fact, according to Mr. Zegarac, the City collects the taxes for the levy across all properties within its borders. Part VII of the **Municipal Act** provides municipalities with the power to levy and collect taxes from owners inside its borders and section 326 allows for a "special services levy" that targets properties within a designated area. The City's submissions reflected an inconsistency and conflict in terms of the evidence it presented and the **Conservation Authorities Act** itself.

[55] The Region noted that Mr. Burt (under subpoena for the City) acknowledged that the procedure which had been followed was not permitted by the Regulation. Mr. Burt's response to being questioned on this point was that "we thought [it] was fair and equitable". He agreed that the Regulation would have to be changed to accommodate the procedure they had used. In his words, "[t]he Regulation doesn't reflect what we would like it to reflect." In addition, Mr. Zegarac (for the City) agreed that the calculation for the 2015 was accurate and that he had no issue with the manner in which the apportionment had been calculated.

[56] The Region also disputed the City's argument that using the entire assessment base in the calculations would create an absurd result. In response the Region said that all witnesses acknowledged that this is how the Regulation worked. Nor does the NPCA exercise assessment powers. It is not a taxing authority. It imposes a levy and charge for the work it carries out on behalf of its participating municipalities. These "charges" were not taxes. They worked to defray expenses and not to raise revenue.<sup>10</sup>

[57] In response to the City's request that the testimony of Messrs. Timms and D'Angelo be given no weight on the basis that they failed to notice references to the Regulation contained in budget reports starting in 2010, the Region argued that an examination of the reports shows that no explanation was ever given as to what the Regulation provided for and required in terms of the calculation of the apportionment. In any case, their testimony regarding the existence of an agreement was clear and unshaken under cross-examination.

[58] The Region of Niagara asked to have the appeal dismissed; to have the 2015 levy confirmed, and to be awarded costs.

### **The Niagara Peninsula Conservation Authority**

[59] While the NPCA concurred with and did rely on the submissions of Niagara, it did make submissions of its own.

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<sup>10</sup> The Region relied on the decision in *Ontario Home Builders Assn v. York Region Board of education* 493, 15 M.P.L.R. (2d) 1 (Div Crt).

[60] Being a creature of statute, the NPCA is bound to follow the requirements of the Regulation, meaning that absence agreement amongst itself and its participating municipalities, it must apply the formula found in the Regulation.

[61] Unfortunately, for the years 2000-2014, the requirements were not properly considered. The apportionment for 2015 was correctly calculated and should be upheld.

[62] The NPCA did not act capriciously nor did it act in an arbitrary manner. The CAO, Mr. D'Angelo (appointed in May 2014), questioned the levy calculation data sent by the MNRF in September of 2014. He was told in November that the calculations "assumed the existence of an agreement among the member municipalities". He began to search out such an agreement. MNRF advised on December 2, 2014 that it had no record involving Haldimand or Niagara. Mr. D'Angelo could only locate evidence of an agreement between Hamilton and the four conservation authorities that cover its territory.

[63] Haldimand and Niagara did not want to continue with the old allocation formula. Mr. D'Angelo attempted to obtain some resolution to the problem but was unable to do so.

[64] The NPCA argued that there was no agreement in existence; that voting board members could not bind member (participating) municipalities into accepting an agreement; that if there was an enforceable agreement in past years, there was no evidence to support an extension into 2015; that the notice of the change provided to Hamilton was carried out with "due dispatch", and that even if there was an alleged agreement, a notice term could not be added to it as this was beyond the Commissioner's jurisdiction.

[65] As for the City's interpreting the Regulation to limit the assessment data used in the calculation, its own witnesses interpreted the legislation in the manner proposed by the NPCA and this interpretation was reasonable and conformed to the legislation.

[66] As for the City's attack on the credibility of the NPCA witnesses (Timms and D'Angelo) for having missed references to the Regulation in documents put to them, it should be ignored. What was important was that the references "did not disclose to them ... what the Regulation required."

[67] The NPCA argued that the City's asking for the application of geo-referencing is a request that exceeds the Commissioner's jurisdiction. It was not adopted by the ministry, nor is it used by other authorities. Using it would set a dangerous precedent. The ministry provides the data used by authorities and it uses the modified assessment for the entirety of each participating municipality. Using the City's method would in effect require re-drafting of the Regulation.

[68] In addition to asking that the appeal be dismissed and that the 2015 levy apportioned by the NPCA be confirmed, the authority has asked for costs. Haldimand adopted and relied on the Region's response to the City's final submission.

## **The Law, Analysis and Reasons**

### **The Conservation Authorities Act**

[69] The **Conservation Authorities Act** was enacted in 1946<sup>11</sup> and from its inception, it looked to “participating municipalities” to finance the work of authorities under the **Act**.

[70] Under the 1946 **Act**, a “*participating municipality*” according to statutory definition said that it “[*was*] either wholly or partly within a watershed”; that it “*may benefit by a scheme established therein*” and that it was “*declared by the Lieutenant-Governor in Council to be a participating municipality for the purposes of such scheme*”. The statute granted powers to authorities to carry out a scheme (a defined term). Municipalities benefitted from schemes and the **Act** required them to pay proportionately for benefits. An authority determined the proportionate amount to be paid by a municipality. Authorities were given the power to determine what moneys would be required for capital expenditures, as well as maintenance and administration costs. Participating municipalities were required to proportionately pay for all of these items. There was no wording in the 1946 **Act** that went beyond giving an authority the power to determine proportionate amounts to be paid.

[71] The current legislation (as of the date of the hearing) generally resembles the 1946 **Act**. Conservation authorities still come into existence through the aegis of a certain number of municipalities within a watershed. As well, participating municipalities within a particular watershed are still obligated to financially support the work of a conservation authority, including its maintenance and administration costs. Authority members are appointed by a municipal council. One can describe both versions as enabling pieces of legislation designed to facilitate the establishment of conservation authorities by a group of like-minded municipalities.

### **Maintenance and Administration Costs**

[72] Prior to 1996 and the **Savings and Restructuring Act**, (frequently referred to as the Red Tape Bill), maintenance and administration costs were levied against municipalities with no opportunity for appeal. Maintenance costs (a defined term connected to “project”, another defined term connected to the furtherance of an authority’s objects), were apportioned according to the benefit derived by each municipality.

[73] The treatment of administration costs was slightly more complicated and involved referring to something called “equalized assessment” – a defined term as well. Reference can be made to the **Act** as it was in 1990 for exact wording.<sup>12</sup>

<sup>11</sup> **Conservation Authorities Act**, 1946.

<sup>12</sup> **Conservation Authorities Act**, R.S.O. 1990, C. c. 27, s. 27

[74] These costs were levied against municipalities without them being given the opportunity to appeal. In 1996, with the **Savings and Restructuring Act**, all that changed to allow for the appeal of a levy to the Mining and Lands Commissioner.<sup>13</sup> This legislation also opened the door to the creation of a regulation that would set out the process for determining the levy payable for either administration or maintenance costs. In 1997, further amendments to Section 27 did away with the use of “equalized assessment” in the apportionment of administration costs. Both sets of costs would be determined “subject to” an impending regulation.

[75] Ontario Regulation 670/00 (“Regulation 670/00”), which came into effect on December 19, 2000, is at the heart of this matter and it contains two options for the determination of the levy payable to the authority for maintenance costs. The apportionment of costs is arrived at either by agreement or through use of a set formula. The apportionment of administration costs is calculated only through use of the formula. Prior to enactment of this regulation, an imposed formula was not in existence.

## **The Current Law**

### **Conservation Authorities Act, R.S.O. 1990, C. 27, as amended**

[76] The sections of the **Act** that are relevant to this matter are set out below. Regulation 670/00 follows.

[77] Section 27 which is entitled “Maintenance and administration costs” states as follows:

#### ***Maintenance and administration costs***

*27 (1) Repealed: 1997, c. 29, s. 54 (1).*

#### ***Apportionment of maintenance costs***

*(2) Subject to the regulations made under subsection (16), after determining the approximate maintenance costs for the succeeding year, the authority shall apportion the costs to the participating municipalities according to the benefit derived or to be derived by each municipality, and the amount apportioned to each such municipality shall be levied against the municipality. R.S.O. 1990, c. C.27, s. 27 (2); 1996, c. 1, Sched. M, s. 47 (1).*

#### ***Apportionment of administration costs***

*(3) Subject to the regulations made under subsection (16), after determining the approximate administration costs for the succeeding year, the authority shall apportion the costs to the participating municipalities and the amount apportioned to each such municipality shall be levied against the municipality. 1997, c. 29, s. 54 (2).*

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<sup>13</sup> **Savings and Restructuring Act**, S.O. 1996, Sched. M, s. 47(4)

***Minimum levy for administration costs***

(4) *Subject to the regulations made under subsection (16), an authority may establish a minimum sum that may be levied for administration costs by the authority against a participating municipality, and, where the amount apportioned to any municipality under subsection (3) is less than the minimum sum, the authority may levy the minimum sum against the municipality. R.S.O. 1990, c. C.27, s. 27 (4); 1996, c. 1, Sched. M, s. 47 (3).*

***Notice of apportionment***

(5) *The secretary-treasurer of the authority, forthwith after the amounts have been apportioned under subsections (2), (3) and (4), shall certify to the clerk of each participating municipality the total amount that has been levied under those subsections, and the amount shall be collected by the municipality in the same manner as municipal taxes for general purposes. R.S.O. 1990, c. C.27, s. 27 (5).*

***Levy where only part of municipality in area***

(6) *Where only a part of a participating municipality is situated in the area over which the authority has jurisdiction, the amount apportioned to that municipality may be charged only against the rateable property in that part of the municipality and shall be collected in the same manner as municipal taxes for general purposes. R.S.O. 1990, c. C.27, s. 27 (6).*

***Enforcement of payment***

(7) *An authority may enforce payment against any participating municipality of any portion of the maintenance costs or administration costs levied against the municipality as a debt due by the municipality to the authority. R.S.O. 1990, c. C.27, s. 27 (7).*

***Appeal***

(8) *A municipality against which a levy is made under this section may appeal the levy to the Mining and Lands Commissioner appointed under the Ministry of Natural Resources Act. 1996, c. 1, Sched. M, s. 47 (4).*

*Note: On a day to be named by proclamation of the Lieutenant Governor, subsection 27 (8) of the Act is amended by striking out "Mining and Lands Commissioner appointed" and substituting "Mining and Lands Tribunal continued". (See: 2017, c. 8, Sched. 17, s. 5 (1))*

***Time for appeal***

(9) *The appeal must be commenced within 30 days after the municipality receives notice of the levy from the authority. 1996, c. 1, Sched. M, s. 47 (4).*

**Parties**

(10) *The parties to the appeal are the municipality, the authority and any other person added as a party by the Commissioner. 1996, c. 1, Sched. M, s. 47 (4).*

*Note: On a day to be named by proclamation of the Lieutenant Governor, subsection 27 (10) of the Act is amended by striking out "Commissioner" and substituting "Tribunal". (See: 2017, c. 8, Sched. 17, s. 5 (2))*

**Compliance pending determination**

(11) *The municipality shall comply with the levy pending the determination of the appeal. 1996, c. 1, Sched. M, s. 47 (4).*

**Matters to be considered at hearing**

(12) *The Commissioner shall hold a hearing on the appeal and shall consider,*

*(a) whether the levy complies with this section and the regulations made under subsection (16); and*

*(b) whether the levy is otherwise appropriate. 1996, c. 1, Sched. M, s. 47 (4).*

*Note: On a day to be named by proclamation of the Lieutenant Governor, subsection 27 (12) of the Act is amended by striking out "Commissioner" and substituting "Tribunal". (See: 2017, c. 8, Sched. 17, s. 5 (2))*

**Powers of Commissioner**

(13) *The Commissioner may, by order, confirm, rescind or vary the amount of the levy and may order the authority or the municipality to pay any amount owing as a result. 1996, c. 1, Sched. M, s. 47 (4).*

*Note: On a day to be named by proclamation of the Lieutenant Governor, subsection 27 (13) of the Act is amended by striking out "Commissioner" and substituting "Tribunal". (See: 2017, c. 8, Sched. 17, s. 5 (2))*

**No appeal**

(14) *No appeal lies from the decision of the Commissioner. 1996, c. 1, Sched. M, s. 47 (4).*

*Note: On a day to be named by proclamation of the Lieutenant Governor, subsection 27 (14) of the Act is amended by striking out "Commissioner" and substituting "Tribunal". (See: 2017, c. 8, Sched. 17, s. 5 (2))*



***When subss. (8-14) begin to apply***

*(15) Subsections (8) to (14) do not apply until the first regulation made under subsection (16) comes into force. 1996, c. 1, Sched. M, s. 47 (4).*

***Regulations re levies***

*(16) The Lieutenant Governor in Council may make regulations governing the nature and amount of the levies made by authorities under this section, including regulations that restrict or prohibit the making of levies described in the regulations. 1996, c. 1, Sched. M, s. 47 (4)*

[78] In addition to the above sections, the Act contains a section dealing with the effects of amalgamation. Section 13 is entitled "Participating municipalities following annexation, etc." and states as follows:

*13. Where a new municipality is erected or two or more municipalities are amalgamated or any area is annexed to a municipality and any part of the resulting municipality is within the area over which an authority has jurisdiction, such resulting municipality shall be deemed to have been designated a participating municipality by the Lieutenant Governor in Council.*

[79] The Act does not contain a definition for the word "agreement" although the word is used in various sections including subsection 14(2.1) dealing with the appointment of members and where it is found in the phrase "*may be determined by an agreement that is confirmed by resolutions passed by the councils of all the participating municipalities.*"

[80] The Act allows for an authority to enter into agreements for various things and includes agreements with councils and local boards. An authority can make regulations empowering officers to sign agreements (subsection 30 (1) (a)) and so on.

[81] The Regulation contains the word "agreement" in section 2 (see below).

**Ontario Regulation 670/00**

[82] The Regulation is entitled "Conservation Authority Levies". It reads as follows:

***This Regulation is made in English only.***

***1. In this Regulation,***

*"current value assessment" means the current value assessment of land, determined under the provisions of the Assessment Act, for a given year;*

*"property class" means a class of real property prescribed under the Assessment Act. O. Reg. 670/00, s. 1.*

2. (1) *In determining the levy payable by a participating municipality to an authority for maintenance costs pursuant to subsection 27 (2) of the Act, the authority shall apportion such costs to the participating municipalities on the basis of the benefit derived or to be derived by each participating municipality determined,*

*(a) by agreement among the authority and the participating municipalities; or*

*(b) by calculating the ratio that each participating municipality's modified assessment bears to the total authority's modified assessment. O. Reg. 670/00, s. 2 (1).*

*(2) In determining the levy payable by a participating municipality to an authority for administration costs pursuant to subsection 27 (3) of the Act, the authority shall apportion such costs to the participating municipalities on the basis of the ratio that each participating municipality's modified assessment bears to the total authority's modified assessment. O. Reg. 670/00, s. 2 (2).*

3. *The following rules apply for the purposes of section 2:*

*1. The modified current value assessment is calculated by adding the current value assessments of all lands within a municipality all or part of which are within an authority's jurisdiction and by applying the following factors to the current value assessment of the land in the following property classes:*

<i>Property Class</i>	<i>Factor</i>
<i>Residential/Farm</i>	<i>1</i>
<i>Multi-Residential</i>	<i>2.1</i>
<i>Commercial</i>	<i>2.1</i>
<i>Industrial</i>	<i>2.1</i>
<i>Farmlands</i>	<i>0.25</i>
<i>Pipe Lines</i>	<i>1.7</i>
<i>Managed Forests</i>	<i>0.25</i>
<i>New Multi-Residential</i>	<i>2.1</i>
<i>Office Building</i>	<i>2.1</i>
<i>Shopping Centre</i>	<i>2.1</i>
<i>Parking Lots and Vacant Land</i>	<i>2.1</i>
<i>Large Industrial</i>	<i>2.1</i>

2. *A participating municipality's modified assessment is the assessment calculated by dividing the area of the participating municipality within the authority's jurisdiction by its total area and multiplying that ratio by the modified current value assessment for that participating municipality.*

3. *The total authority's modified assessment is calculated by adding the sum of all of the participating municipalities' modified assessments for that authority. O. Reg. 670/00, s. 3.*

4. *An authority may establish a minimum sum that may be levied against a participating municipality within the authority's jurisdiction. O. Reg. 670/00, s. 4.*

[83] The **Act**, through the phrase found in section 27 (“subject to the regulations made under subsection (16)”), sets the stage for the application of Regulation 670/00. Where **maintenance costs** are concerned, apportionment can be “by agreement among the authority and the participating municipalities”. Where no agreement is in place it is calculated using the formula set out in the regulation. This is set out in section 2 of the Regulation. The parties to such an agreement in this matter must be the City of Hamilton, the Region of Niagara, Haldimand County and the NPCA.

[84] The formula (sometimes referred to as the “default formula” meaning where no agreement existed, then by default the formula applies), requires that there be a calculation of the ratio that each participating municipality's modified assessment bears to the total authority's modified assessment. The Regulation has rules that apply to Section 2. One of these (#1) says that “[t]he *modified current value assessment is calculated by adding the current value assessments of all lands within a municipality all or part of which are within an authority's jurisdiction and by applying*” a set of factors set out in the Regulation. (Emphasis added)

[85] The emphasized phrase has led to disagreement in terms of its meaning and impact. A municipality's modified assessment is calculated by dividing the area of the municipality within the authority's jurisdiction by the municipality's total area – giving one a ratio that was then multiplied by the modified current value assessment for the municipality.

[86] The Region, Haldimand and the NPCA all argue that the entire assessment base of a municipality is used in the calculations set out in the formula. In terms of pre-regulation history, the City's witness, Mr. Burt, made reference to “equalized assessment” – which in effect was a calculation that took a municipality's entire assessment base into consideration prior to enactment of the Regulation. Those municipalities with areas containing higher assessment values (e.g., urban cores) ended up paying more for conservation authority services than those having lower assessment values within their boundaries (e.g., rural municipalities). (One of the results of amalgamation in 2001, was that the old City of Hamilton's urban core (which was not in the NPCA jurisdiction) became part of the new larger City of Hamilton. Because amalgamation joined the old City of Hamilton to municipalities already within the NPCA jurisdiction, then by application of rule #1 in the Regulation, the urban core was drawn into the calculation set out in the formula).

[87] In my view, the use of a municipality's entire assessment base in the calculation has not changed through the enactment of Regulation 670/00. Indeed, the notion of taking a municipality's entire assessment value as the starting point in the calculation appears to have been the rule for many years. Research on my part uncovered a decision of the Ontario Municipal Board dating back to 1997. The case of *London (City) v. Kettle Creek Conservation Authority*, [1997] O.M.B.D. No. 103, came about after the 1992 annexation by the City of London of the former Township of Westminster. Although it dates pre-Regulation 670/00, it is enough on point to invite consideration of its issues, one of which was described as "the application of the averaging method vs. the actual area assessment". The case centered on a challenge by the City of London of the formula used to generate the annual apportionment. As the Board noted, the City's position was that with use of the averaging method, "... the charges are deemed to constitute a financial burden to the City of London."

[88] As in the matter before me, counsel for the City of London tried to argue that subsection 27(6) of the Act meant that taking into account the entire assessment area was contrary to the Act. Taking into account the actual area within the Kettle Creek jurisdiction would have produced a much lower value. A Ministry official testified that the averaging method had been Ministry policy for 20-30 years. It was standard practice. As the Board noted, "[t]he Ministry prefers to use the averaging method because the adoption of the actual assessment would mean an examination and calculation of millions of actual assessments that would be costly, time consuming and would have financial impact and result in substantial changes throughout the Province."<sup>14</sup> The Board further noted that according to the official, "[t]he averaging system...results in establishing levies and fees that are reasonable and represent a fair allocation of expenses."

[89] The Board found that "[t]he averaging method used by the Province constitutes a fair and reasonable way of apportionment as it takes into account the municipality's resources through the assessment process and does not discriminate into apportionments by specific areas of the City." And, "... the increase in the apportionment results in greater benefits provided by the Conservation Authority to the residents of London not to mention of the potential benefits that may be gained from lands transferred as the results of the annexation."<sup>15</sup>

[90] With respect then to the question as to whether an entire assessment base is used in the calculation set out in regulation 670/00, I find that it is to be used.

[91] With respect to subsection 27(6) of the **Conservation Authorities Act** the City of Hamilton claims (as the City of London did prior to 2000) that it should be interpreted to mean that only those lands within the watershed boundary are to be included in the apportionment calculation.

<sup>14</sup> The averaging method was prescribed year by year at the time through a regulation made under the Municipal Act – the Board finding that the wording of section 366.192) of the Municipal Act, regulations passed under that Act took precedence over the Conservation Authorities Act and its subsection 27(6).

<sup>15</sup> The decision pre-dates Regulation 670/00. The appeal by the City was brought under subsection 25(2) of the Conservation Authorities Act, (R.S.O. 1990, c. C. 27). This was an issue in itself but is not relevant to this matter. The Municipal Act and its regulations played a role in the case as well. Again, the case provides historical information and shines a light on the reason for using a municipality's entire assessment area in the calculation of apportionment values and the like.

[92] The City submits that the Regulation should be interpreted to comply with this and if it is not, then the Regulation is in conflict with the **Act** and should be ignored.

[93] I cannot agree with the City that subsection 27(6) works in the way suggested. I do accept the argument made by the Region (and admitted by one of the City witnesses), that subsection 27(6) should be read as allowing a municipality having part of its lands located within the boundary of an authority to charge the apportionment amount against those lands only. Authorities do not have the power to charge against rateable properties to defray their expenses. Under the act, they must look to their municipalities for this. This is the only sensible interpretation of this section. It is directed at a municipality allowing it to collect monies to defray the costs of special services such as conservation authority levies.

[94] Another sticking point for the parties was the word “agreement” in the Regulation and the fact that it is not preceded by the word “an”. The City took this to mean that a written agreement was not required, and that a binding agreement by the parties could be signified by the parties’ actions in approving budgets.

[95] I do not accept the City’s arguments in this regard. I place no importance on the fact that the word “an” does not precede the word “agreement”. The **Conservation Authorities Act** contains a number of references to agreement-making powers and sometimes the word is preceded by “an” (subsection 14(2.1)) and sometimes not (section 22). In my view, this is grammatical and drafting style at work. I do agree with the Region’s argument that municipalities are required to comply with the **Municipal Act** when it comes to entering into agreements. The region referred me to Section 5 of that **Act** as well as case law.<sup>16</sup> That section states:

*(1) The powers of a municipality shall be exercised by its council. 2001, c. 25, s. 5 (1).*

***Council a continuing body***

*(2) Anything begun by one council may be continued and completed by a succeeding council. 2001, c. 25, s. 5 (2).*

***Powers exercised by by-law***

*(3) A municipal power, including a municipality’s capacity, rights, powers and privileges under section 9, shall be exercised by by-law unless the municipality is specifically authorized to do otherwise. 2001, c. 25, s. 5 (3); 2006, c. 32, Sched. A, s. 5.*

***Scope***

*(4) Subsections (1) to (3) apply to all municipal powers, whether conferred by this Act or otherwise. 2001, c. 25, s. 5 (4).*

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<sup>16</sup> Adams Pizzeria (Prescott) Ltd. v. Prescott (Town), 2017 ONSC 3034.

[96] For the sake of historical accuracy, the **Municipal Act** in 2000/2001 (R.S.O. 1990, c. M. 45) dealt with the exercise of municipal powers in Section 9. That Act was repealed in 2003.

*Council to exercise corporate powers*

*9. The powers of a municipal corporation shall be exercised by its council. R.S.O. 1990, c. M.45, s. 9.*

[97] In my view the legislators would have expected that any agreement entered into by a municipality for the purposes of Section 2 of Regulation 670/00 would be properly authorized by council acting in accordance with the **Municipal Act**. The **Conservation Authorities Act** for example (and in simple terms), in Section 22 (“enter into agreement”) states that an authority and municipality can join forces and agree to carry out construction work. It leaves it to the parties to ensure that they enter into agreement in accordance with the legislation that empowers their actions. A municipality must work with council approval and an authority with board approval.

[98] The City argued that council member votes on budget items could bind council if those members were also members on an authority’s board. In my view this argument has no merit. I agree with the Region that council approval of authority budgets is simply that. Council members are simply approving payment of an authority’s “bill” just as they do with their other agencies. Board members who also sit on council wear two hats – one for authority work and one for council work. The work is separate and apart and no osmosis occurs. In addition, this argument fails to recognize the requirements of the **Municipal Act** described above.

[99] Having already found above that any agreement in the **Act** and Regulation must be duly approved by council, then I would also agree with the respondents that one should be able to refer to an actual document signifying council’s having been apprised of the rights and obligations associated with such an agreement. I would have expected officials for affected councils and board officials to present a report (either combined or separately) to affected councils setting out the wording of the Regulation; explaining the reasons why the City of Hamilton was asking for a particular apportionment rate; the basis for that rate; explaining how a discounted rate would affect the rates imposed on the other municipalities in the authority’s jurisdiction (as one or both of them might have to make up any shortfall), and asking for approval to proceed. Budget items dealing with the authority’s budget would then be approved on the basis of such an agreement. If circumstances changed (as they did for the 2004 authority budget), then either a new agreement or an amendment of the old one would occur – again, with council approval.

[100] The **Act** also requires that the Mining and lands Commissioner consider whether the levy complies with Section 27 and the regulations made thereunder – in this case, Regulation 670/00. Compliance, in my view, means meeting the requirements of Regulation 670/00 as any apportionment of costs is subject to the regulation. The authority must determine if an agreement is in place which sets out the apportionment rate. If not, then, the authority must apply the regulation’s formula – which makes use of a municipality’s entire assessment value in the calculation.

[101] Finally, the Commissioner must also consider whether the levy is appropriate – meaning is the levy suitable or proper in the circumstances. In this case, the circumstances are that amalgamation took place in 2001 adding the assessment value of the old City of Hamilton and its urban core to the formula in the Regulation. The City says this is wrong as it does not make use of what the City calls the “best information”. The City says the best information should be used (i.e., an updated City “GIS mapping exercise that calculated the properties located in the watershed based on available 2014 MPAC data information in a manner similar to the geo-referencing of properties exercise done in the 2002 Pilot Study.” The Region pointed out that this approach was the subject of a request to the MNR in 2000 and that it was rejected. To employ the City’s approach would be tantamount to re-writing the Regulation. The NPCA made the same argument as the Region. I agree with the Region’s argument that the City’s approach amounts to re-writing the Regulation.

### **Consideration of the Evidence and the Parties’ Positions With Respect to the Issues**

1. *With respect to the 2015 levy payable by the City of Hamilton for **maintenance** costs, is there agreement regarding apportionment values among the NPCA and the participating municipalities as required in Subsection 2 (1) (a) of Ontario Regulation 670/00? Specifically, did the City, the Region, Haldimand and the NPCA through their councils and board respectively agree to apportionment values for 2015 that effectively removed the City’s urban core from the calculation – thereby granting the City a discount in terms of apportionment values?*

[102] The answer to the general and specific questions is “no”. There never has been an agreement (authorized at the appropriate level) amongst the NPCA, the City, the Region and Haldimand County to grant the City the fiscal reprieve it wanted in 2000; there is no “rolling” agreement as a result, and there is no agreement specifically dealing with the 2015 levy.

[103] Looking at the evidence, there are no council resolutions or any form of municipal authorization to consider. There is nothing to rely on to show that the NPCA and its three participating municipalities formed a common bond dealing with apportionment values. The City referred to two charts through its witness Mr. Zegarac. The charts contain apportionment figures provided by the MNR to the City. One chart refers to a percentage that would apply – had there been an agreement. The second chart reflects a percentage calculated through use of the Regulation’s formula. They are simply charts depicting a particular set of data. They do not constitute an agreement pursuant to the Regulation.

[104] In addition, the budget approval process at the municipal level for Niagara and Haldimand was just that. It signified nothing more than each municipality's approval to pay a "bill" submitted by the conservation authority. I am of the view that collective minds at the authority level did not recognize the need for an agreement properly authorized or endorsed by all three participating municipalities. As surprising as it was to hear that the witnesses did not read the **Act** and the Regulation (or pay much attention to either) at least until recently, that seems to have been what happened. I took from his responses to cross-examination questions that Mr. Burt relied on his belief that staff's approach was "fair and equitable" and that they had the support of the ministry. It must have felt like it was the right thing to do at the time. The result was that, as Mr. Burt admitted, there was only agreement at staff level – another reason why there is nothing to show at council level. There does not seem to have been an attempt made at any time to review what was taking place to confirm that it met the requirements of the legislation.

2. *Given that there is no agreement among the NPCA and the participating municipalities regarding the apportionment of maintenance costs, does the 2015 levy comply with Section 27 of the **Conservation Authorities Act** and Regulation 670/00?*

[105] In my view, the levy for 2015 does comply with the **Act** and Regulation 670/00. The NPCA as well as the Region and Haldimand searched for an agreement on apportionment values and found none. The formula must be applied unless the NPCA and its participating municipalities can agree on using an alternative formula. I cannot agree with and find no support for the City's interpretation of the wording in rule #1 of Section 3 that the lands located outside the NPCA's jurisdiction are to be excluded from the calculation. The whole basis of Section 3 is to set up a step-by-step calculation that starts with the entire municipal assessment value. There is no room in the wording of the regulation to formulate another mathematical calculation. Counsel for the Region pointed out that even Mr. Burt (for the City) acknowledged that the wording has been interpreted as using a municipality's entire assessment value as a starting point.

[106] The City has the power under subsection 27(6) to narrow the charge to only those ratepayers located within the authority's boundaries or jurisdiction. As the City witness Mr. Zegarac admitted in cross-examination the City chooses to spread the cost and not narrow it down. Mr. Zegarac also agreed with the Region's counsel that the manner in which the apportionment had been calculated was accurate and that he had no issue with it – or the interpretation of section 2(b). The City's alternative calculation (using lands within the NPCA's jurisdiction) does not comply with the Regulation.

[107] I find that the levy payable for maintenance costs does comply with the **Act** and Regulation 670/00.

3. *With respect to the 2015 levy payable by the City of Hamilton for **administration** costs, has it been calculated in accordance with subsection 2 (2) of Ontario Regulation 670/00?*



[108] The rules set out in Section 3 of the Regulation apply to the determination of the levy payable for administration costs. In light of what I have set out above dealing with the interpretation of rule #1 in subsection 3 of the regulation, the answer to this question is that the levy has been calculated in accordance with subsection 2(2) of the regulation.

*4. Is the levy for 2015 “otherwise appropriate”?*

[109] The word “appropriate” means suitable or proper in the circumstances. There is no argument with respect to the meaning. The City though has tried to persuade me to accept that the levy is not appropriate in the circumstances unless the formula used to determine it uses more refined information dealing with only those lands located within the NPCA jurisdiction. As I set out above, this is wrong in that it would require that I ignore the Regulation and instead apply different criteria. The Regulation speaks for itself. I have no authority to exempt the City from its requirements and certainly no authority to grant the City the ability to use what would amount to its own formula. Again, the Regulation’s formula can only be avoided through the aegis of the appropriate agreement.

**Costs**

[110] I indicated to the parties that I would consider the issue of costs at the end of the hearing.

[111] I have come to the conclusion that no costs are warranted in this case. As Part VI of the **Mining Act** (with its sections on costs) has not been referenced in the **Conservation Authorities Act**, I am confined to considering the issue of costs pursuant to Section 17.1 of the **Statutory Powers Procedure Act**. That Section reads in part:

*17.1 (1) Subject to subsection (2), a tribunal may, in the circumstances set out in rules made under subsection (4), order a party to pay all or part of another party’s costs in a proceeding. 2006, c. 19, Sched. B, s. 21 (2).*

**Exception**

*(2) A tribunal shall not make an order to pay costs under this section unless,*

*(a) the conduct or course of conduct of a party has been unreasonable, frivolous or vexatious or a party has acted in bad faith; and*

*(b) the tribunal has made rules under subsection (4). 2006, c. 19, Sched. B, s. 21 (2).*

[112] In my view, the conduct of the City of Hamilton in this matter has not been unreasonable, frivolous or vexatious. Nor has it acted in bad faith.

[113] The problems associated with this matter began some time ago. Prior to the enactment of the Regulation in December 2000, the City had the support of its four conservation authorities (including the NPCA) in having its apportionment rate maintained at a certain level. This approach to the City's situation did not change and in fact was used as a template for apportionment calculations that were pertinent to the NPCA and its participating municipalities. Time passed and the fact that an agreement regarding apportionment rates was needed pursuant to the Regulation was never questioned by anyone until sometime in 2014. I am not prepared to criticize the City for objecting as it did to the increased levy amount. This was a reasonable reaction. There was nothing frivolous or vexatious in the City's attempt to restore what it honestly believed to be a valid state of affairs.

**NIAGARA PENINSULA CONSERVATION AUTHORITY  
STATEMENT OF CONTINUITY FOR CAPITAL & OPERATING RESERVES  
FORECAST FOR 2017 & 2018 (REVISED)**

	Balance (Audited) 31-Dec <u>2016</u>	Authorized Appropriations <u>2017</u>	Forecasted Balance 31-Dec <u>2017</u>	2018 Budget Appropriations	Forecasted Balance 31-Dec <u>2018</u>
	\$	\$	\$	\$	\$
<b>Unexpended Capital Reserves</b>					
Equipment	383,390	(102,582)	280,808	(204,000)	76,808
General Capital	1,283,542	(662,560)	620,982	0	620,982
Flood Protection Services	404,350	(40,000)	364,350	0	364,350
Niagara Levy Differential	774,469	431,744	1,206,213	440,378	1,646,591
Land acquisition-Hamilton	900,000	100,000	1,000,000	100,000	1,100,000
Land acquisition-Niagara	798,174	500,000	1,298,174	500,000	1,798,174
	4,160,535	329,184	4,489,719	1,040,378	5,530,097
	4,543,925	226,601.87	4,770,527	836,378	5,606,905
<b>Operating Reserves</b>					
General Operating Reserve	559,492	0	559,492	0	559,492
Tree Bylaw Agreement	82,371	0	82,371	0	82,371
	641,863	0	641,863	0	641,863
	641,863	0	641,863	0	641,863
<b>Grand Total Reserves</b>	5,185,788	226,602	5,412,390	836,378	6,248,768
<b>Deferred Revenue - Ontario Power Generation Funding</b>	1,736,981	(383,000.00)	1,353,981	(275,000)	1,078,981

\*OPG Funded 2017

\$271,000 Capital Works

\$87,000 Flood plain Mapping (work in progress)

\$25,000 Binbrook Fish Study (2016)

**Appendix 3:** Capital projects deferred during the 2018 Budget approval process

Hamilton Special Levy/Land Acquisition Reserve:

CR- Binbrook

**Defeated-** As of Oct 11/17 Budget Committee Meeting

Start process to Relocate Schoolhouse	200,000	Recommended
Splashpad, phase #2 Seating& Shade Structure	75,000	Recommended
Radio Communication	7,500	Recommended
Drainage/ Beach Area	25,000	Recommended
Playground, Phase 2	75,000	Recommended
Charcoal BBQ's	5,000	Recommended
Washroom Interior Refurbish	35,000	Recommended
Volleyball Court	5,000	Recommended
Variable Speed Pump Control	5,000	Recommended

Total: **432,500**

Deferred \* Contingent Upon Matching Funds

Watershed \*  
\*

Chippawa Creek CA Dam Safety Review	50,000	Deferred
Total:	<b>50,000</b>	

Corp Resources	New phone System	50,000	Deferred
CR -Central Work Shop	One New Riding Lawn Mower	35,000	Deferred
CR- Long Beach	Roadway Upgrade	100,000	Deferred
	Playground North Side	80,000	Deferred

Total: **265,000**

**TOTAL: 747,500**

**Report To:** Board of Directors

**Subject:** Board Member Per Diem & Honourarium- Annual Report

**Report No:** 25-18

**Date:** February 28, 2018

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**RECOMMENDATION:**

1. That Report No. 25-18 respecting the Board Member Per Diem & Honourarium – Annual Report and the attached Appendices 1, 2 and 3, **BE RECEIVED**;
2. That, based on the Consumer Price Index (CPI), the 2018 Honourarium and per diems **BE APPROVED** at a 1.9% increase over the previous year.

**PURPOSE:**

To provide public disclosure of 2017 NPCA Board member & Source Water Protection Committee member remuneration (Appendix 1 & 2). Further, to receive Board authorization in setting honourariums and per diems for Chair, Vice-Chair and Board of Directors as per section 9 of NPCA Regulation #1 “Governance and Administration Policies – Honourariums, Per Diems, Expenses and Mileage.”

This report aligns with the 2014-2017 Strategic Plan under, ‘Transparent Governance & Enhanced Accountability.’

**BACKGROUND:**

Under Section 37 of the *previous* Conservation Authorities Act (CA Act), all Board member salaries, expenses or allowances of any kind required the approval of the OMB.

In 2015, the Board requested the OMB to approve subsequent annual increases to its Per Diem & Honourariums to be automatically adjusted based on CPI. This request was denied by the OMB, therefore, necessitating an annual request to mitigate potential larger increase requests between longer intervals of time.

The 2016 CPI rate of increase (1.75%) was submitted to the OMB in January 2016 and February 6, 2017, the OMB rendered its decision to approve the request. The approved increase was paid in 2017 retroactive to January 1, 2016.

The 2017 CPI rate was 1.75%, however, the Board decided to request OMB approval in February 2017 for an increase of 1.5%. On April 4, 2017, the OMB rendered its decision to approve the request (Appendix 3). The approved increase was paid in 2017 retroactive to January 1, 2017.

## **DISCUSSION:**

The previous CA Act specified in s.37 that “...no salary, expenses or allowances of any kind shall be paid to any of the members of the authority without the approval of the Ontario Municipal Board.”

However, the new CA Act is silent on this issue and considers this type of payment as administration costs which is included in Board approval of the levy. Several Conservation Authorities in Ontario are proceeding on this basis. NPCA staff have reached out to both Conservation Ontario (CO) and MNRF for their perspective.

CO confirmed, “that the requirement to have the per diems approved by OMB is gone.”

Further, MNRF confirmed that, “As per the definitions in s.1, “administration costs” includes the salaries and travelling expenses of authority members as are determined, apportioned and recovered in accordance with s.27 of the Act and associated regulations.”

NPCA staff share the interpretation of other Conservation Authorities and CO, that is, the Board may now approve its own Honorarium and Per Diem rates.

2017 Honourariums and Per Diems for the Chair/Vice-Chair/Members, and the proposed 2018 rate, are as follows:

	<b>2017</b>	<b>Proposed 2018</b>	<b>1.9% Differential</b>
Chair	\$6,763.03	\$6891.53	+\$128.50
Vice-Chair	\$1,319.15	\$1344.21	+\$25.06
Members Per Diem	\$74.68	\$76.10	+\$1.42

The current mileage rate is \$.50 per kilometer with no suggested changes.

All Board Members expenses are documented via a monthly tracking sheet coordinated by the Clerk to the Authority and approved by the NPCA Chair.

Previously, the NPCA disclosed Board remuneration information directly to funding municipalities. This report continues a new direction set last year to openly report remuneration for all Board members and Source Water Protection Committee members directly to the public.

## **FINANCIAL IMPLICATIONS:**

Board remuneration is budgeted for on an annual basis and the proposed honorarium/per diem rate can be absorbed in the approved 2018 Operating budget.

## **RELATED REPORTS AND APPENDICES:**

- Appendix 1: 2017 Board Member Remuneration
- Appendix 2: 2017 Source Water Protection Committee Member Remuneration
- Appendix 3: OMB Decision dated April 4, 2017 regarding 2017 NPCA Board Remuneration

**Prepared by:**



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**David Barrick**  
Senior Director, Corporate Resources

**Submitted by:**



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**Mark Brickell**  
CAO/Secretary-Treasurer

*This report was prepared in consultation with John Wallace, Manager of Finance.*

**NIAGARA PENINSULA CONSERVATION AUTHORITY  
2017 Member Remuneration**

<b>REGION</b>	<b>Member</b>		<b>Meetings</b>	<b>Chair/Vice Chair Honourarium</b>	<b>Retroactive Honourarium</b>	<b>Per Diems</b>	<b>Retroactive Per Diem</b>	<b>Mileage</b>	<b>Expenses</b>	<b>Total</b>	<b>CPP</b>	<b>EHT</b>
Niagara, Fort Erie	Sandy Annunziata	(174)	145	6,763.00	22.34	10,828.60	58.42	6,494.70	958.04	25,125.10	874.78	344.60
Niagara, Pelham	Brian Baty	(50)	39	0.00	0.00	2,912.52	25.40	817.00	548.54	4,303.46	0.00	57.29
City of Hamilton	Stewart Beattie	(70)	62	0.00	0.00	4,630.16	76.20	2,657.00	440.11	7,803.47	0.00	91.82
Niagara, Welland	Frank Campion	(12)	10	0.00	0.00	746.80	13.97	235.00	0.00	995.77	37.66	14.84
Niagara, Niagara-on-the-Lake	Patrick Darte	(23)	21	0.00	0.00	1,568.28	8.89	426.25	0.00	2,003.42	78.07	30.75
Niagara, Thorold	Dominic DiFruscio	(52)	47	0.00	0.00	3,509.96	35.56	1,015.00	0.00	4,560.52	0.00	69.14
Niagara, Niagara Falls	Jim Diodati	(19)	17	0.00	0.00	1,269.56	20.32	447.00	0.00	1,736.88	63.87	25.16
Niagara, Lincoln	Bill Hodgson	(6)	0	0.00	0.00	0.00	25.40	0.00	0.00	25.40	1.26	0.50
Niagara, Wainfleet	April Jeffs	(22)	21	0.00	0.00	1,568.28	19.05	799.00	0.00	2,386.33	78.58	30.96
Niagara, West Lincoln	Douglas Joyner	(19)	16	0.00	0.00	1,194.88	26.67	482.00	0.00	1,703.55	60.47	23.82
City of Hamilton	James Kasperetz	(94)	90	1,319.12	0.00	6,721.20	41.91	4,124.00	1,260.99	13,467.22	400.06	157.61
Niagara, Lincoln	Paul MacPherson	(4)	3	0.00	0.00	224.04	0.00	5.00	0.00	229.04	11.09	4.37
Niagara, Port Colborne	John Maloney	(22)	20	0.00	0.00	1,493.60	17.78	701.00	0.00	2,212.38	0.00	29.47
Niagara, Port Colborne	Beatrice Kenny	(0)	0	0.00	0.00	0.00	7.62	0.00	0.00	7.62	0.38	0.15
Niagara, Grimsby	Tony Quirk	(90)	83	0.00	0.00	6,198.44	55.88	2,410.50	488.81	9,153.63	309.60	121.97
Haldimand-Norfolk	Rob Shirton	(19)	17	0.00	0.00	1,269.56	17.78	510.00	0.00	1,797.34	63.73	25.11
Niagara, St. Catharines	Bruce Timms	(56)	41	0.00	114.60	3,061.88	93.98	1,535.50	1,468.28	6,274.24	161.89	63.78
(\$74.68 per meeting)		732.00	632	<b>8,082.12</b>	<b>136.94</b>	<b>47,197.76</b>	<b>544.83</b>	<b>22,658.95</b>	<b>5,164.77</b>	<b>83,785.37</b>	<b>2,141.44</b>	<b>1,091.34</b>



**NIAGARA PENINSULA CONSERVATION AUTHORITY  
SOURCE PROTECTION COMMITTEE  
2017 Member Remuneration**

<b>Member</b>	<b>Per Diems</b>	<b>Mileage</b>	<b>Total</b>	<b>CPP</b>	<b>EHT</b>
Robert Bator	600.00	117.00	717.00	27.90	11.70
Brian Baty	200.00	11.00	211.00	-	3.90
Maria Bellantino-Perco	200.00	6.00	206.00	9.90	3.90
Carl Bodimeade	200.00	31.00	231.00	9.90	3.90
Anthony D'Alimonte	600.00	272.00	872.00	27.90	11.70
Paul Grenier	800.00	62.00	862.00	39.60	15.60
Drew Semple	800.00	56.50	856.50	39.60	15.60
Adrin Willems	<u>800.00</u>	<u>63.00</u>	<u>863.00</u>	<u>39.60</u>	<u>15.60</u>
	<b><u>4,200.00</u></b>	<b><u>618.50</u></b>	<b><u>4,818.50</u></b>	<b><u>194.40</u></b>	<b><u>81.90</u></b>
(\$200.00 per meeting)					

**Ontario Municipal Board**  
Commission des affaires municipales  
de l'Ontario



**ISSUE DATE:** April 4, 2017

**CASE NO.:** FI170002

**PROCEEDING COMMENCED UNDER** subsection 37 of the *Conservation Authorities Act*, R.S.O. 1990, c. C.27, as amended

Applicant:	Niagara Peninsula Conservation Authority
Subject:	Order for an increase in salary, expenses or allowances for members of the authority
OMB Case No.:	FI170002
OMB File No.:	FI170002
OMB Case Name:	Niagara Peninsula Conservation Authority (Re)

**BEFORE:**

B. W. KRUSHELNICKI	)	Tuesday, the 4 <sup>th</sup>
EXECUTIVE CHAIR	)	
	)	day of April, 2017

**THE BOARD** having received a request from the Niagara Peninsula Conservation Authority to approve an increase of 1.5% to the honourariums and per diems paid to the Chair, Vice-Chair and to members, effective January 1, 2017;

**THE BOARD ORDERS** an increase to the honourarium paid to the Chair, effective January 1, 2017, from \$6,663.08 per annum to \$6,763.03 per annum, an increase to the honourarium paid to the Vice-Chair, effective January 1, 2017, from \$1,299.66 per annum to \$1,319.15 per annum, and an increase to the per diems paid to members attending meetings, standing committees and honourariums, effective January 1, 2017, from \$73.58 per diem to \$74.68 per diem.

A handwritten signature in black ink, appearing to read "Ma Hurwicks". The signature is fluid and cursive, with the first name "Ma" being more prominent.

SECRETARY

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

**Ontario Municipal Board**

A constituent tribunal of Environment and Land Tribunals Ontario

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**Report To:** Board of Directors

**Subject:** Niagara Peninsula Conservation Authority (NPCA) Policy Handbook Regulations #1 and #2 Review and Suggested Revisions

**Report No:** Report No. 24-18

**Date:** February 28, 2018

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**RECOMMENDATIONS:**

1. That Report No. 24-18, respecting Niagara Peninsula Conservation Authority (NPCA) Policy Handbook Regulations #1 and #2, Review and Suggested Revisions, **BE RECEIVED**;
2. That Appendix 1 to Report No. 24-18 being the Suggested Revisions to Regulations #1 and #2, **BE APPROVED**; and
3. That staff **BE DIRECTED** to ensure that Regulations #1 and #2 are updated on the Niagara Peninsula Conservation Authority website.

**PURPOSE:**

The recommendations have been formatted in such a way that allows Board Members to consider and approve all noted revisions to Regulations #1- Governance and Administrative Policies and Regulation #2 – Meeting Procedures.

The purpose of this report is to update the Niagara Peninsula Conservation Authority – Full Authority Board Regulations (#1 and #2) to ensure that we exemplify our commitment to good governance.

The updating of the regulations ensures that the NPCA is following the Conservation Authority Act, Section 30 (1) requirement an authority shall make regulations, providing for the calling of meetings of the authority and prescribing the procedure at those meetings.

**BACKGROUND:**

In September 2017 the Niagara Peninsula Conservation Authority appointed a Clerk to the Authority/Executive Coordinator to the CAO and Board. The Clerk was immediately tasked with reviewing the Regulations and bringing forward recommendations for consideration to the Full Authority Board.

The Clerk has since reviewed the regulations, as regulations should be reviewed regularly and updated as meeting structure and process evolves, to ensure that they govern the proceedings of the Board and Standing Committee meetings effectively. The regulations provide the rules of order and conduct and describe the accountability, transparency and notice requirements with respect to the Board and Committee meetings.

The amendments that have been identified in Appendix 1 to Report 24-18, some merely housekeeping, are being proposed to further streamline agenda and meeting management processes to ensure that Board meetings remain effective and productive and to somewhat align with the practices and processes of local area municipalities.

**FINANCIAL IMPLICATIONS:**

There are no financial impacts respecting the approval of this report.

**CONCLUSION:**

The updated regulations reflect the evolving requirements of the NPCA Full Authority Board and Standing Committee meetings and adds clarity regarding some of the meeting processes. The document should be used as a tool to organize and run effective meetings and should be updated as needed to reflect any changes desired by the Board.

**RELATED REPORTS AND APPENDICES:**

Appendix 1 – Summary of Recommended Revisions

Appendix 2 - Regulation 1 –Governance and Administration Policies

Appendix 3 - Regulation 2 – Meeting Procedures

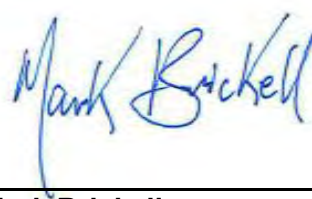
**Prepared by:**



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**Lisa McManus**  
Clerk

**Reviewed and Submitted by:**



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**Mark Brickell**  
Chief Administrative Officer/  
Secretary-Treasurer

**REGULATION #1 – Governance and Administrative Policies**

**ADDITIONS NOTED IN BOLD AND ITALICS:**

**Suggested Revision #1:**

**3.0 Definitions**

***“Clerk” means the Clerk of the NPCA and any other employee of the NPCA delegated to carry out the responsibilities of recording secretary on a temporary basis.***

***“Per Diem” A per diem rate is the rate established that applies to the Chair, Vice-Chair and Board Members for service to the Authority in attendance at Authority Board meetings, Standing Committee meetings, and at such other business functions as may be from time to time requested by the Chair, through the Chief Administrative Officer. A per diem will be paid for each separate meeting attended.***

**Suggested Revision #2:**

**6.0 Duties of Officers:**

**6.4 Role of the Clerk**

***It is the role of the Clerk to:***

- a) carry out the responsibilities of the Clerk to the Authority;***
- b) provide procedural advice to the Chair and to members on agenda business and on preparing motions;***
- c) ensure notice of meetings is provided as set out in this by-law;***
- d) make minor deletions, additions or other administrative changes to any by-law, motion, and/or minutes to ensure the correct and complete implementation of the actions of Council;***
- e) authenticate by signature when necessary all resolutions, by-laws and minutes of meetings and certify copies of such documents when required;***
- f) perform such other duties as prescribed by law, or by direction of Council.***

***The Clerk, or recording secretary designate, will be present at all meetings of Committee and Board.***

### Suggested Revision #3 (a):

DELETE:

#### 9.0 Honourariums, Per Diems, Expenses and Meetings

**9.1** The Authority shall establish an honourarium rate from time to time and this rate will apply to the Chair and Vice-Chair. ~~Rates are subsequently approved by the Ontario Municipal Board.~~

**9.2** The Authority shall establish a per diem rate from time to time and this rate will apply to the Chair, Vice-Chair and Board Members for service to the Authority in attendance at Authority Board meetings, Standing Committee meetings, and at such other business functions as may be from time to time requested by the Chair, through the Chief Administrative Officer. ~~Rates are subsequently approved by the Ontario Municipal Board.~~

NOTE: The revised Conservation Authority Act no longer requires Ontario Municipal Board approval.

### Suggested Revision #3 (b):

ADDITION:

Include the following note under Section 9.2:

***On March 7, 2013 the Ontario Municipal Board approved the per diem paid to Members "per meeting".***

### REGULATION #2 – Meeting Procedures

**ADDITIONS NOTED IN BOLD AND ITALICS:**

### Suggested Revision #4:

#### Section 4.0 Duties of the Chair for the NPCA Board

- b) Ensure that the public in attendance does not in any way interfere or disrupt the proceedings of the Board. ***The Board Chair may expel or exclude from any meeting any person who has been ruled as disruptive to the proceedings of the Board; during or prior to a Board meeting.***

### Suggested Revision #5:

#### Section 8 Agenda for Meetings

- 8.4 The circulation of reports, letters, memorandums, etc. outside of the agenda shall be distributed by the Office of the CAO (**Clerk**, Office of CAO & Board and/or CAO) to all Board Members. Documents should be provided in an electronic format whenever possible.
- 8.5 ***The business of the Board will be taken up in the order on which it appears on the agenda unless otherwise directed by the Board Chair, CAO or Clerk.***

### Suggested Revision #6:

#### Section 12.0 Delegations/ ***Presentations***

- 12.1 Any person or organization desiring an opportunity to address the Authority may make a request in writing to the **Clerk** fourteen (14) days in advance of a scheduled meeting if such request is to be included in the agenda of that meeting. ***A detailed brief of their presentation, including any presentation materials to be used, outlining the request/direction the presenter is seeking from the Standing Committee or the Board and if applicable, the name, address and telephone number of any person(s) or organization which he or she represents. The brief will form part of the official record of the proceedings of Committee or the Board and therefore will be a public document.***

### Suggested Revision #7:

~~DELETE:~~

- ~~12.4 No delegation, whether listed on the agenda, shall be heard without a ruling by the Chair of the meeting giving leave, but such ruling may be immediately appealed by a proper motion, and the ruling of the meeting shall govern.~~

**REPLACE WITH:**

- 12.4 ***It will be at the discretion of the NPCA Board Chair, in consultation with the CAO and Clerk, to determine whether the delegation is an appropriate matter to be considered by the Board.***

***The Board Chair, in consultation with the CAO or Clerk, maintain the right to refuse any delegation request, regardless of having the notice requirements met, for reasons they identify, including, but not limited to, agenda /meeting management and issues outside of NPCA mandate.***

***It shall be the responsibility of the CAO to communicate this decision to the individual(s) applying for a delegation.***

***Board Members maintain the right to overturn such decision, by a proper motion moved by and seconded by and carried by a 2/3rds majority.***



### Suggested Revision #8:

DELETE:

- ~~12.6 Except by leave of the Chair or appeal by the leave of the meeting, delegations shall be limited to a time of not more than ten (10) minutes.~~

REPLACE WITH:

- 12.6** Delegations/***Presentations*** shall be limited to a time of not more than ***five (5) minutes. Board Members may limit or extend the time allowed for a presentation by a majority vote.***
- 12.7** ***Delegations shall be limited to not more than two (2) per Board meeting.***
- 12.9** ***Delegations must abide by the Regulations and public conduct at meetings. They will accept any decisions of the Board Chair and not enter into cross debate with members, other delegations, or staff. Any discourse between members and the delegation will be limited to members asking questions for clarification and obtaining additional, relevant information only.***

### Suggested Revision #9:

***Presentations:***

- 12.7** ***Presentations (NPCA staff or otherwise) addressing matters relevant to the NPCA and seeking to provide information, or receive input from the Board, or Committee will be permitted.***
- 12.8** ***Presentations shall adhere to the rules of order noted under Delegations.***

### Suggested Revision #10:

#### **ADDITIONS/CHANGES IN BOLD AND ITALICS**

#### Section 13.0 Meeting with Closed Session

A Meeting or part of a Meeting may be closed to the public if the subject matter being considered is:

- (a) the security of the property of the ***NPCA***;
- (b) personal matters about an identifiable individual(s), including ***NPCA*** employees;
- (c) a proposed or pending acquisition or disposition of land ***by the NPCA***;
- (d) labour relations, ***Human Resource***, or employee negotiations;
- (e) litigation or potential litigation, including matters before administrative tribunals, affecting the ***NPCA***;

- (f) advice that is subject to solicitor-client privilege, ***including communications necessary for that purpose;***
- (g) ***a matter in respect of which a council, board, committee or other body may hold a closed meeting under another act.***
- (h) ***information explicitly supplied in confidence to the municipality or local board by Canada, a province or territory or a Crown agency of any of them;***
- (i) ***a trade secret or scientific, technical, commercial, financial or labour relations information, supplied in confidence to the municipality or local board, which, if disclosed, could reasonably be expected to prejudice significantly the competitive position or interfere significantly with the contractual or other negotiations of a person, group of persons, or organization;***
- (j) ***a trade secret or scientific, technical, commercial or financial information that belongs to the municipality or local board and has monetary value or potential monetary value; or***
- (k) ***a position, plan, procedure, criteria or instruction to be applied to any negotiations carried on or to be carried on by or on behalf of the municipality or local board.***

NOTE: Bold and italicized items (g-k) noted above are revisions to the *Municipal Act, 2001* resulting from Bill 68 – Modernizing Ontario’s Municipal Legislation Act, 2017, S.O. 2017, c.10

**13.6 A Meeting of the Board may be closed to the public if the following conditions are both satisfied:**

- (a) The meeting is held for the purpose of educating or training the Members.***
- (b) At the meeting, no Member discusses or otherwise deals with any matter in a way that materially advances the business or decision making of the Board.***

**13.7 All deliberations while in Closed Session shall remain confidential unless otherwise agreed upon by a Majority vote of the Board. Only the final results of deliberations may be made public when such disclosure is authorized by the Board.**

### Suggested Revisions #11:

#### **ADDITIONS/CHANGES IN BOLD AND ITALICS**

##### Section 14.0 Vote

Conservation Act 16(1) "Each member of the Authority is entitled to 1 vote"; however, we need to clarify when and how the NPCA Board Chair votes at a Full Authority Board meeting vs. a Standing Committee meeting. Also, how the Standing Committee Chairs vote during committee meetings.

~~DELETE:~~

- ~~14.1 On a tie vote, the motion is lost, and the Chair, may vote to make it a tie unless the vote is by ballot. The Chair cannot; however, vote twice, first to make a tie and then give the casting vote.~~

#### **ADDITIONS/CHANGES IN BOLD AND ITALICS**

**14.1 On a tie vote, the motion is lost;**

**14.1(a) The Chair of the Board shall only vote in a Full Authority Board meeting to break a tie or when a Recorded Vote is requested; however, as a member of any Standing Committee shall be entitled to one vote.**

**14.1(b) The presiding Standing Committee Chairs shall only vote in the event of a tie or when a recorded vote is requested.**

### Suggested Revisions #12:

#### **ADDITIONS/CHANGES IN BOLD AND ITALICS**

##### Section 15.0 Minutes

~~DELETE:~~

- ~~15.2 For matters dealt with in closed session, the CAO or designate will take notes of any direction provided, for endorsement by the Chair and Vice-Chair.~~

NOTE: Section 13.4 of Regulation #2 states, "No written record shall be kept in a closed meeting." NPCA now has a "Business Arising from Closed Session" section on the agenda which publicly communicates whether any direction was provided during Closed Session.

- ~~15.5 The Authority will electronically send the minutes of Board meetings to member municipalities following approval of those minutes by the Board.~~

**REPLACE WITH:**

**15.5 The Clerk shall, following Full Authority Board meetings, ensure that local area municipalities are notified of any resolutions affecting areas within their jurisdiction.**

NOTE: All Full Authority Board minutes are on the NPCA website.

NOTE: Where necessary notations of Administrative Assistant have been revised to note Clerk.

### Suggested Revision #13:

#### **ADDITIONAL SECTION:**

##### **17.0 General**

**17.1 All matters not specifically provided for in this By-law shall be regulated in accordance with the parliamentary procedures outlined in Bourinot's Rules of Order.**

### Suggested Revision #14:

#### **ADDITIONS/CHANGES IN BOLD AND ITALICS**

Regulation #2 – Common Motions:

**NOTE: Unless there was a recorded vote, how are we to “prove” who voted in the majority?**

#### **DELETE:**

Motion to Reconsider

- G.2 After any question, except one of indefinite postponement has been decided by the Authority, any Member who was present ~~and who voted in the majority~~ may, at a subsequent meeting of the Authority, move for the reconsideration thereof, provided due notice of such intention is given as required by this Regulation, but no discussion of the main question by any person shall be allowed unless the motion to reconsider has first been adopted.
- G.3 After any question, except one of indefinite postponement has been decided by Committee, but before a decision thereon by the Authority, any member who was present at the Committee meeting concerned ~~and who voted in the majority~~, may, at a subsequent meeting of the Committee, provided the Authority still has made no decision thereon, move for the reconsideration thereof, provided due notice of such intention is given as required by this Regulation, but no discussion of the main question by any person shall be allowed unless the motion to reconsider has first been adopted.



# **Board Members**

## **Policy Handbook - Regulation # 1**

### **Governance and Administration Policies**



**Resolution No. FA-210-14**  
**Date Revised: November 24, 2014**

**Resolution No. FA-102-17**  
**Date Revised: April 26, 2017**

**Resolution No. FA-172-17**  
**Date Revised: September 20, 2017**

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**Mark Brickell,**  
**Chief Administrative Officer**

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**Sandy Annunziata,**  
**NPCA Chair**

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## 1.0 INTRODUCTION

As per Section 30. (1) of the *Conservation Authorities Act*, an Authority shall make regulations, which includes:

- Providing for the calling of meetings of the authority and prescribing the procedure at those meetings;
- Prescribing the powers and duties of the Secretary-Treasurer; and
- Designating and empowering officers to sign contracts, agreements and other documents on behalf of the Authority.

This ***Board Members Regulation #1 Policy Handbook*** has been developed to adhere to the legislation cited above.

This handbook will also function as a reference for appointed Board Members in order to effectively and efficiently conduct business relevant to the Niagara Peninsula Conservation Authority.

Furthermore, this handbook will guide the Board Members in adhering to the legislative mandate of the Niagara Peninsula Conservation Authority (NPCA) and achieving the associated NPCA Mission and Vision.



## 2.0 MANDATE, MISSION, VISION AND VALUES

### 2.1 Mandate

The objects of an authority are to establish and undertake, in the area over which it has jurisdiction, a program designed to further the conservation, restoration, development and management of natural resources other than gas, oil, coal and minerals.” R.S.O. 1990, c.C.27 s.20

### 2.2 Mission

To manage our watershed’s natural resources by balancing environmental, community, and economic needs.

### 2.3 Vision

Balancing conservation and sustainable development for future generations by engaging landowners, stakeholders and communities through collaboration.

### 2.4 Values

- 2.4.1 A sustainable balance between environmental conservation, economic growth and agricultural prosperity.
- 2.4.2 Clear and respectful communication.
- 2.4.3 Integrity, fairness and sensitivity to all impacted by our actions and decisions.
- 2.4.4 Creativity and innovation in service delivery to clients.
- 2.4.5 Transparency, accountability and quality in our services.
- 2.4.6 Pragmatic solution oriented approaches to decision making.
- 2.4.7 A respectful work environment and professional development.

## 3.0 DEFINITIONS

“**Authority**” means the Niagara Peninsula Conservation Authority.

“**NPCA**” means the “Authority” or the “Niagara Peninsula Conservation Authority”.

“**Staff**” shall mean staff members employed at the Niagara Peninsula Conservation Authority.

“**Board Members**” means the appointed members to the Authority by the participating municipalities within the watershed.

“**Chair**” shall mean the Chairperson as elected by the Board Members of the Niagara Peninsula Conservation Authority.

“**Vice-Chair**” shall mean the Vice-Chairperson as elected by the Board Members of the Niagara Peninsula Conservation Authority.

“**CAO/Secretary-Treasurer**” means Chief Administrative Officer of the Authority.

“**Officer**” means a member of the Authority and the CAO/Secretary-Treasurer.



**“Call of the Chair”** shall mean the Chairperson of the Niagara Peninsula Conservation Authority will make the decision to have a meeting and will inform the Chief Administrative Officer/Secretary-Treasurer or designate and that person will ensure action if it is necessary.

**“Inaugural Meeting”** shall be an annual meeting to complete past year’s business; for annual elections and appointments; and to start current year’s business.

**“Majority”** shall mean half of the votes plus one.

**“Private Interest”** includes the financial or material interests of a member and the financial or material interests of a member of the member’s immediate family.

**“Fiscal Year”** shall mean the period from January 1 through December 31.

#### **4.0 BOARD MEMBERS**

**4.1** Membership of the Niagara Peninsula Conservation Authority includes three (3) participating municipalities: Region of Niagara, City of Hamilton, and Haldimand County.

**4.2** The Niagara Peninsula Conservation Authority Board comprises all members appointed by the participating municipalities.

**4.3** The following represent the number of representatives that the participating municipalities may appoint:

Region of Niagara	As appointed by the regional municipality, one member from each of their twelve (12) local municipalities for a total of 12 members
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City of Hamilton	Two members
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Haldimand County	One member
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**4.4** The duration of the appointment aligns with the municipal 4-year term.

**4.5** The Board Members shall approve all policies and procedures of the Niagara Peninsula Conservation Authority, approve the budget with or without revisions, give direction on priority of programs and projects and are generally responsible for other matters as required by the Conservation Authorities Act and Regulations.

#### **5.0 MANDATORY RESPONSIBILITIES OF BOARD MEMBERS**

##### **5.1 Bound by Conservation Authorities Act**

The Niagara Peninsula Conservation Board is bound by the *Conservation Authorities Act*, where:

Section 20 of the *Conservation Authorities Act* defines the mandate of a Conservation Authority as follows:

“The objectives of an authority are to establish and undertake, in the area over which it has jurisdiction, a program designed to further the conservation, restoration, development and management of natural resources other than gas, oil, coal or minerals.”

Section 21 of the Conservation Authorities Act specifically outlines the powers of a Conservation Authority to accomplish its objectives:

- the power to study the watershed and develop an appropriate resource management program;
- acquire and/or dispose of lands;
- collaborate and enter into agreements with landowners, governments and organizations;
- control the flow of surface waters;
- alter the course of any waterway;
- develop their lands for recreational purposes;
- generally, to do all such acts as are necessary for the due carrying out of any project.

## **5.2 Functions of the Board**

In addition to the procedures in this policy and subject to the Conservation Authority Act, the Authority shall:

- Approve the auditor's statement for the preceding year – if the statement is not approved, the amended statement shall be reintroduced for approval at the next appropriate meeting;
- Pass a borrowing resolution for a specified amount for the purposes of the Authority and authorizing the appointed signing officers to sign notes as required to implement this borrowing;
- Approve a budget for the Authority for the ensuing year;
- Approve the levies to be paid by Municipalities;
- Supervise the activities of any Standing Committees and to accept or reject any of their recommendations;
- Receive delegations on behalf of the Authority;
- Consider requests for grants or donations from groups outside the Authority;
- Decide and recommend policies not covered in these resolutions;
- Update as required policies of the Authority.

All Board Members are public officials and thus have the responsibility to be guided by and adhere to the rules of conduct (Refer to Regulation #4-Code of Conduct), explicit and implied, for all such holders of public office in the Province of Ontario. In addition, all Board Members must adhere to all applicable acts of incorporation. In the case of the Niagara Peninsula Conservation Authority, Board Members must adhere to the following:

- The *Municipal Conflict of Interest Act*;
- The *Municipal Freedom of Information and Protection of Privacy Act*;
- Ontario Regulation 139/06 Municipal Levies;
- Ontario Regulation 670/00 Conservation Authority Levies;
- Ontario Regulation 155/06 Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses.

### **5.3 Ensuring Fiscal Stability of Niagara Peninsula Conservation Authority**

The Board Members must ensure the financial stability of the Niagara Peninsula Conservation Authority. While the CAO/Secretary-Treasurer provides day-to-day leadership in fiscal affairs, the Board bears the ultimate responsibility for financial soundness. This includes approving an annual budget, receiving and approving reports on financial performance of the Niagara Peninsula Conservation Authority, and ensuring policies are in place for financial soundness.

### **5.4 Relationship between Board Members and CAO/Secretary-Treasurer**

The Board relies on the CAO/Secretary-Treasurer to inspire, lead and manage the Niagara Peninsula Conservation Authority. The Board will forge a strong partnership with the CAO/Secretary-Treasurer, working cooperatively to achieve the mandate, mission and vision of the Niagara Peninsula Conservation Authority. The Board regularly evaluates the CAO/Secretary-Treasurer, measuring his/her performance against the Niagara Peninsula Conservation Authority's strategic plan and financial and human resources goals of the organization.

### **5.5 Relationship between Board Members and NPCA Staff**

The Board Members must act as a team and represent the interests of the entire watershed. A strong partnership must be forged between the Board and the CAO/Secretary-Treasurer. The Board allows the CAO/Secretary-Treasurer to manage the organization and its staff. The following parameters are to be followed throughout the organization and by the public at large:

- If a Board Member has questions on a project or report, such questions should be referred through the CAO/Secretary-Treasurer for him/her to invite the appropriate Department lead to explain the project and answer questions.
- If a Board Member would like to volunteer to assist in a project, such actions should be taken in consultation with the CAO/Secretary-Treasurer to organize the process.

- If a Board Member receives a complaint about a staff person or would like to acknowledge a staff person, such information should go through the CAO/Secretary-Treasurer.
- If a Board Member receives a complaint from a staff person, the Board Member must advise the staff person to follow the appropriate procedure as outlined in the personnel policy.

With respect to staffing issues, the following outlines the responsibilities of the Board Members and the CAO/Secretary-Treasurer:

The Board is solely responsible for the following:

- Recruiting the CAO/Secretary-Treasurer;
- Hiring the CAO/Secretary-Treasurer; and
- Dismissing the CAO/Secretary-Treasurer;

The Board's Chair and Vice-Chair are responsible for:

- Evaluating the CAO/Secretary-Treasurer; and
- Recommending the annual salary and pay for performance of the CAO/Secretary-Treasurer for consideration to the Board Members.

The Board and the CAO/Secretary-Treasurer share the following responsibilities in that the recommendation will come from the CAO/Secretary-Treasurer and the approval will come from the Board:

- Setting key commitments and deliverables for the CAO/Secretary-Treasurer;
- Setting human resource and personnel policies which will have a dollar impact upon the budget; and
- Setting staff salary schedules and plans as part of the annual budget review process.

The CAO/Secretary-Treasurer is solely responsible for the following:

- Assessing staffing requirements;
- Recruiting, hiring and dismissing staff;
- Providing staff direction;
- Approving staff evaluations;
- Implementing approved salary schedule and salary plan by setting individual staff salaries;
- Designing the organizational structure; and
- Setting human resource and personnel policies, which have no dollar impact on the budget.

## **6.0 DUTIES OF OFFICERS**

### **6.1 Chair of the Board**

- Oversees Board meetings and ensures Meeting Procedural By-Law is adhered to;
- Serves as ex-officio member of all committees;
- Works in partnership with the CAO/Secretary-Treasurer to ensure Board resolutions are carried out;
- Assists CAO/Secretary-Treasurer in preparing agenda for Board meetings where required;
- Calls special meetings if necessary;
- Periodically consults with Board Members on their roles;
- Acts as a public spokesperson for the Niagara Peninsula Conservation Authority to facilitate the mandate, mission and vision of the organization;
- Represents the Niagara Peninsula Conservation Authority at such functions as warrant the interest of the Authority except where this responsibility is specifically assigned to some other person;
- Inspires other Board Members with his or her own commitment of support, time and enthusiasm;
- Represents the Niagara Peninsula Conservation Authority at Conservation Ontario Council meetings;
- Serves as signing officer for the Niagara Peninsula Conservation Authority;
- Performs other duties when directed to do so by resolution of the Niagara Peninsula Conservation Authority;
- Keeps the Board Members apprised of significant issues in a timely fashion;
- Member of the Source Water Protection Committee.

## **6.2 Vice-Chair of the Board**

- Attends all Board meetings;
- Carries out special assignments as requested by the Chair of the Board;
- Understands the responsibilities of the Board Chair and acts as Chair immediately upon the death, incapacity to act, absence or resignation of the Chair until such time as a new Chair is appointed or until the Chair resumes his/her duties;
- Serves as an alternate signing officer for the Niagara Peninsula Conservation Authority;
- Keeps the Board Members apprised of significant issues in a timely fashion;
- Alternate to Chair at Conservation Ontario Council Meetings.

## **6.3 CAO/Secretary-Treasurer**

- Attends all Board meetings;
- Acts as Secretary-Treasurer of the Board in accordance with the Conservation Authorities Act;
- Serves as a signing officer for the Niagara Peninsula Conservation Authority;
- Keeps the Chair and Vice-Chair apprised of significant issues in a timely fashion;
- Develops and implements both short and long-term strategic plans in accordance with business goals and objectives;
- Tends to the day-to-day requirements, details and management of the Niagara Peninsula Conservation Authority;
- Manages staff and programs of the Niagara Peninsula Conservation Authority;
- Makes certain that appropriate actions are taken in a timely fashion;
- Works in close collaboration with the Chair and Vice-Chair;
- Implements all Board resolutions in a timely fashion;
- Ensures Board policies and strategic plan are adhered to;
- Manages the financial activities of the Niagara Peninsula Conservation Authority;

- Makes recommendations to the Board regarding suggested policy changes;
- Acts as public spokesperson for Niagara Peninsula Conservation Authority in the absence of the Chair and Vice-Chair of the Board, or, on behalf of the Chair and Vice-Chair;
- Represents the Niagara Peninsula Conservation Authority at Conservation Ontario, Council, Committee and Task Force meetings;
- Negotiates and enters into contracts with external agencies/partners to carry out the goals of the organization in accordance with approved Policy;
- Develops and maintains effective relationships and ensures good communications with watershed municipalities, federal and provincial government ministries/agencies, other Conservation Authorities, Conservation Ontario and community groups and associations;
- The CAO will develop an education /orientation program designed to inform Board Members of their roles and responsibilities with respect to the Code of Conduct. The CAO will ensure Board Members are made fully aware of the roles and responsibilities with respect to various applicable legislation and regulations as well as that contained in the Code of Conduct (Regulation #4) through an education/orientation program. Each Board Member is required to sign an Acknowledgement Form as part of their orientation program.

## **7.0 ELECTION OF CHAIR AND VICE CHAIR**

### **7.1 Chair for Election of Officers (Board Chair and Vice-Chair)**

An individual other than a Board Member of Niagara Peninsula Conservation Authority will assume the position of Chair for the purpose of Election of Officers. The CAO/Secretary-Treasurer, or designate, assumes this position.

### **7.2 Appointment of Scrutineers**

The appointment of scrutineers is required for the purpose of counting ballots should an election be required. All ballots will be destroyed by the scrutineers afterwards. The appointment of scrutineers requires a mover and seconder by Board Members of the Authority.

### **7.3 Election of Board Chair and Vice-Chair**

The CAO or designate advises that the election will be conducted in accordance with Section 10 of the Conservation Authorities Act as follows:

- Only current Board Members of the Authority may vote;
- Nominations will be called three (3) times and will only require a mover;

- The closing of nominations will require both a mover and a seconder;
- Each Board Member nominated will be required to accept the nomination. The Board Member must be present to accept the nomination;
- In the event of an election, each nominee will be permitted not more than three (3) minutes to speak for the office, in the order of the alphabetical listing of his or her surnames;
- Upon the acceptance by nominees for the position of office, ballots will be distributed to the Board Members for the purpose of election. A Member's choice for a nominee will be written on the ballot and the appointed scrutineers for the counting of the ballots will collect the ballots;

**A majority vote will be required for election.** If there are more than two nominees, and upon the first vote no nominee receives the majority required for election, the name of the person with the least number of votes will be removed from further consideration for the office and new ballots will be distributed. In the case of a vote where no nominee receives the majority required for election and where two or more nominees are tied with the least number of votes, a special vote shall be taken to decide which one of such tied nominees' names shall be dropped from the list of names to be voted on in the next vote.

Should there be a tie vote between two remaining candidates, new ballots will be distributed and a second vote held. Should there still be a tie after the second ballot a third vote shall be held. Should there be a tie after the third vote, the election of the office shall be decided by lot drawn by the CAO.

## 8.0 STANDING COMMITTEES

### 8.1 Current

- Audit Committee
- Budget Steering Committee
- Niagara Peninsula Conservation Authority Advisory Committee (NPCAAC) (formerly known as CLAC; amended September 20, 2017)
- Watershed Floodplain Committee

**8.2** The Authority may strike a standing committee to investigate and make recommendations on matters of interest to the Authority.

**8.3** Any standing committee of the Authority will be recognized as a functioning committee until the Authority replaces or dissolves that committee or until December 31 of the year in which the committee is formed.

**8.4** The Authority will strike standing committees at the first business meeting of the year or at other times as may be desired.

**8.5** Notwithstanding the NPCAAC Terms of Reference, any standing committee of the Authority will be comprised at a minimum of one member, plus the Chair and the Vice-Chair of the Authority. All Members of the Board may attend Standing Committee meetings and comment and participate, however, only committee members may vote at committee.



- 8.6** Each standing committee will have terms of reference established by the Authority. The terms of reference will serve as a consistent guide to committee members and provide a continuity of understanding by the Authority as to the specific purpose for the standing committee. The terms of reference may be altered by the Authority where the scope of a standing committee's mandate is either altered or changed.
- 8.7** When a new standing committee is proposed, either the Authority Board Member proposing the new standing committee will present terms of reference for Authority approval, or the Authority will cause such terms of reference to be prepared. In either case, a new standing committee shall not be struck until the Authority approves terms of reference for the standing committee.
- 8.8** Authority standing committees will be comprised of Authority Board Members. Other than the Source Water Protection Authority, the Board Members may invite people to participate as a committee member and/or attend committee meetings as a resource.
- 8.9** Only committee members are entitled to vote on matters coming before the committee.
- 8.10** Standing Committees make recommendations only to the Board, where in turn, recommendations are considered for approval.

## **9.0 HONOURARIUMS, PER DIEMS, EXPENSES AND MILEAGE**

- 9.1** The Authority shall establish an honourarium rate from time to time and this rate will apply to the Chair and Vice-Chair. Rates are subsequently approved by the Ontario Municipal Board.
- 9.2** The Authority shall establish a per diem rate from time to time and this rate will apply to the Chair, Vice-Chair and Board Members for service to the Authority in attendance at Authority Board meetings, Standing Committee meetings, and at such other business functions as may be from time to time requested by the Chair, through the Chief Administrative Officer. Rates are subsequently approved by the Ontario Municipal Board.
- 9.2** A per diem will be paid for each separate meeting attended.
- 9.3** The Chair, Vice-Chair and Board Members will be responsible for advising the Executive Assistant to the Board of any per diems and mileage incurred for other than Full Authority Board Meetings or Source Protection Authority Meetings, within 30 days of the per diem or mileage being incurred.
- 9.4** The Authority will reimburse Board Members' travel expenses incurred for the purpose of attending meetings and/or functions on behalf of the Authority. Mileages are based on the Board Member's principle residential address in the municipality they represent.



# **Board Members**

## **Policy Handbook - Regulation # 2**

### **Meeting Procedures**



<b>Resolution No. FA-210-14</b> <b>Dated: November 24, 2014</b>	<b>Resolution No. FA-99-16</b> <b>Revised June 15, 2016</b>
<b>Resolution No. FA-203-15</b> <b>Revised December 16, 2015</b>	<b>Resolution No. FA-104-17</b> <b>Revised April 26, 2017</b>
<b>Resolution No. FA-89-16</b> <b>Revised May 18, 2016</b>	<b>RESOLUTION NO. FA-172-17</b> <b>REVISED SEPT. 20, 2017</b>

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**Mark Brickell,**  
**Chief Administrative Officer**

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**Sandy Annunziata,**  
**NPCA Chair**

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## 1.0 INTRODUCTION

As per Section 30. (1) of the *Conservation Authorities Act*, an Authority shall make regulations, which includes:

- Providing for the calling of meetings of the authority and prescribing the procedure at those meetings;
- Prescribing the powers and duties of the Secretary-Treasurer; and
- Designating and empowering officers to sign contracts, agreements and other documents on behalf of the Authority.

This ***Board Members Regulation #2 Meeting Procedures*** has been developed to adhere to the legislation cited above.

This handbook will also function as a reference for appointed Board Members in order to effectively and efficiently conduct board meetings relevant to the Niagara Peninsula Conservation Authority.

Furthermore, this handbook will guide the Board Members in adhering to the legislative mandate of the Niagara Peninsula Conservation Authority (NPCA) and achieving the associated NPCA Mission and Vision.



## **2.0 QUORUM**

- 2.1** At an NPCA Board meeting, a quorum consists of one-half of the members appointed by the participating municipalities. Given that there are 15 appointed members from the participating municipalities, quorum is eight or more appointed members.
- 2.2** If there is no quorum within one half hour after the time appointed for the meeting, the Chair for the meeting shall declare the meeting adjourned due to a lack of a quorum and the recording secretary shall record the names of the members present and absent.
- 2.3** Where the number of members, who by reason of the provisions of the Municipal Conflict of Interest Act, R.S.O. 1990, c.M.50, are disabled from participating in a meeting, is such that at the meeting the remaining members are not of sufficient number to constitute a quorum, then the remaining number of members shall be deemed to constitute a quorum, provided such number is not less than two.
- 2.4** If during the course of an Authority or Committee meeting a quorum is lost, then the Chair shall declare that the meeting shall stand recessed or adjourned, until the date of the next regular meeting or other meeting called in accordance with the provisions of this Regulation. (See also Section 7.0 below).

## **3.0 ANNUAL MEETING**

- 3.1** The annual meeting of the NPCA Board will occur on the third Wednesday of January.
- 3.2** Appointed members will continue to serve on the NPCA Board until the Chief Administrative Officer receives written notice that the respective members have been re-appointed or the respective members have been replaced by another appointment.
- 3.3** At this meeting, the election of the Chair and Vice-Chair shall occur in accordance to Section #7 of Regulation #1: Governance and Administration Policies.

## **4.0 DUTIES OF THE CHAIR FOR THE NPCA BOARD**

- 4.1** It shall be the duty of the Chair, with respect to any meetings over which he/she preside, to:
  - a) Preserve order and decide all questions of order, subject to appeal; and without argument or comment, state the rule applicable to any point of order if called upon to do so;
  - b) Ensure that the public in attendance does not in any way interfere or disrupt the proceedings of the Board;
  - c) Ask any individual that is disrupting the Board to leave;

- d) Adjourn the meeting without question, in the case of grave disorder arising in the meeting room;
- e) Receive and submit to a vote all motions presented by the Members or Committee, as the case may be, which do not contravene the rules and regulations of the Authority;
- f) Announce the results of the vote on any motions so presented;
- g) Decline to put to a vote motions which infringe upon the rules of procedure, or which are beyond the jurisdiction of the Authority;
- h) Enforce on all occasions the observance of order and decorum among the Members;
- i) Adjourn the meeting when business is concluded;
- j) Adjourn the sitting without a question being put or suspend or recess the sitting for a time to be named if considered necessary;
- k) Represent and support the Authority, declaring its will and implicitly obeying its decisions in all things; and
- l) Perform other duties when directed to do so by resolution of the Authority.

**4.2** Upon request of the Chair, the Vice-Chair assumes the duties of the Chair as described above.

## **5.0 CONDUCT OF MEMBERS OF THE PUBLIC, COMMUNITY AGENCIES & THE MEDIA**

- 5.1** Except under the parameters of Section #14 “Meetings with Closed Sessions”, all meetings of the NPCA shall be open to the public to ensure accountability and transparency.
- 5.2** During a meeting of the NPCA, no member of the public, community agency or media shall address the Board unless they have been approved to address the Authority as described in Section #12 “Delegations”.
- 5.3** Prior, during or post a meeting of the NPCA, no member of the public, community agency or media shall be abusive, insulting or threatening or make excessive noise or disturb other persons.
- 5.4** As determined by the Chair of the NPCA meeting or by the Chief Administrative Officer (or designate), if a member of the public, community agency or media is abusive, insulting or threatening or makes excessive noise or disturbs others, the individual(s) will be requested to leave the conservation area for the day.

- 5.5** In the event the individual(s) refuses to leave the conservation area for the day, the Chief Administrative Officer (or his/her delegate) will direct the Superintendent of the conservation area, or an appointed NPCA Officer, to have the individual(s) removed. Should the individual(s) refuse to leave the conservation area as requested by the Superintendent or appointed NPCA Officer, the municipal police service will be called to assist.
- 5.6** Should the same individual(s) repeat actions that are deemed abusive, insulting or threatening or make excessive noise or disturb other persons, the NPCA Chair may establish a period of time where the individual(s) will be denied access to the conservation area.
- 5.7** For individuals identifying themselves as media representatives, when requested by the NPCA Chair or Chief Administrative Officer, the media person(s) shall produce media credentials that demonstrate they are affiliated with a media association that has formally adopted a “Code of Conduct” or similar policy framework that adheres to the Canadian Association of Journalists’ *Ethics Guidelines* and the associated *Principles for Ethical Journalism*. Further, the media representative(s) should be associated with a media association that has a formal appeal mechanism that is accessible by the NPCA should any reporting be deemed unfair. If the media representative(s) do not produce credentials as described, they will be treated as a member of the public.

## **6.0 FREEDOM OF INFORMATION**

- 6.1** The Authority members shall be governed at all times by the provisions of the Municipal Freedom of Information and Protection of Privacy Act (MFIPPA).
- 6.2** In the instance where a member vacates their position on the Authority Board they will continue to be bound by MFIPPA requirements.

## **7.0 NOTICE OF MEETING**

- 7.1** The Chair shall call regular meetings of the Authority. Notice of regular meetings will be sent out from the Authority office at least five calendar days prior to the meeting date.
- 7.2** Notice of any meeting shall indicate the time and place of that meeting and the agenda for the meeting.
- 7.3** All material and correspondence to be dealt with by the Authority at a meeting will be submitted to the Chief Administrative Officer at least fourteen (14) days in advance of the meeting in question.



- 7.4** Written notice of motion may be given by any member of the Authority and shall be forthwith placed on the agenda of the next meeting.
- 7.5** When a quorum is first present after the hour fixed for a meeting, the Chair shall call the meeting to order.
- 7.6** If no quorum is present one-half hour after the time appointed for a meeting, the Chief Administrative Officer shall call the roll and record the names of the members present and the meeting shall stand adjourned until the next meeting.
- 7.7** The business of the Authority shall be taken up in the order in which it stands on the agenda unless otherwise decided by the Authority.
- 7.8** No member shall present any matter to the Authority for its consideration unless the matter appears on the agenda for the meeting of the Authority or leave is granted to present the matter by the affirmative vote of a majority of the members present.
- 7.9** The following matters shall have precedence over the usual order of business:
- a. a point of order
  - b. a matter of privilege
  - c. a matter of clarification
  - d. a motion to suspend a rule of procedure or to request compliance with the rules of procedure
  - e. a motion that the question be put to a vote
  - f. a motion to adjourn
- 7.10** The Chair may, at his/her pleasure, call a special meeting of the Authority on three days' written notice. That notice shall state the business of the special meeting and only that business shall be considered unless permission is granted by two-thirds of the members present.
- 7.11** With the exception of any municipal planning or regulation matter that requires an immediate decision of the Board, or priority business of a matter before the courts, all matters will be dealt with "in person" at a Full Authority Board meeting. For those planning and regulation matters requiring immediate attention, and/or matters before the courts, the Chair may call a meeting of the Board via telephone conference or other conferencing technology. Such a telephone conference meeting must have quorum of the Board Members participating and voting will be as outlined in Section 14.0.
- 7.12** Any member of the Board, with 50% support of the other Board Members, may request the Chair to call a meeting of the Board and the Chair will not refuse.



- 7.13** Notwithstanding Section 7.6 of this Procedure, a meeting which has been interrupted through the loss of a quorum may be reconvened without notice provided that the meeting is reconvened on the same day.
- 7.14** The Chair or the CAO/Secretary-Treasurer may, by notice in writing or email, deliver to the members so as to be received by them at least 12 hours before the hour appointed for the meeting, postpone or cancel any meeting until the next scheduled date for the specific committee affected.
- 7.15** The Chair or the CAO/Secretary-Treasurer may, if it appears that a storm or like occurrence will prevent the Board Members from attending a meeting, postpone that meeting by advising as many members as can be reached. Postponement shall not be for any longer than the next regularly scheduled meeting date.

## **8.0 AGENDA FOR MEETINGS**

- 8.1** Authority staff, under the supervision of the CAO shall prepare for the use of members at all regular meetings of the Authority, an agenda which shall include, but not necessarily be limited to, the following headings:
- a. Business – In Camera
  - b. Roll Call
  - c. Approval of Agenda
  - d. Declaration of Pecuniary Interest
  - e. Presentations
  - f. Administrative Business
    - i. Approval of Minutes of Previous Meeting
    - ii. Business Arising from Minutes
    - iii. Correspondence
    - iv. Chair's Comments
    - v. CAO's Comments
  - g. Business – For Information (including):
    - i. Project Status Reports
    - ii. Financial Statements
  - h. Business – For Consideration
  - i. New Business
  - j. Reports and Updates from Board Members
  - k. Adjournment
- 8.2** The agenda for special meetings of the Authority shall be prepared as directed by the Chair.

- 8.3** Meeting management is a fundamental responsibility of the Chair. Part of this responsibility includes agenda management. As such, it shall be the duty of the Chair, with respect to any meetings over which he/she preside, to approve the agenda prior to circulation to the Board and public as outlined in section 8.1 and within all legislative reporting requirements.
- 8.4** The circulation of reports, letters, memos, etc. outside of the agenda shall be distributed by the Office of the CAO (Executive Assistant, Office of CAO & Board and/or CAO) to all Board Members. Documents should be provided in an electronic format whenever possible.

## **9.0 CONFLICT OF INTEREST**

- 9.1** A conflict of interest refers to a situation in which the private interests or personal considerations of the member could compromise, or could reasonably appear to compromise, the member's judgment in acting objectively and in the best interest of the Authority.

A conflict of interest also includes using a member's position or confidential information for private gain or advancement or the expectation of private gain or advancement (e.g. direct or indirect financial interest in a matter, a contract or proposed contract with the Authority). A conflict may occur when an interest benefits any member of the member's family (spouse, partner, children, parents, siblings), friends or business associates. A conflict of interest includes engagement of members in private employment or rendering services for any person or corporation where such employment of services are considered a conflict of interest as defined by the Province of Ontario conflict of interest legislation.

- 9.2** Members shall refrain from placing themselves in conflict of interest situations.
- 9.3** A member must resign from the Authority if he or she is or becomes involved in private employment or rendering services considered to be a conflict of interest.
- 9.4** A member who has reasonable grounds to believe that he or she may have a conflict of interest or that there may be an appearance of a conflict of interest, in respect of a matter that is before the committee shall:
- a) Disclose orally the actual, potential or perceived conflict of interest at the beginning of the committee meeting or as soon as possible; and
  - b) Excuse him or herself from the committee meeting while the matter is under consideration. If the member is participating via telephone or other electronic means, the chair shall ensure that the member is not able to listen to or participate in the discussion of the matter.

- 9.5** A member who has disclosed an actual, potential or perceived conflict of interest to the chair or the committee, as the case may be, shall refrain from voting or participating in the consideration of the matter, or from commenting on, discussing or attempting to exert his or her personal influence on another member with respect to the matter.
- 9.6** The minutes of the meeting shall reflect the disclosure of the actual, potential or perceived conflict of interest and whether the member withdrew from the discussion of the matter.
- 9.7** If it is not entirely clear whether or not an actual, potential or perceived conflict of interest exists, then the member with the potential conflict of interest shall disclose the circumstances to the Chair. The Chair will determine if there is a conflict of interest or if the member's conduct has violated this policy, in a timely fashion, dependent on the complexity of the situations and will communicate his or her decision directly to the member.
- 9.8** A member who has concerns about the conduct of another member regarding compliance with this policy should raise those concerns with the Chair. The Chair will follow essentially the same process for addressing complaints as for dealing with declared conflicts of interest with modifications to suit the difference circumstances.

## **10.0 DISCLOSURE OF PECUNIARY INTEREST**

- 10.1** Where a member, either on his own behalf or while acting for, by, with or through another, has any pecuniary interest, direct or indirect, in any matter and is present at a meeting of the Authority or Standing Committee at which the matter is the subject of consideration, the member shall:
- a) prior to any consideration of the matter at the meeting, disclose the interest and the general nature thereof;
  - b) not take part in the discussion of, or vote on any question in respect of the matter; and
  - c) not attempt in any way whether before, during or after the meeting to influence the voting on any such question.
- 10.2** Where a meeting is not open to the public, in addition to complying with the requirements, the Member shall forthwith leave the meeting for the part of the meeting during which the matter is under consideration.

- 10.3** Where the interest of a Member has not been disclosed by reason of their absence from the particular meeting, the Member shall disclose their interest and otherwise comply at the first meeting of the Authority or Standing Committee, as the case may be, attended by them after the particular meeting.
- 10.4** The meeting secretary shall record in reasonable detail the particulars of any disclosure of pecuniary interest made by members of the Authority or Committees, as the case may be, and any such record shall appear in the minutes/notes of that particular meeting of the Authority or of the Committee, as the case may be.

## **11.0 NOTICE OF MOTION**

- 11.1** Except as otherwise provided in this Regulation, a notice of motion to be made at an Authority or Committee meeting shall be given in writing and shall be delivered to the CAO/Secretary-Treasurer not less than seven (7) business days prior to the date and time of the meeting, to be included in the agenda for the Authority or Committee meeting at which the motion is to be introduced.
- 11.2** The CAO/Secretary-Treasurer shall include such notice of motion in full in the agenda for the meeting concerned.
- 11.3** Reports of Committees included in the Authority agenda shall constitute notice of motion with respect to any matter contained in such reports and recommended by any such Committee for adoption by the Authority.
- 11.4** Staff reports in the Authority agenda not having been considered by any Committee for adoption, shall constitute notice of motion for the purposes of any motion brought to the Authority with respect thereto.
- 11.5** Notwithstanding the foregoing, any motion or other business may be introduced for consideration of the Authority provided that it is made clear that to delay such motion or other business for the consideration of an appropriate Standing Committee would not be in the best interest of the Authority and that the introduction of the motion or other business shall be upon an affirmative vote of the majority of the members of the Authority present.
- 11.6** Any motion called from the Chair and for whatever reason deferred in three successive regular meetings of the Authority or Committee which is not proceeded with shall be deemed to be withdrawn.
- 11.7** Reconsideration of a motion previously adopted by the Authority requires a two-thirds majority of the Board, thus 10 or more Members (See Section G of Appendix A).

## **12.0 DELEGATIONS**

- 12.1** Any person or organization desiring an opportunity to address the Authority may make a request in writing to the Chief Administrative Officer/Secretary-Treasurer fourteen (14) days in advance of a scheduled meeting if such request is to be included in the agenda of that meeting. The request should comprise a brief statement of the issue or matter involved and indicate the name of the proposed speaker(s).
- 12.2** The Chief Administrative Officer/Secretary-Treasurer is empowered to seek clarifications from the person or organization if the submitted statement is ambiguous and/or requires further explanation.
- 12.3** Any person or organization requesting an opportunity to address the Authority but not having made a written request to do so in accordance with Section 12.1 may appear before a meeting of the Authority but will be heard only if approved by a ruling of 2/3 of the Board Members of the meeting.
- 12.4** No delegation, whether or not listed on the agenda, shall be heard without a ruling by the Chair of the meeting giving leave, but such ruling may be immediately appealed by a proper motion, and the ruling of the meeting shall govern.
- 12.5** Notwithstanding Section 12.2, a representative of a participating municipality of the Authority, duly authorized by resolution of such council, shall be heard as of right, and further any member of the Authority shall be heard as of right.
- 12.6** Except by leave of the Chair or appeal by the leave of the meeting, delegations shall be limited to a time of not more than ten (10) minutes.

## **13.0 MEETINGS WITH CLOSED SESSIONS**

- 13.1** A meeting or a part of a meeting may be closed to the public if the subject matter being considered relates to:
- a) the security of the property of the Authority;
  - b) personnel matters about an identifiable individual including Authority employees;
  - c) a proposed or pending acquisition of land;
  - d) labour relations or employee negotiations;
  - e) litigation or potential litigation including matters before administrative tribunals affecting the Authority;
  - f) the receiving of advice that is subject to solicitor-client privilege.

- 13.2** A meeting shall be closed to the public if the subject matter relates to the consideration of a request under the Municipal Freedom of Information and Protection of Privacy Act.
- 13.3** Before holding a meeting or part of a meeting that is to be closed to the public, the members shall state by resolution during the open session of the meeting that there will be a meeting closed to the public and the general nature of the matter to be considered at the closed meeting.
- 13.4** No vote shall be taken and no written record shall be kept in a closed meeting unless it is for a procedural matter, or for giving directions or instructions to officers, employees or agents of the Authority or persons retained under contract with the Authority.
- 13.5** Any materials presented to the Board Members during a closed meeting will be returned to the CAO/Secretary-Treasurer prior to departing from the meeting.

#### **14.0 VOTE**

- 14.1** On a tie vote, the motion is lost, and the Chair, may vote to make it a tie unless the vote is by ballot. The Chair cannot, however, vote twice, first to make a tie and then give the casting vote.
- 14.2** A majority vote of the members present at any meeting is required upon all matters coming before the meeting.
- 14.3** Interrelated motions shall be voted on in the following order:
  - a) motions to refer the matter, and
  - b) if no motion under clause (a) is carried, the order for voting on the remaining motions shall be:
    - i) amending motion
    - ii) the original motion
- 14.4** Unless a member requests a recorded vote, a vote shall be by a show of hands or such other means as the Chair may call.
- 14.5** Before a vote is taken, any member may require a recorded vote and it shall be taken by alphabetical surname with the Chair voting last. On a recorded vote, each member will answer “yes” or “no” to the question, or will answer “abstain” if the said member does not wish to vote. If any Member abstains from voting, they shall be deemed to have voted in opposition to the question, and where the vote is a recorded vote, their vote shall be recorded accordingly by the secretary.

- 14.6** At the meeting of the Authority at which the non-matching levy is to be approved, the Chair shall at the appointed time during the meeting, call the roll of members present, and having been advised by the Secretary-Treasurer of those present and the respective, eligible weighted votes, conduct the roll call vote to approve of non-matching levy by a weighted majority of the members present and eligible to vote. (see O. Reg. 139/96)
- 14.7** Where a question under consideration contains more than one item, upon the request of any member, a vote upon each item shall be taken separately.
- 14.8** A vote on any planning or regulation matter dealt with through a telephone conference meeting, shall be a recorded vote.
- 14.9** If a vote is required, upon circumstances described in Section 7.11, the Chair may direct the CAO to conduct a “telephone or email survey” and record the vote.
- 14.10** Where any member of the Authority or Committee is acting in the place of the Chair or the Committee Chair, as the case may be, such member shall have and may exercise all the rights and powers of the Chair or the Committee Chair of the Standing Committee as the case may be, while so acting.

## **15.0 MINUTES**

- 15.1** The CAO/Secretary-Treasurer shall undertake to have a recording secretary in attendance at meetings of the Authority and each Standing Committee. The recording secretary will make a record in the form of Minutes of the meeting proceedings and in particular shall record all motions considered at the meeting.
- 15.2** For matters dealt with in closed session, the CAO or designate will take notes of any direction provided, for endorsement by the Chair and Vice-Chair.
- 15.3** Minutes of all meetings shall include the time and place of the meeting and a list of those present and shall state all motions presented together with the mover and seconder.
- 15.4** The Secretary-Treasurer shall send out the minutes of Board meetings to each member of the Authority.
- 15.5** The Authority will electronically send the minutes of Board meetings to member municipalities following approval of those minutes by the Boards.

**16.0 LIVE STREAMED / RECORDED FULL AUTHORITY MEETINGS**

The NPCA may live stream and/or make video recordings of all or part of its Full Authority meeting(s) available to the public, but is not obliged to do so. Where in the discretion of the NPCA a Full Authority meeting is live-streamed and/or recorded by video, the following principles shall apply:

- 16.1** At the start of the Full Authority meeting, the Chair shall advise all in attendance that the meeting is being recorded and/or live-streamed.
- 16.2** The Chair shall further advise those in attendance that delegates are solely responsible for all statements of fact, opinion, or of mixed fact and opinion, which they express at the Full Authority meeting. This applies whether the delegate's statements are made orally or included in written materials provided by the delegate. No endorsement by the NPCA of a delegate's statements may be implied or inferred from the communication of the statements during the course of the Full Authority meeting, or on account of the NPCA having granted permission to the delegate to make a presentation at the Full Authority meeting.
- 16.3** Wherever possible, the NPCA will advise all delegates in advance of the Full Authority meeting that their presentation may be live-streamed and the recording archived for public viewing.
- 16.4** Subject to the discretion of the Chair, the goal of the NPCA will be to post, within two business days of meeting, the archived live stream video.
- 16.5** A recorded video of a Full Authority meeting is not an 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.



## **APPENDIX A COMMON MOTIONS**

### **A Motion to Adjourn**

- A.1 A Motion to Adjourn:
- a) is always in order except as provided by this by-law;
  - b) is not debatable;
  - c) is not amendable;
  - d) is not in order when a member is speaking or during the verification of the vote;
  - e) is not in order immediately following the affirmative resolution of a motion to close debate; and
  - f) when resulting in the negative, cannot be made again until after some intermediate proceedings have been completed by the Authority.
- A.2 A motion to adjourn without qualification, if carried, brings a meeting or a session of the Authority to an end.
- A.3 A motion to adjourn to a specific time, or to reconvene upon the happening of a specified event, suspends a meeting of the Authority to continue at such time.

### **B Motion to Amend**

- B.1 A motion to amend:
- a) is debatable;
  - b) is amendable;
  - c) shall be relevant and not contrary to the principle of the report or motion under consideration; and
  - d) may propose a separate and distinct disposition of a question provided that such altered disposition continues to relate to the same issue which was the subject matter or the question.
- B.2 Only one motion to amend an amendment to the question shall be allowed at one time and any further amendment must be to the main question.
- B.3 Notwithstanding anything herein to the contrary, no motion to amend the motion to adopt any report shall be permitted.

### **C Motion to Censure**

The Niagara Peninsula Conservation Authority Board may call for a motion to censure an individual Member for conduct unbecoming a Board Member in the fulfillment of his/her Niagara Peninsula Conservation Authority duties. This will require a seconder and a 2/3 vote of members present at the Board Members meeting to pass. The motion to censure

must be dealt with immediately and once the motion is approved, the appointing municipality will be advised, in writing, by the Chair of the Board.

**D Motion to Close Debate (Previous Question)**

D.1 A motion to close debate:

- a) is not debatable;
- b) is not amendable;
- c) cannot be moved with respect to the main motion when there is an amendment under consideration;
- d) should be moved by a member who has not already debated the question;
- e) can only be moved in the following words: "I move to close debate";
- f) requires a majority of members present for passage; and
- g) when resolved in the affirmative, the question is to be put forward without debate or amendment.

**E Motion to Postpone Definitely**

E.1 A motion to postpone definitely:

- a) is debatable, but only as to whether a matter should be postponed and to what time;
- b) is amendable as to time;
- c) requires a majority of members present to pass; and
- d) shall have precedence over the motions to refer, to amend, and to postpone indefinitely.

**F Motion to Postpone Indefinitely**

F.1 A motion to postpone indefinitely:

- a) is not amendable;
- b) is debatable, and debate may go into the merits of the main question, which effectively kills a motion and avoids a direct vote on the question;
- c) requires a majority vote; and
- d) shall have precedence over no other motion.

**G Motion to Reconsider**

G.1 A motion to reconsider, under this Regulation:

- a) is debatable;
- b) is not amendable; and
- c) requires a two-thirds majority vote, regardless of the vote necessary to adopt the motion to be reconsidered.

- G.2 After any question, except one of indefinite postponement has been decided by the Authority, any Member who was present and who voted in the majority may, at a subsequent meeting of the Authority, move for the reconsideration thereof, provided due notice of such intention is given as required by this Regulation, but no discussion of the main question by any person shall be allowed unless the motion to reconsider has first been adopted.
- G.3 After any question, except one of indefinite postponement has been decided by Committee, but before a decision thereon by the Authority, any member who was present at the Committee meeting concerned and who voted in the majority, may, at a subsequent meeting of the Committee, provided the Authority still has made no decision thereon, move for the reconsideration thereof, provided due notice of such intention is given as required by this Regulation, but no discussion of the main question by any person shall be allowed unless the motion to reconsider has first been adopted.
- G.4 No question upon which a notice of reconsideration has been accepted shall be reconsidered more than once, nor shall a vote to reconsider be reconsidered.
- G.5 If a motion to reconsider is decided in the affirmative, reconsideration shall become the next order of business and debate on the question to be reconsidered shall proceed as though it had never previously been considered.

## **H Motion to Refer (to Committee)**

- H.1 A motion to refer:
- a) is debatable;
  - b) is amendable; and
  - c) shall take precedence over all amendments of the main question and any motion to postpone indefinitely, to postpone definitely or to table the question.

## **I Motion to Suspend the Rules (Waive the Rules)**

- I.1 A motion to suspend the rules:
- a) is not debatable;
  - b) is not amendable; and
  - c) requires a 2/3 majority to carry;
  - d) takes precedence over any motion if it is for a purpose connected with that motion and yields to a motion to table.

## **J Motion to Table**

- J.1 A motion to table:

- a) is not debatable;
  - b) is not amendable.
- J.2 A motion to table a matter with some condition, opinion or qualification added to the motion shall be deemed to be a motion to postpone.
- J.3 The matter tabled shall not be considered again by the Authority until a motion has been made to take up the tabled matter at the same time or subsequent meeting of the Authority.
- J.4 A motion to take up a tabled matter is not subject to debate or amendment.
- J.5 A motion that has been tabled at a previous meeting of the Authority cannot be lifted off the table unless notice thereof is given in accordance with Section 12 of this Regulation.
- J.6 A motion that has been tabled and not taken from the table for six (6) months shall be deemed to be withdrawn and cannot be taken from the table.

**K Point of Order**

The Chair or Committee Chair, as the case may be, shall decide points of order. When a Member wishes to raise a point of order, the Member shall ask leave of the Chair/Committee Chair and after leave is granted, the Member shall state the point of order to the Chair/Committee Chair, after which the Chair/Committee chair shall decide on the point or order. Thereafter, the Member shall only address the Chair/Committee Chair for the purpose of appealing the decision to the Authority or the Committee, as the case may be. If the Member does not appeal, the decision of the Chair/Committee Chair shall be final. If the Member appeals to the Authority or the Committee as the case may be, the Authority/Committee shall decide the question without debate and the decision shall be final.

**L Point of Personal Privilege**

When a Member considers that his integrity or the integrity of the Authority or Committee has been impugned, the Member may, as a matter of personal privilege and with the leave of the Chairman, draw the attention of the Authority or the Committee, as the case may be, to the matter by way of a point of personal privilege. When a point of personal privilege is raised, it shall be considered and decided by the Chair or Committee Chair, as the case may be, immediately. The decision of the Chair or Committee Chair, as the case may be, on a point of privilege may be appealed to the Authority.

**Report To:** Board of Directors

**Subject:** Annual Policy Resolutions 2018

**Report No:** 22-18

**Date:** February 28, 2018

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**RECOMMENDATION:**

1. That Report No. 22-18 respecting the Annual Policy Resolutions 2018 **BE RECEIVED**; and
2. That the Health and Safety Policy Statement and Workplace Violence & Harassment Prevention Policy attached to Report No. 22-18 as Appendix 1 and Appendix 2 **BE APPROVED**, as per Section 25(2)(j) of the Occupational Health and Safety Act.

**PURPOSE:**

The health and safety of our employees is a priority for the Conservation Authority and we endeavor to meet or exceed all the legislative requirements placed on us as an employer.

**CORPORATE HEALTH AND SAFETY POLICY STATEMENT**

Under Section 25(2) (j) of the Occupational Health and Safety Act, the NPCA is required to conduct an annual review of the Corporate Health and Safety Policy Statement. The intent of the policy statement is to reflect the employer's commitment, support and attitude to the health and safety program for the protection of its workers. The current NPCA Policy Statement was adopted in September 19, 2012.

The Policy Statement must be reviewed and adopted on an annual basis. Attached is the 2017 Health and Safety Policy Statement which meets the requirements of the Act, and no change is recommended. The Statement will be communicated to all NPCA employees.

**WORKPLACE VIOLENCE & HARASSMENT PREVENTION POLICY**

Attached is the 2017 Workplace Violence & Harassment Prevention Policy currently included in the NPCA's Terms of Reference and Personnel Regulations. No change is recommended at this time.

**RELATED REPORTS AND APPENDICES:**

Appendix 1 Health and Safety Policy Statement  
Appendix 2 Workplace Violence & Harassment Prevention Policy

**Prepared by:**



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**Misti Ferrusi**  
**Human Resources Consultant**

**Submitted by:**



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**Mark Brickell**  
**CAO/Secretary-Treasurer**



## HEALTH AND SAFETY POLICY STATEMENT

The Niagara Peninsula Conservation Authority is vitally interested in and committed to the health and safety of its employees and the prevention of injury and illness to its employees through the provision and maintenance of healthy and safe workplaces. The Conservation Authority will make every effort to meet its responsibilities for the health and safety of all employees by adhering to the relevant health and safety standards and legislative requirements.

It is a primary duty of all supervisory staff to ensure that all persons under their direction are made aware of and comply with all applicable health and safety policies and procedures. The supervisory staff is responsible for ensuring that all aspects of the workplace including machinery and equipment are safe and any risks, hazards and safety violations brought to their attention are investigated and corrected promptly.

The Conservation Authority will take all reasonable steps to acquaint its employees with their rights and duties in the workplace and the applicable regulations and procedures for protecting their health and safety.

All employees shall protect their own health and safety by complying with prevailing regulations and standards and with the safe practices and procedures established by the Conservation Authority. Employees must report any health hazards and unsafe conditions or practices to supervisory staff for corrective action. Where appropriate, the Conservation Authority will support training programs to assist in maintaining safe conditions and work practices and will support employee participation in health and safety activities including health & safety committees.

It is in the best interest of all parties to consider health and safety in every activity and the commitment to health and safety shall be an integral part of the Conservation Authority's activities.

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Mark Brickell  
CAO/Secretary-Treasurer

Dated: \_\_\_\_\_

**NPCA Corporate Policy**

Developed by: Human Resources

Approved by:

Date:

Effective Date: Jan 1, 2018

Latest Revision: Jan 9, 2017

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**WORKPLACE VIOLENCE & HARASSMENT PREVENTION POLICY**

The management of the Niagara Peninsula Conservation Authority is committed to the prevention of workplace violence and harassment and is ultimately responsible for worker health and safety. We will take whatever steps are reasonable to protect our workers from workplace violence & harassment from all sources.

Violent and/or harassing behaviour in the workplace is unacceptable from anyone. This policy applies to workers, visitors, clients, volunteers, co-workers or their domestic or intimate partners. Everyone is expected to uphold this policy and to work together to prevent workplace violence & harassment.

Consistent with the Occupational Health and Safety Act and the NPCA Health and Safety Policy, the NPCA will maintain a Workplace Violence Prevention Program to implement this policy. It includes measures and procedures to protect workers from workplace violence & harassment, a means of summoning immediate assistance and a process for workers to report incidents, or raise concerns.

The NPCA as the employer, will ensure that this policy and the supporting program are implemented and maintained and that all workers and supervisors have the appropriate information and instruction to protect them from violence & harassment in the workplace.

Supervisors will adhere to this policy and the supporting program. Supervisors are responsible for ensuring that measures and procedures are followed by workers and that workers have the information they need to protect themselves.

Every worker must work in compliance with this policy and the supporting program. All workers are encouraged to raise any concerns about workplace violence & harassment and to report any violent and/or harassing incidents or threats.

Management pledges to investigate and deal with all incidents and complaints of workplace violence & harassment in a timely and fair manner, respecting the privacy of all concerned to the extent possible.



**NPCA Corporate Policy**

Dated: \_\_\_\_\_

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Mark Brickell  
CAO/Secretary-Treasurer

**Report To: Board of Directors**

**Subject: Freedom of Information (FOI) Annual Statistics Report & Designation**

**Report No: 21-18**

**Date: February 28, 2018**

### **RECOMMENDATION:**

1. That Report No. 21-18 respecting the Freedom of Information Annual Statistics Reporting and Designation **BE RECEIVED** for information;
2. That Sandy Annunziata, Niagara Peninsula Conservation Authority (NPCA) Board Chair, **BE DESIGNATED** as 'head' of the NPCA for the purposes of the Municipal Freedom of Information and Protection of Privacy Act; and
3. That the NPCA Chair **DESIGNATE** in writing an individual to act as 'head' for the purposes of the Municipal Freedom of Information and Protection of Privacy Act.

### **PURPOSE:**

To meet the provincially legislated requirements of the Municipal Freedom of Information and Protection of Privacy Act (MFIPPA). This report aligns with the 2014-2017 Strategic Plan under, 'Transparent Governance & Enhanced Accountability.'

### **BACKGROUND:**

The following is a summary of the requests made in 2016 and 2017 under the Freedom of Information and Privacy Act to the NPCA, as submitted to the Province:

	<b>2016</b>	<b>2017</b>
Number of Requests	17	38
Dollar Amount Collected for Application Fees	\$85	\$180
Dollar Amount Collected for Fees	\$ 1,147	\$136.60
Number of Appeals	5	12
Number of Appeals where the Service Decision was upheld	2	1
Number of Appeals Still Outstanding	0	11
Number of Appeals moved to Adjudication	4	4
Number of Current Inquiries in Adjudication	2	4
Number of Inquiries where the Service Decision was Upheld	0	0
Number of Third Party Notices	6	4

The MFIPPA legislation states:

**Designation of head**

*3. (2) The members elected or appointed to the board, commission or other body that is an institution other than a municipality may designate in writing from among themselves an individual or a committee of the body to act as head of the institution for the purposes of this Act. R.S.O. 1990, c. M.56, s. 3 (2); 2002, c. 17, Sched. F, Table.*

*If no designation*

*(3) If no person is designated as head under this section, the head shall be,*

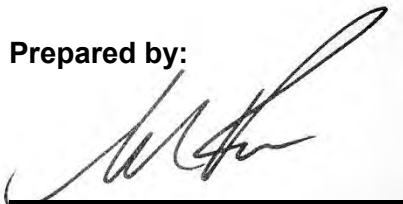
*(b) the members elected or appointed to the board, commission or other body in the case of an institution other than a municipality. R.S.O. 1990, c. M.56, s. 3 (3); 2002, c. 17, Sched. F, Table.*

Therefore, in lieu of no formal designation of a 'head,' the NPCA Board holds the responsibilities required under the Act. The 'head' is responsible for, amongst others, the handling and decision making for each FOI request. In order to both comply with legislation and for greater ease of handling FOI requests, staff is recommending that the NPCA Chair be designated as the 'head,' and that he further delegate that function to relevant staff, when and as necessary.

**FINANCIAL IMPLICATIONS:**

While there are no immediate financial implications, appeals take significant staff time and resources, which may cause undue delay in servicing other clients. Future financial implications may occur if FOI requests are not handled as prescribed by MFIPPA or are subject to appeals.

**Prepared by:**



**Michael Reles**  
**Manager, Communications**

**Submitted by:**



**Mark Brickell**  
**CAO/Secretary-Treasurer**

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**Report To:** Board of Directors

**Subject:** Niagara Peninsula Conservation Authority (NPCA) 2018 Watershed Report Card

**Report No:** 16-18

**Date:** February 28, 2018

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**RECOMMENDATION:**

1. That Report No. 16-18 respecting the NPCA 2018 Watershed Report Card **BE RECEIVED**; and
2. That staff **BE DIRECTED** to forward the NPCA 2018 Watershed Report Card to Conservation Ontario for participation in the 2018 Watershed Checkup Initiative and post on the NPCA website.

**PURPOSE:**

The purpose of this report is to provide a summary of the 2018 NPCA Watershed Report Card and to seek approval to allow staff to forward the final version to Conservation Ontario, for the Conservation Ontario Watershed Checkup Initiative on World Water Day (March 22, 2018), and have it posted on the NPCA website.

**BACKGROUND:**

Watershed Report Cards are a tool to communicate the state of the watershed to residents, businesses, municipalities, agencies and other groups, in a standard, easily understood and concise manner. Watershed Report Cards use standardized grading that was developed by Conservation Authorities which allows for comparison of watersheds across the province of Ontario. These report cards are released simultaneously by Conservation Authorities once every five years to maximize their impact to the public. In 2013, The NPCA was one of 32 Conservation Authorities who participated in the Watershed Report Card initiative and these report cards can be found at the web addresses: 1) [www.npca.ca/watershed-report-cards](http://www.npca.ca/watershed-report-cards) and 2) [www.watershedcheckup.ca](http://www.watershedcheckup.ca). Conservation Authorities are scheduled to release their 2018 Watershed Report Cards on World Water Day which is March 22, 2018.

**DISCUSSION:**

The NPCA used existing data sources from its core programs to produce the information in the 2018 Watershed Report Card. Additional information about NPCA initiatives and program highlights are also included in the NPCA Watershed Report Card.

In the 2018 NPCA Watershed Report Card, the grades for surface water quality and forest conditions were both “D”. These are the same grades reported in the 2013 NPCA Watershed Report Card (Table 1). These are a full grade below the average grades in Ontario but equivalent to grades observed across southwestern Ontario, where there are greater environmental stressors from higher population densities and larger concentrations of agriculture and industry. In this respect, the grades found in the 2018 NPCA Watershed Report Card are typical of other nearby Conservation Authorities. The overall grade for groundwater quality was a “B” and slightly below the provincial average (Table 1). The NPCA did not provide an overall grade for this in the 2013 Watershed Report Card. The overall grade for wetland cover was determined to be a “B”. There is no provincial average available for this category, however for comparison and interest, 11% of the NPCA watershed is covered by wetlands and at levels recommended by Environment Canada.

The table below is a comparison of the four (4) Report Card Indicators (2018) comparing results against the 2013 NPCA Report Card and the 2013 provincial (Ontario) averages.

**Table 1: Summary of 2018 NPCA Watershed Report Card Grades**

<b>Report Card Indicators</b>	<b><u>2013</u> Watershed Report Grades</b>	<b><u>2013</u> Average Grades in Ontario</b>	<b><u>2018</u> Watershed Report Grades</b>
Surface Water Quality	D	C+	D
Forest Conditions	D	C+	D
Groundwater Quality	Not Reported	B+	B
Wetland Cover	Not Reported	N/A	B


**FINANCIAL IMPLICATIONS:**

None

**RELATED REPORTS AND APPENDICES:**

Appendix 1 Niagara Peninsula Watershed Report Card 2018

**Prepared by:**



**Gregg Furtney**  
Acting Director, Watershed Management

**Submitted by:**



**Mark Brickell**  
CAO/Secretary-Treasurer

*Prepared with input from Joshua Diamond, M.Sc., Water Quality Specialist*



## WHAT IS THE NPCA CURRENTLY DOING?



### Land & Water Management, Outreach & Education, and more.

The NPCA is entrusted with the management and operation of 41 properties. These properties total more than 7,194 acres, and are protected and maintained for both their natural heritage features, and for recreational value including camping and public access to various watercourses.

NPCA programs focus on keeping people and their property safe from flooding and erosion. Our programs also monitor the quality of our surface and ground water, and strive to ensure our drinking water remains safe.

Our curriculum-based education programs available at different Conservation Areas also allow teachers and educators to bring the classroom outdoors for fun and innovative experiences.

For more information, please visit [www.npca.ca](http://www.npca.ca), Get Involved!

### Biggest, Boldest, & Most Robust Initiatives in NPCA history.

The NPCA announced eight key initiatives on October 25, 2017. These bold objectives set aggressive targets for improving **water quality**, ecology, and the overall health of the watershed.

Environmental health is everyone's responsibility and these goals can't be achieved without the help of the people of the watershed.

Please see [www.npca.ca/initiatives](http://www.npca.ca/initiatives) for more information, or [www.npca.ca/npca-volunteer-sign](http://www.npca.ca/npca-volunteer-sign) to volunteer!

## HOW CAN WE ENHANCE THE WATERSHED?

### What Can You Do?

- Plant native trees, wildflowers, shrubs, and/or rainwater gardens.
- Reduce the amount of mown grass on your property.
- Reduce the amount of pesticides, herbicides and fertilizers you use.
- Conserve water by using low flow showers and toilets, high efficiency clothes washers and dishwashers.
- Install rain barrels to collect water for use around your yard.



### What Can Your Community Do?

- Sponsor community clean ups to keep waste and garbage out of natural areas.
- Look for ways to expand the existing urban tree canopy.
- Reduce the amount of pesticides, herbicides and fertilizers used.

### What Can Your Business Do?

- Establish a corporate volunteering program to support local initiatives such as tree plantings.
- Invest in 'greener' alternatives to current practices.
- Encourage recycling and composting in the workplace.
- Donate towards water quality and habitat improvement programs.
- Evaluate the effectiveness of environmental programs.

*Do you have questions not answered by this summary document? Visit [npca.ca](http://npca.ca) for more information.*



#### Niagara Peninsula Conservation Authority

250 Thorold Road West, 3rd floor  
Welland ON L3C 3W2

E-mail: [info@npca.ca](mailto:info@npca.ca) | Website: [www.npca.ca](http://www.npca.ca)

Phone: 905-735-3135 | Fax: 905-788-1121

Social Handle: [NPCA\\_Ontario](#)

The Watershed Report Card is available online and in other formats upon request.

# Niagara Peninsula WATERSHED

## Report Card 2018



[www.watershedcheckup.ca](http://www.watershedcheckup.ca)

Niagara Peninsula Conservation Authority has prepared this report card as a summary of the state of Niagara Peninsula's forests, wetlands, and water resources.



## WHERE ARE WE?



### What is a Watershed?

A watershed is an area of land drained by a creek or stream into a river which then drains into a body of water such as a lake or pond. Everything in a watershed is connected. Our actions upstream can affect conditions downstream.

### Why Measure?

Measuring helps us better understand our watershed. We can target our work where it is needed and track progress. We measured:



Groundwater  
Quality



Surface Water  
Quality



Forest  
Conditions



Wetland  
Cover

#### GRADING

**A** Excellent

**B** Good

**C** Fair

**D** Poor

**F** Very Poor

Insufficient Data

### What is a watershed report card?

Ontario's Conservation Authorities report on watershed conditions every five years. The watershed report cards use Conservation Ontario guidelines and standards developed by Conservation Authorities and their partners.





# GROUNDWATER QUALITY

## B

The NPCA monitors groundwater quality and water levels at 50 sites in locally significant hydrogeologic areas within its watershed.

Although most of the NPCA watershed is serviced by drinking water from municipal water treatment plants, there are areas in the watershed where residents obtain their drinking water through private wells.

### What Did we Find?

- The water quality at most NPCA monitoring wells is good, with some wells exceeding Ontario Drinking Water Standards.
- Most groundwater well impacts were attributed to natural conditions, with some impacts attributed to adjacent land uses.
- Groundwater levels at most wells vary seasonally, with their highest water levels being observed during the late winter and early spring. These drop to their lowest level during the fall months.
- Private well owners are responsible for making sure their well is up to standards and having their well-water tested regularly.
- To have your private well tested, contact your local municipality.



# SURFACE WATER QUALITY

## D

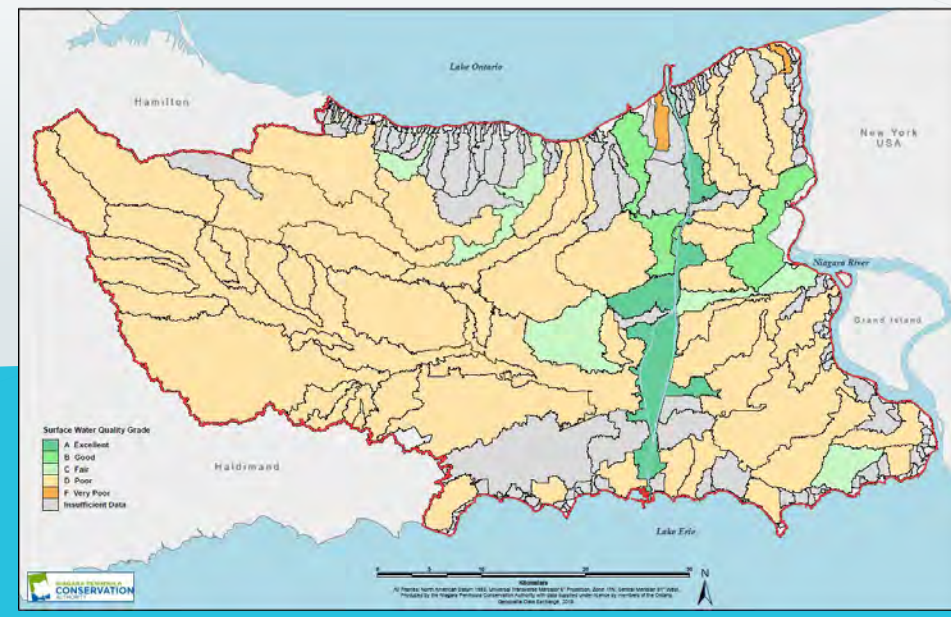
The NPCA monitors water quality at 80 sites throughout its watershed.

Surface water quality is graded using three indicators:

- Phosphorus (contributions from excessive fertilizer use and wastewater discharge)
- E. coli bacteria (found in the intestines of humans and other animals)
- Benthic macroinvertebrates community (small animals without a backbone that live at the bottom of streams). These animals have a range of tolerances to water pollution. Their quantity and variety can provide an indication of the level of water pollution.

### What Did we Find?

- Most of the watersheds scored a D grade and have poor water quality.
- The highest surface water quality grades were found in watersheds where cleaner water is redirected from Lake Erie and the Niagara River to support hydroelectric generation and shipping in the Welland Canal.
- Nutrient and bacteria contamination from non-point sources (agricultural/livestock runoff and faulty septic systems) and point sources (combined sewer overflow and urban stormwater) continue to be the major causes of water quality impairment in the NPCA watershed.



# FOREST CONDITIONS

## D

Forests are ecosystems that are composed of a diverse group of plants, animals and other organisms. Forests provide many social and ecological benefits such as habitat of flora and fauna, carbon sequestration, building materials, and opportunities for recreation.

The percentages of forest cover, forest interior, and stream side cover were used to evaluate the forest conditions of the watershed.

### What Did we Find?

- The majority of NPCA's watershed scored a D grade as most of the woodlands are small, narrow, fragmented, and do not contain interior forest habitat.
- The highest forest condition grades were found in the southern portions of the watershed.
- The lowest forest condition grades were found in watersheds along the Lake Ontario shoreline, portions of Hamilton, and the urban centres such as St. Catharines and Niagara Falls.



# WETLAND COVER

## B

Wetlands are areas of land covered by water for all or part of the year, and are characterized by plants adapted to saturated soil conditions. Wetlands include marshes, wooded swamps, bogs, seasonally flooded forest, sloughs, and any land area that can keep water long enough to let wetland plants and soils develop.

Wetlands are critical for a healthy environment. They play a key role in filtering and purifying water, recharging groundwater, reducing flooding by storing water, providing habitat to many wildlife species, and creating opportunities for recreation.

### What Did we Find?

- 11% of the NPCA watershed is covered by wetlands.
- Environment Canada recommends that a healthy watershed should contain at least 10% wetland cover.
- The most wetland cover is found in the southern portions of the NPCA watershed, in Fort Erie, south Niagara Falls, Wainfleet, and Haldimand.
- The least wetland cover is found in watersheds along the Lake Ontario shoreline and the urban centres such as St. Catharines and Niagara Falls.





**Report To:** Board of Directors

**Subject:** Niagara Peninsula Conservation Authority (NPCA) 2017 Q4 Quarterly Report

**Report No:** No. 17-18

**Date:** February 28, 2018

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**RECOMMENDATION:**

1. That Report No. 17-18 respecting the NPCA 2017 Q4 Quarterly Report **BE RECEIVED**; and
2. That staff **BE DIRECTED** to distribute the 2017 Q4 Quarterly Report to participating municipalities, community stakeholders, Niagara Peninsula Conservation Authority Advisory Committee, and the public.

**PURPOSE:**

To provide the NPCA Board of Directors with a Draft 2017 Quarterly Report to be distributed among key stakeholders, and the public via various forms of media.

This report aligns with the 2014-2017 Strategic Plan under, 'Transparent Governance & Enhanced Accountability,' specifically, *"Improve NPCA profile and accountability to municipal governments by providing ongoing quarterly briefings to watershed member municipalities and local councils on activities and key issues being addressed by NPCA."*

**DISCUSSION:**

Subsequent to the NPCA Board receiving the 2017 Q4 Quarterly Report, the document will be distributed throughout the community in digital format.

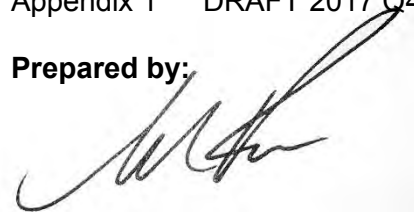
**FINANCIAL IMPLICATIONS:**

Distribution of the Quarterly Report is within 2018 budget allocations.

**RELATED REPORTS AND APPENDICES:**

Appendix 1 DRAFT 2017 Q4 Quarterly Report

**Prepared by:**



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**Michael Reles**  
Manager, Communications

**Submitted by:**



---

**Mark Brickell**  
CAO/Secretary-Treasurer



A photograph of a forest with tall trees and green foliage, partially covered by a large blue rectangular overlay. The text is positioned on the right side of the blue overlay.

# QUARTERLY REPORT Q4 • 2017

Vol. 9 Oct-Dec 2017





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**Welcome to the Niagara Peninsula Conservation Authority (NPCA) Quarterly Report.** This report offers an update to the people in the Niagara peninsula watershed, our funders, and our stakeholders as to what has been happening at NPCA. As laid out in our Strategic Plan, we are making a concerted effort to be more transparent and hope that these reports are helpful in your understanding of our work.



We are so proud of the work staff completed in Q4. As we continue to move this organization forward, we will continue to share the good work NPCA is able to complete.



**Mark Brickell**  
Chief Administrative Officer  
Secretary Treasurer



The Board of Directors was pleased to receive the Strategic Plan 2014-2017 results in Q4, and to welcome new member Paul MacPherson.



**Sandy Annunziata**  
Chair, Board of Directors





# ABOUT US

## **Our Waters**

The NPCA manages the Niagara peninsula watershed with the purpose of keeping people and property safe from flooding and erosion. Our watershed includes several bodies of interconnected waters that flow throughout Niagara and part of Hamilton and Haldimand County. NPCA implements programming aimed at improving water quality.

## **Our Lands**

NPCA manages its 39 Conservation Areas, including Ball's Falls, Binbrook, Long Beach and Chippawa Creek. These lands are held in public trust for recreation, heritage preservation, conservation, and education.

The NPCA also reviews and regulates proposed developments when that development is occurring on land that contains features such as slopes, valleys, wetlands, etc.

## **Our Legacy**

We manage the Niagara peninsula watershed and our conservation areas for this generation and for all future generations.

## **Our Life**

Water and air are essential to biological life. It is all of our responsibility to protect those resources.



# BY THE NUMBERS

## Strategic Plan Review Results:

<b>2</b>	2 Watershed Condition Statements Issued	<b>B+</b>	Governance & Accountability
<b>210</b>	210 Permits Issued	<b>A</b>	Budget/Financial Controls/Asset Management
<b>30,000</b>	30,000 visitors to the Ball's Falls Thanksgiving Festival	<b>B+</b>	Permitting and Development Approvals
<b>7</b>	7 set locations are monitored bi-monthly November-February to measure snowpack throughout the watershed	<b>B</b>	Policy Development Framework
<b>83</b>	Twitter: 83 more followers	<b>C+ to B-</b>	Public/Stakeholder Relations
<b>37,335</b>	Facebook: posts reached 37,335 people	<b>10</b>	10 Well Water Decommissioning Program projects
<b>3,568</b>	3,568 trees planted in a single session with the new WEARTH/The Carbon Farmer, Delta by Marriott partnership	<b>114%</b>	Corporate bookings increased by 114% this past year
		<b>379</b>	379 Hunting Permits issued





# 8 INITIATIVES

**At the #ILoveNPCA launch party, NPCA announced the biggest, most robust initiatives in its history.**

- » New Partnership & Dialogue with the People of the Watershed
- » 1 Million Trees & 3 Million Native Species Plants
- » 100-Year Water Quality Improvement Plan
- » 100-Year Land Plan
- » Lead Role in Climate Change Mitigation
- » Leading & Learning Organization
- » Innovative Technology & Data Integration
- » Establish Annual Watershed Champions Awards Program



# COMMUNITY

The NPCA planted a pollinator garden, as part of the Mickey DiFruscio and Family Legacy Pollinator Project, at Morgan's Point Conservation Area in partnership with the Niagara Restoration Council. Volunteers from NRC and NPCA assisted in planting and mulching the garden.

The 2017 Ball's Falls Thanksgiving Festival engaged a total of 125 volunteers who contributed a total of 1600 hours over the course of the weekend

WEARTH/The Carbon Farmer, Delta by Marriott, and staff volunteers from The Printing House Head Office planted over 3,568 trees (4.1 acres or 10 NHL hockey rinks) in two days at the NPCA's Smith Ness Forest Conservation Area.

## **We also engaged with:**

- » Conservation Ontario Biennial Tour
- » Ball's Falls Thanksgiving Festival
- » Site visit at St. Johns Conservation Area – Centennial Secondary School

- » Niagara Economic Summit-GNCC
- » Lt. Gov. Volunteer Recognition Event-Trans Canada Trail
- » Ceremonial Tree Planting at Niagara Region Headquarters for Canada 150th School board Project
- » Pen Centre
- » Morningstar Mill
- » Stratus Winery
- » School of Restoration Arts at Willowbank
- » Port Colborne Environmental Advisory Committee
- » School Tree Plantings (McKay and A.N. Myer)
- » Westmount Public School Presentation





# OUR WATERS

Staff have completed routine monitoring at all 80 water quality monitoring stations for 2017. This monitoring was performed monthly from March until November at all stations, and samples have been analyzed for general chemistry, nutrients, metals, and bacteria.

Staff undertook fall biological water quality monitoring at 25 water quality monitoring stations, which includes biological monitoring at the Hamilton International Airport as per our agreement with the City of Hamilton

Staff deployed loggers into several watercourses for the 2017-2018 winter to monitor road salt concentrations in these creeks and streams.

NPCA staff continue daily monitoring of water levels at our 15 stream gauge stations, climatic data at our 15 climate stations, and undertake routine maintenance, calibration, and inspections at all 30 installations, as part of the NPCA's routine Flood Forecasting and Warning duties.





# OUR LANDS

The **Living Landscape's** primary objective is to review and complete a fundamental rewrite of NPCA's primary development guidance document entitled 'Procedures and Guidelines for the Administration of Ontario Regulation 155/06 and Land Use Planning Policy Document'.

## **Ball's Falls Conservation Area**

Staff winterized the property, and have begun promoting March Break camps. There is a new Thanksgiving Festival website being built and new branding around wedding promotions, and event support materials.

## **Binbrook Conservation Area**

The 2018 Ice Fishing Derby was planned and promoted.

## **Chippawa Creek Conservation Area**

80 seasonal campers were confirmed for 2018 with a projection of 93 total

## **Long Beach Conservation Area**

91 seasonal campers were confirmed for 2018 with a projection of 115 total











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**Report To:** Board of Directors

**Subject:** Niagara Peninsula Conservation Authority (NPCA) Advisory Committee Appointments

**Report No:** 19-18

**Date:** February 21, 2018

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**RECOMMENDATION:**

1. That Report No. 19-18 respecting the NPCA Advisory Committee (NPCAAC) Appointments **BE RECEIVED**; and
2. That the individuals identified in Confidential Appendix 1 to Report 19-18 **BE APPOINTED** as the members representing the following sectors to the NPCA Advisory Committee:
  - Public-at-Large
  - User/volunteer
  - Urban/rural planning
  - Agriculture/value-added agriculture

**PURPOSE:**

The Public-at-Large, User/volunteer, Urban/rural planning and Agriculture/value-added agriculture positions on the NPCA Advisory Committee are currently vacant. The purpose of this report is to have the NPCA Board fill the vacancies on the NPCA Advisory Committee.

**BACKGROUND:**

The NPCA Advisory Committee was created based on recommendations of the NPCA's Strategic Plan 2014-2017. The purpose of the Advisory Committee is to provide collaborative local perspective, guidance and expert advice in the implementation of the NPCA policies, plans and/or other issues as the Board may request. Members serve in a non-governance capacity with a focus on providing advice and recommendations for consideration by the NPCA Board. The NPCA Advisory Committee is comprised of 10 members and the NPCA Board Chair. The members represent the public-at-large, Métis Niagara, property owners, Chamber of Commerce/Tourism, agriculture/value-added agriculture, development, conservation, urban/rural planning, and user/volunteers. Members are appointed by the NPCA Board of Directors and the NPCA Chair functions as Co-Chair of the NPCA Advisory Committee until the end of his/her term.



The vacancies in the Public-at-Large, User/volunteer, Agriculture/value-added agriculture, and urban/rural planning sectors were advertised starting in October 2017 until December 31<sup>st</sup>, 2017 on social media, the NPCA's website and through emails to our stakeholders and volunteer groups. Applicants were asked to fill out an on-line application form including the following information:

- Contact information
- Highest level of education and how it relates to the position
- Professional/Employment Background
- Professional Memberships
- Why they want to serve on the Advisory Committee?

A total of 35 applications were received for the vacancies. The applications were reviewed, as per the NPCAAC Terms of Reference (excerpt included below), by the NPCA Coordinator of Community Outreach and Volunteers, as well as the NPCA Advisory Committee Selection Sub-Committee; including, NPCA Board Chair Sandy Annunziata, and members Jonathan Whyte and Harry Korosis.

For Committee recruitments, the Advisory Committee will develop a Selection Sub-Committee comprised of the NPCA Board Chair, the member Co-Chair and one Advisory Committee member in good standing. In the absence of a Co-Chair in good standing, the NPCA Chair shall approve a 3<sup>rd</sup> member to sit on the sub-Committee from the members in good standing on the Advisory Committee.

Final recommendation of candidates will be presented to the NPCA Board for appointment.

Applications were evaluated based on the following criteria:

- Knowledge and experience related to the sector representation
- Knowledge of the Niagara Peninsula Conservation Authority
- Experience working on multi-sector committees

Considerations for diversity of gender, age, geography and ethnicity were also part of the evaluation process.

Through the evaluation process, the individuals identified in the Confidential Appendix 1 to Report 19-18 were acknowledged to be the preferred candidates for their respective sectors. The Selection Sub-Committee is confident that the individuals will serve to advance the mandate of the NPCA Advisory Committee and will work collaboratively with the other members of the group. As such, it is recommended that the NPCA Board confirm these nominations.

**RELATED REPORTS AND APPENDICES:**

Appendix 1 A Matter respecting Personal Matters about Identifiable Individuals

**Prepared by:**



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**Renee Bisson**  
**Community Engagement Manager**

**Submitted by:**



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**Mark Brickell**  
**CAO/Secretary-Treasurer**

*Prepared with input from Kerry Royer, Coordinator, Community Outreach and Volunteers*

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**Report To: Board of Directors**

**Subject: Greenbelt and Greater Golden Horseshoe Conservation Authorities Collaborative**

**Report No: 28-18**

**Date: February 28, 2018**

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**RECOMMENDATION:**

1. That Report No. 28-18 respecting the Greenbelt and Greater Golden Horseshoe Conservation Authorities Collaborative **BE RECEIVED**; and
2. That the Niagara Peninsula Conservation Authority (NPCA) Full Authority Board **APPROVE** the NPCA's participation in the Greenbelt Golden Horseshoe Conservation Authorities Collaborative and authorize the CAO to sign the attached Memorandum of Understanding.

**PURPOSE:**

To seek Board approval for NPCA's participation in the Greater Golden Horseshoe Conservation Authorities Collaborative.

**BACKGROUND:**

The province of Ontario enacted the **Conservation Authorities Act** in 1946 enabling municipalities to create watershed-based agencies called Conservation Authorities (CA). Today, 36 conservation authorities exist, predominantly in southern Ontario, which contains 90% of the province's population.

Although CAs are autonomous bodies focused on local watershed issues, over the years CAs have also grouped together to address broader environmental issues which transcend watershed boundaries. For example, in 2000, the nine CAs having the Oak Ridges Moraine (ORM) within their watersheds formed an alliance entitled the **Conservation Authorities Moraine Coalition (CAMC)** to develop a position on how the CA could assist with the Moraine's protection.

The CAMC formed a partnership with the Regions of York, Peel and Durham and the City of Toronto (YPDT) to advance the hydrogeological science of the Oak Ridges Moraine. The CAMC also worked with the Regions to advance recommendations for land securement, stewardship, monitoring and Natural Heritage Systems data management and protection, leading to provincial actions to enact ORM legislation and the ORM Conservation Plan.

Similarly, ten urban-based CAs have met for over a decade to address concerns and challenges specific to more populated watersheds. This assembly is entitled the **Greater Golden Horseshoe Chief Administrative Officers (GGH CAO)** Group.



## **Context**

At recent meetings of both the CAMC and the GGH CAO, discussions were held regarding amalgamating the two groups into one broader collaborative to address current resource management challenges within the GGH, such as climate change, flood remediation and the environmental impacts of growth. A collaborative of conservation authorities on the GGH scale would have as a primary objective to support our respective municipalities to be successful in creating sustainable communities. As examples, 13 GGH CAs have been working together over the past year to develop a Greenbelt Enhancement Action Plan. Similarly, three GGH CAs (Credit Valley, Lake Simcoe and TRCA) have been leaders for research and promotion of Low Impact Development (LID). Additionally, these two groups have maintained a leadership role in the 10-year review of the four geographically based provincial plans for the Greenbelt, the Niagara Escarpment (NE), the Oak Ridges Moraine (ORM) and the Greater Golden Horseshoe Growth Plan, by preparing report cards and collaborating in the consultation and commenting process.

## **Rationale**

There are many benefits to amalgamating the two groups, including the streamlining of efforts and reducing any duplication in work or overlap in attendance at meetings. This grouping of Greenbelt and Greater Golden Horseshoe CAs has many common interests that can be addressed most efficiently as a collaborative including:

- providing expertise for the consistent implementation of new policies in the four provincial land use plans, in order to manage the environmental impacts of future growth;
- conducting research on sustainable technologies to minimize urban impacts;
- enhancing and restoring the environmental quality of natural heritage and water resource systems;
- supporting sustainable agriculture and food security;
- growing the green economy; and
- advancing trail connections and recreational opportunities across the Greenbelt landscape.

It is the intent that the amalgamated collaborative will provide a platform for dialogue among the CAs whose watersheds are located in the geographic area of the Greenbelt, NE, ORM and GGH Growth Plan area. Further, it is intended that this new CA collaborative will provide key advice and support to municipalities that are addressing climate change response, Great Lakes water quality, healthy communities and other growth-related challenges. The vision, mission, goals and objectives for the GGH CA Collaborative are detailed in the Charter/Terms of Reference, included as Attachment 1. The mission of the GGH CAC is:

**“To advance the science, understanding, protection, restoration and public enjoyment of the Natural Heritage and Water Resource Systems of the Greenbelt and Greater Golden Horseshoe, in order to support municipal and provincial policies to provide a healthy, resilient and sustainable foundation for GGH communities.”**

### Membership in the New Collaborative

In addition to the CA currently involved with the CAMC, it is proposed to expand the collaborative to include the CA that have a large portion of their watersheds in the Greater Golden Horseshoe and Greenbelt areas (Appendix 1 in attached Charter/ToR). The new collaborative would include the CAOs from the following CAs:

Central Lake Ontario	Lake Simcoe Region
Conservation Halton	Lower Trent
Credit Valley	Niagara Peninsula
Ganaraska Region	Nottawasaga Valley
Grey Sauble	Otonabee Region
Kawartha Conservation	Toronto and Region

### Collaborative Logistics - Scope of Collaborative Work

The collaborative will engage with regional partnerships for sustainability initiatives and provincial/regional/GGH issues and initiatives that are not identified as a strategic priority for Conservation Ontario.

A Memorandum of Understanding (MOU) that identifies the general provisions for the operation of and participation in the collaborative is included as Attachment 2. The MOU contains the value proposition and statement of challenge and opportunity to guide the Collaborative in its work. It also contains details of the working relationships of the parties, as well as provisions for adding new members or terminating the partnership.

A listing of 2018 work plan priorities are included as Appendix 3.

### **FINANCIAL IMPLICATIONS:**

The nine CAs involved in the CAMC provide an annual (pro-rated) amount of \$40,000 to support a secretariat function, which is provided by the TRCA. NPCA's share would be approximately \$2,500 per year. New partners to the collaborative will contribute to the secretariat support on a similar pro-rated basis. This funding will be used to support secretariat staffing functions (administrative and coordination/policy support at 20% of one full time equivalent position), meeting costs and as seed funding for contributions to successful project grant/funding proposals. The budget to support the secretariat is included as Attachment 4, which will become effective for all members beginning in 2018, and will be updated and approved annually.

**RELATED REPORTS AND APPENDICES:**

- Appendix 1 Terms of Reference/Charter - Greenbelt Golden Horseshoe Conservation Authorities Collaborative (GGHCAC)
- Appendix 2 Greenbelt Golden Horseshoe Conservation Authority Collaborative Memorandum of Understanding (MOU)
- Appendix 3 GGHCAC 2018 Work Plan Priorities
- Appendix 4 GGHCAC 2018 Budget
- Appendix 5 Full Resolution

***Prepared and Submitted by:***



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**Mark Brickell**  
**CAO/Secretary-Treasurer**

## APPENDIX 5:

**WHEREAS** the Province has affirmed its commitment to strengthen the Greenbelt, and to advance place-based planning on a regional scale through the Growth Plan for the Greater Golden Horseshoe;

**WHEREAS** the Greater Golden Horseshoe is one of the fastest growing regions in North America, with a projected population of almost 12 million people by 2031;

**WHEREAS** the planning and environmental issues affecting the Greenbelt and the Greater Golden Horseshoe are increasing in number and complexity;

**WHEREAS** there is a need to be able to address not only the local challenges but those that are more pervasive and regional in scale including climate change, flood remediation and the environmental impacts of growth;

**WHEREAS** a collaborative, coordinated and cohesive response to the environmental challenges of growth are needed by building a constituency of interests for a healthy urban region;

**WHEREAS** the health of Greenbelt Golden Horseshoe residents depends on the health of the natural environment and the sustainability and resilience of our communities;

**WHEREAS** Conservation Authorities provide valuable and value-added services and benefits to our municipal partners who are addressing complex issues including climate change, Great Lakes water quality, public health and safety and sustainable city-building and transportation options;

**WHEREAS** the ten urban-based Conservation Authorities have met for over a decade as the Greater Golden Horseshoe Chief Administrative Officers (GGH CAO) group to address common concerns and to advance mutually beneficial solutions to the challenges facing the more populated watersheds;

**WHEREAS** there is an established history of place-based collaborative action among Conservation Authorities since 2000 - in the form of the Conservation Authorities Moraine Coalition (CAMC);

**WHEREAS** there is a need for and an opportunity to build expertise, understanding and capacity at a landscape scale;

**WHEREAS** there is an opportunity among Conservation Authorities to share knowledge, coordinate action and ensure consistency of practice to advance better planning, policy and program outcomes;

**WHEREAS** an understanding exists that climate change is a significant threat to development and the security of individuals, communities and regions and there is a need to act in order to preserve and enhance, for future generations, the economic, social and environmental conditions that we enjoy;

**WHEREAS** there is an opportunity for Conservation Authorities and partner agencies to utilize resources (fiscal and human) in a more efficient and effective manner and to consider economies of scale from a research, knowledge and planning perspective;

**THEREFORE, IT IS RECOMMENDED THAT** the Authority endorse NPCA's participation in the Greenbelt Golden Horseshoe Conservation Authorities Collaborative and authorize the CAO to sign the attached Memorandum of Understanding.

## Terms of Reference/Charter

### Greenbelt Golden Horseshoe Conservation Authorities Collaborative

#### **Background:**

The province of Ontario enacted the ***Conservation Authorities Act*** in 1946 enabling municipalities to create watershed-based agencies called Conservation Authorities (CA). Today, 36 conservation authorities exist, predominantly in southern Ontario, which contains 90% of the province's population.

Although CA are autonomous bodies focused on local watershed issues, over the years CA have also grouped together to address broader environmental issues which transcend watershed boundaries. For example, in 2000, at the request of Conservation Ontario (CO), the nine CA having the Oak Ridges Moraine within their watersheds formed an alliance entitled the ***Conservation Authorities Moraine Coalition (CAMC)*** to develop a position on how the CA could assist with the Moraine's protection.

The CAMC formed a partnership with the Regions of York, Peel and Durham and the City of Toronto (YPDT) to advance the hydrogeological science of the Oak Ridges Moraine. The CAMC also worked with the Regions to advance recommendations for land securement, stewardship, monitoring and Natural Heritage Systems data management and protection, leading to provincial actions to enact ORM legislation and the ORM Conservation Plan.

Similarly, ten urban-based CA have met for over a decade to address concerns and challenges specific to more populated watersheds. This assembly is entitled the ***Greater Golden Horseshoe Chief Administrative Officers (GGH CAO)*** Group.

#### **Context**

At recent meetings of both the CAMC and the GGH CAO, discussions were held regarding amalgamating the two groups into a broader collaborative to address current resource management challenges within the GGH, such as climate change, flood remediation and the environmental impacts of growth. A collaborative of conservation authorities on the GGH scale would have as a primary objective to support our respective municipalities to be successful in creating sustainable and resilient communities. As examples, 13 GGH CA have been working together over the past year to develop a Greenbelt Enhancement Action Plan, and three GGH CA (CVC, LSRCA, and TRCA) have been identified as leaders, on behalf of CO, for Low Impact Development (LID). As well, these two groups have maintained a leadership role in the 10-year review of the four geographically based provincial plans for the Greenbelt, the Niagara Escarpment (NE), the Oak Ridges Moraine (ORM) and the Greater Golden Horseshoe Growth Plan, in collaboration with Conservation Ontario.

## Rationale

There are many benefits to amalgamating the two groups, including the streamlining of efforts and reducing any duplication in work or overlap in attendance at meetings. Additionally, this group of CA has many common interests that can be addressed most efficiently as a collaborative, including: implementing the four provincial land use plans to manage the environmental impacts of anticipated growth; supporting sustainable agriculture and food security; growing the green economy; and advancing trail connections and recreational opportunities across the full Greenbelt landscape. It is the intent of this Terms of Reference (TOR) that the amalgamated/combined collaborative will provide a platform for dialogue among the CA who are involved in the geographic area focused on the Greenbelt, NE, ORM and GGH Growth Plan area. Further, it is intended that this TOR will offer a foundation for this new CA collaborative to provide key advice and support to municipalities that are addressing climate change response, Great Lakes water quality, healthy communities and growth related challenges.

## Membership in the New Collaborative

In addition to the CA currently involved with the CAMC (ORM/Greenbelt), who support a secretariat through an annual budget, the new combined collaborative will include willing CA from the Greater Golden Horseshoe Growth Plan area (except those CA that have only a minor portion of their geography in the GGH Growth Plan area) and NE/Greenbelt area (Appendix 1). The new combined Collaborative includes the following CA:

<b>Conservation Authority</b>	<b>CAMC</b>	<b>GGH CAO</b>	<b>New Combined GGH CAC</b>
Central Lake Ontario	X	X	X
Conservation Halton		X	X
Credit Valley	X	X	X
Ganaraska Region	X		X
Grand River		X	
Grey Sauble			X
Hamilton Region		X	
Kawartha Conservation	X	X	X
Lake Simcoe Region	X	X	X
Lower Trent	X		X
Niagara Peninsula		X	X
Nottawasaga Valley	X	X	X
Otonabee Region	X		X
Toronto & Region	X	X	X

Conservation Ontario will be invited to attend all meetings and be included in the circulation of agendas and minutes. To further work plan priorities, the Collaborative will seek to engage with potential key partners such as the Regional Planning and Works Commissioners, the Friends of the Greenbelt Foundation, provincial ministries (on a project-specific basis), Toronto Global (former GTA Marketing Alliance) and others.

### Relationship to Conservation Ontario and Individual CA

The relationship between the Collaborative, the individual CA and Conservation Ontario is based on four themes:

1. The Collaborative will function as a value-added organization. It will not reinvent the wheel and will not duplicate services provided by others, such as Conservation Ontario.
2. The Collaborative, comprised of twelve Greenbelt Golden Horseshoe Conservation Authorities, and working with stakeholder organizations, will facilitate and promote consistent and effective conservation, sustainable technologies research and environmental planning across these watersheds and the Western Lake Ontario basin.
3. The Collaborative will assist staff in advancing innovation and best practices in water and natural heritage systems management using green technologies and green infrastructure in Greenbelt and Greater Golden Horseshoe watersheds, with implementation done by the individual CA.
4. The Collaborative will share lessons learned and key messages for Conservation Ontario's use in collective positioning, advocacy and strategic partnerships.

Strategic priorities for the Conservation Ontario network will be coordinated through Conservation Ontario. Individual CA of the GGH Collaborative will still be circulated by CO to make submissions through that commenting process, to ensure submission deadlines can be met. Through this process, the GGH Collaborative may determine that, in addition, a more detailed, technical submission is warranted from the GGH Collaborative.

### **Vision and Mission for the GGH CA Collaborative**

The vision for the new Collaborative is three-fold:

1. To work collaboratively to ensure a healthy natural environment continues to be enhanced and protected in perpetuity for the benefit of all GGH residents while providing a significant contribution to the region's resilience and our ability to adapt to a changing climate.
2. To become the CA leadership voice on regional GGH-wide environmental issues and initiatives by reinforcing Conservation Ontario branding as the 'partners of choice' for all levels of government, by coordinating among the CA to share



knowledge and ensure consistent practice for better outcomes in urbanization and environmental protection across the GGH.

3. To be a trusted source in the Greenbelt and Greater Golden Horseshoe for science-based natural resource and hazard management, identification of challenges and barriers, facilitating implementation of best practices, and reporting on actions and progress.

## **Mission**

This mission is founded on our collective and applied understanding that effective natural systems management is still best accomplished through comprehensive planning on a watershed basis. The GGH CAC will be a vehicle to share information on natural systems and sustainability planning between the organizations. Sharing, promotion and application of the knowledge gained on individual CA and collaborative projects is a key means to conserve, enhance and protect a landscape-level natural system that provides protection from natural hazards and is a resilient foundation for sustainable growth planning in southern Ontario. Accordingly, the mission of the GGH CAC is:

**To advance the science, understanding, protection, restoration and public enjoyment of the Natural Heritage and Water Resource Systems of the Greenbelt and Greater Golden Horseshoe, in order to support municipal and provincial policies to provide a healthy, resilient and sustainable foundation for GGH communities.**

## **PRINCIPLES**

The Collaborative will operate on the principles of:

- Timeliness
- Credibility
- Relevancy
- Innovation
- Science and evidence-based
- Consistency, and
- Sustainability.

## **Goals & Objectives for the GGH CA Collaborative**

### **Goal 1:**

**To foster partnerships to protect and restore an integrated natural heritage, land form and water resource system throughout the Greenbelt and Golden Horseshoe.**

1. Work collaboratively to develop standards and ecologically based targets for terrestrial natural cover and wildlife habitat suitable for the varied landscapes of the GGH.
2. Drive innovation in managing water systems in urban and urbanizing areas by sharing knowledge and research that will facilitate the uptake of green technologies and green infrastructure.
3. Share policies and best practices that have proven effective in managing the challenges of urbanization and the integration of the rural land base and agricultural network with natural systems protection.

### **Goal 2:**

**Strengthen the collaborative capacity of Conservation Authorities to further establish science-based research, monitoring and modelling through the development of environmental centres of excellence.**

1. Collaborate with partners to ensure a long term monitoring and data collection program is in place for a variety of parameters in order to periodically report on GGH-wide health and sustainability trends over time, on a comparative watershed basis.
2. Become a GGH center of excellence for environmental modeling in areas such as groundwater, surface water hydrology, near-shore Lake Ontario and Green Infrastructure/Green Technologies and encourage, support and integrate the application of this knowledge into sustainable community planning, servicing and development.

### **Goal 3:**

**To promote healthy communities and provide opportunities for public use, enjoyment and outdoor recreation by contributing to an accessible, linked public green space and trail system across the Greenbelt–Golden Horseshoe.**

1. Promote the use of public green space and trail systems across the GGH for their contribution to broader social goals and values such as ecological goods and services, public health, food security and social equity.
2. Work with trail and other organizations to identify a regional network of off-road trail routes featuring a diversity of habitats, views and vistas to maximize educational and interpretive opportunities.

3. Utilize public lands to demonstrate the value and significance of the Greenbelt and connected natural systems, and promote their use for public enjoyment, recreation, local foods and health.

#### **Goal 4:**

**To advocate for ongoing and consistent funding for programs to protect and restore natural systems through stewardship, land securement and education.**

1. Facilitate partners and stakeholders to advocate for the protection and enhancement of natural systems, features and functions, through the development of common messaging about the importance of natural systems.
2. Empower a team of partners to seek funding support and investment in stewardship activities on both public and private lands, as well as for the management of secured lands.
3. Collaborate with municipal and other partners to ensure adequate funding to maintain a coordinated network of educational programs and related facilities at conservation lands to provide family and youth oriented environment-based experiential learning and recreational opportunities.

#### **Goal 5:**

**To provide expert advice on environmental planning and policy matters to support a robust and resilient natural environment as the foundation for sustainable community planning across the Greenbelt – Golden Horseshoe.**

1. Develop strategic partnerships to establish roles, responsibilities and funding mechanisms to support effective implementation of planning and policy matters for sustainable communities and new policy directions resulting from the 10-year review of Provincial Plans for the Oak Ridges Moraine, Greenbelt, Niagara Escarpment and Growth Plan.
2. Establish a team of planning and policy experts to research, develop and promote consistent and effective policy tools and mechanisms to support sustainable GGH environment/community needs.
3. Develop a strategy to enhance communications with key stakeholders, critical to effective planning and policy implementation.

## **Collaborative Logistics**

### **Financial Support**

The nine CA involved in the CAMC provide an annual (pro-rated) amount of \$40,000 to support a secretariat function, which is provided by the TRCA. New partners to the Collaborative are requested to contribute to the secretariat support on a similar pro-rated basis. This funding will be used to support the secretariat staffing functions (administrative, coordination and policy support), meeting costs and as seed funding for contributions to successful project grant/funding proposals. A proposed budget to support the secretariat, once approved by the Collaborative, will become effective for all members beginning in 2018. The budget will be updated and approved annually, with any required adjustments made in accordance with the Memorandum of Understanding (MOU).

### **Meeting Schedule and Location**

The CAMC meets mostly at the CLOCA office and the GGH CAOs meet at the CVC office. It is envisioned that the CAO's within the amalgamated Collaborative will meet quarterly, with rotational chairs at meeting locations to be jointly determined.

### **Scope of Collaborative Work**

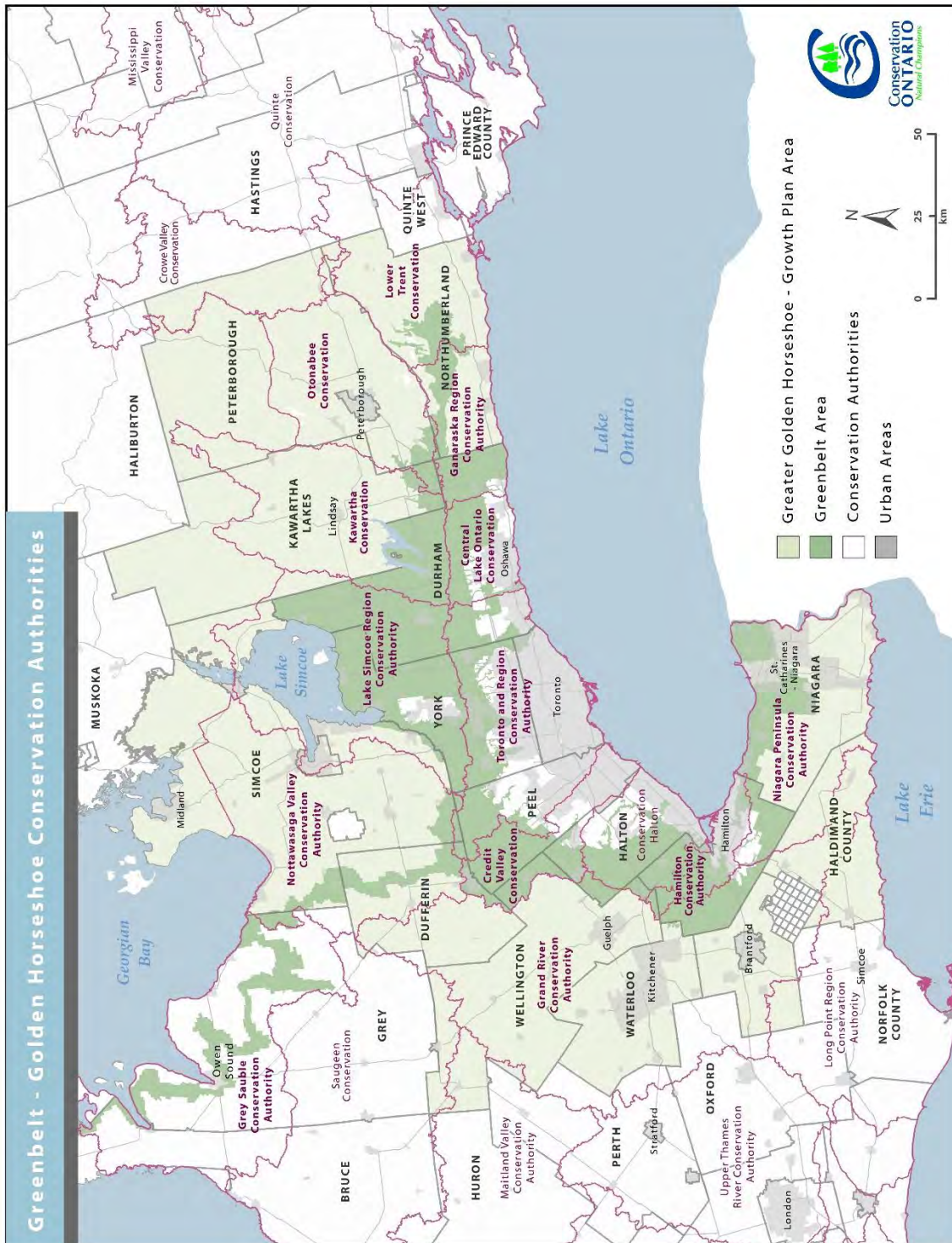
The Collaborative, through its own secretariat, will engage with regional partnerships for sustainability initiatives and provincial/regional/GGH/Greenbelt issues and initiatives that are not identified as a strategic priority for Conservation Ontario.

A list of proposed work plan priorities will be updated and approved annually. Work plan priority projects may be delegated to specific staff leads and participants from individual CA in accordance with the MOU, and may be established as issue-specific project or technical sub-committees as necessary. The GGH CAC will serve as an oversight committee to which the chairs/project managers of those technical/project sub-committees can report, provide recommendations and seek support.

## **Attachments**

Appendix 1 Greenbelt Golden Horseshoe Conservation Authorities Map

## Appendix 1 - Greenbelt Golden Horseshoe Conservation Authorities



GREENBELT GOLDEN HORSESHOE CONSERVATION  
AUTHORITY COLLABORATIVE

*MOU*

2017



## **PREFACE:**

The Greater Golden Horseshoe is one of the most rapidly growing, dynamic, economically and ecologically significant regions in North America. More than 25% of Canada's Gross Domestic Product is created here. At the same time, it is hydrologically and ecologically significant and has some of Canada's most productive farmland and important water resources. The Province has recently updated the Provincial Growth Plan for the Greater Golden Horseshoe and, at the same time, confirmed its commitment to the Greenbelt, including such natural features as the Oak Ridges Moraine and the Niagara Escarpment. Protecting and enhancing these areas in perpetuity will require the involvement and commitment of many. Conservation Authorities (CA) with watersheds in these planning areas have a key role to play in promoting a culture of conservation, ensuring that the environmental health of our communities is sustained, and that our quality of life continues to be unparalleled.

Like the geography that unites us, CA share many of the same challenges but also many of the same aspirations. Working closely with our member municipalities and other partners, we recognize that escalating growth pressures will continue to impact our green spaces and water resources. Over time, the issues we face, particularly across our most populated watersheds, will only increase in number and complexity. Climate change, healthy and resilient communities, natural heritage systems protection, water quality in the rivers, creeks, ground water and Great Lakes are issues that transcend jurisdictions. They are critical issues that require collaborative action and innovative solutions.

CA within the Greenbelt and Greater Golden Horseshoe have historically established ad-hoc collaborative alliances on an as-needed basis in response to topical issues of common interest. The approach to date has been operational and tactical in nature. The time for more formalized strategic action is now. The Province has committed to strengthening the Greenbelt and upholding its provincial interests at a landscape level across the Greater Golden Horseshoe and beyond. Conservation Authorities must be driven to provide coordinated and value-added products and services to municipal partners as this is essential, not only to ensuring that our municipal partners are equipped with the right information, but that our relevance as watershed management agencies and resource management partners of choice, is affirmed.

Stronger partnerships, better information, more informed decisions and a commitment to work together is no longer a "nice to do" - it is a "must do". Creating a formal Greenbelt Golden Horseshoe Conservation Authority Collaborative (GGH CAC) is a necessary first step to ensuring that the issues facing the Greenbelt and Greater Golden Horseshoe are identified and addressed and that opportunities to achieve a sustained high quality of life are pursued. Through the combined efforts of the Collaborative, the environmental quality of Ontario's Greenbelt and Greater Golden Horseshoe Growth Plan lands can be positively influenced. Thinking strategically about these lands and establishing a collaborative partnership among CA will allow better information sharing, more efficient and effective alignment of resources, and ultimately, for better decisions and better ecological outcomes to emerge. The time is ripe to seize the opportunities before us and demonstrate the value of collaborative actions by Conservation Authorities.



## **GGH CA Collaborative Collective Purpose (Value Proposition)**

The Greenbelt Golden Horseshoe CA Collaborative has a three-fold collective purpose, as follows:

1. To improve our ability to provide coordinated and beneficial products and services to our municipal partners and stakeholders that will continue to build CA relevance.
2. To provide the critical mass of expertise and legitimacy to tackle landscape-scale issues and secure larger project grants for application at the local level.
3. To coordinate among our CA to share knowledge and ensure consistent practice for better outcomes in urbanization and environmental protection.

## **CHALLENGE & OPPORTUNITY STATEMENT**

**WHY THIS IS SO  
IMPORTANT...**

The Greater Golden Horseshoe is one of the fastest growing regions in North America.

The issues facing this geography are complex, urgent and all too often, compelling and pervasive.

The Greenbelt and Greater Golden Horseshoe Growth Plan lands are facing many challenges, not the least of which are time and a growing population. New stories, new approaches and new collaborations are needed.

The environment of the Greenbelt and Greater Golden Horseshoe is connected; it needs to be viewed as part of the same integrated thought process.

The Conservation Authorities of the Greenbelt and Greater Golden Horseshoe are perfectly positioned to advance a more thoughtful, cohesive and collaborative approach to addressing environmental protection needs and impacts of growth on a landscape level.

A formal Greenbelt Golden Horseshoe Conservation Authority Collaborative is needed.

**THE SIGNATORIES TO THIS MEMORANDUM OF UNDERSTANDING AGREE** to collaborate on actions to build a stronger CA place-based partnership across the Greenbelt and Greater Golden Horseshoe to protect natural systems, improve understanding of the environmental impacts of growth and to make Greenbelt and Greater Golden Horseshoe communities safer, healthier, and more sustainable by:

1. Undertaking science-based research and monitoring and regularly reporting on the state of the environment across the Greenbelt and Greater Golden Horseshoe.
2. Creating and sharing value-added knowledge and information with municipal partners and stakeholders about environmental challenges and issues to support decision making for more sustainable and resilient growth planning outcomes.
3. Providing opportunities on appropriate public lands for outdoor environmental education, recreation and community-based urban agriculture to support healthy and engaged citizens.
4. Providing environmental planning and policy advice and expertise to build ecological resilience and support sustainable community planning across the Greenbelt and Greater Golden Horseshoe.

## **MOU SUPPORT**

Signatories to the MOU will support the work of the collaborative by:

- Committing the CAO/GM or senior staff alternate to attend quarterly meetings of the Collaborative;
- Identifying issues of concern that impact member municipalities as well as areas of opportunity for the GGH CA Collaborative;
- Working with other members of the Collaborative to develop an Annual Work Plan that will identify projects and initiatives of mutual benefit and support to the Collaborative, its partners and member municipalities;
- Contributing modest financial support, by April of the year to which it is applicable, based on the CA ability to pay, in keeping with an annual proposed budget. Financial support will be used to support the Collaborative and will offset meeting costs and secretariat support including the administration of funds secured through the Collaborative, and provide seed funding to approved projects and associated grants;
- Contributing to the preparation of joint grant applications for project specific initiatives that are of interest and benefit;

- Providing in-kind staff support on specific projects, in keeping with the capacity of an individual CA and relevance to its watershed issues;
- Sharing watershed-based plans, information, tools and data to enable landscape scale report carding that in turn will support CA-specific research, policy and planning.

## **IMPLEMENTATION**

The signatories to this MOU charge their Board of Directors with ensuring the effective implementation of this Memorandum of Understanding.

The signatories establish a Greenbelt Golden Horseshoe CA Collaborative specifically focused on the vision, mission, principles, goals and objectives as stated in the Terms of Reference/Charter, and on the annually reviewed and updated work plan.

The GGH CA Collaborative will facilitate the implementation of the provisions of this MOU. Working Groups may be established to guide specific tasks, as identified by the Collaborative. A work plan will be established for this purpose.

## **GENERAL PROVISIONS**

This MOU does not create legally binding obligations on the signatories.

The signatories confirm their intention to preserve the confidentiality of commercially sensitive business information of third parties, and not to disclose such information other than as required or permitted by law.

Nothing in this Memorandum of Understanding derogates from the powers, rights or privileges entrusted to the parties to this MOU, nor can it affect the interpretation of legislation or any regulation, by-law or order made under an Act.

The signatories may amend this Memorandum of Understanding by a written document signed by each signatory, including the addition of new members.

Any party may terminate their participation in this Memorandum of Understanding by providing sixty (60) days written notice to the other signatories.

This Memorandum of Understanding is produced in twelve (12) copies, one for each of the signatories.

Signatories to the GGH CA Collaborative

Dated at \_\_\_\_\_, on the \_\_\_\_\_ day of \_\_\_\_\_, 2018.

For Central Lake Ontario Conservation Authority,

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For Conservation Halton,

---

For Credit Valley Conservation,

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For Ganaraska Region Conservation Authority,

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For Grey Sauble Conservation Authority,

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For Kawartha Conservation,

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For Lake Simcoe Region Conservation Authority,

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For Lower Trent Region Conservation Authority,

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For Niagara Peninsula Conservation Authority,

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For Nottawasaga Valley Conservation Authority,

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For Otonabee Region Conservation Authority,

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For Toronto and Region Conservation Authority

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## Attachment 3

**GGH CAC 2018 Work Plan Priorities**

- 1) Greenbelt Enhancement Action Plan: work with the Friends of the Greenbelt Foundation to complete an implementation strategy for the existing project.
  - a. Finalize the top priority projects
  - b. Develop a communications and launch strategy
  - c. Secure funding and implementation partners
  - d. Execute plans and strategies (by individual Authorities).
- 2) Western Lake Ontario Basin-Lake Initiative
  - a. Provide leadership and direction for coordinating actions to link land and lake-related actions in the Western Lake Ontario basin to restore, preserve and protect Lake Ontario.
  - b. Hold workshops to confirm partners and identify projects for inclusion.
- 3) GGH Coordinated Land Use Plans and Initiatives: review and understand the implications of amendments to the four GGH Provincial Plans and other related GGH initiatives, and direct any needed changes to CA implementation roles.
  - a. Collaboratively with Conservation Ontario, participate in the review of work done by provincial technical teams in creating the Agricultural System, the Natural Heritage System, implementation guidelines for watershed plans, green infrastructure, performance measures, etc.
  - b. Knowledge transfer to front line staff in permitting and planning functions.
  - c. Sharing of technical comments on relevant GGH issues and initiatives.
  - d. Prepare monitoring and reporting strategy to inform the next 10-year review of the 4 Plans and/or other GGH report cards.
- 4) Green Technologies (GT), Green Infrastructure (GI) and Environmental Modeling
  - a. Work with partners to establish Centre of Excellence hubs to test and promote GT and GI innovations and offer technical transfer opportunities to the broader Conservation Ontario network.
  - b. Develop strategies to mainstream the use of Green technologies and infrastructure in climate change mitigation and recommend to CO.
  - c. Formalize a regional Center of Excellence for the modeling of groundwater, surface water hydrology, source water protection and the western basin of Lake Ontario.
  - d. Establish a STEP (Sustainable Technologies Evaluation Program) Water collaborative to bring all knowledge, tools and training resources under one brand to support the delivery of LID across the GGH and Ontario.
- 5) Development of strategic partnerships with organizations such as:
  - a. Friends of the Greenbelt Foundation
  - b. Regional Planning Commissioners of Ontario (RPCO) and Regional Engineers
  - c. Greater Golden Horseshoe Food and Farming Alliance
  - d. Toronto Global (GTA marketing alliance)
  - e. Ontario Environment Industries Association (ONIEA)
  - f. Green Infrastructure Ontario (GIO) (\*collaboratively with CO)
  - g. Others such as Civic Action, Neptis, Academia.
- 6) Receive presentations by CA technical project groups to provide advice and direction at their key project milestones.
- 7) Begin to establish Technical Teams as necessary for identified work plan priorities.



## Attachment 4

## GGH CAC 2018 Budget

15-Nov-17

	<b>CAMC Estimated 2017 Year End \$</b>	<b>2018 Approved GGH CAC \$</b>
<b>REVENUE</b>		
GGH CAC Partners		
Central Lake Ontario	5,000	5,000
Credit Valley	5,000	5,000
Ganaraska Region	5,000	5,000
Kawartha Conservation	2,500	2,500
Lake Simcoe Region	5,000	5,000
Lower Trent Region	2,500	2,500
Nottawasaga Valley	2,500	2,500
Otonabee Region	2,500	2,500
Toronto and Region	10,000	10,000
Conservation Halton	n/a	5,000
Niagara Peninsula	n/a	5,000
Grey Sauble	n/a	2,500
Prior Period Revenue (carry forward)	\$21,060	\$42,125
Other Revenue (GBF Action Plan - final payment)	6,815	0
<b>TOTAL REVENUE</b>	<b>\$67,875</b>	<b>\$94,625</b>
<b>EXPENDITURES</b>		
Salary	17500	25,000
Benefits	4200	5,000
Supplies	0	100
Meetings & Functions	500	1,200
Travel Expenses	100	500
Staff Development, Prof. Membership	700	750
Conference Expenses	0	0
Courier, Postage, Telephone	0	500
Promotional Material & Expenses	0	5,000
Printing Expenses	0	2,000
GIS/mapping support	200	1,000
Communications Support - Facilitation	2550	2,000
Grant-matching Project "Seed" Funds	0	51,575
<b>TOTAL EXPENDITURES</b>	<b>\$25,750</b>	<b>\$94,625</b>
Excess of Revenue Over Expenditures (Expenditures Over Revenue)	\$42,125	\$0

**Report To:** Board of Directors

**Subject:** Meeting and Agenda Management Solution

**Report No:** 23-18

**Date:** February 28, 2018

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**RECOMMENDATION:**

1. That Report No. 23-18 respecting the Meeting and Agenda Management Solution **BE RECEIVED**;
2. That eSCRIBE software solution Option 2, highlighted in Appendix 1 to Report No. 23-18, **BE APPROVED** as the NPCA Meeting and Agenda management solution; and
3. That the following costs associated with Option 2, highlighted in Appendix 1 to Report No. 23-18, **BE FUNDED** from the General Capital Reserve:

eSCRIBE Accessibility Bundle with YouTube Integration

Annual Software and Support Fees	\$18,500
Implementation and Training Fees	\$5,250
<b>Total Year 1 Fees</b>	<b>\$23,750</b>

**PURPOSE:**

The purpose of this report is to present the Board with a meeting and agenda management software solution that affords NPCA Authority Board and Committee meetings the opportunity to inform, engage, and meet the increasing transparency and accessibility mandates by automating the legislative process.

High level benefits of the meeting and agenda management software solution:

- Improved accountability;
- Reduced impact on the environment by choosing to decrease, not eliminate, the need to print lengthy agendas and reports;
- Increased efficiency; established workflows that structure the review and approval processes to assist with version control issues;
- Predefined comprehensive meeting templates, attendee groups and schedules to ensure consistency between Board and Standing Committee processes;
- An engaged Public: increased ease of access to agenda packages, reports and video recordings.

## **BACKGROUND:**

Currently NPCA staff develop reports for board and committee meetings; however, in the absence of an information system to manage the workflow, the current process is onerous, inefficient and fraught with administrative struggles related to version control, adherence to deadlines, last minute additions and the manual collation of agenda packages that include, in some cases, upwards of 20 reports (open and closed session) as well as numerous appendices.

Several municipal partners and more predominantly, the Region of Niagara, currently use eSCRIBE as their meeting and agenda management solution; therefore, most Board Members would be familiar with the software and process involved. The system handles each step of the meeting lifecycle for staff, meeting participants and the public with the aim to improve transparency and reduce the resources required to support meetings. eSCRIBE is a cloud-based solution built around centralized meeting portals where defined comprehensive meeting templates, attendee groups, schedules streamline the preparation and publishing of agendas and conduct and record the results of motions and their votes for ease of formulating minutes.

Implementing eSCRIBE to introduce efficiencies to the Authority's agenda preparation process would also add value by limiting paper usage for agenda distribution, improve meeting document management internally and externally, and potentially integrate with Authority live stream recordings. The public can easily search through historical and upcoming meeting materials, access agenda details, open and download attachments.

Further, consideration of this software solution is timely and aligns well with the current website redesign, and the Niagara Peninsula Conservation Authority's 'Innovative Technology and Data Integration' broader initiative.

## **FINANCIAL IMPLICATIONS:**

Operational or Capital budget dollars have not been allocated for this need in 2018. Drawing from the current general reserves identified in the capital budget would be required for the year one (1) fees should the board support the implementation of such a system. The current General Capital reserve balance is \$620,982.

Annual software fees for years two (2) and three (3) would be included in subsequent operational budgets.

### **Option 1: eSCRIBE Accessibility Bundle**

Annual Software and Support Fees	\$15,000
Implementation and Training Fees	\$4,750
<b>Total Year 1 Fees</b>	<b>\$19,750</b>
Year 2, 3 Annual Fees	\$15,000

### **Option 2: eSCRIBE Accessibility Bundle with YouTube Integration**

Annual Software and Support Fees	\$18,500
Implementation and Training Fees	\$5,250
<b>Total Year 1 Fees</b>	<b>\$23,750</b>
Year 2, 3 Annual Fees	\$18,500

**Option 3:** eSCRIBE Transparency Bundle (Includes Video)

Annual Software and Support Fees	\$25,000
Implementation and Training Fees	\$6,250
<b>Total Year 1 Fees</b>	<b>\$31,250</b>
Year 2, 3 Annual Fees	\$25,000

**Option 4:** Status Quo

Staff carry on with the current practices for agenda preparation and meeting management.

**Option 5:** Procure Alternatives

The board direct staff to procure an Agenda Management Solution that evaluates both eSCRIBE and alternatives.

Due to the reasons noted above and full details identified in Appendix 1 respecting the eSCRIBE: Paperless Meeting and Agenda Management Solution for Board and Committee Meetings Proposal, staff are recommending Option 2. This is the base package but includes the ability to integrate our current live stream solution into the online presentation and distribution of meeting minutes by integrating agenda items and associated discussion to timestamps in the recordings.

**RELATED REPORTS AND APPENDICES:**

**Appendix 1** eSCRIBE Proposal, updated Feb 12, 2018.

**Prepared by:**



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**Geoff Verhade**  
Manager, Information Management

**Reviewed by:**



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**David Barrick**  
Senior Director, Corporate Resources

**Submitted by:**



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**Mark Brickell**  
CAO/Secretary-Treasurer

*This report was prepared in consultation Lisa McManus, Clerk and John Wallace, Manager of Finance.*



## *Paperless Meeting and Agenda Management Solution for Council and Committee Meetings*

### **Proposal**



**NIAGARA PENINSULA**  
**CONSERVATION**  
AUTHORITY

**Author:**  
James Coulen

**Client:**  
Niagara Peninsula  
Conservation Authority

**Date:**  
February 12, 2018



## eSCRIBE Software Summary

eSCRIBE is a leading provider of cloud-based meeting management solutions, and the go-to-choice for public sector boards, committees and councils.

More than simple agendas and minutes; eSCRIBE supports each step of the meeting lifecycle with comprehensive tools and workflow for staff, meeting participants and the public. Compliant with accessibility requirements, such as AODA, WCAG2, eSCRIBE aims to improve transparency and reduce the resources required to support meetings, so staff can focus on higher-value tasks and projects to better serve their stakeholders.

A comprehensive, paperless solution, eSCRIBE also seamlessly integrates with Office365 – it's Meetings, Evolved.

Should you have any specific questions about this document please feel free to contact eSCRIBE at: [jcoulén@escribemeetings.com](mailto:jcoulen@escribemeetings.com) or 1-905-305-3426.

## Overview

Available on the cloud, eSCRIBE's robust 100% user configurable meeting management engine becoming the go-to choice of public boards, committees and councils looking to improve efficiency, transparency and accessibility while at the same time reducing costs and impact on the environment

### Product Highlights

- ✓ Robust end to end meeting and legislative management
- ✓ Create and manage unlimited meeting templates and users
- ✓ Manage end to end legislative process on items (approval stages, readings, etc.)
- ✓ Full legislative meeting support (Roll call, voting, quorum management, resolutions, pecuniary interest, additions/deletions, etc.)
- ✓ Flexible video streaming and archival options
- ✓ Seamless and accessible publishing of meetings documents
- ✓ Tracking and reporting of post meeting actions
- ✓ Reporting of statistics & past meeting information

eSCRIBE has been designed to be integrated seamlessly into your organization's overall document management environment and is built around centralized meeting portals where administrators can predefine comprehensive meeting templates and attendee groups, schedule, prepare and publish agendas, and conduct and record the results of their own eSCRIBE meetings.



## eSCRIBE Meeting Bundles


MODULES   BUNDLES	Accessibility	Transparency	Board Efficiency
<b>Meeting Manager</b> Agendas, minutes, and more	✓	✓	✓
<b>Report Manager</b> Manage templates, automated approvals and submission of reports and legislative items	✓	✓	—
<b>Participant Portal</b> Secure access for board and elected officials	✓	✓	✓
<b>Video Manager</b> Automatically index video or audio with agenda and minutes	—	✓	—
<b>Video Storage and Streaming Service</b> Unlimited live and archival web streaming and content distribution	—	✓	—
<b>Internet Publishing+</b> Engage with your stakeholders and drive greater transparency	✓	✓	—
<b>Vote Manager</b> Voting in real-time electronically	—	—	—
<b>YouTube Video Integration</b> Tagged video services with minimal configuration	—	—	—
<b>Outlook (Add-in)</b> Schedule eSCRIBE meetings directly from your Outlook calendar	—	—	—





## Proposed Solution – Accessibility Bundle

eSCRIBE is modular software available both as Cloud Based solution. Given the functionality detailed in the requirements matrix above, eSCRIBE offers the following recommended configuration for this solution.

	Module Description	Required
	<p><b>Meeting Manager</b> facilitates the building of agendas, minutes, action lists, and provides a platform for adding additional eSCRIBE functionality.</p> <p>Streamline and automate meeting preparation and post meeting activities. Conduct meetings; take roll-call and manage member conflicts, record motions and actions. And with the addition of eSCRIBE Meetings for the iPad or Windows 10 , your board can go totally paperless.</p> <p><b>Key Features</b></p> <ul style="list-style-type: none"> <li>• Create and manage unlimited meeting templates and user groups</li> <li>• Robust end-to-end pre- and post-meeting management, and user-configurable workflow support</li> <li>• Live meeting support, including roll call, quorum and conflict management, electronic voting and request-to-speak, and minute capture <ul style="list-style-type: none"> <li>Integrated Action Log for post-meeting follow-up and staff direction</li> <li>Comprehensive Report Center for meeting and attendee statistics</li> </ul> </li> </ul>	Y



**Report Manager** provides administrators and staff comprehensive management of all pre-meeting and post-meeting workflow activities, Report Manager revolves around the preparation and approval of reports and legislative items for submission to meetings. Easily manage submission deadlines and notifications to staff, reducing last minute changes to the agenda.

Y

Leveraging the power of Microsoft Word, administrators can easily standardize and maintain unlimited templates for bills, resolutions, and reports, ensuring compliance across the organization.

### Key Features

- Collaboration support, including version control, check in/out, simultaneous multi-user document editing
- Managed user permissions for both public and private/in-camera items
- Flexible, user-configurable approval workflows, such as late item and exception management, ad-hoc and delegate approvers
- Automatic extraction of content to populate agenda items details, motions, minutes and custom fields
- Comprehensive audit reports and workflow approval histories, including electronic signature options



**Internet Publishing+** has a fully-responsive WCAG2 design that allows organizations to easily engage stakeholders through their existing website, without programming and fully supports evolving accessibility requirements.

Y

Easily search through historical and upcoming meetings, access agenda details, open and download attachments with a single click.

#### Key Features

- Supports HTML and/or PDF publishing to website with links to individual supporting attachments
- Supports one-click publishing of meeting agendas and minute packages
- Flexible layout options including list and calendar views
- Supports automated delegation request and approval
- Can be integrated with Video Manager for automatic indexing and publishing of video/audio linked files for increased transparency

## OPTIONAL



**Video Storage and Streaming Service** offers a fully-managed, end-to-end unlimited storage and streaming solution and integrated encoder, provides everything you need to capture video from cameras located onsite in your council or boardrooms. This service provides automatic indexing of audio and video content with the meeting's agenda and minutes for publishing to the web, for both live and archived viewing by stakeholders

Bridge the gap between elected officials and stakeholders with live and archived video streaming of meetings through your existing website with the addition of Internet Publishing+ and Video Manager.

#### Key Features

- Unlimited storage and streaming of audio or video content from meetings
- Automatically detects device used to view the video stream, and loads a suitable video player



- 
- Supports unlimited viewers for both live stream and archival access, which can be automatically indexed to the meeting's agenda and minutes with the addition of Video Manager
  - Access to reporting and metrics of viewership (number of viewers, etc.)
  - Video feed can be provided by any video capture source, even from a cable company
  - Optional closed captioning service. Cameras and installation sold separately.
  - Automatically indexes and records smart (hyper) tags of video with agenda item details during the meeting
  - Simple-to-use, post-meeting editing tools allow administrators to adjust tags prior to publishing
  - Allows users to view entire meeting or jump to specific agenda item sections with a single tap
-



## Software Fees and Implementation Costs

The following outlines the eSCRIBE software, installation/configuration and training costs based on the requirements as they have been outlined.

### Option 1 - eSCRIBE Accessibility Bundle

eSCRIBE Annual Service and Support Fees					
Module	Product Code	License Type	License Fee	Quantity	Cost
<b>Accessibility Bundle</b>	<b>eSCRIBE-AB</b>	Annual	\$ 14,500	1	\$ 14,500
eSCRIBE Report Manager			INCL		
eSCRIBE Meeting Manager			INCL		
eSCRIBE Participant Access Module			INCL		
eSCRIBE Internet Publishing + Citizen Engagement			INCL		
Authentication Modality (ADFS OR Azure AD)	eSCRIBE-ADFSAS / eSCRIBE-AZADAS	Annual	\$ 500	1	\$ 500
<b>Annual Software and Support Fees</b>					<b>\$ 15,000</b>
Professional Services			Service Fee	Quantity	Cost
Setup and Training	eSCRIBE-ABS		\$ 9,500	1	\$ 9,500
2 Meeting Types, 2 Report Template, 10 Workflows			INCL		
Training - Administrator, Contributor & Participant sessions			INCL		
Implementation Discount 50%					<b>\$ (4,750)</b>
<b>Implementation and Training Fees</b>					<b>\$ 4,750</b>
<b>Total Year 1 Fees</b>					<b>\$ 19,750</b>
<b>Year 2, 3 Annual Fees</b>					<b>\$ 15,000</b>

### Option 2 - eSCRIBE Accessibility Bundle with YouTube Integration

eSCRIBE Annual Service and Support Fees					
Module	Product Code	License Type	License Fee	Quantity	Cost
<b>Accessibility Bundle</b>	<b>eSCRIBE-AB</b>	Annual	\$ 14,500	1	\$ 14,500
eSCRIBE Report Manager			INCL		
eSCRIBE Meeting Manager			INCL		
eSCRIBE Participant Access Module			INCL		
eSCRIBE Internet Publishing + Citizen Engagement			INCL		
Authentication Modality (ADFS OR Azure AD)	eSCRIBE-ADFSAS / eSCRIBE-AZADAS	Annual	\$ 500	1	\$ 500
Video Manager Annual Subscription (includes YouTube Integration Support)	eSCRIBE-VMAS	Annual	\$ 3,500	1	\$ 3,500
<b>Annual Software and Support Fees</b>					<b>\$ 18,500</b>
Professional Services			Service Fee	Quantity	Cost
Setup and Training	eSCRIBE-ABS		\$ 9,500	1	\$ 9,500
2 Meeting Types, 2 Report Template, 10 Workflows			INCL		
Training - Administrator, Contributor & Participant sessions			INCL		
Video Manager Setup			\$ 1,000	1	\$ 1,000
Implementation Discount 50%					<b>\$ (5,250)</b>
<b>Implementation and Training Fees</b>					<b>\$ 5,250</b>
<b>Total Year 1 Fees</b>					<b>\$ 23,750</b>
<b>Year 2, 3 Annual Fees</b>					<b>\$ 18,500</b>



## Option 2 - eSCRIBE Transparency Bundle (Includes Video)

eSCRIBE Annual Service and Support Fees					
Module	Product Code	License Type	License Fee	Quantity	Cost
<b>Transparency Bundle</b>	<b>eSCRIBE-TB</b>	Annual	\$ 24,500	1	\$ 24,500
eSCRIBE Report Manager			INCL		
eSCRIBE Meeting Manager			INCL		
eSCRIBE Participant Access Module			INCL		
eSCRIBE Internet Publishing + Citizen Engagement			INCL		
Web Streaming & Archival Service			INCL		
Authentican Modality (ADFS, Azure AD)	eSCRIBE-ADFSAS / eSCRIBE-AZADAS	Annual	\$ 500	1	\$ 500
<b>Annual Software and Support Fees</b>					<b>\$ 25,000</b>
Professional Services			Service Fee	Quantity	Cost
Setup and Training	eSCRIBE-TBS		\$ 12,500	1	\$ 12,500
2 Meeting Types, 2 Report Template, 10 Workflows			INCL		
Training - Administrator, Contributor & Participant sessions			INCL		
Implementation Discount 50%				1	<b>\$ (6,250)</b>
<b>Implementation and Training Fees</b>					<b>\$ 6,250</b>
<b>Total Year 1 Fees</b>					<b>\$ 31,250</b>
<b>Year 2, 3 Annual Fees</b>					<b>\$ 25,000</b>

### eSCRIBE Online Pricing Notes:

1. Quote is valid for 60 days
2. Annual Service and Support fees are for the hosted eSCRIBE modules as outlined in this proposal. Additional eSCRIBE modules can be added at any time (additional charges apply)
3. Pricing is based on terms of a three (3) year agreement.
4. Implementation fees are for remote support, optionally should the customer wish to have eSCRIBE provide onsite training, travel and living expenses would apply.
5. All fees are in \$CAD and are exclusive of any applicable taxes.
6. This proposal includes unlimited usage of the eSCRIBE iPad Standard Application. Additional iPad Professional licenses may be purchased for \$50 (1 – 25 users), \$35 (26 – 50 users), \$25 (51 – 250 users) and \$10 (251 or more), per user per year.
7. eSCRIBE Vote Manager is available for an annual fee of \$3050 with a \$500 setup and training fee. Setup includes standard "grid" public display layout. Custom public display vote screen fee is \$2500 one time.
8. Provox legacy document migration would require an estimate and quote before approval
9. Year 1 fees are invoiced upon commencement of the project.
10. Subsequent year renewals will be invoiced on the anniversary date of the activation of the Software unless notice is received in writing 60 days prior to the anniversary date.
11. Payment Terms are Net 30 from date of invoice.



## eSCRIBE Implementation – Accessibility Bundle

Dates	Activity	Description	Team
<b>StartDate (SD)</b>	Contract Signed	<ul style="list-style-type: none"> <li>Contract awarded to eSCRIBE</li> <li>Contract signed</li> </ul>	Purchasing (Customer), Sales (eSCRIBE)
<b>SD</b>	Coordinate Hand Off Call	<ul style="list-style-type: none"> <li>Sales to Coordinate hand off introduction with eSCRIBE Implementation team &amp; customer</li> </ul>	Sales & Project Lead (eSCRIBE)  Project Sponsor (Customer)
<b>SD + 2 days</b>	Project Hand Off Mtg (15 min call)	<ul style="list-style-type: none"> <li>Project Hand Off Meeting</li> <li>Introductions of project teams (eSCRIBE &amp; Customer)</li> <li>Review of modules purchased &amp; Configuration details</li> <li>Confirm Goals &amp; Objectives</li> <li>Confirm desired project kick off &amp; completion timeline</li> </ul> <p><b>ACTIONS AFTER CALL:</b></p> <ul style="list-style-type: none"> <li>eSCRIBE to finalize project plan &amp; build site</li> <li>Customer to gather &amp; send meeting artefacts (Agendas, Minutes, Reports)</li> <li>eSCRIBE review meeting artefacts</li> <li>Customer to gather &amp; send logos/colours /website page for publishing for publishing</li> </ul>	Sales & Project Lead (eSCRIBE)  Project Team (Customer)
<b>SD + 4 days</b>	Project Kick Off Discussion (1 hr call)	<ul style="list-style-type: none"> <li>Review project plan, adjust with customer feedback</li> <li>Review further detail of implementation &amp; training plan</li> <li>Review meeting artefacts, identify any process &amp; formatting adjustments</li> <li>Explain Configuration Work Package</li> </ul> <p><b>ACTIONS AFTER CALL:</b></p> <ul style="list-style-type: none"> <li>Customer to provide user configuration work package</li> <li>eSCRIBE to configure environment with users from Configuration Work Package (*If ADFS in use, Customer must have internal ADFS configured &amp; parameters sent to eSCRIBE before any user configuration can begin)</li> </ul>	Project Team (Customer)  Project Lead (eSCRIBE)
<b>SD + 7 days</b>	Configure eSCRIBE	<ul style="list-style-type: none"> <li>Create meeting artefacts in environment (agenda &amp; minutes for 2 meetings, 1 report, 5 workflows, 2 attendee groups – with up to 25 users)</li> <li>Test the environment</li> <li>Complete user configurations</li> <li>Build publishing site</li> </ul>	eSCRIBE Project Team





<b>SD + 12 days</b>	Configuration Review Mtg (60 min call)	<ul style="list-style-type: none"> <li>Review finalized meeting artefact template configuration</li> <li>Review finalized publishing site</li> <li>Review remaining configuration settings</li> <li><i>*NOTE Customer must provide all configuration detailed by "Configure eSCRIBE" date in order to meet date at this stage*</i></li> </ul>	Project Teams (Customer) Project Lead (eSCRIBE)
<b>ACTIONS AFTER CALL:</b> <ul style="list-style-type: none"> <li>eSCRIBE to adjust templates &amp; send revised copy for sign off</li> <li>Customer to confirm training dates</li> </ul>			
<b>SD + 16 days</b>	Meeting Manager Training	<ul style="list-style-type: none"> <li>Meeting Manager Training with primary user group (2 days)</li> <li>Mock Meeting Preparation</li> <li>Mock Meeting Delivery</li> </ul>	eSCRIBE Trainer, Customer Meeting Admin Group
<b>ACTIONS AFTER CALL:</b> <ul style="list-style-type: none"> <li>eSCRIBE Trainer to send training summary &amp; next steps via email to Customer Project Team &amp; eSCRIBE Project Lead</li> <li>Customer Training Attendees to start using eSCRIBE immediately for meetings</li> <li>Customer is responsible for training additional staff and rolling out Meeting Manager to other departments</li> </ul>			
<b>SD + 19 days</b>	Conduct Practice Meeting	<ul style="list-style-type: none"> <li>Customer to prepare meeting and conduct practice meetings in eSCRIBE (build agendas &amp; minutes)</li> <li>First meeting support from eSCRIBE Team</li> </ul>	Customer Project Team, eSCRIBE support
<b>SD + 24 days</b>	Post Meeting Debrief	<ul style="list-style-type: none"> <li>Highlight areas of difficulty or challenges for review from Meeting Manager Practice</li> </ul>	eSCRIBE Trainer, Customer Project Team
<b>SD + 27 days</b>	Publishing Implementation	<ul style="list-style-type: none"> <li>eSCRIBE Implementation Coordinator to send iFrame details to integrate publishing into current website</li> <li>Customer web developer implement new publishing pages (iFrame into existing site)</li> </ul>	Customer IT (web admin)
<b>SD + 29 days</b>	Contributor Training	<ul style="list-style-type: none"> <li>½ day for Report Administrators</li> <li>½ day for Report Writers (primary user group)</li> </ul>	eSCRIBE Trainer, Customer Contributor & Admin Group
<b>ACTIONS AFTER CALL:</b> <ul style="list-style-type: none"> <li>eSCRIBE Trainer to send training summary &amp; next steps via email to Customer Project Team &amp; eSCRIBE Project Lead</li> <li>Customer Training Attendees to start using eSCRIBE immediately for reports</li> <li>Customer is responsible for training additional staff and rolling out Report Manager to other departments</li> </ul>			



<b>SD + 36 days</b>	Post Practice Debrief	<ul style="list-style-type: none"> <li>Highlight areas of difficulty or challenges for review from Report practice</li> </ul>	eSCRIBE Trainer, Customer Project Team
<b>SD + 37 days</b>	Participant Training (1 hr)	<ul style="list-style-type: none"> <li>Training for meeting participants, web/iPad access (train the trainer)</li> </ul> <p><b>ACTIONS AFTER CALL:</b></p> <ul style="list-style-type: none"> <li>eSCRIBE Trainer to send training summary and user guides to attendees</li> <li>Customer Project Team train meeting participants</li> </ul>	eSCRIBE Trainer, Customer Project Team
<b>SD + 40 days</b>	Account Mgmt Hand Off Call (15min call)	<ul style="list-style-type: none"> <li>Once implementation tasks are complete, account mgmt. hand off call</li> <li>Confirm implementation work is complete, intro Acct Mgr, recap outstanding issues, explain support process.</li> </ul> <p><b>ACTIONS AFTER CALL:</b></p> <ul style="list-style-type: none"> <li>Customer to actively use eSCRIBE for core meetings, rolling out to additional meeting types/users is done at the discretion of the customer</li> <li>Customer will engage eSCRIBE support for additional support after training.</li> </ul>	eSCRIBE Project Lead, eSCRIBE Account Manager, Customer Project Team

**NOTES:**

- Day count increment represents working days
- Schedule is subject to change during Project Plan creation
- Assumption is made that Customer will commit resources as outlined in plan
- Assumption that template emphasis will be on electronic agenda & minutes
- Assumption is made that eSCRIBE will be training primary user group with a "Train the Trainer approach"
- Accessibility bundle implementation is approximately 5 days shorter.



We look forward to working with you on this exciting project. Should you have any questions please call me at +1 905 305 3426.

*James Coulen*

*Territory Sales Manager*

*eSCRIBE Software*

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**Report To: Board of Directors**

**Subject: S.S, No 6 Glanford (Hannon) Schoolhouse relocation**

**Report No: 29-18**

**Date: February 28, 2018**

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**RECOMMENDATION:**

1. That Report No. 29-18 respecting the S.S, No 6 Glanford (Hannon) Schoolhouse relocation **BE RECEIVED** for information.

**PURPOSE:**

To provide a plan, for the Board's consideration, to move S.S. No 6 Glanford (Hannon) School from 685 Nebo Road, Mount Hope to Binbrook Conservation Area at 5050 Harrison Road, Binbrook.

**BACKGROUND:**

On October 25, 2017 the NPCA Board of Directors passed the following motion:

Resolution No. FA-193-17  
Moved by Board Member Beattie  
Seconded by Board Member Darte

That the NPCA Board **DIRECT** staff to prepare a plan, to move the S.S. No 6 Glanford (Hannon) School from 685 Nebo Road, Mount Hope to the Binbrook Conservation Area at 5050 Harrison Road Binbrook.

**CARRIED**

Staff Direction:

- 1) The plan should include the following:
  - a. A cost estimate to lift, load, transport and relocate the school to a new site at the Binbrook Conservation Authority
  - b. A cost estimate to rebuild, restore and winterize the school. The restored school will have a dedicated electrical service, lighting, heat, water service, plumbing and septic service. The winterized school will be usable twelve months of the year.
  - c. A cost estimate of all permits required to transport, relocate and rebuild the school.
  - d. A cost estimate for road improvements, to the entrance of the Binbrook Conservation Authority, to allow the school to be moved on site.
  - e. A list of possible funding sources to complete the plan.

## **DISCUSSION:**

This report considers costs associated with relocating the S.S. No. 6 Glanford (Hannon) Schoolhouse from its current location on Nebo Road in Hamilton to the Binbrook Conservation Area, located 12 kilometers away on Harrison Road in Binbrook, Ontario. The building currently sits on privately-owned property, which is planned for further development later this year. The schoolhouse is not scheduled to be included in this development, therefore, will be demolished if it is not relocated. The current owner is supportive of having the schoolhouse relocated, understanding the NPCA Board is under no obligation to do anything on this matter.

## **FINANCIAL IMPLICATIONS:**

The projected costs to relocate the S.S Hannon School House is attached as Appendix 1. In sum, the costs range between approximately \$1.3 million to \$1.6 million; a portion of which could be funded through the Hamilton Land Acquisition reserve (current balance is \$1.1 million).

However, using these funds for any purpose other than land acquisition in Hamilton would require a supporting resolution from Hamilton City Council. Further potential funding sources and partners are attached as Appendix 2.

## **RELATED REPORTS AND APPENDICES:**

Appendix 1 Expenses for relocating S.S Hannon School House (including Shoalts Engineering relocation and dismantling and reconstructing cost proposal)

Appendix 2 Potential Funding Sources and Partners

**Prepared by:**



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**David Barrick**  
Senior Director of Corporate Resources

**Submitted by:**



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**Mark Brickell**  
CAO/Secretary-Treasurer

***This report was prepared in consultation with Adam Christie, Manager, Strategic Initiatives & Capital Assets, Mike Boyko, Superintendent Binbrook CA, and Alicia Powell, Program Assistant.***

## Hannon Schoolhouse Expenses

### ***Option A***

<b>Relocate</b>	<b>Expense</b>	
	Base Price for Removal	\$175,000.00
	New Foundation and Floor	\$40,000.00
	Masonry Work in Binbrook	\$25,000.00
	Wood Framing/Repairs	\$10,000.00
	Doors and Windows	\$20,000.00
	Exterior Trims and Finishes	\$10,000.00
	Interior Finishes	\$40,000.00
	Mechanical	\$15,000.00
	Electrical	\$20,000.00
	Professional Fees	\$10,000.00
	Contingency	\$35,000.00
	Hydrto Lines Temporary Removal	\$280,000.00
	Permits	N/A
<b>Total</b>		<b>\$680,000.00</b>

### ***Option B***

<b>Dismantle and Reconstruct</b>	
	Base Price for Removal
	New Foundation and Floor
	Masonry Work in Binbrook
	Wood Framing/Repairs
	Doors and Windows
	Exterior Trims and Finishes
	Interior Finishes
	Mechanical
	Electrical
	Professional Fees
	Contingency
	Permits
<b>Total</b>	

\$85,000.00
\$40,000.00
\$75,000.00
\$35,000.00
\$20,000.00
\$20,000.00
\$40,000.00
\$15,000.00
\$20,000.00
\$10,000.00
\$35,000.00
N/A
<b>\$395,000.00</b>

### **Binbrook Conservation Area**

	200 Amp Service	\$13,074.55
	Concrete Foundation	\$41,810.00
	New Entrance	\$69,043.00
	Septic System	\$800,000.00
	Permits	N/A
<b>Total</b>		<b>\$923,927.55</b>

<b>Option A Total</b>	<b>\$1,603,927.50</b>
<b>Option B Total</b>	<b>\$1,322,427.50</b>

November 30, 2017

Adam Christie  
Manager, Strategic Initiatives  
Niagara Peninsula Conservation Authority  
3292 Sixth Avenue  
Lincoln, ON

Re: Former Glanford & Barton S.S. No. 6

Dear Adam:

Further to our site visit at 685 Nebo Road in Hamilton and our discussions about relocating the former schoolhouse from its present site to the Binbrook Conservation Area on Harrison Road in Binbrook, I have carried out some preliminary investigations and have the following brief report and budget figures for you.

The 1875 Hannon schoolhouse is a 28'x44'x 14' high (27' to the ridge) brick structure with a wood framed floor and roof. Its present ownership and use is as a storage building for the International Brotherhood of Electrical Workers. The walls are 8" thick, double wythe loadbearing brick with brick pilasters all around the building, a projecting watertable, and corbelled brick below the eaves. These projections are all 4", making the masonry thickness approximately 12" at these locations. With the exception of the watertable, the projections are of buff brick, as are bricks laid in a hood moulding shape over the gothic-arched windows and doors. The window sills are dressed stone. The interior of the walls have wood strapping and a wood lath and plaster finish, with a wood lath and plaster ceiling. The floor joists frame into the brick on each side and bear on a beam down the centre of the building. There is a very low crawlspace and the exterior grade is close to the level of the floor. Much of the floor has collapsed, presumably because the damp conditions have promoted decay of the wood joists although we did not go into the crawlspace. There is a rudimentary vestibule across the west (front) end of the interior, but the building is essentially a one-room schoolhouse.

At some point in years past, the IBEW cut a large hole in the east end (rear) of the building, adjacent to the north east corner, for a larger door to facilitate storage. There are numerous areas of the brick structure that have either badly deteriorated bricks or extensive cracking indicative of foundation problems. The northeast corner has both of these issues in addition to the poorly executed door opening. There are concrete sidewalks across the east and west ends of the building, and asphalt paving against the north wall. The south side has turf.



Despite all of the problems outlined in the forgoing description, the building is a charming example of a late-nineteenth-century rural Ontario schoolhouse and it maintains its basic exterior appearance and configuration. It has never had additions to it. The soft brick walls have been extensively covered with carved graffiti to well above the height of the average schoolchild; the graffiti consists mainly of initials and names, presumably of former students. The dichromatic brick scheme is attractive, elevating the building slightly above a very similar schoolhouse in monochromatic brick right at the corner of Harrison Road and Kirk Road near the proposed destination for this building. That schoolhouse is now a residence.

Moving this building intact presents some very serious challenges. The condition of the masonry makes it vulnerable to collapse, requiring substantial structural steel work and extremely careful execution to carry out the move. It is likely that the wood floor would simply be abandoned and replaced with a concrete slab in the new location; it could be finished with the salvaged flooring if desired or left as concrete for higher durability in its new role as a programme facility in the park. Removal of the roof and gable end walls to lower the height and facilitate moving the building down the roadway would also remove much of the stability of the structure and is not a practical option. Leaving the roof intact means that virtually every overhead wire encountered must be temporarily moved. Bearing all of this in mind, a budget for moving the building is shown in the table below. This does not include any allowance for the relocation of hydro and telephone lines, permits, escorts, and the like. Restoration of the original site is not included. Masonry repairs as shown would be necessary to stabilize the building and restore its integrity once moved. New windows, doors, interior finishes, electrical, and mechanical would also be required, including design fees and permits for this work. Some of these items would be required whether the building was moved intact or was dismantled and reconstructed, however if it were to be dismantled, it would make sense from a few perspectives to reconstruct the building as a wood-framed structure with brick veneer, rather than as a load-bearing masonry building. Figures for this option are also shown in the table.

I trust that this is helpful in your planning and I look forward to the opportunity to work with you on the conservation of this valuable heritage resource if the project moves forward. Please do not hesitate to contact me should you have any questions.

Sincerely,



Mark Shoalts, P.Eng., CAHP



Glanford & Barton S.S. #6, 1875

Budget Costs

Project element	Building moving	Dismantle and reconstruct
Base price for removal	\$ 175,000.00	\$ 85,000.00
New foundation and floor	\$ 40,000.00	\$ 40,000.00
Masonry work in Binbrook	\$ 25,000.00	\$ 75,000.00
Wood framing/repairs	\$ 10,000.00	\$ 35,000.00
Doors & windows	\$ 20,000.00	\$ 20,000.00
Exterior trims & finishes	\$ 10,000.00	\$ 20,000.00
Interior finishes	\$ 40,000.00	\$ 40,000.00
Mechanical	\$ 15,000.00	\$ 15,000.00
Electrical	\$ 20,000.00	\$ 20,000.00
Site servicing	?	?
Professional fees	\$ 10,000.00	\$ 10,000.00
Utility relocations	?	\$ -
Permits	?	\$ 3,500.00
Contingency	\$ 35,000.00	\$ 35,000.00
Total	\$ 400,000.00	\$ 398,500.00

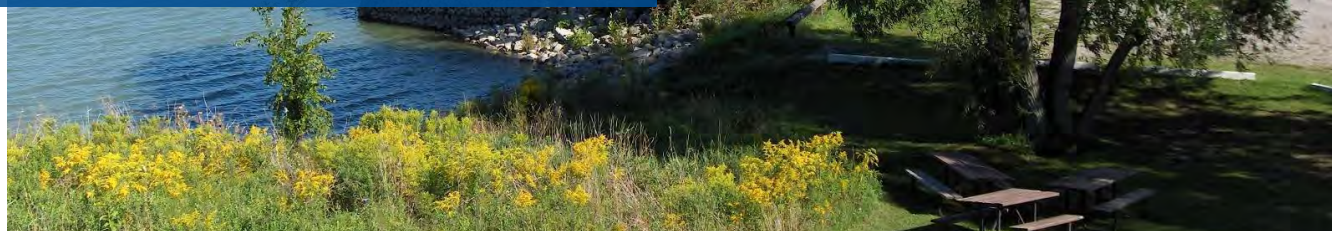




# **HISTORICAL SIGNIFICANCE AND POTENTIAL FUNDING SOURCES AND PARTNERS**

S.S. NO. 6 GLANFORD (HANNON)  
SCHOOLHOUSE

Prepared by Alicia Powell, Niagara Peninsula Conservation  
Authority



**JANUARY 2018**

## **TABLE OF CONTENTS:**

- PROJECT DESCRIPTION
- ABOUT THE NPCA
- ABOUT BINBROOK CONSERVATION AREA
- STRUCTURE OVERVIEW
- THE HISTORY OF S.S. NO. 6 GLANFORD (HANNON) SCHOOLHOUSE
- HISTORICAL SIGNIFICANCE
- REUSE AND PRESENCE WITHIN THE COMMUNITY
- REFERENCES
- POTENTIAL FUNDING AND PARTNERSHIP SOURCES





## PROJECT DESCRIPTION

This project proposes that S.S. No. 6 Glanford (Hannon) Schoolhouse should be moved from its current location on Nebo Road in Hamilton to the Binbrook Conservation Area, located 12 kilometers away on Harrison Road in Binbrook, Ontario. The building currently sits on privately-owned property, which is planned for further development in 2018. The schoolhouse is not scheduled to be included in this development, and would be demolished if it is not relocated. The current owner is supportive of having the schoolhouse relocated in order to maintain its cultural heritage, sustain its presence in the community and so that it's rich history is not physically lost.

S.S. No. 6 Hannon is an important symbol for early settlement and education history in Hamilton. This one-room schoolhouse, built in 1875, is a historically significant building to the communities of Glanford and Hannon, in which generations of local and early settler families were educated. Many of these early families continue to reside in the community.

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## PROJECT DESCRIPTION CONTINUED...

The proposed project is critical to the preservation of that history, in which the schoolhouse will be saved from demolition, relocated and re-purposed to continue to service the surrounding community. This project will maintain the historical authenticity of the building while also making it accessible for all, and will re-purpose the building for renewed use within the community at a local conservation area where educational programs and events for school and educational groups will be offered and hosted.

The project will consist of the relocation of S.S. No. 6 Hannon to Binbrook Conservation Area, the reconstruction and repair of the brick schoolhouse for functionality through all seasons, and the preparation of the new location to support the building, including electrical, lighting, heating, water, plumbing and septic services. This project will require a number of conditions to be met, in order to move the schoolhouse to Binbrook Conservation Area and for it to be functional and accessible as a program facility. In addition to the requirements of moving the schoolhouse to Binbrook, a foundation, new building infrastructure and laneways will be required at Binbrook Conservation Area to accommodate the schoolhouse.

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Figure 1: Hannon Schoolhouse, located at the corner of Nebo Road and Twenty Road in Hamilton.



Figure 2: Suggested location for Hannon Schoolhouse at Binbrook Conservation Area.



## ABOUT THE NPCA

The Niagara Peninsula Conservation Authority (NPCA) was established on April 30, 1959 and serves approximately half a million people throughout the Niagara Peninsula Watershed, encompassing the entire Niagara Region and portions of the City of Hamilton and Haldimand County. The NPCA manages the impact of human activities, urban growth and rural activities on the watershed.

With its unique resources, the Niagara Peninsula is one of the most complex watersheds in the Province. It includes lands drained by the Niagara River, Twenty Mile Creek, the Welland River, the Welland Canal, Lake Erie and Lake Ontario. NPCA programs focus on initiatives that help keep people and their property safe from flooding and erosion while keeping our drinking water safe to drink.

The NPCA's ongoing commitment to land stewardship is reflected in management of over 2, 870 hectares of some of the most sensitive and unique natural areas in Niagara. These lands are held in public trust, allowing the people of Niagara to enjoy its distinctive natural heritage at 39 Conservation Areas, each offering diverse recreational and educational opportunities and a place to experience nature's beauty.

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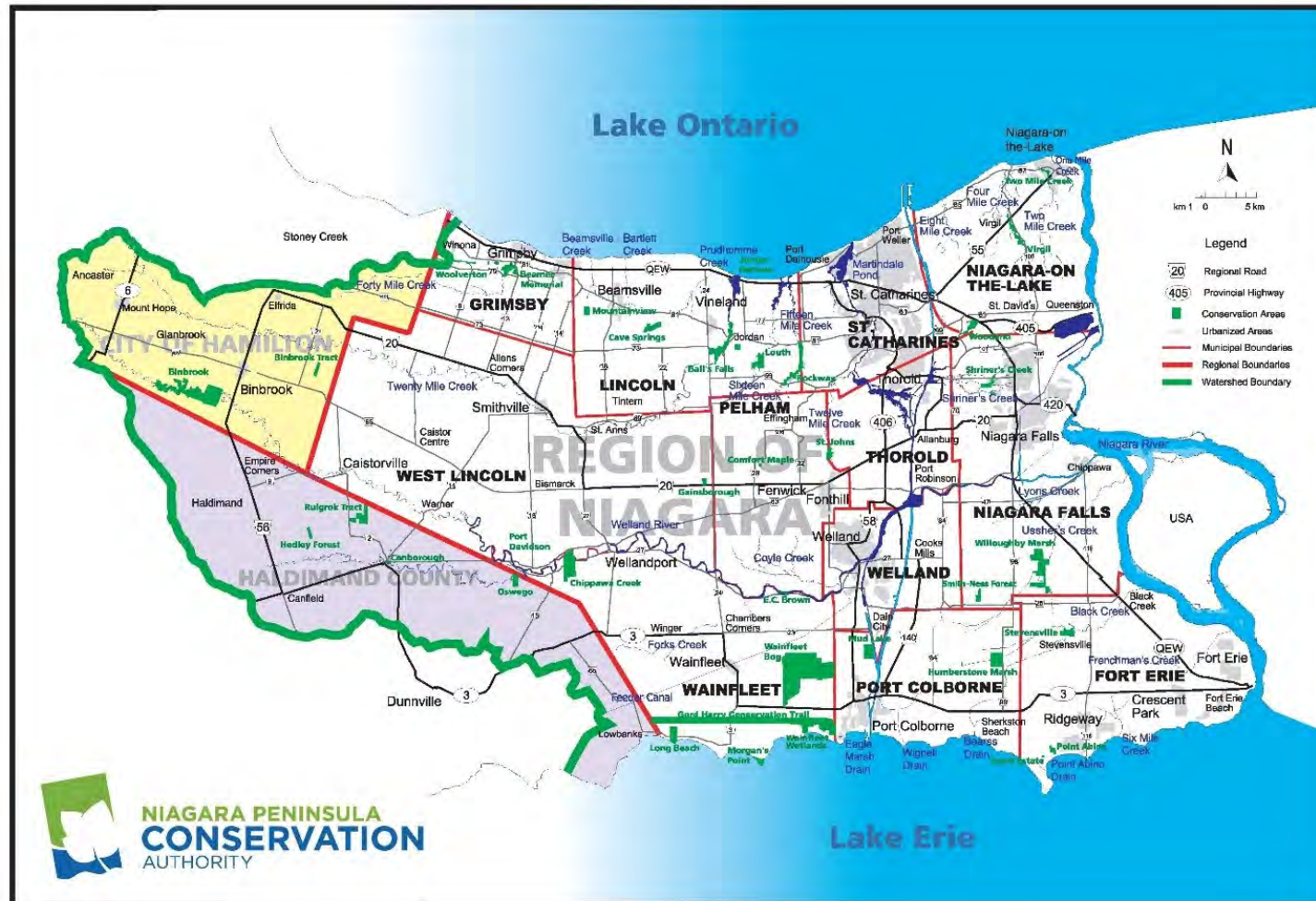
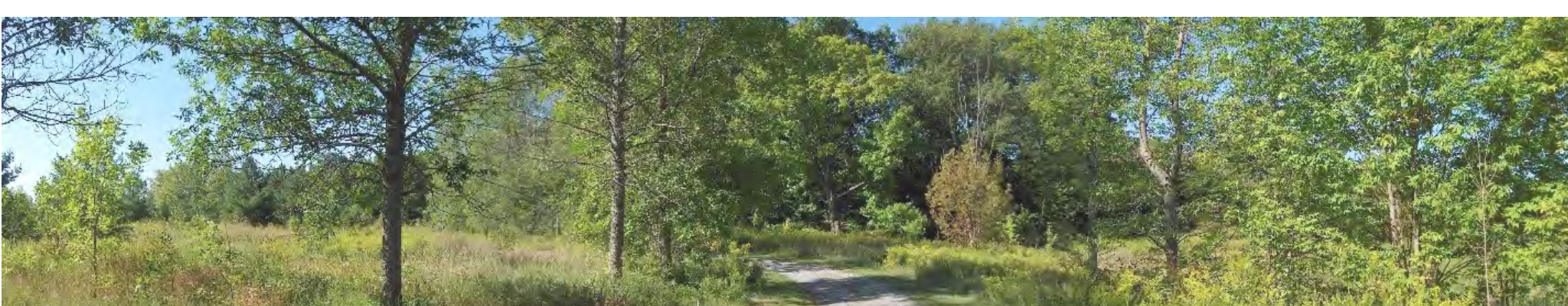


Figure 3: Niagara Peninsula Watershed Map.

## ABOUT BINBROOK CONSERVATION AREA

The Binbrook Conservation Area, located in Binbrook Ontario, is a popular recreational park, which hosts Lake Niapenco, a reservoir that serves as the headwaters of the Welland River. Binbrook offers a sandy beach and swimming, a new recirculating splash pad, hiking trails, fishing platforms, watercraft rentals, and picnicking areas. The site is home to ecologically-significant wetlands and at-risk species, making it an important and fascinating location for learning within the watershed. Visitors come to Binbrook Conservation Area throughout the year from across the Greater Golden Horseshoe area, including Toronto, Mississauga, Burlington, Hamilton, Caledonia and St. Catharines.

With so much to offer, Binbrook is an ideal location for educational programming for elementary, secondary, and university and college students. A facility where programming can be offered year-round is needed at Binbrook. The introduction of the Hannon Schoolhouse to this Binbrook Conservation Area serves multiple purposes both as a site for historical preservation and as a space for educational programming, while addressing the program needs of the local community and meeting the mandate of the NPCA.





## STRUCTURE OVERVIEW: BUILDING MATERIALS AND ARCHITECTURAL STYLE

The schoolhouse was built in classical revival style in dichromatic buff red brick and pale accentuating brick around the pilasters. This style and details are complex and significant, as many rural schools at this time were built simplistically, and lacked these types of accentuations.

The building company, Edward Dickenson and Sons of nearby North Glanford, selected local building materials in the construction of this, and several other schoolhouses and structures at that time. All bricks would have been made and sourced locally, for example, from Hamilton Brickworks. The windowsills are made of dressed stone, the base of the gothic-style arched windows that mark Dickenson and Sons' style of build, and the trend in construction of the time. Similarly, each door is arched in a reflection of the gothic style.

The Hannon schoolhouse serves as an example of late 19th century revival architecture, and of the educational settings of early settlers in rural, agricultural Ontario.



## **STRUCTURE OVERVIEW: COMMUNITY CONTEXT AND ENVIRONMENT**

The schoolhouse is currently situated upon the original property once owned by Joseph Hannon, an early settler of the area, for which the community was named. Fittingly the schoolhouse was also named for the Hannon family. The growth of Hannon increased rapidly in the 1870's, most notably due to the announcement of the construction of the Hamilton-Lake Erie Railway, which would serve to connect the northern shores of Lake Erie with the southern shore and stations along Lake Ontario in the industrial city of Hamilton.

The railway was built in 1872, running right through the center of Hannon village and passing immediately in front of Hannon schoolhouse. Residents were pleased to have the railway cross through, as it meant access to new markets for their farm goods, produce and white pine lumber. Unfortunately, there was no station planned Hannon, however the passing of the first train was an exciting moment in Hannon history. Following this, local residents appealed to their local Federal Member of Parliament, Joe Rymal, for a station in Hannon. Rymal's efforts were a success, and Rymal Station was named for him in appreciation.

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## CONTINUED...

Through the late 1800's businesses and industry in Hannon grew beyond the small family farm. There were sawmills, a gristmill, a lime kiln, a post office, a quarry, a small distillery, coal works and a farm supply store. The children of local business owners attended Hannon schoolhouse, an important fixture within the community, used as a meeting place for the village.

This community has changed over the proceeding decades, growing in population size, later becoming part of the Township of Glanbrook, and most recently, in 2001, a part of the City of Hamilton in an amalgamation of municipalities surrounding the city. The railway is now decommissioned, and over time many small, family farming operations have ceased. The Rymal Road and Hannon West areas are now heavily developed with homes and commercial businesses.

The school property is now owned privately, and is slated for redevelopment by the property owner. It is clear as one makes their way into Hannon West where the schoolhouse is located, that this land is no longer an agricultural hamlet. Once surrounded only by farm fields, which children would cross to get to their one-room school, this small community is now a construction business park. The Hannon schoolhouse no longer fits within its environment, the single reminder of Hannon's past.

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Figure 2: Satellite image of Hannon schoolhouse location. Note the railway line crossing in front of the schoolhouse.





## THE HISTORY OF S.S. NO. 6 GLANFORD (HANNON) SCHOOLHOUSE

Over the past 40 years, local heritage societies have been recording the histories and recollections of the people that have passed through the doors of S.S. No. 6 School. The Hannon schoolhouse, as it was called colloquially was a place of education for many local pioneer families who had settled in the area, and their ancestors, many of whom still reside in the community today.

Settlement of the Hannon area, south of the escarpment of Hamilton, Ontario, began in 1790. At this time, settlement occurred primarily in the clearing of land for the building of farmsteads. In these days, school attendance was not compulsory, and did not become so until 1870. The community that was growing south of Hamilton, like many other growing settlements in Ontario, had been educating children privately in their homes if they could afford instruction in reading, writing and arithmetic from a traveling educator.

The settlers in the area recognized the need for a proper schoolhouse, and saw to the construction of a central building for their children to attend.

---



## CONTINUED...

The original schoolhouse in the Hannon community was a log house built on Nebo Road, in the same location that the current building stands, in the early 1800s.

The log schoolhouse was replaced in 1840 with a clapboard frame building. In 1874 the school trustees discussed in their annual meeting that a new school building was required to replace the clapboard building, due to overcrowding and unsanitary conditions.

With the construction of the Hamilton-Lake Erie railway in the early 1870's, the hamlet began to grow, and was excited by the opportunities that a railway station would hold for the village. Unfortunately, the railway, completed in 1872, never included a station at Hannon. The community carried on as an agricultural village, and the need for a new schoolhouse was clear.



Hannon Log School, approximate date 1800



## CONTINUED...

Hannon schoolhouse as it stands today was built in 1875, a red brick structure with arched windows and doorways. The land upon which the school was built was never owned by the school board or any other government agency, being owned by members of the Hannon family as early as 1809. In 1875 the land was purchased from Joseph Hannon by the trustees of S.S. No. 6. It was at this time that the frame building was demolished and the current brick building was constructed by Edward Dickenson and Sons, from North Glanford.

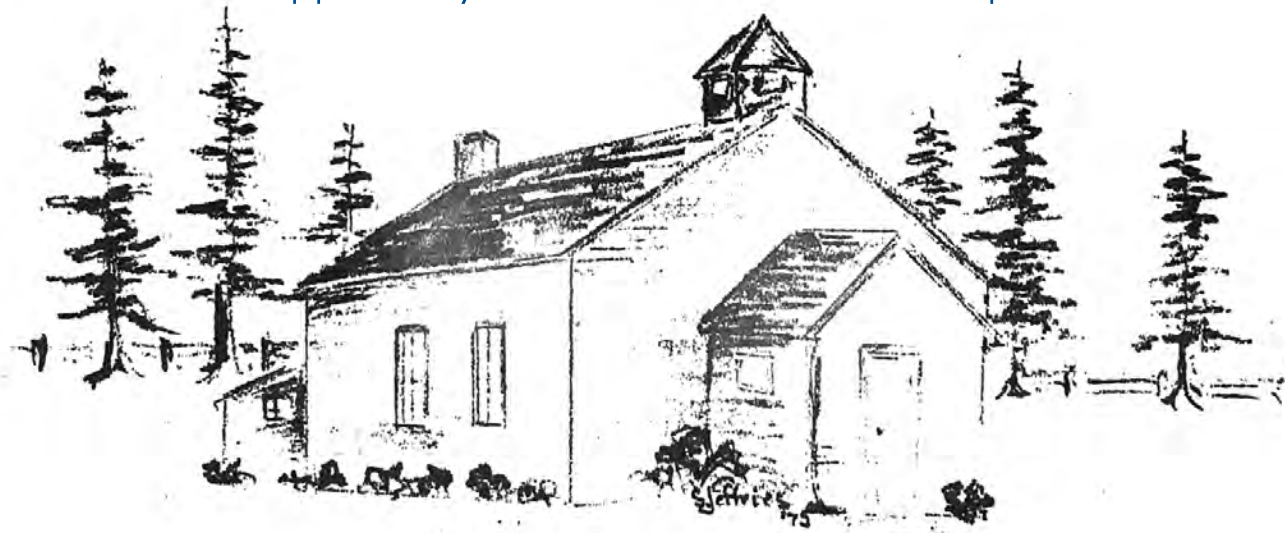
A reflection of its time, the brick schoolhouse was built with two arching front doors, providing a separate entrance for girls and boys. The school was named to honour Joseph Hannon and his family, as pioneers of the area and prominent citizens as was the local surround community. Hannon was not only a name, but now also a place. The first trustees of the new red brick school included William Ralston, John Wilson and Ransom Soules, members of early settler families who would go on to attend school at S.S. No. 6 for generations to come.

---



## CONTINUED...

Interesting anecdotes have been shared with local historians by family members of past students of Hannon schoolhouse. With its proximity to the railway tracks, teachers made stern rules for the children to follow. One reflection tells of a cardinal rule, "Children must not take their pennies to the tracks!" As students would often be caught sneaking across the school yard and down to the tracks, to lay their pennies along the rails. Once a train had passed, the children would hurry down to the railway tracks at their next opportunity to discover their flattened pennies.



Hannon Clapboard School, approximate date 1840.

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## COMMUNITY CONTEXT

Interestingly, the school was significant to families outside of Hannon, as the schoolhouse also served as a union school, allowing children from other townships including Barton, Saltfleet and Binbrook, to attend. This was done to accommodate such students who lived on the fringe of their township, and were in closer proximity to S.S. No. 6 Hannon, than to the nearest school in their township.

Children from outside of Hannon however, were required to pay a fee to attend the school. For example, records show that the union fee in 1877 was 25 cents each month, reaching 30 cents in 1896. In this time, all of the attending children walked to school and participated in activities altogether, in typical one-room schoolhouse fashion.

The school carried on into the 20th century, a primary community fixture, and gathering space for the residents of the Hannon community. Small modifications and projects were undertaken to maintain the school, and large projects such as the lowering of the ceiling and the installation of hydroelectricity took place between 1935 and 1941.

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## CONTINUED...

In the 1950's the schoolhouse again became overcrowded, and a new, modern building with two classrooms was built adjacent to the red brick schoolhouse. But in the decade to follow, local demographics began to change, and fewer seats were filled. Coupled with the growth of surrounding townships, and the need for modern schools in those areas, Hannon, once a centralized school, became outdated and underutilized.

Hannon School was officially closed by the Wentworth County Board of Education on June 30, 1976 due to decreased enrollment. Despite sitting unused for its original purpose for over 40 years, this building holds potential for a new life as a place of education. This brick schoolhouse is only one of five existing school buildings in the surrounding area that remains standing in original condition, making it a valuable piece of heritage and history.





## HISTORICAL SIGNIFICANCE

While Hannon schoolhouse has not been designated as a heritage building with the City of Hamilton, it is possible to have it listed as a heritage building once it has been relocated. A number of examples similar to this situation exist within Hamilton, such as the Mohawk Trail School on Hamilton Mountain.

Importantly, S.S. No. 6 Hannon School is considered a sister building to the Hannon Church, which was relocated in 1976 to Ball's Falls Conservation Area in Lincoln, Ontario, to become a part of the recreated settler village there. In fact, one of the stained glass windows within the church was placed there in 1924 in memory of the Hannon family, who were regular attendants over the church's 94 year history. This subtle, yet significant connection between these buildings marks the importance of the preservation of the Hannon schoolhouse by the Niagara Peninsula Conservation Authority, as like Binbrook, Ball's Falls is a Conservation Area within the Niagara Peninsula Conservation Authority and these sister buildings would be preserved and utilized by the same organization.

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Figure 3: George's Anglican Church [circa 1862], originally of Hannon, Ontario. Now situated in the historic Village at Ball's Falls Conservation Area.



In his 1980 reflection on the history and future of S.S. No. 6 Hannon schoolhouse, historian and then Assistant Area Superintendent of Schools, John W. Pell says, "Let us trust and hope always stand for the preservation of the Hannon School of 1875."





Figure 3: Title stone on the front face of the school house reads "U.S.S. No 6 Glanford School 1875."

"U.S.S. No. 6  
Glanford & Barton  
1875

This is the inscription at the front of our "Old School." Although this is somewhat scarred by time, weather, and numerous initials, the building stands firm. It is one of the few remaining little red school houses that once dotted the county... Here the shouts and laughter of children still echo from walls built one hundred years ago. As a community, we salute its historic past and with it a long meaningful future."

J. DeGelder, Principal  
November 8, 1975





Figure 4: Undated black and white photograph of Hannon Schoolhouse and woodshed.



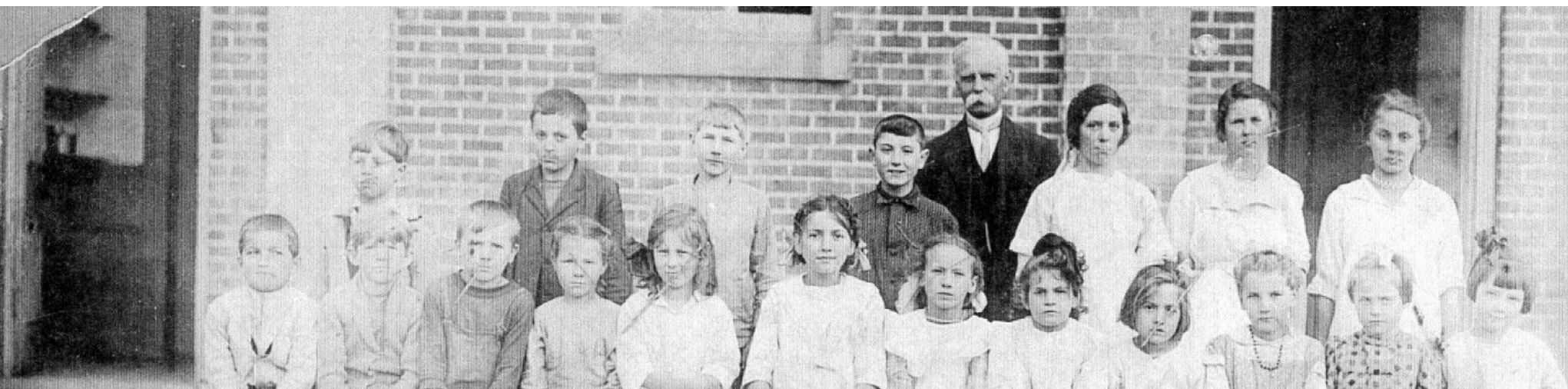
Figure 5: Class of Hannon Schoolhouse circa 1900, names unknown.



4 #6 Glanford school students, 1915-16. 5"x7".

**Back row:** ---- Johnston, Alex Armes, Sam Ecker, Garfield Smith, Mr. Nettie Armes, Irene Oliphant, Millie Soules

**Front row:** Grant Howard, Lorne Johnson, Roy Armes, Alma Ralston, Mabel Bell, ---- Korman, ---- ----, Laura Ecker, Eileen Armes, Grace Ho



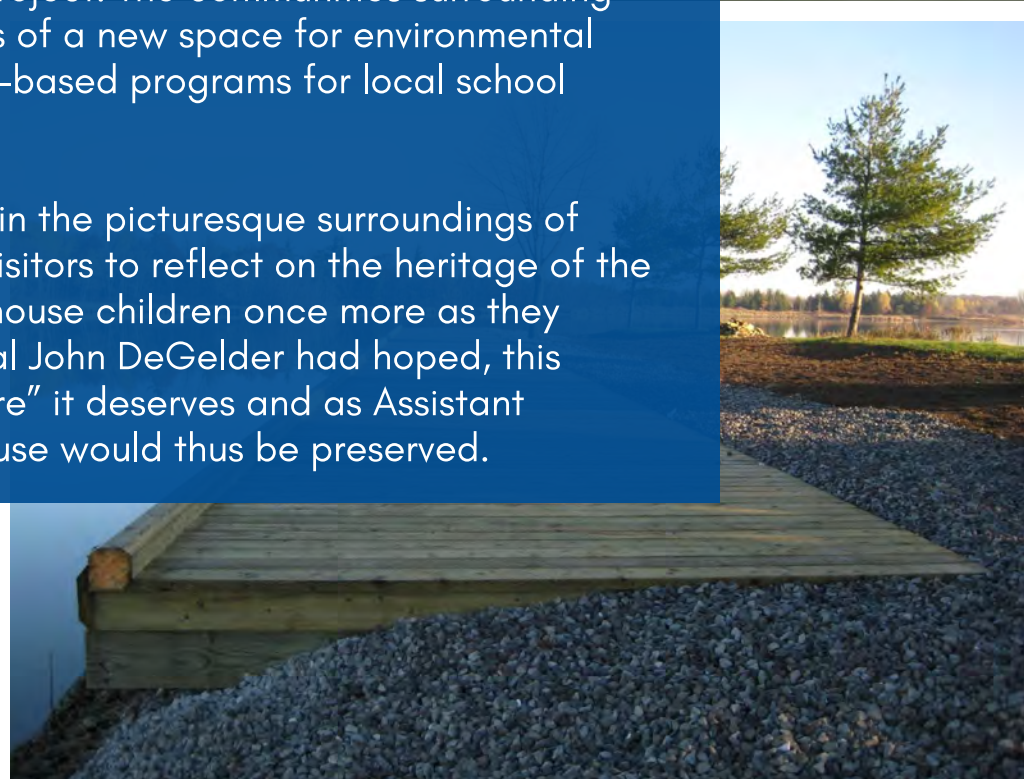
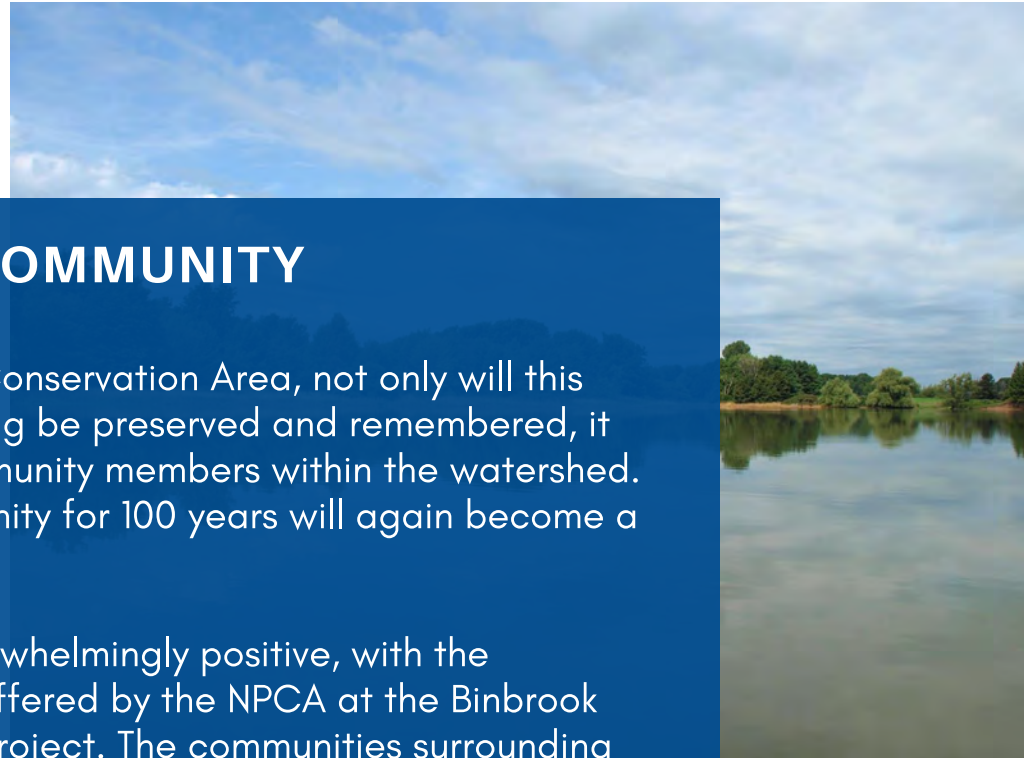


## REUSE AND PRESENCE WITHIN THE COMMUNITY

In relocating S.S. No. 6 Hannon Schoolhouse to Binbrook Conservation Area, not only will this historically significant and picturesque 143 year-old building be preserved and remembered, it will also provide a space for learning and activity for community members within the watershed. Therefore, in relocating this school that served the community for 100 years will again become a place of education.

The outcomes of this project will be longstanding and overwhelmingly positive, with the opportunities for educational programming and services offered by the NPCA at the Binbrook Conservation Area growing profoundly as a result of this project. The communities surrounding Binbrook Conservation Area would experience the benefits of a new space for environmental education, and recreational events, particularly curriculum-based programs for local school groups.

The presence of such a profound piece of history situated in the picturesque surroundings of Binbrook, and Lake Niapenco provides an opportunity for visitors to reflect on the heritage of the community. S.S. No. 6 Hannon will continue to stand, and house children once more as they learn about the environment around them. As past principal John DeGelder had hoped, this project would provide S.S. No. 6 with the “meaningful future” it deserves and as Assistant Superintendent John W. Pell had hoped, Hannon Schoolhouse would thus be preserved.





## References

Glanford Historical Society. (1985). Glanford Recollections and Reflections. Canada: W.L. Griffin Printing Limited.

Pell, J.W. (1975). Hannon School: Past and Present. [Published for the Centennial Anniversary of S.S. No. 6



## POTENTIAL FUNDING AND PARTNERSHIP SOURCES

### PUBLIC FUNDERS: CANADA CULTURAL SPACES FUND

The Canada Cultural Spaces Fund (CCSF) supports projects that aim to improve the physical conditions of spaces reserved for arts and heritage related creation, presentation, preservation and exhibition, as well as improving access for all Canadians to performing and visual arts, museum collections and heritage displays. This is largely done through projects that construct or renovate arts and heritage facilities, improve or update infrastructure, or better present arts and heritage experiences to a wide range of communities.

As a registered charitable organization, the NPCA is eligible to apply to the CCSF, and the proposed project appears to meet the eligibility requirements, as the goal of the project is to preserve a building of historical significance with cultural heritage value through construction, renovation and infrastructure improvements to the Hannon Schoolhouse. This project will ultimately allow for increased heritage programming and access to cultural space for the communities within the watershed.

**Website:** <https://www.canada.ca/en/canadian-heritage/services/funding/cultural-spaces-fund.html>

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## POTENTIAL FUNDING AND PARTNERSHIP SOURCES

### PUBLIC FUNDERS: ONTARIO TRILLIUM FOUNDATION

While the proposed project would fall under the Capital Grant Investment Stream of the OTF, Conservation Authorities are not eligible for funding. However, when in partnership with other charitable, or non-profit organizations, projects undertaken in part by Conservation Authorities are considered eligible. The caveat to this partnership option is that the eligible partner organization must be listed and act as lead on the associated project.

The Capital Grant investment stream funds projects that broaden access to and improve community spaces. Funded activities include renovations and repairs, building structures and spaces, and the purchase and installation of equipment.

**Eligibility Policy:** <https://otf.ca/eligibility-policy>

**Capital Grant:** <https://otf.ca/what-we-fund/investment-streams/capital-grants>

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## POTENTIAL FUNDING AND PARTNERSHIP SOURCES

### CORPORATE & PRIVATE FUNDERS: ALECTRA UTILITIES

Alectra Utilities' Community Support Program sponsors local organizations, and sustainable community projects to improve quality of life in local communities. This project may come under two Pillars of Sustainability that Alectra focuses their contributions on, including Innovation and Environment and Culture. These Pillars centralize the importance the projects that bring people together with technology and the building of environmentally friendly, healthy and culturally diverse communities.

**Website:** <https://www.powerstream.ca/about-us/community-involvement/community-support-application.html>

### CANADA BREAD

As a locally operating business, Canada Bread could be approached to support the project. They currently have two programs to contribute back to their local communities, largely based upon volunteer commitments, such as their Good Neighbour Program.

**Website:** <https://www.canadabread.com/social-responsibility>

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## POTENTIAL FUNDING AND PARTNERSHIP SOURCES

### CORPORATE & PRIVATE FUNDERS: CARDI CONSTRUCTION

Located a short distance from the schoolhouse, Cardi is a local, Hamilton construction company. Involvement or support of the proposed project is relevant to this local business.

**Website:** <http://www.cardiconstruction.com/>

### COCO PAVING

Coco Paving is a division of Coco Group, the largest paving and heavy construction company in Ontario. Coco Paving has a site in Hamilton, Ontario, located on Nebo Road, one minute from the Hannon Schoolhouse. Given its proximity and shared presence in the community, and as an organization with relevance to such a project, this company should be included in requests for sponsorship.

**Website:** <http://www.cocopaving.com/>

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## POTENTIAL FUNDING AND PARTNERSHIP SOURCES

### CORPORATE & PRIVATE FUNDERS: COUNTRY-WIDE RECYCLING

As a local, family-owned business Country-Wide Recycling provides demolition and construction product recycling services. Located nearby to the Hannon schoolhouse, and as local community members, support of this project may be a relevant investment or partnership opportunity. In addition, as a member of the Canada Green Building Council, Country-Wide provides documentation for LEED demolition and construction, which may also be relevant to this project.

**Website:** <http://www.countrywiderecycling.ca/>

### INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS (LOCAL 105)

The Hannon schoolhouse is currently owned by the IBEW, Local 105, and has been used for the past several years by the organization as a storage facility. The local is in the process of further developing their property and training facilities, and this calls for the removal of the old schoolhouse. The building has served IBEW, who may serve to support the proposed project as a way to preserve the buildings history, past and recent.

**Website:** <http://www.ibew105.com/index.cfm>

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## POTENTIAL FUNDING AND PARTNERSHIP SOURCES

### CORPORATE & PRIVATE FUNDERS: TD CANADA TRUST

This project may fall under two of three funding priority streams, including Creating Opportunities for Young People, which concentrates on promotion of education and the creation of opportunities to access arts and culture; and Environment where environmental education and community engagement are the primary focus.

Website: <https://www.td.com/corporate-responsibility/community/our-priorities/creating-opportunities-for-young-people.jsp>

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## PUBLIC CROWD-SOURCING CAMPAIGNS

### NATIONAL TRUST FOR CANADA: THIS PLACE MATTERS COMPETITION

This Place Matters is the first Canadian national crowd-sourcing program for heritage buildings. While the National Trust for Canada has not yet announced if or when there will be a 2018 This Place Matters competition, this program has been run for the past three years and has been highly successful in generating crowd-sourced funds that support important cultural and heritage buildings. Applications must be submitted, approved and accepted by the review committee, and typically competitions have run in the summer and fall months. The National Trust for Canada assists with the promotion and sharing of each approved campaign, which is sent out to partners and individuals nationally. Successful local projects that have been included in This Place Matters campaigns include Lock One in St. Catharines, which raised over \$37k, which exceeded the campaign goal of \$25k.

**Website:** <https://thisplacematters.ca/>

Note: Public funding for such a project involving a historical building may depend on whether the building is listed or designated by the City of Hamilton as a heritage building. Public funds and grants are made available to those projects concerning the preservation of such buildings for their cultural and historical value. Further, many grants require an organizational matching scheme. This may be something to consider moving forward.

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# THANK YOU

Alicia Powell

[apowell@npca.ca](mailto:apowell@npca.ca)

905-788-3135 ext. 260



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**Report To: Board of Directors**

**Subject: PT Watersports Inc – Facility Use Agreement**

**Report No: 30-18**

**Date: February 28, 2018**

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**RECOMMENDATION:**

1. That Report No. 30-18 respecting PT Watersports Inc – Facility Use Agreement **BE RECEIVED**; and
2. That the NPCA Board of Directors **AUTHORIZE** staff to enter into a three (3) year Facility Use Agreement, attached to Report No. 30-18 as Appendix 1, with PT Watersports Inc. to operate at Binbrook Conservation Area.

**PURPOSE:**

For the Board to consider an unsolicited proposal from PT Watersports Inc.

**DISCUSSION:**

PT Watersports have put forward an unsolicited proposal (Appendix 2) to expand water related activities at Binbrook Conservation Area which would provide a new attraction and entertainment hot spot – Binbrook ‘FunSplash Sports Park’ - an inflatable waterpark manufactured by Wibit, leaders in recreational open water playgrounds.

PT Watersports would like to establish a multi-year partnership and proposes a three-year lease agreement commencing June 4, 2018 and terminating September 4, 2020 with PT watersports being able to accept a fourth-year option in 2021.

**FINANCIAL IMPLICATIONS:**

The proposed agreement places the lease at \$2000 per month of their operating season (3 months a year). Over the course of the proposed agreement term of 3 years, this equates to approx. \$19,000 additional revenue directly from the lease plus an anticipated increase in day-use revenue from patrons paying admission rates to use the new park amenity.

There are no costs to the NPCA associated with the proposed agreement and PT Watersports would carry \$5 million liability insurance with NPCA as additional insured.

Although staff support this proposed agreement and attraction at Binbrook, the Board can further direct staff to put out an RFP or the Board can decide to do nothing on this matter.

**RELATED REPORTS AND APPENDICES:**

Appendix 1 - DRAFT 2018 PT Watersports Inc lease agreement

Appendix 2 – Unsolicited Proposal from PT Watersports

**Prepared by:**



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**David Barrick**  
Senior Director of Corporate Resources

**Submitted by:**



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**Mark Brickell**  
CAO/Secretary-Treasurer

***This report was prepared in consultation with Adam Christie, Manager, Strategic Initiatives & Capital Assets***

THIS FACILITY USE AGREEMENT made in triplicate this            Day of            2018.

BETWEEN:

THE NIAGARA PENINSULA CONSERVATION AUTHORITY

**Hereinafter called the *AUTHORITY***  
OF THE FIRST PART

-and-

PT Watersports Inc

**Hereinafter called PT Watersports**  
OF THE SECOND PART

WHEREAS PT Watersports are desirous of entering into a Facility Use Agreement with the AUTHORITY to use and maintain dedicated space at Binbrook Conservation Area for the purpose of operating a “FunSplash Sports Park – an inflatable waterpark manufactured by Wibit. The waterpark will enhance the visitor experience at the park from Monday June 4<sup>th</sup>, 2018 to Tuesday, September 4<sup>th</sup>, 2018.

NOW THEREFORE herein contained and subject to the terms and conditions hereinafter set out, the parties agree as follows:

(1)    Transfer of Agreement

PT Waterports shall not assign or transfer this Agreement without consent from the AUTHORITY.

(2)    Site Requirements

PT Watersports shall have use of 167ft by 131ft waterway space on Lake Niapenco adjacent to the north-east side of the beach area. PT Watersports shall also have use of additional shoreline frontage and/or beach frontage available and agreed upon by the Manager, Strategic Initiatives, Park Superintendent, or their designate.

(3)    Electrical/ Water Connections

The Niagara Peninsula Conservation Authority at Binbrook Conservation Area will supply no electrical connections or water. Any additional work needed by PT Watersports will need to be discussed with the Park

Superintendent or his/her designate prior to taking place.

(4) Capital Investment

The Niagara Peninsula Conservation Authority will not be adding any capital investment to aid PT Watersports in their operation.

Any proposed capital investment, relating to or on behalf of the facilities and infrastructure at Binbrook Conservation Area by PT Watersports must be discussed, prior to work or purchase, with the Park Superintendent or his/her designate.

(5) Amenities

PT Watersports and its patrons will have use of the Binbrook Conservation Area washrooms and parking lots.

(6) Services

PT Watersports will be notified before the beginning of the season scheduled events that will impact their business.

The Authority will allow PT Watersports to promote their services to all the Authorities pavilion rentals

PT Watersports will be granted exclusive right to operate an inflatable waterpark.

(7) Loss or Injury

The AUTHORITY will not accept any responsibility for any injury or loss sustained by any person that is a PT Watersports client or customer that are in the use of the said facilities, or for the loss of any personal property or effects stored or left on premises, PT Watersports shall and hereby does indemnify the AUTHORITY against any and all claims in respect of any such loss or injury.

PT Watersports shall amend its Releases attached as Schedule B or add an additional release so that the AUTHORITY is named as a Release and so that the Release is signed personally by all persons over the age of 18 years of age.

The Authority makes no representation about the depth of water, nor the state of the bottom, in the area. It shall be PT Watersports sole responsibility to ensure that their operation can be safely conducted at the

site.

(8) Access to site

Any AUTHORITY personnel may at any time enter on the described premises for whatever purpose as deemed necessary by them.

(9) Maintenance

At the commencement of the signing of this Agreement, PT Watersports shall be responsible, entirely, for the maintenance of their equipment including garbage and recycling removal from the site. All other site maintenance will be discussed with and coordinated through the Park Superintendent or his/ her designate.

(10) Utilities

The AUTHORITY shall be solely responsible for the payment of all utility bills (electricity only) related to the operations.

(11) Fees

PT Watersports in consultation with the AUTHORITY shall set the rental rates and shall retain all rental fees collected. PT Watersports will submit a payment of \$2000 plus hst/month of their operating season to the Binbrook Conservation Area Park Superintendent on the 30<sup>th</sup> day of each operating month starting on JUNE 30<sup>th</sup> of 2018. Payment dates will be June 30<sup>th</sup>, July 30<sup>th</sup>, August 30<sup>th</sup>, 2018 by posted dated cheques supplied to the Binbrook Conservation Area Park Superintendent prior to May 30<sup>th</sup>, 2018 for the 2018 operating season. PT Watersports understands that its clientele are subject to approved day use fees at Binbrook Conservation Area's front gate prior to entering the park. The dates and procedure will remain true through the 2019 and 2020 operating season. The monthly payment rate for 2019 will be \$2100 plus hst/month and the monthly payment rate for 2020 will be \$2200 plus hst/month. PT Watersports will have an option to renew in 2021 and the monthly rate will be \$2300 plus hst/month.

The Authority agrees to allow PT Watersports to purchase a limited amount of season passes at a 50% discounted rate to promote PT Watersports by selling packages that include an all parks season pass.



(12) Insurance

PT Watersports shall at all times throughout the term of this Agreement provide at its own expense and keep in force Comprehensive General Liability Insurance which will include as an additional insured Niagara Peninsula Conservation Authority in an amount not less than five million dollars (\$5,000,000.00) inclusive and to furnish a copy of such insurance or certified letter from PT Water Sports insurance company by June 4<sup>th</sup>, 2018.

(13) Restoration of site

Upon cancellation or termination of this Agreement, PT Watersports shall forthwith remove, at their own expense, its property from the land and premises of Binbrook Conservation Area, leaving and restoring said land and premises in a neat and clean condition to the entire satisfaction of the Binbrook Conservation Area Park Superintendent or his/her designate within 21 days of the cancellation or termination. In case of default of PT Watersports to remove their property within a reasonable period as determined by the AUTHORITY, said property shall be removed and the site restored by the AUTHORITY at the expense of PT Watersports or, at the option of the AUTHORITY said property shall become the property of and shall vest in the AUTHORITY without any right of compensation of PT Watersports.

(14) Headings

The parties hereto agree that the headings herein form no part of this Agreement and shall be deemed to have been inserted for convenience only.

(15) Notice

And it is further agreed that any notice required to be given to PT Watersports shall be sufficiently served by email or mail and that any notice required to be given to The AUTHORITY shall be sufficiently served if given to the Binbrook Conservation Area Park Superintendent personally, or sent by prepared registered mail to the office of the Manager, Strategic Initiatives at the Niagara Peninsula Conservation Authority Head Office. (250 Thorold Road West, 3<sup>rd</sup> Floor, Welland, ON, L3C 3W2)

(16) Amendments

If at any time during the continuance of this Agreement the parties hereto shall deem it necessary or expedient to make any alteration or addition to this Agreement they may do so by means of a written Agreement between them which shall be supplemental hereto and form part thereof.

(17) Agreement in Entirety

It is agreed that this written instrument embodies the entire Agreement of the parties hereto with regard to the matters dealt with herein, and that no understandings or agreements, verbal or otherwise, exist between the parties except as herein expressly set out.

(18) Termination Of Agreement

PT Watersports may at its sole option and discretion, terminate this Agreement by advising The Niagara Peninsula Conservation Authority in writing by September 1<sup>st</sup> of each year of this Agreement of its intention to terminate this Agreement and vacate the premises known as Binbrook Conservation Area. PT Watersports shall forthwith remove, at their own expense, its property from the land and premises of Binbrook Conservation Area, leaving said land and premises in a neat and clean condition to the reasonable satisfaction of the Binbrook Conservation Area Park Superintendent or his/ her designate. In case of default of PT Watersports to remove their property within a reasonable period as determined by the Binbrook Conservation Area Park Superintendent or his/ her designate, said property shall become the property of the Niagara Peninsula Conservation Authority without any right of compensation of PT Watersports therefore in any case.

The Niagara Peninsula Conservation Authority may at its sole option and discretion, terminate this Agreement by advising PT Watersports in writing giving them a minimum of 30 days' notice. PT Watersports shall, within the 30 days or within an agreed upon time frame agreed to in writing by the Director of Corporate Resources, remove all equipment in a timely manner and return the site to its original state to the satisfaction of the Binbrook Conservation Area Park Superintendent.

(19) Renewal

PT Watersports shall inform the management at the Niagara Peninsula Conservation Authority by December 1<sup>st</sup>, 2020 in writing if they are desirous to renew this Agreement, for an additional 3 years subject to approval by the Niagara Peninsula Conservation Authority Board of Directors, the CAO, Members of the Senior Management Team, and the

Binbrook Conservation Area Park Superintendent of the day.

DRAFT

This Management Agreement shall insure to the benefit of and be binding on the respective administrators, successors and assigns of each of the parties hereto.

IN WITNESS WHEREOF the parties have hereunto set their hands and seals and the Corporation has affixed its corporate seal under the hands of its proper officers duly authorized on that behalf.

SIGNED, SEALED AND DELIVERED )

In the presence of

PT WATERSPORTS INC

\_\_\_\_\_  
Owner Date

\_\_\_\_\_  
Owner Date

THE NIAGARA PENINSULA CONSERVATION AUTHORITY  
CHIEF ADMINISTRATIVE OFFICER/ SECRETARY/ TREASURER

\_\_\_\_\_  
CAO Date

# The Ultimate Aquatic Playground



Expression of Interest – Niagara Peninsula Conservation Authority

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### Contact Information

*PT Watersports Inc.*

**Patrick Jackson** – 780.207.5054

**Teresa Jackson** – 780.812.4940

hello@funsplashsportspark.ca



# Overview

## The Ultimate Aquatic Playground

Introducing the evolution of water play. We are proposing a commercial agreement with the Niagara Peninsula Conservation Authority to lease water space on Lake Niapenco to provide a new attraction and entertainment hot spot – Binbrook FunSplash Sports Park - an inflatable waterpark manufactured by Wibit, the global leaders in recreational open water playgrounds.

Wibit Waterparks are being installed in over 60 countries and throughout prime tourism locations in Canada. The Hamilton, Ontario area is IDEAL for this water sports park and it simply NEEDS to have one!

Binbrook is a busy hub where many come to enjoy the sun, the lake and other activities already offered here. The FunSplash Sports Park is an affordable and fun environment that will bring friends and families together. It promotes physical fitness and outdoor fun drawing our young people away from screens and technology. Plus, the laughter and fun they will experience on the FunSplash will have them wanting to keep coming back.



# Benefits to the region

## Endless activities – smiles guaranteed

FunSplash Sports Park represents quality time for all types of target groups. Local families, tourists, clubs, summer camp programs, or companies that want to be entertained in a fun and casual atmosphere. The waterpark provides action in a safe environment that also allows for users to be as physically and mentally challenged as they desire.

## TOURISM

With an operating schedule of the second half of June until the first half of September, the waterpark will become the most talked about, affordable, summer attraction in the area providing entertainment for visiting tourists.

## MULTI-DAY PASSES

FunSplash will offer 3-day and 5-day Splash Passes encouraging our visitors to come to the region and stay to play, eat, shop, spend the night, while also taking in other attractions the area has to offer. This will bolster not only the local economy and benefit other local businesses but visitors will also want to experience the other activities offered at Binbrook while they are in the area. This will also encourage the purchase of multi-day admission to the Binbrook Conservation Area.

## THE SPECIAL EVENT MARKET - TEAM BUILDING

At FunSplash Sports Park companies as well as various groups, schools, and sports teams, can enjoy team work and competition, testing their athletic potential and creating memorable experiences together.



## PROMOTING PHYSICAL FITNESS

Waterparks promote physical fitness in a fun way to people of all ages and cultures. Physical activity is proven to improve health, happiness and overall well-being.

# Activities on offer

The Wibit Waterparks are eye-catching in every open water location and they attract customers from near and far!

The open water configuration allows endless routes of fun. The Wibit Waterpark is modular, the shape of the facility is easy to assemble and expand to match a specific location and its parameters.

Wibit offers many different individual inflatable obstacles which allows for the aquatic playground to occasionally be changed creating a new experience for returning visitors.

We're proposing the installation of a 167ft by 131ft configuration on Lake Niapenco.

Many different paths can be taken on the obstacle course that is equipped with hurdles, trampolines, climbing walls and monkey bars where visitors can swing and dangle to see who can get the farthest.



**Climbing, jumping, sliding – obstacles galore!**





# Operational Overview

## Roles and responsibilities

Under a commercial lease agreement with the Niagara Peninsula Conservation Authority, PT Watersports Inc. will be responsible for:

- Installation and pack down of the inflatable Wibit waterpark
- Installation of safety buoys surrounding the waterpark
- All staffing, during hours of operation and after hours security
- All required insurance
- Cleanliness of the beach area in front of the waterpark when the facility is in operation
- All marketing and promotion of the FunSplash Sports Park to target markets
- Payments to the Niagara Peninsula Conservation Authority for lease of lakefront area for a proposed 5 year term

## Infrastructure requirements

FunSplash Sports Park can operate with a simple branded shade canopy on the beach and a small storage trailer however the company is open to contributing capital for the installation of a more permanent structure.

## Proposed operational times

We are proposing Binbrook FunSplash Sports Park to be operational from mid-June until the first week of September each year pending prevailing weather and water conditions. The waterpark would be open for business seven days a week including all holidays. Groups would be able to rent the park for event bookings for a full day or selected durations within the standard operating hours of 10am – 8pm.

## Pricing structure

All ticket prices include the following:

- Safety briefing and rules of play
- Life Jacket

<u>Type of tickets</u>	<u>Price</u>
2 hour Splash Pass	\$18
1 day Splash Pass	\$25
1 evening Splash Pass (5:30-8pm)	\$15
3 day Splash Pass	\$65
5 day Splash Pass	\$100

All players must be a minimum 8 years old. All children under the age of 12 need to be accompanied by an adult.

## Uncompromised safety

### Waterpark capacity

The Wibit Waterpark model PT Watersports Inc. is seeking to operate at the Binbrook Conservation Area has the capacity for 120-140 users during operation. This could potentially be expanded to a larger waterpark in the future.

### Specifications

- The inflatable waterpark needs to be in water depth ranging from 5-10 feet
- The dimensions of the park are 167' by 131'
- Buoys would be in place to meet all Transport Canada requirements
- The waterpark is moored to the lake floor using 5' bundy cord flexing to 20' moored to concrete anchor points

### Lifeguards

The FunSplash Sports Park will be equipped with a lifeguard tower allowing an ideal field of vision over the whole waterpark for quick reaction times. The lifeguards also will roam the park utilizing lifeguard boards. These enable dynamic surveillance and quick reaction time in case of emergency.

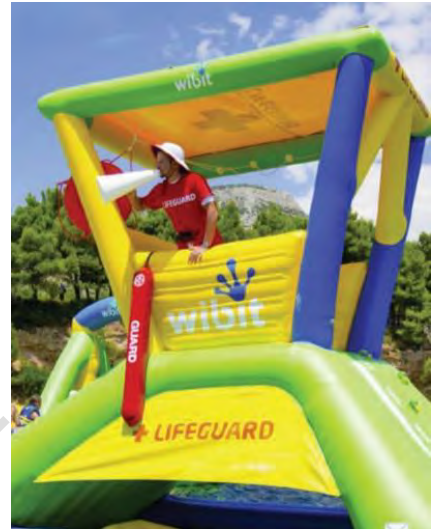
PT Watersports Inc. is open to discussing the possibility of an agreement being reached with the Niagara Peninsula Conservation Authority to supply the lifeguards for the aquatic splash park. This will ensure that the lifeguards are familiar with the lake and local water conditions and fully trained in the safety procedures already in place at Lake Niapenco.

### Brand Presence

FunSplash Sports Park fixtures and staff will be in fully branded gear (shirts, shorts, caps, wristbands, flags, etc). Having a professional and branded beach presence is key to building trust with customers. A simple branded shade canopy on the beach will act as a ticket booth and entrance to the aquatic splash park while protecting our staff from the elements. A small storage trailer with the Binbrook FunSplash Sports Park logo would be present at the beach as well as it would be used for overnight storage.

### Safety and Emergency Plan

Lifeguard training is key to preventing injury and severe accidents. All staff will be trained on traffic control in the park, where lifeguards should be located and incident management. Safety warning signs will also be in place with other required safety equipment.



# About us

## Who we are

PT Watersports Inc. is a small, startup company founded in Alberta that is owned and operated by Patrick and Teresa Jackson. Patrick previously lived in Goderich, ON before joining the Canadian Arm Forces where he served for 10 years before voluntarily releasing in 2013. Teresa has a graphic design and marketing background and for the past 8 years she has been a sales and training director with the Pampered Chef. She has consistently been a trip achiever and among the top 50 consultants across Canada. We both come from an entrepreneurial background and have been in business together for the past twelve years.

We are dedicated to maintaining a high safety standard, offering friendly service, and highly value using only the best equipment at our water splash parks. Over the next few years we plan to expand by bringing water splash parks to more and more communities across our beautiful country.

## What we believe

At PT Watersports Inc., we know the importance of healthy, family fun and creating lasting memories. We were first introduced to the Wibit Waterparks while on a family vacation with our five children, at the time ranging in age from 2-10 years.

We want to offer families as well as individuals, friends and groups a place to come to physically and mentally challenge themselves while laughing and having fun in a safe environment in the beautiful outdoors!

## Fund raising

In the future, a FunSplash Sports Park fundraising program can be developed and made available for local groups and organizations looking to raise funds for various initiatives.



# The Wibit brand 'quality'

Wibit is the brainchild of two entrepreneurs that wanted to bring fun and excitement to pools and resorts around the world.



The German watersports company Wibit Sports GmbH founded the inflatable waterpark industry. They have the most experience in this business with a worldwide network in more than 60 countries. There are over 7.5 million users of Wibit Water Parks in commercial pools, resorts, camps and open water locations.

Wibit does not take any chances with safety and neither should the Niagara Peninsula Conservation Authority.

You can take comfort in knowing the products are third party certified by the stringent German TÜV who ensures that the safety standards of the European Norm (EN15649) are fulfilled. In all cases Wibit either meet or exceed those standards. The European Norm requirements include disclosures and markings for required water depth, entrapment hazards and intended number of users.

## Technical specifications

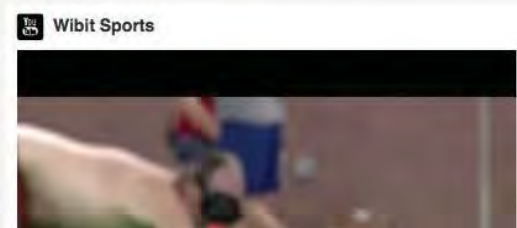
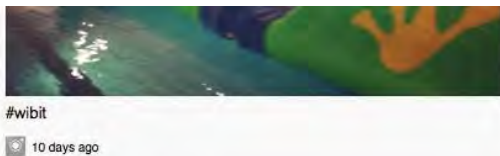
For some it may be enough to know that Wibit is a German company as they are well known for exceptional quality and standards. Everything is designed in their German headquarters and engineered for commercial use.

The Wibit Waterpark is manufactured using a 5 layer seam system and super strong UV protected PVC sheeting (1.100g/m<sup>2</sup>) / (32 oz/yd<sup>2</sup>) to ensure durability.

With 316 stainless steel metal parts and springs, the Wibit Waterpark will last for years and is covered under warranty.

# The future of water play

Wibit believes people everywhere should experience the excitement of play on the water. Check them out in social media to get the unvarnished truth from their customers' customers.





# Let's lead as a region

Raise the bar to be Ontario's greatest open water aquatic playground!

Aquatic Splash Parks just like this are already featured in various locations in British Columbia, Alberta, Quebec and one already in Barrie, ON. Some of these Wibit Waterparks have been in operation for 2 years already and have a huge reputation as being the most affordable value for money and fun tourism experience these areas have to offer. There has been lots of excitement and hype about these waterparks in their areas. Locals and tourists, adults and children are all having so much fun!

Aquatic Splash Parks are becoming more and more popular! Let's make Binbrook a leader in outdoor aquatic fun and be one of the first lakefront beaches to offer an open water obstacle course attraction!



**Report To:** Board of Directors

**Subject:** Financial Report – 2017 Completed & Carry-over Capital Projects

**Report No:** 26-18

**Date:** Feb 28, 2018

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**RECOMMENDATION:**

- 1) That Report No. 26-18 respecting the Financial Report – 2017 Completed & Carry-over Capital Projects and the attached appendices 1-4, **BE RECEIVED**; and
- 2) That the Board **APPROVE** the transfer of the \$13,389.71 capital surplus from the 2017 Special Levy (Niagara) to the General Capital Reserve.

**PURPOSE:**

To inform the Board of the financial status of its capital projects as of Dec. 31<sup>st</sup>, 2017 (unaudited).

This report aligns with the 2014-2017 NPCA Strategic Plan under 'Transparent Governance & Enhanced Accountability,' specifically, 'Budget process structures to reflect current operating and capital projects.'

**BACKGROUND:**

As part of the 2017 Budget process, the Board approved fifteen (15) capital projects totaling \$741,871 to be funded as follows:

Regular Levy	0
Special Levy (Niagara)	471,000
OPG	270,871

Four (4) additional capital projects were approved by the Board throughout the year totaling \$324,000 funded through a combination of reserves, grants and a donation.

Finally, twenty-three (23) capital projects were carried over into 2017 from previous years (unfinished projects from 2015 and 2016) requiring approximately \$500,000 for completion.

**FINANCIAL IMPLICATIONS:**

Thirty (30) capital projects were completed in 2017 (Appendix 1). Seven (7) projects are being carried over into 2018 with a remaining approved expenditure of approx. \$400,000 (Appendix 2).

There was no Regular Levy allocated to capital projects for 2017. However, there was \$471,000 allocated to capital projects from the Special Levy (Niagara). Those completed projects funded by the Special Levy (Niagara) have resulted in a \$13,389.71 surplus. As such, staff are recommending that remaining money be transferred to the General Capital reserve to be utilized for future capital projects and/or to help mitigate any future capital budget shortfalls.

The remaining projects are funded from reserves. Therefore, there is no capital surplus or deficit for consideration. Those completed projects funded by reserves have resulted in an under draw from reserves of \$27,849.02. Any other savings from 2017 carry-over capital projects will result in less money being withdrawn from the General Capital reserve account.

The Board previously approved the use of capital reserves in 2016 for those projects. An updated projection of capital reserve balances for the year ending 2017 is also provided for information (Appendix 3).

**RELATED REPORTS AND APPENDICES:**

Appendix 1 – Completed Capital Projects as of Dec. 31<sup>st</sup>, 2017

Appendix 2 – Capital Projects in progress/Carried over to 2018

Appendix 3 - Capital Reserve Projection for the year-ended 2017 & 2018 (unaudited)

**Prepared by:**



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**David Barrick**  
Senior Director, Corporate Resources

**Submitted by:**



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**Mark Brickell**  
CAO/Secretary-Treasurer

*This report was prepared in consultation with John Wallace, Manager of Finance.*

**APPENDIX 1 - Thirty (30) Completed Capital Projects 2017****2017 Budgeted & Completed**

			Expenditure	2017 Budget	Surplus/(Deficit)	
008008-633	Replace Ball Home Porch & Outbldg Repair	BF-2017-08	44,711.81	50,000	5,288.19	
008112-603	Accessible Walkway	BB-2017-12	25,176.44	15,000	0.00	
008305-609	Pos System	CC-2017-01	2,264.16	0	(2,264.16)	
008408-611	Water Treatment Upgrades	LB-2017-08	62,945.85	75,000	12,054.15	
008411-611	Pos System	LB-2017-11	2,264.16		(2,264.16)	
008504-613	Brook Trout Spawning Area	EB-2017-04	0.00	6,000	6,000.00	Opg Funded
008505-613	Perched Culvert Restoration	EB-2017-05	0.00	15,000	15,000.00	Opg Funded
008609-677	Data Centre Maintenance	GIS-2017-09	35,310.44	29,871	(5,439.44)	
008812-681	Monitoring & Conductivity Loggers	WS-2017-12	23,518.17	26,000	2,481.83	
008813-681	Water Quality Microscope	WS-2017-13	14,886.47	10,000	(4,886.47)	
008814-681	Flood Forecasting Telemetry & Sensors	WS-2017-14	1,580.23	10,000	8,419.77	

Net Surplus

34,389.71 minus OPG funded \$21,000 = **\$13,389.71****Completed Prior years with Budget**

			Expenditure	Original Budget	Fed Govt Grant	Drawn from Reserve	Original Budget	Over/(Under)
008101-603	Canada 150 Splashpad	BB-2016-01	508,012.58	525,000	212,922	295,090.14	275,000.00	20,090.14
008110-603	Pos System	BB-2016-10	2,226.65	5,000		2,226.65		(2,773.35)
008209-643	Electrical Upgrade Wainfleet Wetlands	CW-2016-09	6,368.01	10,000		6,368.01		(3,631.99)



008302-609	Submersible Pumps Water System	CC-2016-02	22,024.58	25,000		22,024.58		(2,975.42)
008303-609	Rehabilitate walking Trail Dil lake	CC-2016-03	9,187.51	15,000		9,187.51		(5,812.49)
008401-611	Fencing and Clearing( Phase 2)	LB-2016-01	54,128.25	65,000		54,128.25		(10,871.75)
008406-611	Scope De Commissioning Lagoon	LB-2016-06	5,545.92	20,000		5,545.92		(14,454.08)
008604-677	Migrate Switch Panel/Patch Panel Data Cntr	GIS-2016-04	6,024.36	15,000		6,024.36		(8,975.64)
008701-673	General Office Enhancements	CS-2016-01	56,555.56	55,000		56,555.56		1,555.56

Net Under Drawn from Reserves for Prior Years Projects

(27,849.02)

**Approved by Board in-year (2017) and completed**

Expenditure drawn from Reserve

008211-643	Galvanized Storage Trailers (2) Compound	CW-2016-11	59,607.50	59,607.50	
008221-643	Water Truck	CW-2017-21	104,078.33	104,078.33	
008410-611	Beach Access Stairs	LB-2017-10	154,895.88	69,379.17	
008010-633	Floating Docks	BF-2017-10	5,447.51	0	

Total

233,065.00

**Approved by Board prior year (2016) and completed**

Expenditure drawn from Reserve

008213-643	3-4 Portable Water Tanks Various Sizes	CW-2016-13	25,371.14	25,371.14	
008214-643	ARGO/ATV with Off Road Trailer	CW-2016-14	38,494.26	38,494.26	
008215-643	Drone with Video , Thermal Imaging GPS	CW-2016-15	22,351.53	22,351.53	
008217-643	Enclosed Trailer Storage	CW-2016-17	15,528.07	15,528.07	

Total (Bog Fire Suppression Equipment)

101,745.00

**OPG Approved prior year (2016) and completed**

Expenditure Drawn from OPG Fund

008502-613	Binbrook Fish Study	EB-2016-02	33,270.12	33,270.12
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008811-681	Floodplain Mapping Model	WS-2016-11	232,003.51	232,003.51
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**APPENDIX 2: Capital Projects in progress/Carried over to 2018**

			Expenditures	Budget	Remaining Drawn from Reserve in 2018
007202-643	Improvements 2 Beamer Look Outs	CW-2015-02	88,623.12	112,000.00	23,376.88
008009-633	Septic System Replacement - Lower Comfort Station	BF-2017-09	0.00	70,000	70,000.00
008219-643	Eavesthough Replacement Jordan Harbour	CW-2017-19	1,312.70	15,000	13,687.30
008220-643	Tree Planting, Shade Structures & Landscaping	CW-2017-20	78,652.23	150,000	71,347.77
					*Drawn from Opg Funding
008407-611	Electrical Upgrades	LB-2017-07	13,867.34	100,000	86,132.66
008409-611	Gate System Replacement	LB-2017-09	19,624.41	70,000	50,375.59
008610-677	Digital Terrain Model Update	GIS-2017-10	0.00	100,000	100,000.00
					*Drawn from Opg Funding

**NIAGARA PENINSULA CONSERVATION AUTHORITY**  
**STATEMENT OF CONTINUITY FOR CAPITAL & OPERATING RESERVES**  
**FORECAST FOR 2017 & 2018 (REVISED)**

	Balance (Audited) 31-Dec <u>2016</u>	Authorized Appropriations <u>2017</u>	Forecasted Balance 31-Dec <u>2017</u>	2018 Budget Appropriations	Forecasted Balance 31-Dec <u>2018</u>
	\$	\$	\$	\$	\$
<b>Unexpended Capital Reserves</b>					
<b>Equipment</b>	383,390	(102,582)	280,808	(204,000)	76,808
<b>General Capital</b>	1,283,542	(662,560)	620,982	0	620,982
<b>Flood Protection Services</b>	404,350	(40,000)	364,350	0	364,350
<b>Niagara Levy Differential</b>	774,469	431,744	1,206,213	440,378	1,646,591
<b>Land acquisition-Hamilton</b>	900,000	100,000	1,000,000	100,000	1,100,000
<b>Land acquisition-Niagara</b>	798,174	500,000	1,298,174	500,000	1,798,174
	4,160,535	329,184	4,489,719	1,040,378	5,530,097
	4,543,925	226,601.87	4,770,527	836,378	5,606,905
<b>Operating Reserves</b>					
<b>General Operating Reserve</b>	559,492	0	559,492	0	559,492
<b>Tree Bylaw Agreement</b>	82,371	0	82,371	0	82,371
	641,863	0	641,863	0	641,863
	641,863	0	641,863	0	641,863
<b>Grand Total Reserves</b>	5,185,788	226,602	5,412,390	836,378	6,248,768
<b>Deferred Revenue - Ontario Power Generation Funding</b>	1,736,981	(383,000.00)	1,353,981	(275,000)	1,078,981

\*OPG Funded 2017

\$271,000 Capital Works

\$87,000 Flood plain Mapping (work in progress)

\$25,000 Binbrook Fish Study (2016)