

FULL AUTHORITY MEETING
Wednesday April 26, 2017 9:30 am
Ball's Falls Centre for Conservation – Glen Elgin Room
3292 Sixth Avenue, Jordan, ON

A G E N D A (Revised)

Upcoming Events

- May 9 – 12 *Niagara Children's Water Festival*
 - May 27 & 28 *Roots on the Twenty*
-

9:30 am

Closed Session

-
1. Update Legal----- Verbal
 2. Outstanding Violations----- Report No. CR-37-17
 3. Cave Springs Offer ----- Verbal
-

10:30 am

Public Session

-
- ◆ **DECLARATION OF CONFLICT OF INTEREST**
 - ◆ **ADOPTION OF AGENDA**
 - ◆ **DELEGATION / PRESENTATIONS**
 "Roots on the Twenty" – Presentation by Kris Smith – Twenty Valley Tourism Association

◆ **BUSINESS**

- (1) Resolutions resulting from Closed Session
- (2) **A. Approval of Draft Minutes**
 - 1. ***Full Authority Meeting*** held March 29, 2017
 - 2. ***Special Authority Meeting*** held April 21, 2017
- B. Draft Committee Minutes**
 - 1. ***CLAC Meeting*** held March 23, 2017
 - 2. ***CAO Selection Committee Meeting*** held April 5, 2017
 - 3. ***Audit Committee Meeting*** held April 11, 2017
- (3) Business Arising from Minutes
- (4) Correspondence & Addendum Correspondence
- (5) Chairman's Remarks
- (6) Chief Administrative Officer Comments

Reports for Information

- (7) Financial & Reserves – Month ending March 31, 2017----- **Report No. 38-17**
- (8) Q1 2017 – Watershed Management Status ----- **Report No. 39-17**
- (9) Q1 2017 – Operations Status----- **Report No. 40-17**
- (10) Q1 2017 – Capital Projects Status ----- **Report No. 41-17**
- (11) Q1 2017 – Strategic Initiatives Status ----- **Report No. 42-17**
- (12) Q1 2017 – Ecological Status----- **Report No. 43-17**
- (13) Q1 2017 – Corporate Services Status----- **Report No. 44-17**
- (14) Q1 2017 – Communications Status ----- **Report No. 45-17**
- (15) 2016 NPCA Annual Report----- **Report No. 46-17**
- (16) 2016 Annual Report –Tree & Forest Conservation Bylaw 2008-30 ---- **Report No. 47-17**
- (17) Q1 2017 – Region of Niagara Tree & Forest Conservation By-law ---- **Report No. 48-17**

Reports for Consideration

- (18) 2016 DRAFT Audited Financial Statements ----- **Report No. 49-17**
- (19) Living Landscape – Draft Policy----- **Report No. 50-17**
 - *Presentation: Dillon Consulting*
- (20) Regulation #1 Governance & Administration Policies Draft Amendment - **Report No. 51-17**
- (21) Regulation #2 Meeting Procedures – Draft Amendment----- **Report No. 52-17**
- (22) BoarderPass Canada Facility Use Agreement----- **Report No. 53-17**
- (23) Long Beach CA RFQ for Stairs and AODO Ramp----- **Report No. 54-17**
- (24) Other Business

◆ **ADJOURNMENT**

ROOTS ON THE TWENTY

MAY 27-28 | 2017

BALL'S FALLS, ON

★ A NEW EVENT
NOT FOR THE FAINT AT HEART



**REAL AUTHENTIC FOOD | LOCAL CRAFT BEVIES |
SOUNDS TO LOSE YOUR SOUL IN**

May 27 - 28, 2017 | Ball's Fall Conservation Area

We are a little hipster, a smidge country, all about nature and a whole lot of fun! This ain't your parent's bush party!

FREE Admission, tickets may be purchased for alcoholic beverages. Live entertainment will be provided by a variety of local and cultural talent. Live educational exhibits will be on display throughout the event.

SATURDAY: Open from 11:00AM to 9:30PM

- Great Canadian Lumberjacks - 12:30PM, 3:00PM and 6:00PM
- White Pine Dancers - 2:00PM and 4:30PM

SUNDAY: Open from 12:00PM to 5:00PM

- Great Canadian Lumberjacks - 1:30PM and 3:00PM



WELCOME TO THE HOTTEST NEW EVENT IN NIAGARA

Not your average Canada 150 Celebration, Roots on the Twenty is embracing iconic Canadiana with a twist. Craft. Homegrown. In the dirt fun!

We are telling guests to dust off their boots and kick up their heels as they explore our history, experience its culture, and sample the best local fare we have to offer.

Twenty Valley Tourism and Niagara Peninsula Conservation Authority have joined forces in perfect synergy to bring the BEST, most unpretentious event to Twenty Valley! We encourage bringing your rubber boots.

Nestled on the campground amongst the natural beauty of Ball's Fall's Conservation Area – Roots is bound show off our Canadian Spirit!





WHAT ELSE??

In addition to satisfying your belly; we will tickle your inner dare devil with these outdoorsy adventures:

- Bury the Hatchet – Interactive Axe & Archery Demonstrations
- Niagara Spinners, Little Foot Farms (Alpaca wool)
 - Ball's Fall Grist Mill Demonstration
 - Photo booth
 - Storytelling
- #plaidcrazy comfort seating



MARKETING PLAN

	TACTIC/LOCATION	REACH	EARNED
Newsprint/Local	Niagara This Week/Grimsby Lincoln News, News Now, Post Media	Local /Niagara 30,000 homes, 3 circulations	Yes
Radio	Country 89, GiantFM, KX94.7, 92.9TheGrand, 105.7EZRock, 97.7HTZ-FM and 610CKTB	Niagara, Haldimand, Hamilton, Halton	Yes, +on-site activations
Lured Print	Lure cards, Full Colour Poster	In market, TVTA partners and direct mail	No
Digital	AdFuel Geo-fenced ads, Horizon Travel – The PATH, Times Square, Dundas Square	100,000 impressions, spots on Toronto Morning shows through Dundas Square	Yes
Magazine Print	Quench Magazine, Horizon Travel, WEST Magazine – ads and advertorials	Various, reach.	Yes



OTHER DIGITAL:

Social Media, Twenty Valley newsletters, event listings throughout Ontario and Twenty Valley Partners

THANK YOU!



On behalf of Twenty Valley Tourism Association, its Board of Directors and its stakeholders, we would like to thank the Niagara Peninsula Conservation Authority, its Board of Directors and staff for their efforts in this collaboration!



CORRESPONDENCE

❖ **Fort Erie, Community Services** - dated April 3, 2017

RE: Great Lakes and St. Lawrence Cities Initiative

April 26, 2017 Full Authority Meeting



Community Services

Legislative Services

April 3, 2017
File No. 120810

His Excellency the Honorable Donald J. Trump
President of the United States
The White House
1600 Pennsylvania Avenue NW
Washington, DC 20500

Dear Mr. President:

Re: Great Lakes and St. Lawrence Cities Initiative

RECEIVED	
DATE: APR 5 '17 AM 10:39	
To:	<input checked="" type="checkbox"/> CHAIR, NPCA
<input type="checkbox"/> CAO OFFICE	<input type="checkbox"/> CORP. SERVICES
<input type="checkbox"/> WATERSHED	<input type="checkbox"/> OPERATIONS

The Municipal Council of the Town of Fort Erie at its meeting of March 27, 2017 passed the following resolution, which is of great importance to Fort Erie as we are adjacent to Lake Erie and the Niagara River:

Whereas the Town of Fort Erie is a member of the Great Lakes and St. Lawrence Cities Initiative, which consists of 127 municipalities in Canada and the United States that border the Great Lakes and St. Lawrence River; and

Whereas the Great Lakes constitute the largest reservoir of fresh water in the world, containing approximately 20% of the globe's fresh water supply; and

Whereas the Great Lakes and the St. Lawrence River are bounded by two provinces of Canada and eight states of the United States of America, whose responsibility – along with the two federal governments - is to oversee and ensure the sound stewardship of these waters; and

Whereas the Great Lakes and St. Lawrence River are a vital source of drinking water for 45 million people who live in the Great Lakes basin; and

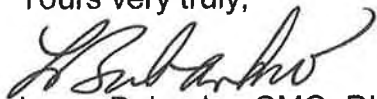
Whereas the Great Lakes are of fundamental importance to the economies of Canada and the United States through activities related to the fisheries, industry, shipping, farming, tourism and sports/recreation; and

Whereas by the end of the 1960's, industrial toxic chemicals, raw sewage and farming nutrients had turned the waters of the Great Lakes into hazards to human health and the sustainability of life in many forms; and

4. That a copy of this Resolution be forwarded to the Office of the President of the United States of America, the Speaker of the House of Representatives, the Leader of the House of Representatives Minority, the Leaders of the Majority and Minority of the United States Senate, the Prime Minister of Canada, the Governors of Wisconsin, Pennsylvania, New York, Ohio, Michigan, Minnesota, Illinois and Indiana, the Premiers of Ontario and Quebec, the Great Lakes and St. Lawrence Cities Initiative, the Association of Municipalities of Ontario, the Region of Niagara and local municipalities in Niagara, the Members of Parliament and Members of Provincial Parliament in Niagara, the International Joint Commission, Conservation Ontario and Niagara Peninsula Conservation Authority.

We thank you for your attention to this matter.

Yours very truly,



Laura Bubanko, CMO, Dipl. M.A.
Manager, Legislative Services/Clerk
lbubanko@forterie.ca

LB:dlk

cc:

Congressman Paul Ryan, U.S. Representative, Speaker of the House of Representatives, Office of the Speaker
Congresswoman Nancy Pelosi, U.S. Representative, Opposition Party Floor Leader, Office of the Democratic Leader
Senator Mitch McConnell, U.S. Senate Majority Leader
Senator Chuck Schumer, U.S. Senate Minority Leader
The Right Honourable Justin Trudeau, Prime Minister of Canada
The Honorable Richard D. Snyder, Co-chair, Council of Great Lakes Governors
The Honorable Tom Wolf, Governor, Office of the Governor, Pennsylvania
The Honorable Bruce Rauner, Governor, Office of the Governor, Illinois
The Honorable Andrew Cuomo, Governor, Office of the Governor, New York
The Honorable Eric Holcomb, Governor, Office of the Governor, Indiana
The Honorable Mark Dayton, Governor, Office of the Governor, Minnesota
The Honorable John Kasich, Governor, Office of the Governor, Ohio
The Honorable Rick Snyder, Governor, Office of the Governor, Michigan
The Honorable Scott Walker, Governor, Office of the Governor, Wisconsin
The Honourable Kathleen Wynne, Premier of Ontario
Monsieur Philippe Couillard, Premier Ministre of Quebec
Mr. David Ullrich, Executive Director, Great Lakes and St. Lawrence Cities Initiative
Ms. Pat Vanini, Executive Director, Association of Municipalities of Ontario
Niagara Region
Niagara Area Local Municipalities
Mr. Vance Badawey, MP-Niagara Centre, Parliament of Canada
Mr. Dean Allison, MP-Niagara West, Parliament of Canada
Mr. Chris Bittle, MP-St. Catharines, Parliament of Canada
Mr. Rob Nicholson, MP-Niagara Falls, Parliament of Canada
Mr. Sam Oosterhoff, MPP-Niagara West-Glanbrook, Legislative Assembly of Ontario
Mr. James Bradley, MPP-St. Catharines, Legislative Assembly of Ontario
Mr. Wayne Gates, MPP-Niagara Falls, Legislative Assembly of Ontario
Ms. Cindy Forster, MPP-Niagara Centre, Legislative Assembly of Ontario
Mr. Gordon Walker, Canadian Section Chair, International Joint Commission
Ms. Lana Pollack, US Section Chair, International Joint Commission
Mr. Richard Hibma, Chair, Conservation Ontario
Mr. Sandy Annunziata, Chair, Niagara Peninsula Conservation Authority

ADDENDUM

Correspondence

❖ Town of Pelham – dated April 20, 2017

RE: Great Lakes & St. Lawrence Cities Initiative

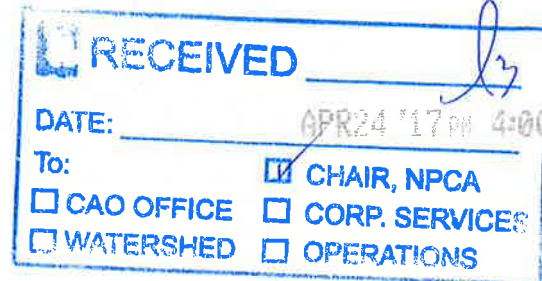
April 26, 2017 Full Authority Meeting



Vibrant · Creative · Caring

April 20, 2017

Laura Bubanko
Manager, Legislative Services/Clerk
Town of Fort Erie
lbubanko@forterie.ca



Dear Ms. Bubanko:

Great Lakes and St. Lawrence Cities Initiative

At their regular meeting of April 18th, 2017, Council of the Town of Pelham received your correspondence, dated April 3, 2017 and endorsed the following:

BE IT RESOLVED THAT Council receive correspondence from the Town of Fort Erie, dated April 3, 2017 regarding a resolution respecting the Great Lakes and St. Lawrence Cities Initiative; and

THAT the resolution contained therein passed by the Council of the Town of Fort Erie be endorsed and supported; and

THAT this resolution be forwarded to those noted therein.

On behalf of Council, thank you for your attention to this important matter.

Yours very truly,

(Mrs.) Nancy J. Bozzato, *Dipl.M.M., AMCT*
Town Clerk

/js

Cc:

The Honorable Donald J. Trump, President of the United States
Congressman Paul Ryan, U.S. Representative, Speaker of the House of Representatives, Office of the Speaker
Congresswoman Nancy Pelosi, U.S. Representative, Opposition Party Floor Leader, Office of the Democratic Leader
Senator Mitch McConnell, U.S. Senate Majority Leader
Senator Chuck Schumer, U.S. Senate Minority Leader
The Right Honourable Justin Trudeau, Prime Minister of Canada
The Honorable Richard D. Snyder, Co-chair, Council of Great Lakes Governors
The Honorable Tom Wolf, Governor, Office of the Governor, Pennsylvania

From the Clerk's Department



**Administrative
Services**



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The Honorable Bruce Rauner, Governor, Office of the Governor, Illinois
The Honorable Andrew Cuomo, Governor, Office of the Governor, New York
The Honorable Eric Holcomb, Governor, Office of the Governor, Indiana
The Honorable Mark Dayton, Governor, Office of the Governor, Minnesota
The Honorable John Kasich, Governor, Office of the Governor, Ohio
The Honorable Rick Snyder, Governor, Office of the Governor, Michigan
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Mr. David Ullrich, Executive Director, Great Lakes and St. Lawrence Cities Initiative
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Mr. Wayne Gates, MPP-Niagara Falls, Legislative Assembly of Ontario
Ms. Cindy Forster, MPP-Niagara Centre, Legislative Assembly of Ontario
Mr. Gordon Walker, Canadian Section Chair, International Joint Commission
Ms. Lana Pollack, U.S. Section Chair, International Joint Commission
Mr. Richard Hibma, Chair, Conservation Ontario
Mr. Sandy Annunziata, Chair, Niagara Peninsula Conservation Authority

From the Clerk's Department



**Administrative
Services**

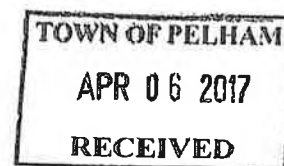
20 Pelham Town Square P.O. Box 400 · Fonthill, ON L0S 1E0 p: 905.892.2607 f: 905.892.5055

pelham.ca



Community Services

Legislative Services



April 3, 2017
File No. 120810

His Excellency the Honorable Donald J. Trump
President of the United States
The White House
1600 Pennsylvania Avenue NW
Washington, DC 20500

Dear Mr. President:

Re: Great Lakes and St. Lawrence Cities Initiative

The Municipal Council of the Town of Fort Erie at its meeting of March 27, 2017 passed the following resolution, which is of great importance to Fort Erie as we are adjacent to Lake Erie and the Niagara River:

Whereas the Town of Fort Erie is a member of the Great Lakes and St. Lawrence Cities Initiative, which consists of 127 municipalities in Canada and the United States that border the Great Lakes and St. Lawrence River; and

Whereas the Great Lakes constitute the largest reservoir of fresh water in the world, containing approximately 20% of the globe's fresh water supply; and

Whereas the Great Lakes and the St. Lawrence River are bounded by two provinces of Canada and eight states of the United States of America, whose responsibility – along with the two federal governments - is to oversee and ensure the sound stewardship of these waters; and

Whereas the Great Lakes and St. Lawrence River are a vital source of drinking water for 45 million people who live in the Great Lakes basin; and

Whereas the Great Lakes are of fundamental importance to the economies of Canada and the United States through activities related to the fisheries, industry, shipping, farming, tourism and sports/recreation; and

Whereas by the end of the 1960's, industrial toxic chemicals, raw sewage and farming nutrients had turned the waters of the Great Lakes into hazards to human health and the sustainability of life in many forms; and

Whereas since the 1970's the governments of the United States and Canada have recognized the significance of the Great Lakes waters and have committed to its regeneration; and

Whereas those efforts over the years have brought the Great Lakes back to life; and

Whereas it has only been through stringent standards and regulations requiring the protection of the waters in the Great Lakes system; continuous research, testing and remedial initiatives; federal, state and provincial commitment to the ideals of environmental stewardship, safe and clean drinking water, protection of wildlife habitats in and adjacent to the Great Lakes and the economic opportunities that arise from such a magnificent fresh water reservoir that have permitted the Great Lakes to regain its importance as a life-sustaining resource; and

Whereas the President of the United States has advanced 2017 budget proposals that include the reduction in funding for the Great Lakes Restoration Initiative by 97%, making the program virtually meaningless; and

Whereas this proposal is reckless, unwarranted and dangerous to the future quality of the waters of the Great Lakes system; and

Whereas the budget proposal of the President fails to recognize the decades of commitment by successive federal, state and provincial governments to rejuvenate the Great Lakes and the need for continuous vigilance to ensure the safety of the waters of the Great Lakes system to those millions of people who rely upon it for clean drinking water, employment, food and recreation;

Now therefore be it resolved:

1. **That** the Council of the Town of Fort Erie recognizes its responsibility as a steward of the waters of the Great Lakes system and fully supports the work of the Great Lakes and St. Lawrence Cities Initiative;

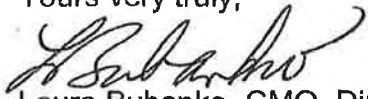
2. **That** the Council of the Town of Fort Erie recognizes the importance of programs, projects, research, initiatives and activities that restore, protect, promote, maintain and enhance the quality of the waters in the Great Lakes system and the responsibility of the governments of Canada and the United States of America and the states and provinces that bound the Great Lakes system;

3. **That** the Council of the Town of Fort Erie hereby expresses its opposition to any reduction in the budget allocated by the United States government to Great Lakes Restoration Initiatives and programs that address the environmental integrity of the waters of the Great Lakes system for 2017 and future years;

4. That a copy of this Resolution be forwarded to the Office of the President of the United States of America, the Speaker of the House of Representatives, the Leader of the House of Representatives Minority, the Leaders of the Majority and Minority of the United States Senate, the Prime Minister of Canada, the Governors of Wisconsin, Pennsylvania, New York, Ohio, Michigan, Minnesota, Illinois and Indiana, the Premiers of Ontario and Quebec, the Great Lakes and St. Lawrence Cities Initiative, the Association of Municipalities of Ontario, the Region of Niagara and local municipalities in Niagara, the Members of Parliament and Members of Provincial Parliament in Niagara, the International Joint Commission, Conservation Ontario and Niagara Peninsula Conservation Authority.

We thank you for your attention to this matter.

Yours very truly,



Laura Bubanko, CMO, Dipl. M.A.

Manager, Legislative Services/Clerk

lbubanko@forterie.ca

LB:dlk

cc: Congressman Paul Ryan, U.S. Representative, Speaker of the House of Representatives, Office of the Speaker
Congresswoman Nancy Pelosi, U.S. Representative, Opposition Party Floor Leader, Office of the Democratic Leader
Senator Mitch McConnell, U.S. Senate Majority Leader
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Mr. Richard Hibma, Chair, Conservation Ontario
Mr. Sandy Annunziata, Chair, Niagara Peninsula Conservation Authority

REPORTS FOR INFORMATION

- ❖ *Report No. 38-17 - Financial & Reserves month ending March 31/16*
- ❖ *Report No. 39-17 – Q1 2017 – Watershed Management Status*
- ❖ *Report No. 40-17 - Q1 2017 – Operations Status*
- ❖ *Report No. 41-17 - Q1 2017 - Capital Projects Status*
- ❖ *Report No. 42-17 - Q1 2017 – Strategic initiatives Status*
- ❖ *Report No. 43-17 - Q1 2017 – Ecological Status*
- ❖ *Report No. 44-17 - Q1 2017 – Corporate Services Status*
- ❖ *Report No. 45-17 - Q1 2017 – Communications Status*
- ❖ *Report No. 46-17 – 2016 NPCA Annual Report*
- ❖ *Report No. 47-17 -2016 Annual Report (Bylaw 2008-30)*
- ❖ *Report No. 48-17 – Q1 2017 – Region of Niagara, Tree and Forest*

April 26, 2017 Full Authority Meeting

Report To: Board of Directors

Subject: Financial and Reserve Report – Month Ending March 2017

Report No: 38-17

Date: April 26, 2017

RECOMMENDATION:

THAT Report No. 38-17 be **RECEIVED** for information.

DISCUSSION:

To provide the Board a summary of operations & capital expenditures versus revenues and to provide a comparison of actual results to the budget as approved by the Board.

The report confirms the general financial oversight and compliance with Public Sector Accounting Board standards.

FINANCIAL IMPLICATIONS:

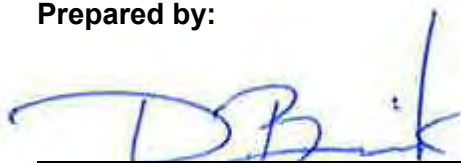
The lines of business are within budget allocations identified during the budget preparation and approval cycle.

RELATED REPORTS AND APPENDICES:

Appendix 1 – Budget Status Report: for month ending March 2017 (consolidated)

Appendix 2 - Statement of Reserves for month ending March 2017

Prepared by:



David Barrick
Director of Corporate Services

Submitted by:



Peter Graham;
Acting CAO/Secretary Treasurer

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

NIAGARA PENINSULA CONSERVATION AUTHORITY
CONSOLIDATED NON CAPITAL
JANUARY 1, 2017 - March 31, 2017

<u>REVENUES</u>	<u>YTD ACTUAL</u>	<u>ANNUAL BUDGET</u>	<u>% OF BUDGET</u>
MNR TRANSFER PAYMENTS	-	174,496.00	0.0%
PROVINCIAL GRANTS - MOE	3,538	99,500	3.6%
PROVINCIAL GRANTS - OTHER	58,458.76	212,000.00	27.6%
FEDERAL GRANTS	39,088	190,000	20.6%
MUNICIPAL LEVY - GENERAL	-	5,638,972	0.0%
LEVY - SPECIAL - NIAGARA	-	1,729,488	0.0%
LEVY - SPECIAL - HAMILTON	-	19,897	0.0%
ADMINISTRATION FEES	90,287	360,325	25.1%
USER FEES /OTHER REVENUES	483,358	1,612,279	30.0%
RESERVE FUNDS	-	-	0.0%
LAND OWNER CONTRIBUTION	3,000	-	100.0%
MISCELLANEOUS	11,514	106,435	10.8%
	689,243	10,143,392	6.8%

EXPENDITURES

CAO/BOARD & CORPORATE SERVICES	640,364	4,028,507	15.9%
WATERSHED	553,797	3,013,598	18.4%
OPERATIONS	523,855	3,101,287	16.9%
	1,718,015	10,143,392	16.9%

**NIAGARA PENINSULA CONSERVATION AUTHORITY
CAO/BOARD AND CORPORATE SERVICES
JANUARY 1, 2017 -March 31, 2017**

<u>REVENUES</u>	<u>YTD ACTUAL</u>	<u>ANNUAL BUDGET</u>	<u>% OF BUDGET</u>
MNR TRANSFER PAYMENTS	-	75,796	0.0%
PROVINCIAL GRANTS - OTHER	16,547	110,000	15.0%
MUNICIPAL LEVY - GENERAL	-	2,640,783	0.0%
LEVY - SPECIAL - NIAGARA	-	1,113,893	0.0%
INTEREST INCOME	5,862	60,000	9.8%
MISCELLANEOUS	20	-	100.0%
RESERVE FUNDS		-	-
CONSERVATION FOUNDATION	5,632	28,035	20.1%
	28,060	4,028,507	0.7%

EXPENDITURES

CAO & BOARD EXPENSES	25,177	365,723	6.9%
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CORPORATE SERVICES

CORPORATE MANAGEMENT	215,273	1,783,738	12.1%
OFFICE SERVICES	90,056	487,600	18.5%
FINANCIAL SERVICES	57,728	270,246	21.4%
HUMAN RESOURCES	40,409	114,120	35.4%
INFORMATION TECHNOLOGY	142,445	526,504	27.1%
CORPORATE COMMUNICATIONS	69,275	480,576	14.4%
	615,186	3,662,784	16.8%

**NIAGARA PENINSULA CONSERVATION AUTHORITY
WATERSHED
JANUARY 1, 2017 - March 31, 2017**

<u>REVENUES</u>	<u>YTD ACTUAL</u>	<u>ANNUAL BUDGET</u>	<u>% OF BUDGET</u>
MNR TRANSFER PAYMENTS	-	98,700	0.0%
PROVINCIAL GRANTS - MOE	3,538	99,500	3.6%
PROVINCIAL GRANTS - OTHER	41,912	102,000	41.1%
FEDERAL GRANTS	39,088	190,000	20.6%
MUNICIPAL LEVY - GENERAL	-	1,642,501	0.0%
LEVY - SPECIAL - NIAGARA	-	482,275	0.0%
LEVY - SPECIAL - HAMILTON	-	19,897	0.0%
ADMINISTRATION FEES	90,287	360,325	25.1%
RESERVE FUNDS	-	-	0.0%
LAND OWNER CONTRIBUTION	3,000	-	100.0%
MISCELLANEOUS	-	18,400	0.0%
	177,825	3,013,598	5.9%
<u>EXPENDITURES</u>			
WATERSHED MANAGEMENT	106,425	434,861	24.5%
PLAN REVIEW AND REGULATIONS	227,063	1,143,552	19.9%
WATERSHED PROJECTS	220,309	1,435,185	15.4%
	553,797	3,013,598	18.4%

**NIAGARA PENINSULA CONSERVATION AUTHORITY
OPERATIONS
JANUARY 1, 2017 -March 31, 2017**

<u>REVENUES</u>	<u>YTD ACTUAL</u>	<u>ANNUAL BUDGET</u>	<u>% OF BUDGET</u>
MUNICIPAL LEVY - GENERAL	-	1,355,688	0.0%
LEVY - SPECIAL - NIAGARA	-	133,320	0.0%
USER FEES/OTHER REVENUES	483,358	1,612,279	30.0%
RESERVE FUNDS	-	-	0.0%
	483,358	3,101,287	15.6%
<u>EXPENDITURES</u>			
OPERATIONS MANAGEMENT	143,967	570,177	25.2%
STRATEGIC INITIATIVES	108,032	724,103	14.9%
LAND PROGRAMMING	245,485	1,648,507	14.9%
VEHICLES AND EQUIPMENT	26,371	158,500	16.6%
	523,855	3,101,287	16.9%

**NIAGARA PENINSULA CONSERVATION AUTHORITY
CONSOLIDATED CAPITAL
JANUARY 1, 2017 - MARCH 31 , 2017**

<u>REVENUES</u>	<u>YTD ACTUAL</u>	<u>YTD BUDGET</u>	<u>% OF BUDGET</u>
FEDERAL GRANTS	-	-	0.0%
MUNICIPAL LEVY - GENERAL	-	902,615	0.0%
LEVY - SPECIAL - NIAGARA	-	500,000	0.0%
LEVY - SPECIAL - HAMILTON	-	100,000	0.0%
RESERVE FUNDS	-	-	0.0%
MISCELLANEOUS/OTHER	-	271,000	100.0%
	-	1,773,615	0.0%

EXPENDITURES

CORPORATE SERVICES	9,202	129,871	7.1%
WATERSHED	-	46,000	0.0%
LAND DEVELOPMENT	31,932	1,166,000	2.7%
NIAGARA DIFFERENTIAL (RESERVE)	-	431,744	0.0%
	41,135	1,773,615	2.3%

**NIAGARA PENINSULA CONSERVATION AUTHORITY
CORPORATE SERVICES - CAPITAL
JANUARY 1, 2017 - MARCH 31, 2017**

<u>REVENUES</u>	<u>YTD ACTUAL</u>	<u>YTD BUDGET</u>	<u>% OF BUDGET</u>
MUNICIPAL LEVY - GENERAL	-	29,871	0.0%
MISCELLANEOUS/OTHER	-	100,000	0.0%
	-	129,871	0.0%

<u>EXPENDITURES</u>			
CORPORATE SERVICES	-	29,871	0.0%
GIS	9,202	100,000	9.2%
	9,202	129,871	7.1%

NIAGARA PENINSULA CONSERVATION AUTHORITY
WATERSHED CAPITAL
JANUARY 1, 2017 - MARCH 31, 2017

<u>REVENUES</u>	<u>YTD ACTUAL</u>	<u>YTD BUDGET</u>	<u>% OF BUDGET</u>
MUNICIPAL LEVY - GENERAL	-	46,000	0.0%
	-	46,000	0.0%

<u>EXPENDITURES</u>			
STREAM GUAGE & MONITORING NETWORK	-	46,000	0.0%
	-	46,000	0.0%

NIAGARA PENINSULA CONSERVATION AUTHORITY
CONSERVATION LAND DEVELOPMENT - CAPITAL
JANUARY 1, 2017 - MARCH 31, 2017

<u>REVENUES</u>	<u>YTD ACTUAL</u>	<u>YTD BUDGET</u>	<u>% OF BUDGET</u>
FEDERAL GRANTS	-	-	100.0%
MUNICIPAL LEVY - GENERAL	-	395,000	0.0%
LEVY - SPECIAL - NIAGARA	-	500,000	0.0%
LEVY - SPECIAL - HAMILTON	-	100,000	0.0%
RESERVE FUNDS	-	-	0.0%
MISCELLANEOUS/OTHER	-	171,000	100.0%
	-	1,166,000	0.0%
<u>EXPENDITURES</u>			
LAND ACQUISITION (RESERVE)	-	600,000	0.0%
BALL'S FALLS	-	120,000	0.0%
BINBROOK	1,977	-	100.0%
CHIPPAWA CREEK	-	-	0.0%
LONG BEACH	10,815	245,000	4.4%
ECOLOGICAL PROJECTS	-	21,000	100.0%
GAINSBOROUGH CENTRAL WORKSHOP	19,140	180,000	10.6%
	31,932	1,166,000	2.7%

**NIAGARA PENINSULA CONSERVATION AUTHORITY
STATEMENT OF CONTINUITY FOR CAPITAL & OPERATING RESERVES
FORECAST FOR 2017**

	Balance (Audited) 31-Dec <u>2016</u>	Authorized Appropriations <u>2017</u>	Forecasted Balance 31-Dec <u>2017</u>
	\$	\$	\$
Unexpended Capital Reserves			
Equipment	383,390	(102,582)	280,808
General Capital	1,283,542	(612,560)	670,982
Flood Protection Services	404,350	0	404,350
Niagara Levy Differential	774,469	431,744	1,206,213
Land acquisition-Hamilton	900,000	100,000	1,000,000
Land acquisition-Niagara	798,174	500,000	1,298,174
	4,160,535	419,184	4,579,719
	4,543,925	316,601.79	4,860,527
Operating Reserves			
General Operating Reserve	559,492	0	559,492
Tree Bylaw Agreement	82,371	0	82,371
	641,863	0	641,863
	641,863	0	641,863.00
Grand Total Reserves	5,185,788	316,602	5,502,390
Deferred Revenue - Ontario Power Generation Funding	1,736,981	(358,000.00)	1,378,981

Report To: Board of Directors

Subject: Q1 2017 Watershed Management Status Report

Report No: 39-17

Date: April 26, 2017

RECOMMENDATION:

That Watershed Management Status Report No. 39-17 be RECEIVED for information.

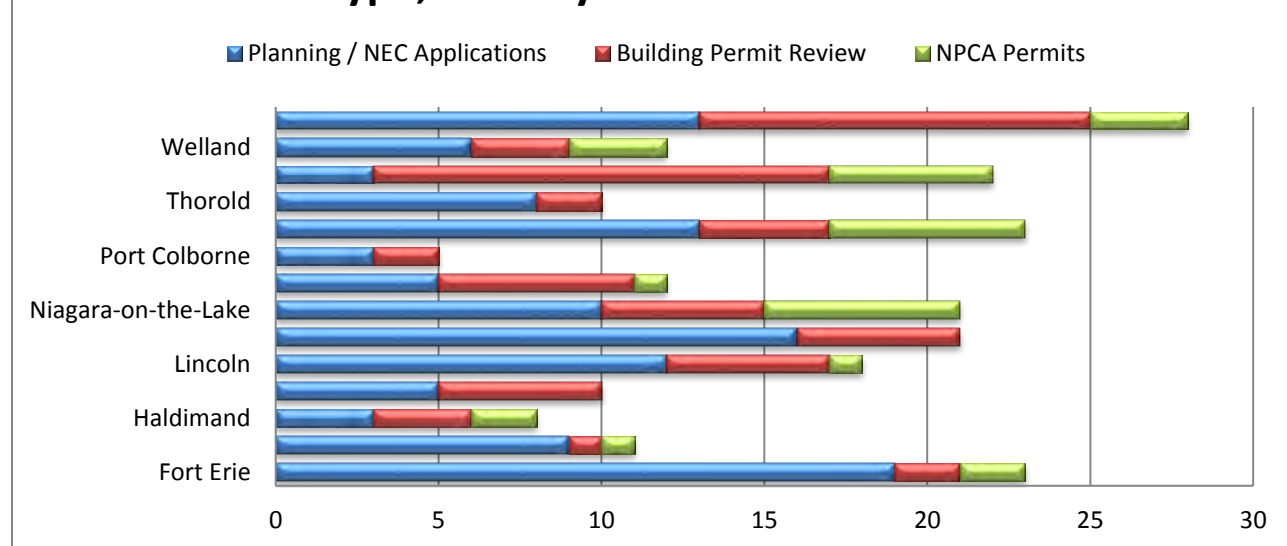
PURPOSE:

To update the Board on the Watershed Management Team's activities and achievements during Q1 2017.

BACKGROUND:

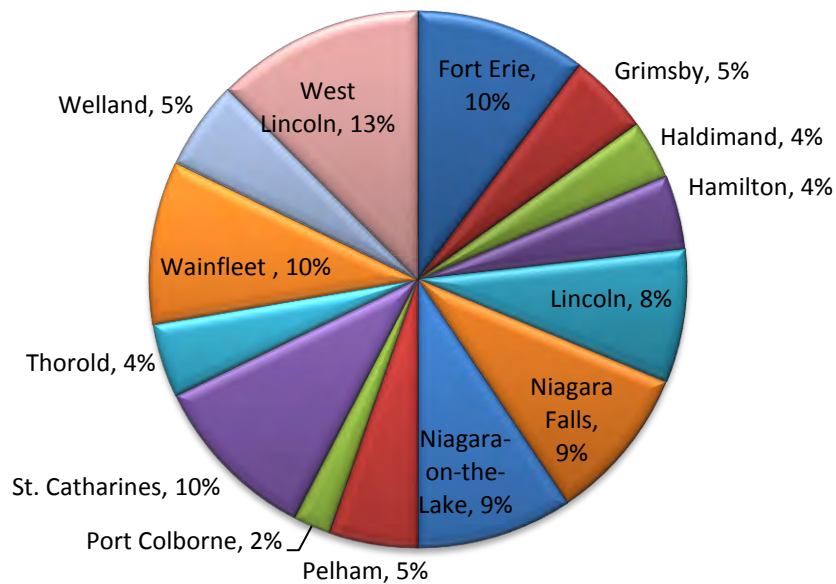
A. Plan Review & Regulations

Figure 1: NPCA Watershed, No. of Applications by Type, January 2017 - March 2017



	Fort Erie	Grimsby	Haldimand	Hamilton	Lincoln	Niagara Falls	Niagara-on-the-Lake	Pelham	Port Colborne	St. Catharines	Thorold	Wainfleet	Welland	West Lincoln	Totals
Planning / NEC Applications	19	9	3	5	12	16	10	5	3	13	8	3	6	13	125
Building Permit Review	2	1	3	5	5	5	5	6	2	4	2	14	3	12	69
NPCA Permits	2	1	2	0	1	0	6	1	0	6	0	5	3	3	30
Totals	23	11	8	10	18	21	21	12	5	23	10	22	12	28	224

**Figure 2: Total No. of Applications (%),
January 2017 - March 2017**



B. Watershed Biology

In the months of January to March the Watershed Ecological Technicians have provided biology review for a variety of planning and regulations files.

The following table is a breakdown of reviews by the Ecological Technicians, excluding reviews tracked within Cityview:

	January 2017	February 2017	March 2017	Q1 TOTAL 2017
Number of site visits for planning files (including pre-consultation)	11	12	12	35
Number of site visits for permits	11	20	18	49
Other site visits (violations, inquiries, etc.)	3	4	3	10
Number of planning file comments completed	14	15	16	45
Number of permit file comments completed	15	26	23	64

The Ecological Technicians have also contributed to the Cave Springs Management Plan project, and to the Health and Safety committee as the Worker Co-Chair, and attended the TRIECA stormwater and erosion and sediment control conference.

The Supervisor of Watershed Biology assisted with the review of the NPCA Living Landscape Policy review, attended a session on Natural Heritage Systems in the context of the Planning Act, and assisted the Region with expertise related to Significant Woodland and other natural heritage designations, and attended the first Chapter 5 Drainage Superintendents Association of Ontario meeting as Chapter Secretary. She attended several meetings, site visits and worked on several files including Thundering Waters (Niagara Falls), Warren Woods (Niagara Falls), Grand Niagara (Niagara Falls), the Regional Road 12 Landfill (Grimsby), and completed scoping for several Environmental Impact Studies.

C. Water Resources

1) Source Water Protection Plan

- Staff prepared and submitted the 2017-2018 Capacity Funding Application to the Ministry of the Environment and Climate Change (MOECC). Prior to submission, staff met with the MOECC to clarify the application process.
- Staff participated in the MOECC 2-day Project Manager and Chair's meeting in Toronto.
- Staff met with the Source Protection Committee in March and finalized the Annual Progress Report which is required to be submitted to the MOECC.
- Staff participated in a number of MOECC and Conservation Ontario conference calls.
- Staff met with the Niagara Region Risk Management Officer on program implementation and continued to respond to other enquiries regarding Source Water Protection; and.
- At the request of the Region of Niagara, NPCA staff assisted with the installation of water level staff gauges to help determine if surface water from private lands are spilling into the middle DeCew drinking water reservoir (see photo below).



2) Water Quality Monitoring Program

- In 2017, the Ministry of the Environment and Climate Change (MOECC) has provided a laboratory allotment for the NPCA to collect winter water samples through the Provincial Water Quality Monitoring Network (PWQMN). NPCA staff collected these samples in February and data will be used to address a significant gap in our monitoring of watershed conditions in the winter season.
- In March, staff initiated routine monitoring at all existing NPCA 75 water quality monitoring stations. This monitoring will be performed monthly until November at all stations and samples will be analyzed for general chemistry, nutrients, metals and bacteria. The NPCA has added 5 new monitoring stations to the network and these stations will be monitoring the water quality of Prudhommes Drain (Lincoln), Richardson Creek (St. Catharines), Welland Canal (Port Colborne), Mill Race Creek and the Feeder Canal Drain (both Wainfleet).



NPCA staff collecting surface water samples

- Staff have update databases, complete benthic identification of biological samples from 2016 and currently preparing the annual water quality report.
- NPCA staff are currently completing the water quality assessment reports for the City of Hamilton's Glanbrook Landfill and Hamilton Airport as per established monitoring agreements.
- Staff attended the MOECC Biomonitoring Workshop and participated on PWQMN Data Analysis Workshop.
- Staff provided support to the Niagara Envirothon event by leading the Aquatics station.
- Provincial Groundwater Monitoring Network (PGMN): Staff continue to visit monitoring wells for manual downloads and perform QA/QC check on groundwater level data as part of their routine data maintenance protocol.

- To date, staff have processed 17 data requests from other governmental agencies, consultants, and academic institutions.
- In the first quarter of 2017, the NPCA has received six (6) applications and completed 2 projects under the Well Water Decommissioning Program. Due to date, approximately 25% of the funding for this program has been allocated. Photo below shows a recently completed project in Hamilton.



3) Flood Control

- Binbrook Reservoir – Due to the ice melt and precipitation experienced over the past three months, the water level in the Reservoir has fluctuated between the holding level of 650.5 feet to the top of the crest of the Morning Glory spillway at 652.5 feet. Staff continue to monitor reservoir water levels on a daily basis and make adjustments as warranted.

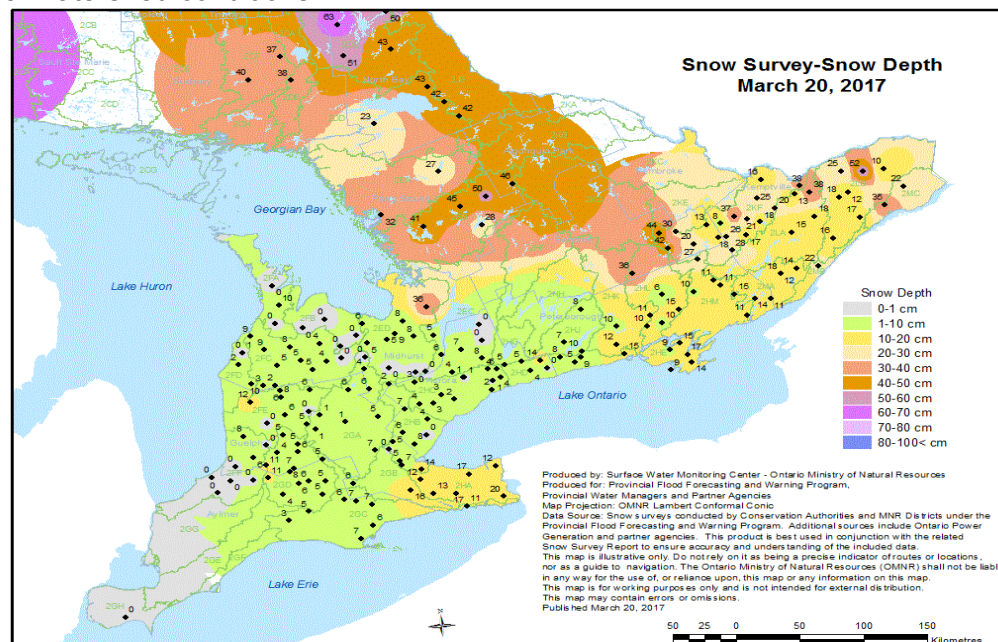


- In the first quarter of 2017, the NPCA has issued 5 Water Safety Bulletins as a result of four heavy rainfall events. No widespread flooding had occurred, although localized flooding was experienced in some areas.



Property along Canborough Road, West Lincoln

- Staff continued to monitor daily water levels at our 15 stream gauge stations, climatic data at our 15 climate stations, and undertake routine maintenance, calibration, and inspections at all 30 installations, as part of the NPCA's routine Flood Forecasting and Warning duties. The public may access this real-time water level and rainfall information through the NPCA's website.
- In support of the Flood Forecasting and Warning program, staff are undertaking the seasonal winter snow surveys. On the 1st and 15th of each month from November to April, NPCA staff measure the snowpack (should one exist) at seven set locations throughout the watershed. These measurements are then analyzed to determine the amount of water present on the ground in the snowpack and the associated potential flood risk should the watershed experience a rapid melt. The information from the NPCA's snow surveys are also routinely sent to the Ministry of Natural Resources' 'Surface Water Monitoring Centre' in Peterborough in an effort to help keep the Province apprised of local watershed conditions.



4) Water Resource Engineering

- Staff continue to provide daily support to the Planning and Regulations program with respect to the analysis of natural hazards and the review of storm water management engineering designs.
- In February, NPCA staff attended the Region of Niagara's 'Building a Disaster Resilient Niagara' Symposium. The estimated audience of 200 people are comprised of representatives from both upper and lower tier municipalities, local police, fire, EMS and utilities staff as well as staff from federal and provincial agencies stationed in Niagara. The goal of this workshop is to identify partners and processes which can be used to help mitigate the severity of a disaster should one occur in this region.
- In mid 2016, the NPCA was successful in obtaining a grant from the Ministry of Natural Resource and Forestry's 'Water and Erosion Control Infrastructure' (WECI) program to cover 50% of the cost to undertake an updated Safety Review of the Binbrook Dam. The last comprehensive Safety Review of the Binbrook Dam was completed in 2003. Best management practices recommend that a Safety Review for a large dam like Binbrook be carried out every 10 – 15 years. Through a competitive selection process, the NPCA has retained WSP Canada Inc. to carry out the study at a total cost of \$65,145. WSP Canada is a large, reputable engineering firm who specialize in this area of practice. The Safety Review was completed in March 2017. WSP concluded that the Binbrook Dam is in excellent condition and continues to be well maintained.
- In order to satisfy the conditions of the NPCA's 4 Permits To Take Water (Binbrook Dam, Virgil Dams, Canborough Weir, Wainfleet Wetlands), staff have submitted the required annual monitoring reports for all permits to the Ministry of Environment and Climate Change prior to the March 31 deadline.

5) Restoration

- In Q1 of 2017, NPCA Restoration staff, in partnership with various organizations, stakeholders and landowners, continue to plan, design, and order plant material for water quality and habitat improvement projects for the coming year. Typical projects include farm nutrient management and discharge prevention, wetland creation, reforestation, and watercourse buffer restoration. To date, 42 projects are planned to be undertaken in 2017.
- In January, staff submitted a proposal to the Great Lakes Sustainability Fund (administered by Environment and Climate Change Canada) for a grant of \$105,000 to fund water quality and habitat improvement projects within the Niagara River and Welland River watersheds (for the 2017-2018 ECCC fiscal year).
- So far in 2017, 2 wetland projects have been excavated and will be planted later in the year. (see below)



New Wetland in West Lincoln



New Wetland in Lincoln

6) Special Projects

- To date staff has provided comments on 33 files, regarding potential impacts from development on the local groundwater regime, to the Region of Niagara and the local municipalities under the Planning Memorandum of Understanding, as well as to the Niagara Escarpment Commission and the MOECC (pursuant to their Permit To Take Water application requirements).
- Staff assisted the Operations Department with the Ball's Falls Sewage System Compliance Report.
- Staff continued work on the Regional Bedrock Aquifer Study. This included field data collection (as per the photo below), data management, laboratory analyses, equipment servicing, geochemical data analysis and documentation.



- Staff responded to groundwater information requests from consultants, the public and other government agencies.
- Staff continue to assist with monitoring the water features associated with the Cave Springs Master Plan. In the winter of 2017, the NPCA trained Niagara College students to measure the flow in 'Margret's Creek' on the property (see attached photo).



Prepared by:

Suzanne McInnes, MCIP, RPP
Acting Director, Watershed Management

Submitted by:



Peter Graham, P. Eng., MBA
Acting Chief Administrative Officer / Secretary Treasurer

Prepared with input from S. Miller, Manager, Water Resources & Restoration, D. Deluce, Supervisor, Plan Reviews, L. Hamilton, Supervisor, Watershed Biology and D. MacKenzie, Supervisor, Construction Permits and Compliance.



OPERATIONS QUARTERLY STATUS REPORT – April 26th, 2017

Prepared By: Gregg Furtney, Manager, Operations and Park Superintendents

Reviewed By: Mark Brickell, Director of Operations and Strategic Initiatives

Report To: Board of Directors
Subject: Q1 2017 Operations Status Report
Report No: 40-17
Date: April 26, 2017

RECOMMENDATION:

THAT the NPCA Board **RECEIVE** Report No. 40-17 for information.

PURPOSE:

To provide the Board with a summary of Conservation Area activity and projects

BALL'S FALLS CONSERVATION AREA:





Revenue:

Revenue figures are included in the Strategic Initiatives Quarterly Report for Ball's Falls Conservation Area.

Capital Projects:

Ball's Falls Conservation Area has two (2) Capital Projects slated for 2017. They include:

- Replacement of the Ball Home Porch and Outbuilding Repairs
- New Septic System for the lower Comfort Station

Both projects are currently being scoped with project plans and quotations being submitted to staff in April. Work on the Ball Home will commence as soon as possible. Work on the Septic System will not take place until the fall, after the Thanksgiving Festival. Staff will start the permitting process after a final design has been approved.

Operations:

Thankfully, Spring is upon us. Staff collaboration, between Strategic Initiatives and Operations, is in full-stride, preparing for the upcoming season, including starting the hiring process for Summer Student Staff.

January and February brought some unforeseen repairs to the Center for Conservation, specifically the HVAC system.

Late in 2016, the tenants of the Rental Property moved on. In February of 2017, staff spent many hours cleaning and rearranging aspects of the house and property to accommodate a new venue for the various Children Camps and Activities that Ball's Falls offers. The new venue will offer more security and opportunity for expanded programming. The Field Center, where these activities have taken place in the past, has been transformed into an accessory feature for Brides on their wedding day, called a "Bridal Suite".

On March 20th, we were happy to welcome Zach, a co-op student from South Lincoln High School. He will be helping us out until the end of the school year and comes for 3 hours each morning. He has proven himself to be a great help.

Currently, staff are planning and preparing for the official seasonal opening of the park on May 1st. The water system, Big Barn, and Comfort Station (on the lower level of the park) are being cleaned up and prepared for mid-April. The first wedding of the season takes place on April 29th.

BINBROOK CONSERVATION AREA:



Revenue

Please refer to the chart below indicating a revenue comparison between past and present years as of March 31st.

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Total Reservations	44	46	44	25
Approximate Revenue	\$6000	\$6300	\$5700	\$3100

** Note: The Park officially opens to the public on Monday May 1st. Aside from Pavilion and Open Air Pavilion Reservations, no other revenue exists in Q1. There was no Ice Fishing Season or Ice Fishing Derby in 2017 due to unfavourable ice and weather conditions.

Capital Projects

Splash Pad – Ongoing construction continues. Pouring of the splash pad is expected to be completed by the end of April. The construction of the mechanical building is underway. It is anticipated to be functional by late May. Area staff have co-ordinated and installed the extension of the water distribution system and electrical supply to meet the NPCA commitment regarding the project.

Accessibility Grant (Concrete walkway around Comfort Station)– This project is scheduled to begin in late May which includes the removal of existing concrete pad, site preparation and pouring of AODA compliant concrete surface. Additional portable toilet units will be brought on site to accommodate washroom service during the construction phase.

Operations

Ice Fishing - With milder/inconsistent temperatures, ice thickness was deemed unsafe by area staff for ice fishing activity. The Annual Hard Water Derby was cancelled as a result.

Tree Felling –Approximately 150 hazardous White Ash were cut, limbed, chipped and stumped during much of January – March. This effort was co-ordinated and performed by all operations crew members for several days. Remaining tree debris clean up activity is still ongoing by area staff, through the month of April.

Reservations are now being accepted by area staff (as of Monday March 6th).

Student Staff Hiring is in progress. Interviews are ongoing.

Water Distribution System – approximately 750 feet of water line was trenched, installed and filled in by area staff to supply the new splash pad demand.

Water distribution system maintenance/preparation work is ongoing through the month of April

Electrical System – Staff are co-ordinating ongoing site meetings with Hydro One to co-ordinate planning of electrical project to supply hydro to the splash pad mechanical building.

Equipment Maintenance – Routine de-winterization and maintenance work has been performed on area vehicles and equipment.

Upcoming Events

Season Opening - Monday May 1st

Annual Spring Crappie Derby + Overnight Camping – Saturday May 13th

Cadet Camping – May 27th – 28th

Society of Creative Anachronism – June 8th – 12th

Scout Camping – June 23rd-25th

Grand Opening of the new Splash Pad/Canada 150 Celebration - Saturday July 1st

CHIPPAWA CREEK CONSERVATION AREA:



Revenue:

The park officially opens on Friday May 19th, 2017. There are no revenue results/ comparisons to share in Q1.

As of April 4, 2017, seventy-eight (78) seasonal campers have paid their seasonal campsite fee. This is comparable to last year at this time. We are projecting to have ninety (90) seasonal campers for the 2017 camping season. This a four percent increase from 2016.

Capital Projects:

Chippawa Creek Conservation Area has 3 capital projects that have carried over from 2016. Staff anticipate that these final 3 items will be largely concluded by the end of Q2.

One project is the resurfacing of the Dils Lake Trail. The mild winter was in our favor as we could spread stone on the Dils Lake Trail. Resurfacing has been completed around the entire trail with sections of the trail receiving multi layers of stone to mitigate flooding during heavy rain events.

Operations:

Park staff has removed 20 ash trees from campsite areas that were potentially hazardous. A Certified Tree Service was also called to remove ash trees that were considered unsafe for staff to remove.

Park staff utilized the Bobcat with the stump grinding attachment for two days. In two days sixty stumps were removed. The condition of the grounds became too soft to continue as heavy rain fell. Work will resume in late fall when the park closes for the season.

With a month left before the campground opens, staff are continuing to clean up campsites and prepare the infrastructure of the park for opening. Staff are looking forward to the 2017 Camping Season.

LONG BEACH CONSERVATION AREA:



Revenue:

The park officially opens on Friday May 19th, 2017. There are no revenue results/ comparisons to share in Q1.

As of April 4, 2017, ninety-two (78) seasonal campers have paid their seasonal campsite fee. This is comparable to last year at this time. We are projecting to have one-hundred and ten (110) seasonal campers for the 2017 camping season.

Capital Projects:

Long Beach Conservation Area has four (4) new 2017 Capital Projects and three (3) Carry-Over projects from 2016 to complete in 2017. The new 2017 capital projects include:

- Park Electrical Upgrades
- Water Treatment System Upgrades
- New Gate System
- New Beach Stairs and Accessible Ramp to the Beach.

All projects are underway. The RFQ for the Beach Stairs has been publicly tendered with a final submission date in April. The Water Treatment System upgrades and the installation of the new gates will take place prior to the park being open in May.

Operations:

Senior Staff are in the midst of interviewing new summer student staff. Unfortunately there will be only 2 returning staff from last year.

The online campground reservation system is fully operational and taking online reservations for the 2017 summer camping season. There is a lot of staff time involved in providing the reservation company with updated information.

Additional ongoing projects include new site posts with routed numbers to replace the old sign posts, a new sewer line and grinder pump from Comfort Station #1 to #2, and new counter tops in Comfort Station #2, both men's and women's.

The upcoming weeks will be seasonal cleanup work and preparing for the upcoming camping season.

CENTRAL WORKSHOP – GAINSBOROUGH CONSERVATION AREA:





Operations:

Staff at the Central Workshop have been extremely busy this Spring already with a significant amount of time being spent cutting down hazardous ash trees and stumping those ash trees at all of our parks, Revenue parks and Non-Revenue parks. These locations included Ball's Falls Conservation Area, Chippawa Creek Conservation Area, Binbrook Conservation Area, 2 Mile Creek, and Wainfleet Wetlands. Tree removal will be ongoing throughout 2017.

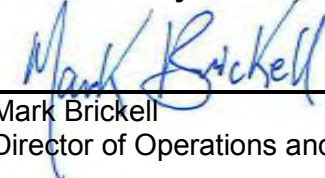
Staff have also been replacing damaged or stolen signs at each of the area, some by natural means and others by vandalism.

All staff have participated in capital projects at all areas along with their regular maintenance routines at the non-revenue parks. With spring now upon us, spring clean ups have begun and capital projects are ramping up as well.

Prepared by:


Gregg Furney
Manager, Operations

Reviewed by:


Mark Brickell
Director of Operations and Strategic Initiatives

Submitted by:


Peter Graham, P.Eng.
Acting Chief Administrative Officer/Secretary Treasurer

Report To: Board of Directors

Subject: 2017 Quarterly (1) Capital Projects Update

Report No: 41-17

Date: April 26, 2017

RECOMMENDATION:

THAT Report No. 41-17 be **RECEIVED** for information.

PURPOSE:

To provide Board members with a quarterly report on the 2017 Capital Projects, Operations Department.

BACKGROUND AND DISCUSSION:

A detailed Projects Calendar is attached as Appendix 1.

As can be seen by the Projects Calendar, sixteen (16) 2016 projects or purchases have been carried over to 2017. Ten (10) projects or purchases were added to 2017. All projects and purchases have been initiated under the direction of the NPCA's Purchasing Policy. Staff are finalizing timelines so that projects will not interfere with Seasonal Operations and Public Safety.

FINANCIAL IMPLICATIONS:

Financial Totals are for money already spent or money committed to spend that may not have been processed at the time of the creation of this report.

RELATED REPORTS AND APPENDICES:

1. Appendix 1: Updated 2016 Capital Projects Calendar

Prepared by:



Gregg Furtney
Manager, Operations

Reviewed by:



Mark Brickell, Director
Operations and Strategic Initiatives

Submitted by:



Peter Graham
Acting CAO/Secretary Treasurer

Projects Calendar for 2017					Project Schedule												ACTUAL EXPENSES
Conservation Area	Project Description	Reference No.	B U D G E T	Pr. Lead	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
Ball's Falls CA	Replace Ball Home Porch and Repairs on Outbuildings	BF-2017-08	\$ 50,000.00	JF													\$ -
	New Septic System - Lower Level Comfort Station	BF-2017-09	\$ 70,000.00	ND													\$ -
Totals			\$ 120,000.00														\$ -
Binbrook CA	Canada 150 Splashpad	BB-2016-01	\$ 500,000.00	RS													\$ 216,419.37
	Splashpad Building	BB-2016-08	\$ 25,000.00	RS													\$ 266.33
	POS System	BB-2016-10	\$ 5,000.00	MB													\$ 2,030.29
	Accessible Walkway	BB-2017-11	\$ 15,000.00	MB													\$ -
Totals			\$ 545,000.00														\$ 218,715.99
Central Workshop	Beamer Lookouts	CW-2015-02	\$ 120,000.00	RS													\$ 8,776.39
	Electrical Upgrades - Wainfleet Wetlands	CW-2016-09	\$ 10,000.00	RS													\$ -
Gainsborough CA	Galvanized Storage Trailer (2) & Compound	CW-2016-11	\$ 68,500.00	RS													\$ 55,904.58
	3-4 Portable Water Tanks	CW-2016-13	\$ 35,000.00	RS													\$ -
	Argo/ ATV	CW-2016-14	\$ 35,000.00	RS													\$ -
	Drone with video/ thermal imaging & GPS	CW-2016-15	\$ 14,000.00	RS													\$ -
	Hand Held Thermal Imaging Camera	CW-2016-16	\$ 8,000.00	RS													\$ -
	Enclosed Trailer	CW-2016-17	\$ 20,000.00	RS													\$ -
	Eavestrough Replacement - Jordan Harbour	CW-2017-19	\$ 15,000.00	RS													\$ -
	Tree Planting, Shade Structures & Landscaping	CW-2017-20	\$ 150,000.00	RS													\$ -
	Water Truck - Long Beach	CW-2017-21	\$ 120,000.00	RS													\$ -
Totals			\$ 595,500.00														\$ 64,680.97
Chippawa Creek CA	Replace Submersible Pumps Water System	CC-2016-02	\$ 25,000.00	RK													\$ 15,868.10
	Rehab Walking Trails around Dils Lake	CC-2016-03	\$ 15,000.00	RK													\$ 9,187.51
	Update Old Pavilion Washrooms	CC-2016-04	\$ 7,000.00	RK													\$ -
Totals			\$ 47,000.00														\$ 25,055.61
Long Beach CA	Fencing & Clearing (Phase 2)	LB-2016-01	\$ 65,000.00	MM													\$ 49,752.57
	Scope Water Treatment Plant	LB-2016-05	\$ 7,000.00	MM													\$ -
	Scope Decommissioning of Lagoon/ Repairs or Cleanout	LB-2016-06	\$ 20,000.00	MM													\$ -
	Electrical Upgrades	LB-2017-07	\$ 100,000.00	MM													\$ -
	Water Treatment System Upgrades	LB-2017-08	\$ 75,000.00	MM													\$ -
	Gate System Replacement	LB-2017-09	\$ 70,000.00	MM													\$ -
	Beach Access Stairs and Ramp	LB-2017-10	\$ 89,000.00	MM													\$ -
Totals			\$ 426,000.00														\$ 49,752.57
						Initiated		Not Initiated		On Hold		Completed					

Report To: Board of Directors

Subject: 2017 Q1 - Strategic Initiatives Status Report

Report No: 42-17

Date: April 26, 2017

RECOMMENDATION:

THAT the Strategic Initiatives 2017 Q1 Status Report No. 42-17, be RECEIVED for information.

PURPOSE:

To keep Board members informed of the various activities undertaken by the Strategic Initiatives team, on a quarterly basis.

BACKGROUND:

The Strategic Initiatives team was created 2 years ago for the purpose of enhancing our visitor experience while increasing revenues. The team is guided by a business plan, *Connecting People to Conservation*. The plan focuses on connecting people to nature, conservation, and the environment by creating exceptional experiences for people of all ages.

This is the Strategic Initiatives team's first status report to the Board (attached as Appendix 1).

DISCUSSION:

The Strategic Initiatives team has introduced new events, new experiences and increased revenues. Overall year-over-year revenues generated by this team are up 80% year-to-date.


FINANCIAL IMPLICATIONS:

N/A

RELATED REPORTS AND APPENDICES:

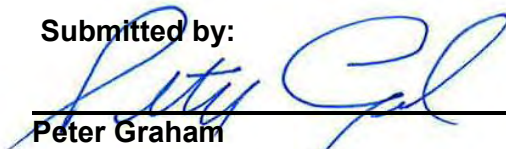
1. Strategic Initiatives 2017 Q1 Status Report

Prepared by:



Mark Brickell
Director, Operations and Strategic Initiatives

Submitted by:



Peter Graham
Acting Chief Administrative Officer
Secretary Treasurer

This report was prepared with the consultative input from: Adam Christie, Brianne Wilson, Catherine Ursini, Jill Walters-Klamer



STRATEGIC INITIATIVES

QUARTERLY REPORT Q1 2017



NIAGARA PENINSULA
CONSERVATION
AUTHORITY



ABOUT STRATEGIC INITIATIVES

Strategic Initiatives is the department responsible for the optimization of programs, activities, events, facility rental management and services at our revenue generating conservation areas. This department provides our clients and customers the opportunity to interact fully and be immersed in the conservation culture. From our vast conservation areas to our facility rentals, the Strategic Initiatives team members pride themselves on customer service, relationship building, revenue generation and helping to support the NPCA's short and long term visions on conservation area properties.

Comprised of a manager, event coordinator, program assistant and customer service representative, this small but heavily involved group tackles hospitality, programming, major events implementation, facility rental management and long term master planning.

The main focus of this team in 2017, is to optimize revenues by increasing corporate rentals, wedding rentals, educational and recreational programming as well as other opportunities.

CORPORATE & GENERAL FACILITY RENTALS

Corporate & General Facility Rentals includes any facility or site bookings that are not of a wedding or school programming nature. Corporate rentals can include filming contracts, multipurpose room bookings and overall site rentals.

2017 goals include increasing the usage and rentals related to the multipurpose rooms, overall site rentals, increasing wedding business and offering broader programming opportunities, while increasing revenues.

Early success has shown a 108% increase in corporate multipurpose room bookings compared to the same time frame in 2016.

In 2017 the SI team attracted an adventure race to participate at the Ball's Falls Conservation Area on April 15th. The race format sees teams of three race along connecting conservation areas dotting the escarpment within a 5 hour time frame with the finish line at Ball's Falls. As a result of forging this relationship, "Don't Get Lost" has committed to host their youth programming at NPCA properties this fall.

Another notable relationship was formed with Sinking Ship productions, which is responsible for the production of "Dino Dana". The show's premise sees a 7 year-old paleontologist in training who eats, sleeps and breaths dinosaurs. The episode coined "Game of Bones" will air on TVOKids in the fall.





EDUCATIONAL PROGRAMMING & CAMPS

A sold out March Break camp took place at Ball's Falls in early March. An average of 25 campers per day were immersed in activities related to exploring our outdoor environment and conservation area.

A large snowfall provided unique winter opportunities such as snowshoeing and building winter shelters in the forested areas of the property. Unfortunately, the same snowfall resulted in a day of camp being cancelled. Despite this, camp revenues were still up 18% compared to 2016. A total of \$2,614 was collected in camp fees. 2017 was the first year this camp was completely sold out.

March Break Camp was also the first opportunity for staff to employ their newly acquired training in teaching Archery. Campers were eager to try their hand at this very inclusive activity, and enjoyed it thoroughly!

Volunteers offered nearly 140 hours of their time over the course of camp, which lent to the camp's overall success.

Educational Program bookings have begun for the spring of 2017 with 14 bookings placed. A new program targeting secondary students has been developed for implementation this spring.





WEDDING BOOKINGS & FACILITY RENTALS

In the first quarter of 2017, there have been 71 bookings related to wedding facility rentals.

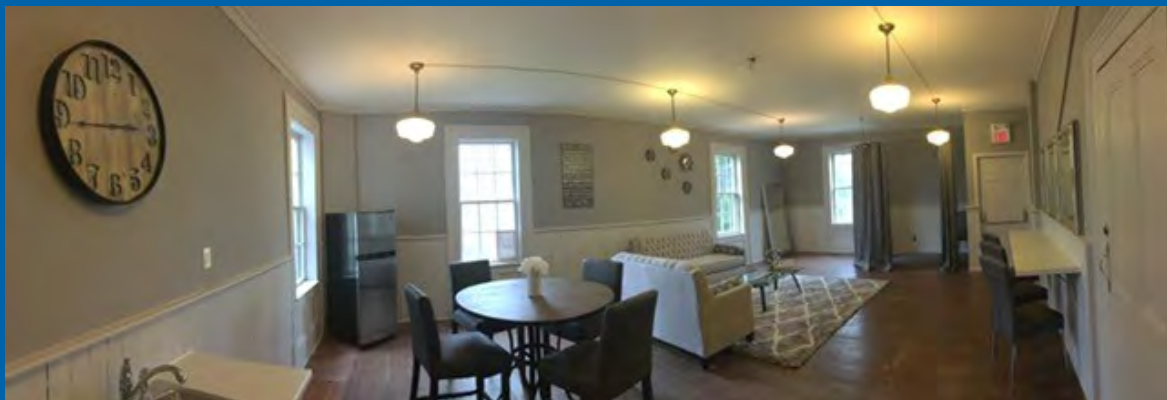
The Big Barn is booked every Friday, Saturday and most Sundays for 2017.

The Glen Elgin room is booked every Saturday and most Fridays in 2017.

All sales in hospitality including wedding rentals, ceremonies and corporate rentals are up \$29,000 in revenue which is a 70% increase from 2016.

A preferred vendor's brochure has been updated with a fresh look. New caterers and other wedding related service providers have been included. A \$300 fee was applied for vendors wishing to be featured in the brochure for 1 year. \$500 was collected for those wishing to be featured for 2 years. To date, 16 vendors have been included in this opportunity. The listing is provided in paper format and available on our website.

The SI & Operations teams have worked hard over the winter months to offer a new rental facility in relation to weddings. The "Field Centre" has now been re-purposed to be offered as a "Bridal Suite". This "add-on" option is being offered as a rental for \$300 per day starting in May. An additional \$15,000 in revenue is projected to be generated as a result of this new initiative. This "Suite" allows Ball's Falls to have a competitive advantage in the wedding industry by now being able to offer ceremony venues, photography on site, reception facilities and a bridal suite, all on one property.



ROOTS ON THE TWENTY

MAY 27-28 | 2017

BALL'S FALLS, ON

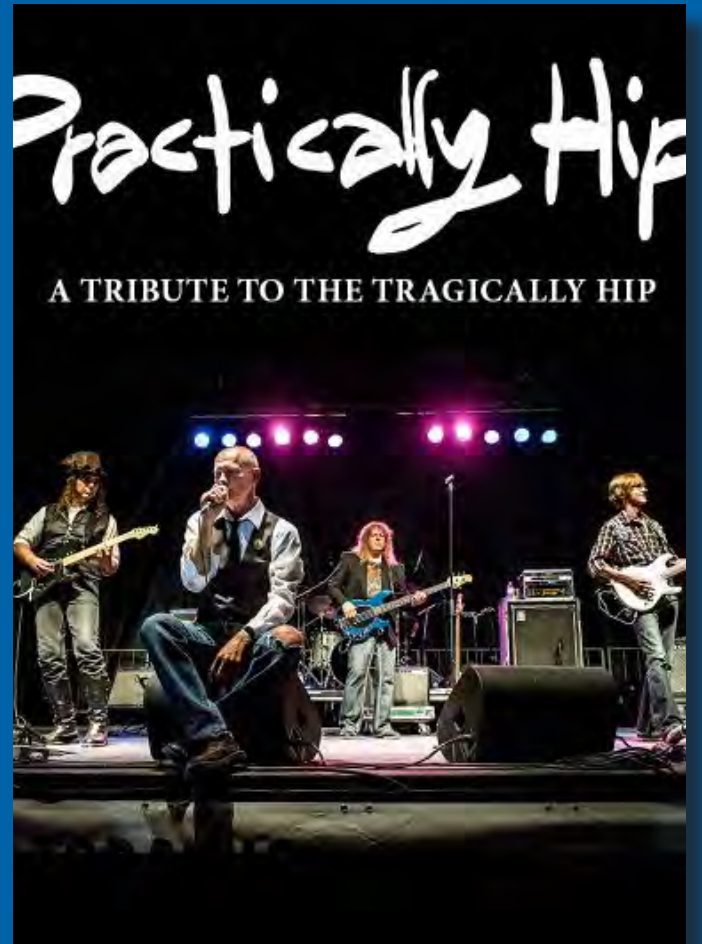
EVENT MANAGEMENT & DEVELOPMENT

NPCA staff have been working in partnership with the Twenty Valley Tourism Association to develop a new spring event at Ball's Falls. Roots on the Twenty will feature live entertainment, a variety of local craft beverages and VQA wines, live educational exhibits and local culture. This event is expected to attract 5,000 to 6,000 guests over a two-day period.

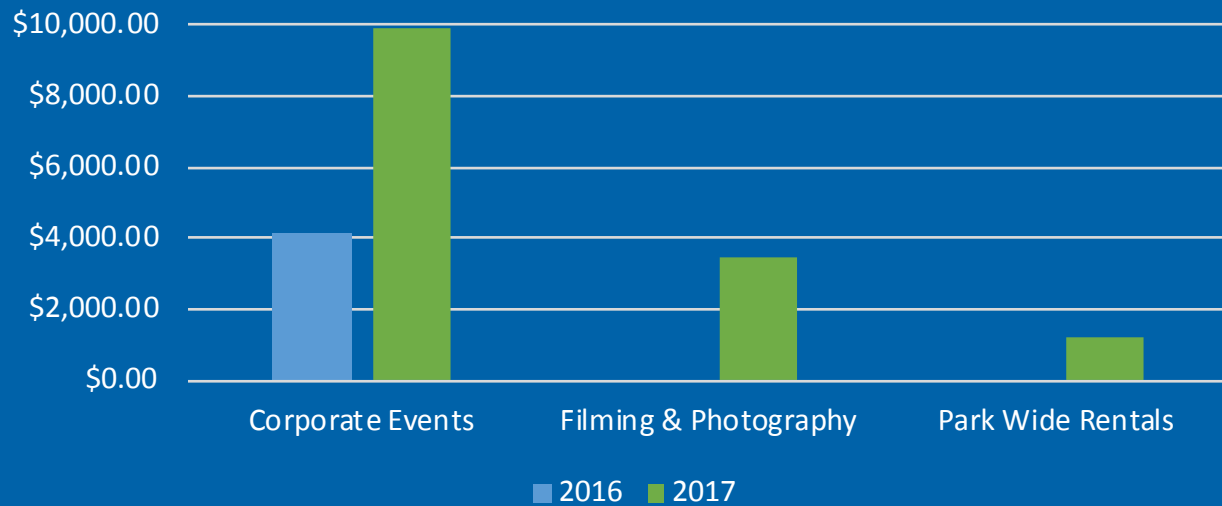
Binbrook will host a "Party in the Park" celebration in honour of Canada's sesquicentennial! Event features will include a "beach day" themed party which will incorporate Canadiana themes with live music by the "Practically Hip". Expected attendance is 2,500. The night will be capped off with an outdoor movie presentation of "Sing".

Thanksgiving Festival applications have recently closed. 220 vendor applications have been received and will be vetted by the events selection committee in the next quarter.

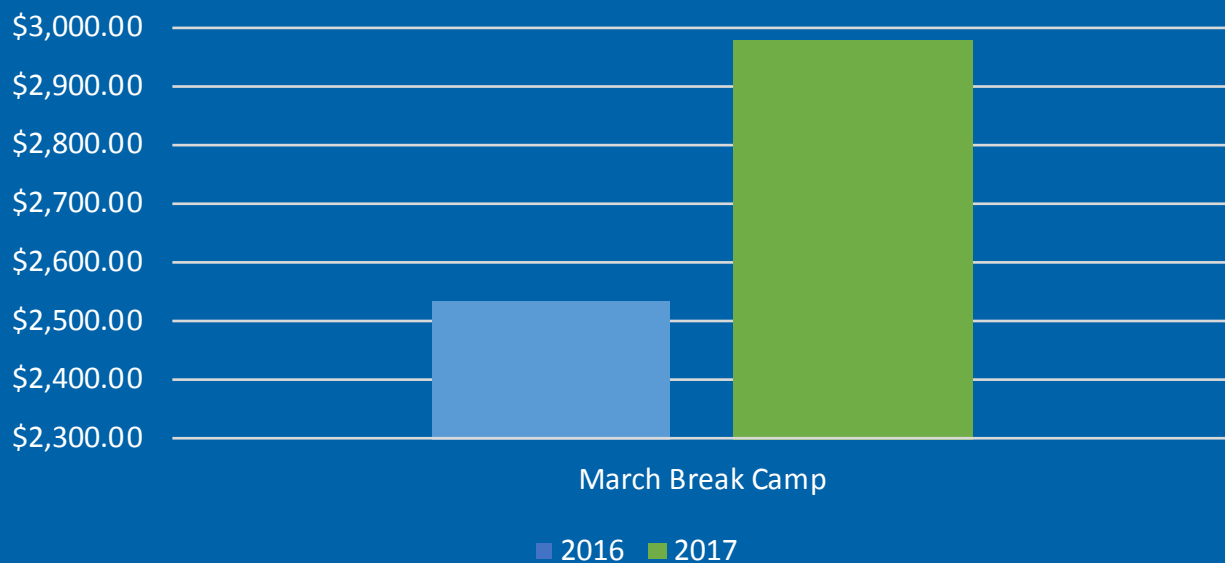
The Niagara Children's Water Festival will run May 9th to 12th. 216 classes representing nearly 5,000 children will participate in the 2017 event. The support from nearly 500 volunteers will be required to run the interactive activity stations.



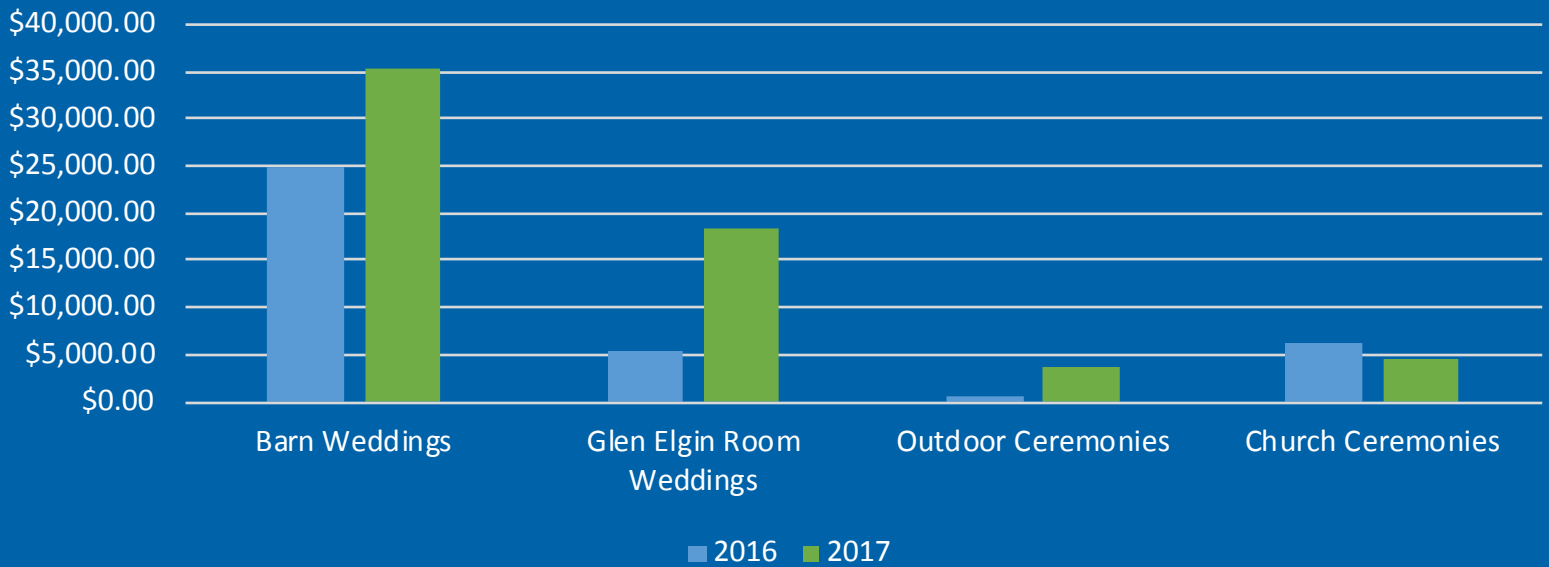
Corporate & General Facility Rentals Revenue Comparison



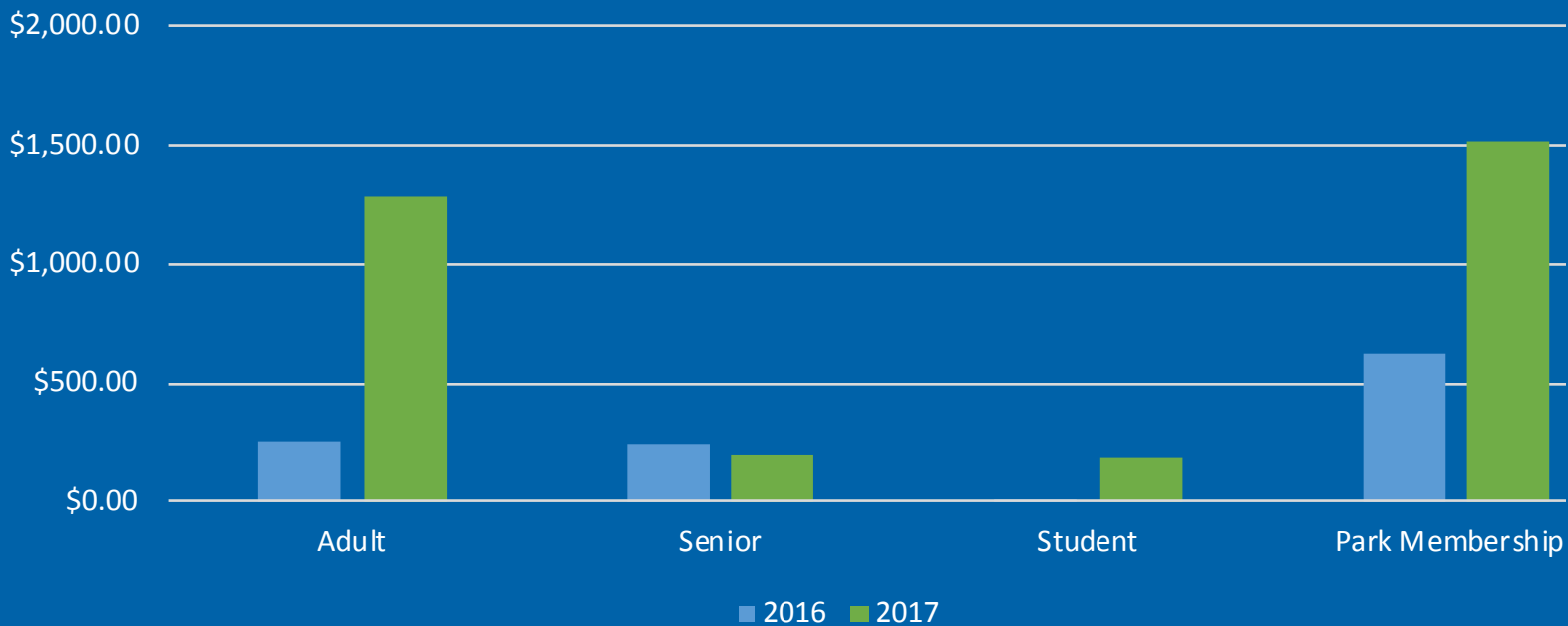
March Break Camp Revenue Comparison



Wedding Bookings & Facility Rentals Revenue Comparison



Admission Revenue Comparison



STRATEGIC INITIATIVES REPORT- Q1 2017

	2016 Quantity	2016 Sales (\$)	2017 Quantity	2017 Sales (\$)	% Increase of Revenue
ADMISSIONS					
Adult	42	\$252.00	206	\$1,277.20	407%
Senior	61	\$244.00	46	\$203.78	-16%
Student	2	\$8.00	43	\$190.00	2275%
Park Memberships	7	\$623.00	17	\$1,615.00	159%
TOTAL	112	\$1,127.00	312	\$3,285.98	192%

HOSPITALITY					
Barn Weddings	24	\$24,990.00	31	\$35,238.83	41%
Glen Elgin Room Weddings	5	\$5,450.00	16	\$18,361.08	237%
Bridal Suite	0	\$0.00	0	\$0.00	0%
Outdoor Ceremonies	2	\$675.00	11	\$3,629.00	438%
Church Ceremonies	17	\$6,257.00	13	\$4,661.50	-25%
Corporate Events	10	\$4,137.00	17	\$8,595.35	108%
Hospitality Total	58	\$41,509.00	88	\$70,485.76	70%

PROGRAMMING					
March Break Camp	93	\$2,535.00	98	\$2,979.40	18%

OTHER					
Filming	0	\$0.00	1	\$3,424.96	
Orienteering Race	0	\$0.00	1	\$1,200.00	
Other Total	0	\$0.00	2	\$4,624.96	

TOTAL REVENUE	263	\$45,171.00	500	\$81,376.10	80%
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Report To: Board of Directors
Subject: 2017 Q1 Ecological Status Report
Report No: 43-17
Date: April 26, 2017

RECOMMENDATION:
THAT Report No. 43-17 be RECEIVED for information.

PURPOSE:
To provide Board members with an overview of the activities undertaken by the Ecological staff on a quarterly basis.

DISCUSSION:
The Ecological Status Report is attached as Appendix 1.

FINANCIAL IMPLICATIONS:
There are no direct financial implications associated with this report.

RELATED REPORTS AND APPENDICES:
1. Ecological 2017 Q1 Status Report

Prepared by: Kim Frohlich Ecologist

Reviewed by:



Mark Brickell
Director, Operations & Strategic Initiatives

Submitted by:



Peter Graham
Acting Chief Administrative Officer
Secretary Treasurer

Status Report- March 2017

Beamer Conservation Area

The Hawkwatch season for monitoring the migration of raptors internationally over the site began March 1. The Niagara Peninsula Hawkwatch (NPH) Group continues this monitoring through May 15.

As well the NPH group holds its annual Public Open House on Good Friday, April 14. NPCA staff will be on site for administering parking as well as staffing a tent to increase awareness of the NPCA, its Conservation Areas and wildlife habitat. The Open House held by the NPH will be from 10 a.m. to 3 p.m. It will include a live demonstration of raptors, 'Hawk Talks' and a children's program, to increase the awareness of the natural phenomenon of bird migration and how it serves as a gauge on environmental health.



Binbrook Lake Conservation Area

The Binbrook Fish Study has been awarded to an outside firm and will be conducted spring through fall 2017. It will further characterize the fishery communities and ratios of the Binbrook CA Reservoir, including specific reference to the public's concern re: crappie (White and Black) populations and its trends, and assist in modifying site fishing policies and habitat needs.

The Study is to be completed by December 2017 with the information to be used in the continued development of sustainable measurements for habitat restoration and fishing policy measures for NPCA staff to implement to continue in ensuring a healthy, sustainable population of fish.

Cave Springs Conservation Area

- a) Salamander Monitoring by the NPCA Ecological department staff, continues for the third consecutive year, to assess the presence/absence of the less detectable species of salamanders. This monitoring is further to the site Management Plan work. The end of 2017 will complete the assessment of the recent salamander species for the site. This information on habitat and species needs will continue to be incorporated in the site activities and operations.



- b) Monitoring of the bat species by NPCA Ecological department staff, continues to refine further critical areas of habitat operation measures. Acoustic monitors have been re-installed with species and areas of use further refined. This information will continue to be incorporated into the site operations and activities.



- c) The Draft Caves Springs Conservation Area Management Plan and documents were submitted to the Niagara Escarpment Commission in March

St. Johns Conservation Area

- a) The annual fish stocking of the site pond will be completed for the opening day of the trout fishing season, Saturday April 22 at 12 noon. On this day, NPCA staff will be on site for administering parking and ensuring site rules are known.
- b) Details and permits are being finalized by NPCA staff with expectations to complete two projects at the site, the Brook Trout Spawning Bed and Perched Culvert rock ramp to assist this regionally small population.

Wainfleet Bog Conservation Area

NPCA staff met in January to review the fire remediation options for the site. Several options were outlined and costs estimated. The group will finalize the preferred options by the end of May.

Waterfront Conservation Area Master Plans

Resource inventories by NPCA Ecologist department staff commences at the Wainfleet Wetlands, Long Beach, Morgan's Point, Wainfleet Acquisition Site and Jordan Harbour Conservation Areas. These inventories are for one year (with the exception of salamanders to be monitored for five consecutive years) to assess presence and absence of species at the sites, assess habitat needs and incorporate this information and needs in the decision/ and site planning and operation for the site. A summary of the inventories include:

- a) large mammals were curtailed this year, as the needed snow cover was not suitable to conduct the survey. Snow cover of These inventories will recommence next year in 2018.
- b) Amphibian and salamander inventories in the spring 2017; as well as small mammal inventories in late spring through fall 2017
- c) Ecological Land Classification, plant species and cavity habitat studies will commence in June 2017.

Other Conservation Area Ecological Activity

NPCA Hunting Program

- a) General: Hunting Permits
A total of 113 Hunting Permits have been issued for the various hunting areas at the NPCA. Of these 12 individuals are residents from outside the NPCA administrative watershed area.
- b) CA Hunting Area: In 2017, the Chippawa Creek and Long Beach Conservation Areas were added to the list of Conservation Areas permitting hunting after a year of re-evaluation. With subsequent concerns of hunting site use by area residents, hunting

at the Long Beach Conservation Area has further restrictions for the remainder of 2017. This includes, those having received a hunting permit prior to February 8 are able to continue to hunt for the 2017 season with no additional hunting permits being granted for 2017.

- c) The 2017 NPCA Hunting Policies and Hunting Brochure has been updated, including the Conservation Areas where hunting is permitted, species that can be hunted, and additional site restrictions/rules. This information is available on the NPCA website as well as digitally and in hard copy.

Gypsy Moth Monitoring

NPCA Ecological department staff is continuing the annual monitoring of the Gypsy Moth populations and forest activity requirements on CA lands, using several Conservation Areas for representation. This involves surveys at several of our NPCA Properties, including: Chippawa Creek, Comfort Maple, Hedley Forest, Ruigrok Tract, St. Johns, Smith-Ness, and Willoughby Marsh. An egg mass survey is completed initially to help forecast the moth populations and control needs, if any, for forest ecosystem management. Surveys continue in the summer months for defoliation rates to assess and monitor populations and forecasts, and used to modify site restoration/operation activities as deemed necessary. These surveys continue each year as part of overall property and ecosystem management.

External Research on CA lands

Two research permits were granted.

- One is with Trent University for the study of pathogen risks/ emerging infectious diseases of amphibians (frogs/toads/salamanders) in areas of overlap with Ontario's Species-At-Risk and the feasibility of species reintroduction.
- The second is with Brock University for the study of habitat selection and thermal preferences of Eastern garter snakes.

The information from both of these studies will assist in the long term survival of Species-at-Risk and the individual species communities, as well as, utilized by the NPCA staff for modifying any site habitat restoration or operational procedure needs.

Niagara Invasive Species Workshop

The NPCA partnered with the Ontario Invasive Plant Council (OIPC) recently, to deliver a workshop to increase awareness to develop an invasive plant management strategy for Niagara. The workshop was well attended with over 60 individuals from local and regional municipalities, nature clubs, Ministry of Transportation, and NGO's, represented. It was held March 28, 2017 at the Ball's Falls Conservation Area, Centre

for Conservation and was free for participants, through the generous primary funding of the OIPC.

As a result, this workshop helped raise the profile of invasive species and their management, established a level of interest in developing a Niagara Management Strategy for Invasive Species, and identified the key stakeholders.

This workshop will be followed up by another to identify the lead, establish the Strategy and assess resources/funding.



Report To: Board of Directors

Subject: 2017 Q1 Corporate Services Project Status Report

Report No: 44-17

Date: April 26, 2017

RECOMMENDATION:

THAT Corporate Services Project Status Report No.44-17 be RECEIVED for information.

PURPOSE:

To provide the Board a summary of projects important to the Conservation Authority's business objectives from the period January-March, 2017.

DISCUSSION:

The project status report is to provide information pertaining to process improvements, initiatives in support of the strategic plan and supporting the organization to achieve its mission, vision and values.

Community Engagement:

Volunteers

Between January and March, staff recruited volunteers to assist in the delivery of the March Break Camp program and to assist with two ecological monitoring programs, Marsh Monitoring in various Conservation Areas and Bluebird box monitoring at Ball's Falls Conservation Area. NPCA staff also met with new volunteers to discuss opportunities:

13 volunteers helped with NPCA programs

226 volunteer hours recorded

30 new volunteer applications between January and March

Conservation Awards

The 26th Annual Conservation Awards took place on Wednesday February 22nd 2017 at Club Castropignano in Thorold, ON. The event recognizes the work of residents in Niagara working to improve our watershed through volunteerism, partnership projects and participation in the NPCA's Restoration grant program. In 2016, the NPCA was helped by over 750 volunteers, contributing over 6300 hours to our events, programs, and camps. These numbers are the result of strong partnerships with over 40 community groups and organizations throughout our watershed. The Restoration program saw nearly 70,000 trees planted and over 37,000 wildflowers planted in 2016. The volunteers and project partners came together at the Conservation Awards and we saw a record number of attendees, over 280 at this event. The Conservation Awards included presentations by NPCA staff, board members and the master of ceremonies, acting CAO, Peter Graham. Attendees were given a token gift of appreciation, a custom toque with the Conservation Awards logo and a lapel pin. Recipients who were not able to attend this event will be sent their gift in the mail.

Niagara Envirothon

The Niagara Envirothon is an environmental skill testing program for high school students that allows them to learn outside of the classroom and interact directly with various professionals in the environmental field. The program takes place over 3 days in March, April and May. The first session is indoors and took place on Wednesday March 9th at Ball's Falls Centre for Conservation. A total of 15 teams from 10 different schools in Niagara participated. The program sees professionals from Ag Canada, Heartland Forest, NPCA, local naturalist groups, Brock University and local farming organizations. This year's current issue topic is "Sustainable Farming". On April 19th the students will return to Ball's Falls to do the hands-on workshop so they can interact directly with the professionals in an outdoor setting. Students will learn how to label a soil profile, identify soil type, measure the diameter of a tree, identify tree species, learn water quality sampling techniques and protocols, learn about wetland types, learn how to identify wildlife by various techniques, learn about invasive species and about sustainable farming. On May 3rd the students will return for the Niagara Envirothon competition where they will compete against each other to be the top team in Niagara. Our winning team will represent Niagara at the Ontario Envirothon in May 2017 at Trent University.

Community Outreach

The NPCA has been out in the watershed, working with community groups and interacting with our community.

In March, the NPCA attended the Niagara Outdoor show in Fort Erie to interact with the community and highlight some of our programs. The NPCA also attended Notre Dame Catholic High School's Earth Week fair in an attempt to recruit volunteers and highlight NPCA educational programs. In April, the NPCA will be at the St. Catharines Market for the Earth Day event organized by Links for Greener Learning and in Port Colborne for the Earth Day event at Evergreen Academy.

NPCA staff worked with students from Hamilton District Christian High School on a planning project that the students were doing as part of their Careers class. This gave the NPCA the opportunity to talk to young adults about planning permits, processes and considerations.

Yellow Fish Road™

The Yellow Fish Road™(YFR) program is a national program coordinated by Trout Unlimited and the NPCA has been the regional coordinator for this program since 2006. Recently, this program has been identified by the Source Protection Plan as part of the outreach and communication strategy for the “intake protection zones” in Port Colborne and Niagara Falls. The NPCA will be taking on a public relations intern from Niagara College for the month of April to create a communications plan for the delivery of this program with respect to the Source Protection Plan guidelines. The PR student will create a social media strategy, enhance the current YFR presentation and contact schools and community groups in Port Colborne and Niagara Falls to deliver the program.

Communications:

Freedom of Information

As designated by the Chair, the Communications Department is responsible for responding to Freedom of Information Requests and disclosing records to the public when appropriate. The NPCA has received 3 Freedom of Information requests in Q1 of 2017, one of which is still outstanding by the date this document has been prepared. The NPCA four decisions being appealed by the requestor. Three are in the adjudication process, and one is the initial mediation phase.

Stakeholder meetings

Communications along with the Board Chair have been initiating several stakeholder engagement meetings over the first quarter. Meetings have taken place between many environmental groups as well as a roundtable discussion with Planning Department heads from Niagara municipalities. These meetings are help provide the NPCA, and Chair with the views and opinions of the diverse range of people which are involved in NPCA business. Moving toward Q2, we will be furthering out outreach to include Mayors, CAOs, developers, and school boards.

Ball's Falls Branding

The NPCA Communications team has been working closely with Strategic Initiatives to develop an identifiable image for Ball's Falls Conservation Area. The intent of the use of this image is to use it on merchandise in the gift shop, as well as on advertising and any other high-viewing frequency exposure.

NPCA Board Meetings – Average Live-Stream Results 2016 (March-Dec)

Month	Peak Viewers	Total Views	Average View Duration
Monthly Combined Average	11.6	74.8	14:43

NPCA Board Meetings - Live-Stream Results 2017

Month	Peak Viewers	Total Views	Average View Duration
January	57	135	11:13
February	20	130	21:50
March (Special)	14	177	14:27
March	18	166	14:21
Monthly Combined Average	27	152	15:28

Information Management & Technology Services:

- ❖ Staff continues to support the Planning and Regulations teams with implementation refinements for the CityView development tracking system focusing specifically on the web portal aspect.
- ❖ Map and data archiving for the approved Source Water Protection Assessment Report is complete, as well support for the 2017 Source Water Protection reporting, work plan, and data licensing requirements.
- ❖ The external public facing co-located server has been upgraded to a more current operating system and associated applications and services remain intact.
- ❖ 2016 and 2017 computer workstation replacements have been completed.
- ❖ The data center capital upgrades project is well underway. This includes installing a higher capacity and speed server at the office, and placing the existing one out at Balls Falls to increase network performance onsite there.
- ❖ Several Wetland updates were integrated into our hazard inventories and screening products that support development review activities.
- ❖ Delineation of potential monarch butterfly habitat using Natural Areas Inventory and criteria based on Ministry of Natural Resources' Significant Wildlife Habitat Technical Guide. The model identifies potential ideal locations for the restoration and enhancement of monarch butterfly habitat in the NPCA jurisdiction.
- ❖ Continued support for multiple Niagara College GIS projects including the re-evaluation of the objectives and deliverables to enhance the data production of the Forest

Resource Inventory and to ensure full delivery of the respective data within the timelines of the school year.

- ❖ Production of all Water Quality maps for inclusion in the 2017 Water Quality Report.

Human Resources:

Recruitment

Community Engagement Manager

- Total of 101 applications received
- Successful applicant started effective March 20, 2017

Project Manager, Niagara River Remedial Action Plan

- Total of 58 applications received
- Successful applicant started effective March 13, 2017

Compliance & Enforcement Officer

- Total of 320 applications received
- Interview process currently in progress

Planner (12 month contract)

- Total of 83 applications received
- Successful applicant to start April 18, 2017

Program Assistant (11 month contract)

- Total of 186 applications received
- Interview process currently in progress

Park Assistant (6 month contract)

- Total of 196 applications received
- Interview process currently in progress

Assistant Water Resources Technician (funded in part through the Summer Experience Program)

- Total of 164 applications received
- Interview process currently in progress

Stewardship Assistant (funded in part through the Summer Experience Program)

- Total of 157 applications received
- Interview process currently in progress

Park Attendant (pending Summer Job Service funding)

- Total of 301 applications received to date
- Interview process currently in progress

Training

- ❖ Two successful applications (for training of 3 employees) through the Canada-Ontario Job Grant program resulting in \$13,545 of training for a total cost of \$4515.

Policy

- ❖ Student terms of employment and personnel regulations-students, updated for 2017, including insertion of holiday pay calculation in line with Employment Standards Act, allowing for savings in student holiday pay.

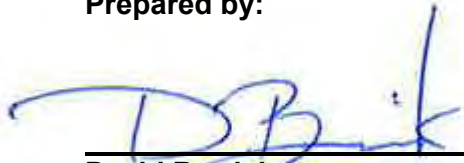
Compensation

- ❖ Online electronic pay slips launched, allowing ease of use with employee access to pay slips 24/7.
 - This also allows for up to date vacation and banked time balances to be accessible 24/7.
 - Both updates result in time savings as well as decreased employee requests and increased access for employee self-service.
- ❖ Total compensation document provided for all full-time permanent employees for 2016, demonstrating total compensation including wages, benefits and intangible benefits.

HRIS

- ❖ Piloting of approval portal open allowing for paperless approval process, additionally saving time and providing for electronic documentation.

Prepared by:



David Barrick
Director of Corporate Services

Submitted by:



Peter Graham
Acting Chief Administrative Officer
Secretary Treasurer

This report was prepared in consultation with: Renee Bisson, Community Engagement Manager; Kerry Royer, Community Outreach Coordinator; Michael Reles, Communications Specialist; Geoff Verkade, Manager, Information Management and Technology Services; and, Misti Ferrusi, HR Generalist.

Report To: Board of Directors

Subject: NPCA 2017 Q1 DRAFT Quarterly Report

Report No: 45-17

Date: April 26, 2017

RECOMMENDATION:

That the NPCA 2017 Q1 Report No. 45-17 be RECEIVED for information.

NOTE: Following board approval, the Quarterly Report (Appendix 1) will be distributed to participating municipalities, community stakeholders, CLAC, 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 Q1 Quarterly Report, the document will be distributed throughout the community in various media formats.

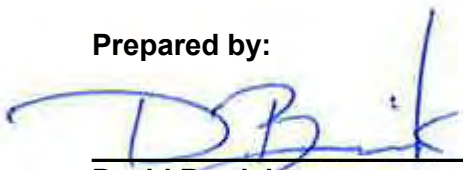
FINANCIAL IMPLICATIONS:

Distribution of Quarterly Report is within 2017 budget allocations.

RELATED REPORTS AND APPENDICES:


1. Appendix 1: DRAFT 2017 Q1 Quarterly Report

Prepared by:



David Barrick
Director of Corporate Services

Submitted by:



Peter Graham
Acting CAO/Secretary Treasurer

This report was prepared with the consultative input from Michael Reles, Communication Specialist; and, the Senior Management Team.

Vol. 6: Jan-Mar 2017

QUARTERLY REPORT Q1 2017

NPCA MISSION, VISION & VALUE STATEMENTS

“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

Responsibilities of NPCA include;

- Floodplain Management (1970's)
- Hazard Land Management including the management of local areas susceptible to flood and erosion risks (1983)
- Great Lake Shoreline management (1988)
- Ontario Regulation 155/06 NPCA: Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses (2006)

MISSION

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


VISION

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

VALUES

To the landowners, stakeholders and communities affected by our actions, we value:

1. A sustainable balance between environmental conservation, economic growth and agricultural prosperity.
2. Clear and respectful communication.
3. Integrity, fairness and sensitivity to all impacted by our actions decisions.
4. Creativity and innovation in service delivery to clients.
5. Transparency, accountability and quality in our services.
6. Pragmatic solution oriented approaches to decision making.
7. A respectful work environment and professional development.

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Welcome to our Quarterly Report. Each year we will endeavour to produce quarterly reports for our funders, stakeholders and communities we are proud to serve. 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.




Peter Graham, MBA, PEng
Acting Chief Administrative Officer




Sandy Annunziata
Chair, Board of Directors

ABOUT US

The Niagara Peninsula Conservation Authority (NPCA) was established on April 30, 1959, under the Conservation Authorities Act, and serves approximately half a million people in the Niagara Peninsula Watershed, encompassing the entire Niagara Region and portions of the City of Hamilton and Haldimand County. The NPCA strives to manage the impact of human activities, urban growth and rural activities on its watershed.

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 the conservation and preservation of the unique environment, and initiatives that help keep people and their property safe from flooding and erosion while keeping our drinking water clean and safe.

The NPCA's ongoing commitment to land stewardship is reflected in the management of over 2,870 hectares of unique natural areas. These lands are held in public trust, allowing the people of Niagara, Hamilton, and Haldimand County to enjoy its distinctive natural heritage at 39 Conservation Areas, each offering diverse recreational and educational opportunities and a place for both children and adults to experience nature's beauty.

WATER

In 2017, the Ministry of the Environment and Climate Change (MOECC) has provided a laboratory allotment for the NPCA to collect winter water samples through the **Provincial Water Quality Monitoring Network (PWQMN)**. NPCA staff collected these samples in February and data will be used to address a significant gap in our monitoring of watershed conditions in the winter season.

In March, staff initiated routine monitoring at all existing NPCA 75 water quality monitoring stations. This monitoring will be performed monthly until November at all stations and samples will be analyzed for general chemistry, nutrients, metals and bacteria. The NPCA has added five new monitoring stations to the network and these stations will be monitoring the water quality of Prudhommes Drain (Lincoln), Richardson Creek (St. Catharines), Welland Canal (Port Colborne), Mill Race Creek and the Feeder Canal Drain (both Wainfleet).

Due to the ice melt and precipitation experienced over the past three months, the water level in the Reservoir has fluctuated between the holding level of 650.5 feet to the top of the crest of the Morning Glory spillway at 652.5

feet. Staff continue to monitor reservoir water levels on a daily basis and make adjustments as warranted. In the first quarter of 2017, the NPCA has issued 5 **Water Safety Bulletins** as a result of four heavy rainfall events. No widespread flooding had occurred, although localized flooding was experienced in some areas.

In mid 2016, the NPCA was successful in obtaining a grant from the Ministry of Natural Resource and Forestry's 'Water and Erosion Control Infrastructure' (WECI) program to cover 50% of the cost to undertake an updated Safety Review of the Binbrook Dam. The last comprehensive Safety Review of the **Binbrook Dam** was completed in 2003. Best management practices recommend that a Safety Review for a large dam like Binbrook be carried out every 10 – 15 years. Through a competitive selection process, the NPCA has retained WSP Canada Inc. to carry out the study at a total cost of \$65,145. WSP Canada is a large, reputable engineering firm who specialize in this area of practice. The Safety Review was completed in March 2017. WSP concluded that the Binbrook Dam is in excellent condition and continues to be well maintained



COMMUNITY

The **Niagara Envirothon** is an environmental skill testing program for highschool students that allows them to learn outside of the classroom and interact directly with various professionals in the environmental field. The program takes place over three days in March, April, and May. The first session is indoors and took place on Wednesday, March 9th at Ball's Falls Centre for Conservation. A total of 15 teams from 10 different schools in Niagara participated. The program sees professionals from Ag Canada, Heartland Forest, NPCA, local naturalist groups, Brock University and local farmers organizations. This year's current issue topic is "Sustainable Farming." On April 19th the students will return to Ball's Falls to do the hands-on workshop so they can interact directly with the professionals in an outdoor setting. Students will learn how to label a soil profile, identify soil type, measure the diameter of a tree, identify tree species, learn water quality sampling techniques and protocols, learn about wetland types, learn how to identify wildlife by various techniques, learn about invasive species and sustainable farming.

The NPCA has been out in our watershed, working with community groups and interacting with our community. In March, the NPCA attended the **Niagara Outdoor Show** in Fort Erie to interact with the community and

highlight some of our programs. The NPCA also attended Notre Dame Catholic High School's **Earth Week Fair** in an attempt to recruit volunteers and highlighted our educational programs. NPCA staff worked with students from **Hamilton District Christian High School** on a planning project that the students were doing as part of their Careers class. This gave the NPCA the opportunity to talk to young adults about planning permits, processes and considerations.

The **Yellow Fish Road™(YFR)** program is a national program coordinated by Trout Unlimited, and the NPCA has been the regional coordinator for this program since 2006. Recently, this program has been identified by the Source Protection Plan as part of the outreach and communication strategy for the "intake protection zones" in Port Colborne and Niagara Falls. The NPCA will be taking on a public relations intern from Niagara College for the month of April to create a communications plan for the delivery of this program on the Source Protection Plan guidelines. The PR student will create a social media strategy, enhance the current YFR presentation and contact schools and community groups in Port Colborne and Niagara Falls to deliver the program.

COMMUNITY

Between January and March, staff recruited **volunteers** to assist in the delivery of the **March Break Camp** program and to assist with two ecological monitoring programs, Marsh Monitoring in various Conservation Areas and Bluebird box monitoring at Ball's Falls Conservation Area. NPCA staff also met with new volunteers to discuss opportunities and events coming up in 2017. Volunteers from the **Glanbrook Conservation Committee** built and installed 12 new wood duck boxes at Binbrook using funds raised from Niagara Peninsula Conservation Foundation's 2016 Wild Game Dinner. They also built 2 wood duck boxes that will be installed at Mud Lake Conservation Area at a later date.

- 13 volunteers helped with NPCA programs
- 226 volunteer hours recorded
- 30 new volunteer applications between January and March

The 26th Annual **Conservation Awards** took place on Wednesday, February 22nd, 2017 at Club Castropignano in Thorold, ON. The event recognizes the work of residents in Niagara working to improve our watershed through volunteerism, partnership

projects and participation in the NPCA's Restoration grant program. In 2016, the NPCA was helped by over 750 volunteers, contributing over 6300 hours to our events, programs, and camps. These numbers are the result of strong partnerships with over 40 community groups and organizations throughout our watershed. The Restoration program saw nearly 70,000 trees planted and over 37,000 wildflowers planted in 2016. The volunteers and project partners came together at the Conservation Awards, and we saw a record number of attendees, over 280 at this event. The Conservation Awards included presentations by NPCA staff, board members and the master of ceremonies, Acting CAO, Peter Graham. Attendees were given a token gift of appreciation, a custom toque with the Conservation Awards logo and a lapel pin. Recipients who were not able to attend this event will be sent their gift in the mail.



OUR LAND

NPCA staff have been working in partnership with the Twenty Valley Tourism Association to develop a new spring event at Ball's Falls. **Roots on the Twenty** will feature live entertainment, a variety of local craft beverages and VQA wines, live educational exhibits and local culture. This event is expected to attract 5,000 to 6,000 guests over a two-day period.

Binbrook will host a **"Party in the Park"** celebration in honour of Canada's sesquicentennial. Event features will include a "beach day" themed party which will incorporate Canadiana themes with live music by the "Practically Hip". Expected attendance is 2,500. The night will be capped off with an outdoor movie presentation of "Sing".

Thanksgiving Festival applications have recently closed. 220 vendor applications have been received and will be vetted by the events selection committee in the next quarter.

The **Niagara Children's Water Festival** will run during the beginning of May. 216 classes representing nearly 5,000 children will participate in the 2017 event. The support from nearly 500 volunteers will be required to run the interactive activity stations.

Ongoing construction continues for the **Splash Pad at Binbrook Conservation Area**. Pouring of splash pad is expected to be complete by the end of April. The construction of the mechanical building is underway. It is anticipated to be functional by late May. Area staff has co-ordinated and installed the extension of the water distribution system and electrical supply to meet the NPCA commitment regarding the project.



OUR LAND

Binbrook Fish Study has been awarded to an outside firm and will be conducted spring through fall 2017. It will further characterize the fishery communities and ratios of the Binbrook CA Reservoir, including specific reference to the public's concern of crappie (White and Black) populations and its' trends, and assist in modifying site fishing policies and habitat needs. The Study is to be completed by December 2017 with the information to be used in the continued development of sustainable measurements for habitat restoration and fishing policy measures for NPCA staff to implement to continue in ensuring a healthy, sustainable population of fish.

Salamander Monitoring at Cave Springs by NPCA Ecological department staff, continues for the third consecutive year, to assess the presence/absence of the less detectable species of salamanders. This monitoring is further to the site Management Plan work. The end of 2017 will complete the assessment of the recent salamander species for the site. This information on habitat and species needs will continue to be incorporated in the site activities and operations.

Monitoring of the bat species by NPCA Ecological department staff continues to refine further critical areas of habitat operation measures. Acoustic monitors have been re-installed with species and areas of use to further refined. This information will continue to be incorporated into the site operations and activities.

The drafted **Caves Springs Conservation Area Management Plan** and documents were submitted to the Niagara Escarpment Commission in March.

Resource inventories by NPCA Ecologist department commences at the Wainfleet Wetlands, Long Beach, Morgan's Point, Wainfleet Acquisition Site and Jordan Harbour Conservation Areas. These inventories are for one year (with the exception of salamanders to be monitored for five consecutive years) to assess presence and absence of species at the sites, assess habitat needs and incorporate this information and needs in the decision/ and site planning and operation for the site.

THE NUMBERS

YEAR TO DATE

\$11,917,007 2017 Gross Approved
Budget

Total Expenditure as of
March 2017 **\$1,759,149**

125

Planning Act
Applications (YTD)

69

Building Permit
Reviews (YTD)

30

NPCA Permits
(YTD)

113 Hunting Permits Issued

Site Visits by Watershed
Ecological Technicians **94**

50 Voluntary Restoration
Plans Implemented





250 Thorold Road, 3rd Floor

Welland, ON L3C 3W2

Phone: 905-788-3135

Report To: Board of Directors

Subject: 2016 Draft Annual Report

Report No: 46-17

Date: April 26, 2017

RECOMMENDATION:

That Report No. 46-17 be RECEIVED for information.

NOTE: Following Board approval, the 2016 Annual Report (Appendix 1) will be distributed to participating municipalities, community stakeholders, CLAC, and the public.

PURPOSE:

To provide the NPCA Board of Directors with a Draft 2016 Annual 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, 'Effective Communication with Stakeholders & Public.'

BACKGROUND:

Staff reviewed Annual Reports from within the sector (Conservation Authorities) and other sectors in developing an annual report, and have implemented various best-practices in preparing the 2016 report.

DISCUSSION:

The purpose of the NPCA Annual Report is to provide the community with a document that:

1. highlights major accomplishments of the organization;
2. communicates the legislative mandate, Mission, Vision and Values of the organization;
3. provides information on programs and services of the organization;
4. and specifically:
 - a. provides information on the Source Water Protection;
 - b. financial reporting; and
 - c. contact information.

The NPCA Annual Report is easy to read, sustains the purpose of the report as expressed above, and is significantly shorter than most of reports in NPCA archives.

The 2016 Annual Report will be distributed throughout the community in various media formats.

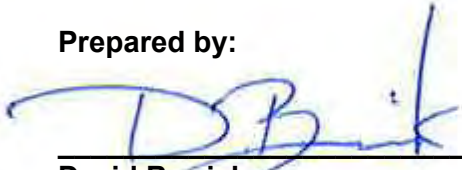
FINANCIAL IMPLICATIONS:

Distribution of Annual Report is within 2017 budget allocations.

RELATED REPORTS AND APPENDICES:

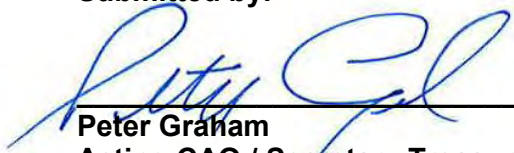
1. Appendix 1: 2016 Draft Annual Report

Prepared by:



David Barrick
Director of Corporate Services

Submitted by:



Peter Graham
Acting CAO / Secretary Treasurer

This report was prepared with the consultative input from Michael Reles, Communication Specialist; and, the Senior Management Team.



NIAGARA PENINSULA
CONSERVATION
AUTHORITY

Annual Report 2017

Welcome Message



It is my pleasure to present to you the 2016 NPCA Annual Report. We have accomplished many great things and have taken great strides forward on some major projects.

The 2014-2017 Strategic Plan is nearing completion. A report to the Board of Directors in October of 2016 showed that NPCA had completed approximately 85% of the deliverables within the plan. We are pleased to see the positive changes within the organization as a result of effective new policies and more efficient delivery of services to our stakeholders.

In 2016, we witnessed the organization advance on two key projects; the Living Landscape Policy Review and Welland River Floodplain Mapping. Both projects have included extensive public and stakeholder consultations. The NPCA has been going above and beyond expectations in regards to listening to our partners and all those that are affected by our legislation, policies, and regulation.

We are very proud of our staff for their tremendous effort and commitment that was put forth in the completion of the Cave Springs Management Plan. This marked the first time the NPCA completed a Management/Master Plan in-house. We presented that plan to the public at an Open House in the Fall of 2016. We were overwhelmed by the positive feedback we received. Every presentation was received with applause from the gallery. The plan honours the cultural and ecological heritage of the site, and we foresee Cave Springs as another flagship property within our expanding group of Conservation Areas.

The NPCA has planted over 69,803 trees, 36,713 wildflowers, and created over 8.8 acres of wetland in 2016. These numbers are astonishing and are proof that our staff is some of the hardest working and dedicated individuals in their field. It also does not go unnoticed that the NPCA had over 750 volunteers in 2016 - The highest ever.

The success of 2016 has set the table for the important work we have ahead of us; listening and balancing the many voices of our partners, and identifying our strengths and weakness. We embrace the challenges ahead and remain committed to finding pragmatic solutions.

We have consistently adapted to the ever-expanding role of conservation authorities as downloaded by the province. Conservation authorities have taken on more regulations, and policy with little to no increase in our funding. We are working towards striking a balance between the priorities set by legislation and remain steadfast in achieving our goals while meeting the expectations of our stakeholders.

A black ink signature of Sandy Annunziata, featuring a large, stylized 'S' and 'A'.

Sandy Annunziata
Chair, NPCA Board of Directors

A blue ink signature of Peter Graham, written in a cursive style.

Peter Graham, P.Eng., MBA
Acting CAO

Cave Springs Management Plan



At its June 2014 Board meeting, the NPCA Board of Directors authorized the initiation of a Management Plan process for its Cave Springs property, in the Town of Lincoln. The Board further directed that a cross-functional team of NPCA staff members would lead the process, in contrast to the traditional approach of hiring an external consultant. In 1981 and again in 2006 master plan processes were initiated but not completed due to a combination of internal and external factors. Over the past two and a half years, the project team has studied this property, as never before.

As the property runs along the Niagara Escarpment and is part of the Niagara Escarpment Parks and Open Space System (NEPOSS), the planning process was guided by the NEPOSS Planning Manual (2012). To be certain, the requirements outlined in the NEPOSS Manual, are specific and substantial and need to be fully documented. The entire project team embraced this challenging project and worked tirelessly to see it through to completion.

Along the way, there was extensive public engagement and involvement in the process. Stakeholders and members of the public gave generously of their time, knowledge and expertise to support and inform the project.

In October 2016, the Cave Springs Management Plan Steering Committee approved the Draft Management Plan and its final recommendations to the NPCA Board of Directors.

Now approved by NPCA Board of Directors, Management Plan, as will be submitted to the Niagara Escarpment Commission for review and endorsement, before being presented to the Ministry of Natural Resources and Forestry, for final approval.

Cave Springs is a truly unique escarpment property, rich in both natural and cultural heritage. The establishment of a management plan for this property ensures that the natural and cultural heritage features and attributes of this property will be protected, enhanced and celebrated for many years to come. It also ensures that the public will have access to this beautiful property.



756 Volunteers
6,315 Volunteer Hours

Treetop Trekking



At the September 2015 Board meeting, a report outlined an opportunity to enter into a revenue-generating partnership with Treetop Trekking, at Ball's Falls Conservation Area. Treetop Trekking is an industry leader in aerial zip line parks in Ontario and Quebec. Of its five existing aerial zip line parks in Ontario, three of them are within Conservation Areas; Ganaraska Forest Center, Bruce Mills, and Heart Lake.

Through formal and informal discussions with the Niagara Escarpment Commission, it became clear that the idea of establishing an aerial game and zip lining park at Ball's Falls would be challenging. Given the restrictive legislative parameters within the Niagara Escarpment Plan and the associated parameters within the Niagara Escarpment Parks and Open Space System (NEPOSS) it was decided to no longer move forward with Treetop Trekking at Ball's Falls.



At the July 2016 Board meeting, staff informed Board members of the perceived challenges and asked for permission to explore the viability of establishing such an operation at the Binbrook Conservation Area. Board members provided preliminary support for this request.

Treetop Trekking capital and operating investments in this operation include over \$1.8 million within a three-year phase-in plan.

NPCA revenues related to this operation are expected to reach over \$75,000 by Year 3, over \$100,000 by Year 4 and over \$150,000 from 5 years and beyond. Also, NPCA anticipates greater entrance fees at Binbrook with the implementation of this project and the new splash pad.



69,803 Trees Planted

Wainfleet Bog Recovery & Restoration



Since 1997 there have been five confirmed fires at the Wainfleet Bog. The risk of fires at the Bog is greatly increased when the summer months are hot and dry. Recognizing the high risk of fire in 2016, due to weather conditions, NPCA convened a meeting of key stakeholders, including the Fire Chiefs from Welland, Port Colborne and Wainfleet, and the Resource Management Supervisor from the Ministry of Natural Resources and Forestry (MNRF) on June 28th. The purpose of the meeting was to discuss and update protocols, roles, and responsibilities related to monitoring and mitigating the risk of fire at the Wainfleet Bog, and dealing with a fire event, should one occur.

During this meeting some suggestions were put forward, many of which had minimal financial implications, such as the development of a site-specific fire plan, enhanced communication strategies, the development of fire risk parameters, monitoring the property more frequently, and closing the Wainfleet Bog during times of high fire risk. Other suggestions focused on the need to purchase equipment that would better allow NPCA to monitor the site, access more remote areas of the property and support fire suppression efforts, as required.

On July 5th, a fire was detected at the Bog. NPCA's experience with this fire further confirmed the need for this investment.

Site Management and Ecological Restoration Plans were completed for the Conservation Area in 1997 and 2000 respectively. This included a full ecological inventory 1997-1999, and restoration measures implemented 2000-2001.

The Wainfleet Bog Restoration Plan implements the Wainfleet Bog CA Management Plan, and its goals and objectives. This primary goal is to restore the site to a healthier, more natural bog ecosystem, providing recreational, education and scientific research opportunities for existing and future generations. It includes natural restoration and monitoring measures based on ecosystem wise philosophies to correct identified factors of adverse impact on the bog.



Gord Harry Trail Restoration



Gord Harry Trail Conservation Area in Wainfleet is approximately 13 kilometres long, traversing from Cement Plant Road to the County of Haldimand boundary. A portion of the trail from Etling Road to East of Hutchinson Road was used by Niagara Region Wind Corporation/Enercon by agreement for the construction and to maintain two nearby wind turbines. The trail was widened by 3 metres and restored to pre-construction conditions or better.

During 2015-2016, the trail reconstruction was completed. Vegetation was removed. An entrance for one wind turbine and for a side lane which was installed for truck passing was later removed. A native seed mix of grass and flowers will be hydroseeded at the site as part of the restoration. The seed mixture of Big Bluestem, New England Aster, Fox Sedge, Bottlebrush grass, Fowl manna grass, Fowl Bluegrass and Brown-eyed Susans will be used. There is no cost to the NPCA for restoration of the site.



36,713 Flowers Planted

Customer Service Charter



As part of the 2014-2017 Strategic Plan, staff has developed a Customer Service Charter to publicly affirm the NPCA's commitment to providing a high standard of effective and efficient service delivery.

The Customer Service Charter is developed as a platform upon which a broader Customer Service strategy may be built. It outlines as succinctly as possible the NPCA's customer service commitment.

Customer satisfaction surveys would be a key component of a broader Customer Service strategy regarding assessing the organization's success in delivering on the Charter. Customer Feedback Forms and Planning Client Surveys will be developed. It is anticipated that additional surveys may be developed in the future as required to assess specific areas of customer service.

Strategic Plan Update



With the provision of over 50 years of NPCA regulations, programming and services, the NPCA Board of Directors developed and implemented its inaugural Strategic Plan in 2014 to guide the corporation over the next four years.

The Strategic Plan contained the first ever Mission, Vision, and Values of the organization. Also, the Strategic Plan returned the corporation back to its legislative mandate of conserving, restoring, managing and development of the natural resources within the watershed.

The 2014 - 2017 Strategic Plan contained 42 Deliverables under the themes of:

- Effective NPCA Model to set Policies and Priorities; Streamlined, Efficient Delivery of Development Approvals Process;
- Improved Capacity for Managing Assets and Land Program; Transparent Governance and Enhanced
- Accountability; and Effective Communication with Stakeholders and Public.

The NPCA is on pace to meet all deliverables in 2017.

Living Landscape Policy Review



The Living Landscape is the name given to this NPCA's policy review project, with its primary objective to review and complete a fundamental rewrite of NPCA's primary development guidance document titled Policies, Procedures and Guidelines for the Administration of Ontario Regulation 155/06 and Land Use Planning Policy Document.

This policy review and update is also an important element of the NPCA Strategic Plan (2014-2017) to develop streamlined, efficient delivery of its development approvals process. As noted, the updated "NPCA policy document should clearly distinguish between broader planning guidance and regulatory/permit requirements."

In June 2016, the Discussion Paper was publicized and open for public comment. The purpose of the Discussion Paper is to present the themes, issues, and opportunities to be addressed in the Living Landscape Policy Project. It is intended to provide direction for the broad range of policy changes and modifications to be considered for updating the NPCA's Policy Document.

Ducks Unlimited Partnership



Ducks Unlimited Canada (DUC) is the recognized leading agency in wetland design and creation; NPCA initially consulted with DUC on many projects for their expertise in the creation of wetlands and subsequently started a partnership in 2002.

Since 2002, DUC and the NPCA have been working together with Niagara landowners to create wetland projects in Niagara. This collaboration has allowed for the sharing of both expertise and resources. The DUC-NPCA partnership has successfully implemented over 70 wetland projects, creating over 125 ha of wetlands with a total project value of \$1.3 million dollars. The respective organizations' goals and conservation programs are well aligned, and their strengths and expertise complement one another.

Under the current partnership structure, DUC will contribute \$26,000 towards seven (7) wetland projects to be completed during the term of this agreement (by March 31, 2017). These seven (7) wetland projects are located as follows: Niagara Falls (2), West Lincoln (2), Niagara-on-the-Lake (1), Port Colborne (1) and Haldimand County (1). The NPCA and landowners will fund the remaining costs not covered by DUC, with NPCA funding up to a maximum of \$10,000 (as per NPCA program guidelines) for each wetland project.

Source Water Protection



The Ministry of Environment and Climate Change (MOECC) completed a successful program review of the Source Protection program at the NPCA in January 2016. It was the first conservation source protection program review conducted in the province. A Source Protection Committee meeting was held in September. A Draft Annual Progress Report was presented at the meeting summarizing the progress made in Source Protection Plan implementation from October 2014 to December 2015. As part of the source protection program, staff also participated on the MOECC's provincial auditor's Source Protection Recommendation "5b" Committee. This concerns notifying the public about naturally occurring groundwater elevated above drinking water standards. NPCA is the only conservation authority on this committee. Complimentary to this, protection of groundwater quality was pursued through almost 100 Highly Vulnerable Aquifer reviews for Niagara Region, local municipalities, and the Niagara Escarpment Commission. Staff continued to address groundwater data gaps identified during the source protection technical studies through on-going partnerships with the Ontario Geological Survey, McMaster University and the University of Waterloo and purchase and installation of equipment for long-term monitoring.

Welland River Floodplain Mapping

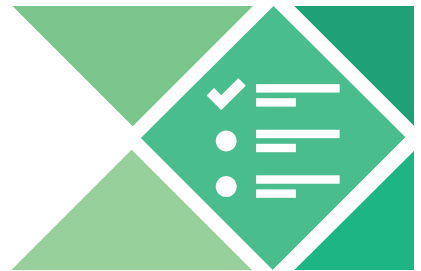


A Consultation Summary Report, incorporating comments and answers to questions from the February Public Information Sessions, was distributed to all Committee members for their feedback. The Consultation Summary Report is posted on the project website (www.wellandriver.ca) once all comments are received and updated.

Mark Hartley of MMM Group presented to floodplain committee members an updated technical presentation that was later used to communicate to the public at the 2nd round of information sessions in June.

A total of 8 public information sessions were held in 2016 in February and June. Through the consultation process, it was decided that the Policy Review would be completed before the implementation of new floodplain mapping. Both projects are expected to be completed in 2017.

Watershed Plans



Between 2005 and 2012 the NPCA developed watershed plans for 12 of its 18 watershed planning areas. The program was suspended in 2012 due to budget constraints.

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

Aecom was retained to undertake the study. Prioritizing the recommended actions was a key element of the study report. For instance, NPCA wanted to know if existing older watershed plans should be updated first or whether the areas with no watershed plans should be a higher priority.

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



188 Permits Issued
18 Day Average Processing Time

Water Quality Best Practices



The NPCA continually collects and analyzes water samples from 74 surface water locations and 13 groundwater locations throughout the NPCA watershed. The 2016 NPCA Annual Water Quality Monitoring Report was presented to the NPCA Board in June 2016. It summarizes the results of the Water Quality Monitoring Program for 2015. For surface water, the biological and chemical monitoring results indicate that most of Niagara's watersheds have poor or impaired water quality. For groundwater, results indicate that water quality meets Ontario Drinking Water Standards.

Improving the quality of water in the NPCA's watercourses is a challenging and complex task. There are many factors such as human activities, land use, urbanization, faulty septic systems, and agricultural practices that can have an impact on the quality of our water. Often the way the land is managed is reflected in the health of our water.

The NPCA is committed to achieving and maintaining a healthy and sustainable environment. To this end, the NPCA's Water Quality and Habitat Improvement Program is an initiative focused on providing local landowners with financial incentives to implement water quality and habitat improvement projects on their properties. These projects can include wetland creation, reforestation, and implementing Best Management Practices for agriculture, and the decommissioning of abandoned water wells.

Highlights from 2016 include:

- 66 projects
- 69,803 trees planted
- 36,713 wildflower plugs planted
- 5.0 acres of land seeded with wildflowers
- 8.8 acres of wetlands created
- 2.5 km of grassed waterways installed on agricultural fields
- 9 abandoned water wells plugged and decommissioned

The difficulty of improving water quality is too immense for the Restoration Program to correct on its own. Watershed plans and sub-watershed plans are first needed to developed an overall strategy in each watershed planning area.

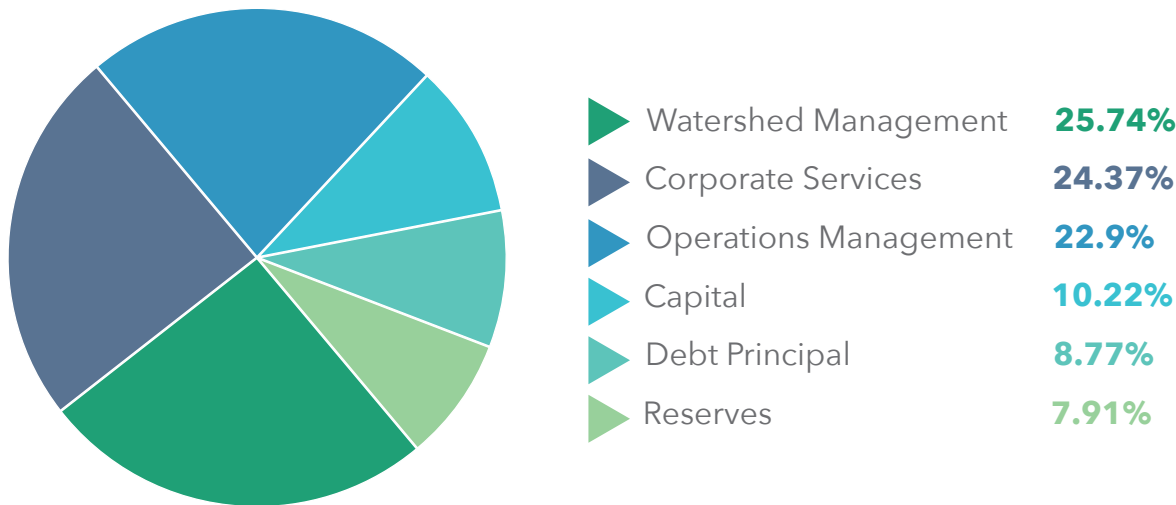
Watershed plans are developed to help protect the long-term health of the ecosystem within the watershed, as land uses change over time. The Watershed Plans do this by managing the land/water interactions, aquatic life and other water resource elements within the watershed. Water quality is a central part of this watershed management planning process.

In 2012, NPCA discontinued its watershed planning program due to budget concerns, but has initiated the processes to reestablish the program in 2016.

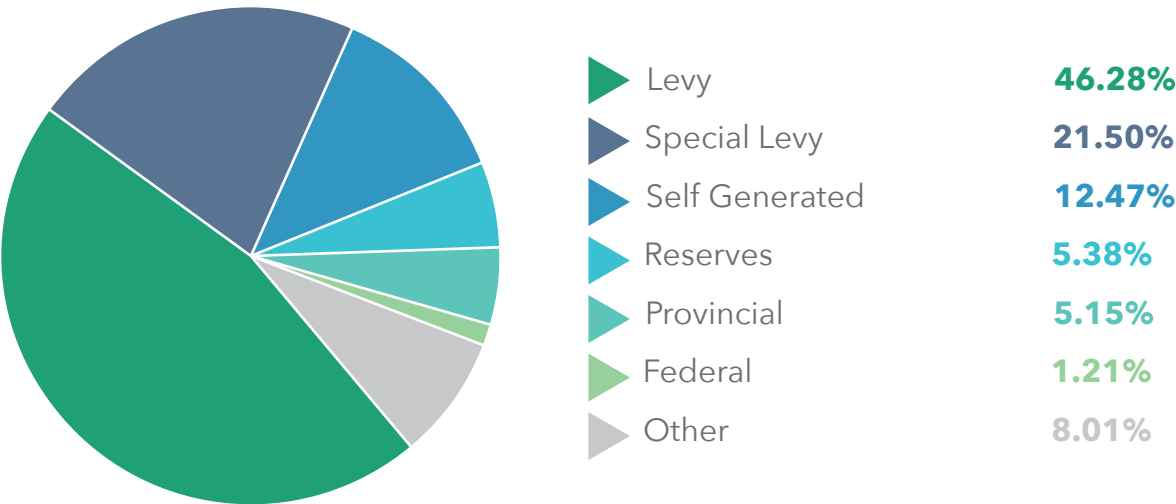
Financials



ALLOCATION



SOURCES





Report To: Board of Directors

Subject: NPCA Tree and Forest Conservation By-law – 2016 Annual Report

Report No: 47-17

Date: April 26, 2017

RECOMMENDATION:

THAT Report No. 47-17 regarding the 2016 Annual Report, provided to the Region to satisfy a condition in the Service Level Agreement between the Region and the NPCA, be RECEIVED for information.

PURPOSE:

To provide a copy of the 2016 Annual Report (attached-Appendix 1) for the Board's information.

BACKGROUND:

This report is completed annually and is provided to Niagara Region to satisfy a condition in the Service Level Agreement between the Region and the NPCA.

RELATED REPORTS AND APPENDICES:

1. 2016 Annual Report for the Tree & Forest Conservation Bylaw (attached)

FINANCIAL IMPLICATIONS:

None

Prepared by:

Dan Drennan

Dan Drennan, R.P.F.
Forester

Submitted by:

Peter Graham

Peter Graham
Acting Chief Administrative Officer & Secretary Treasurer

2016 ANNUAL REPORT

NIAGARA REGION TREE AND FOREST CONSERVATION

BYLAW (2008-30)



Niagara Region Tree and Forest Conservation Bylaw
2016 Annual Summary Report
Niagara Peninsula Conservation Authority

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Introduction

The Niagara Region Tree and Forest Conservation By-law 30-2008 exists to encourage the conservation and improvement of woodlands in Niagara through Good Forestry Practices. The By-law prohibits the clearing of woodlands except under specific circumstances and requires landowners to follow Good Forestry Practices when harvesting trees. This is done by requiring landowners to submit a forest management plan or a silvicultural prescription prepared by a Registered Professional Forester (or a member of the Ontario Professional Foresters Association) in order to obtain a permit.

In August of 2008 the Region of Niagara delegated administration of the By-law to the Niagara Peninsula Conservation Authority (NPCA). The NPCA is responsible for reviewing applications and issuing permits for timber harvesting within the Region. We also follow up on public inquiries and investigate violations, which sometimes lead to charges. For this reason NPCA forestry staff is designated as Provincial Offences Officers under the Provincial Offences Act. The NPCA employs one full-time staff, a Registered Professional Forester to administer the By-law.

The 2016 year marked the eighth year in which the NPCA administered the By-law on behalf of the Region. This report will summarize the activities undertaken throughout the year by the NPCA to promote Good Forestry Practices, educate the public and enforce the provisions of the By-law.

Permits

Good Forestry Practices (GFP) Permits are issued after an application is received and satisfies the necessary criteria. In 2016, 12 new GFP Permits were issued by the NPCA, 3 permits were carried over from the 2015 year. Two thirds of these permits were completed by the end of 2016.

Commenced in 2012 and continued on in 2016, strategies for managing woodlots for emerald ash borer (EAB) are required in prescriptions and tree marking for woodlots that have a significant component of ash. This strategy will continue into 2017 as the impact of EAB continues to be an issue.

Landowners are provided a copy of a recent publication from the Ontario Woodlot Association, 'A Landowner's Guide to Careful Logging', when a permit is approved. The guide provides landowners with information on proper logging practices that will ensure good forestry is attained. The harvest inspections conducted by the NPCA are based on the contents in the guide.

All permits are subject to conditions which are specified and tailored to the characteristics of the individual site. For example, harvesting in woodlands with sensitive ground conditions will be conditional to the work being done while the ground is frozen in the winter, or during a dry period during the summer, to minimize soil disturbance. Failure to follow the conditions of a permit is considered a violation of the By-law. There were no incidents in 2016 where permit conditions were not complied with. Forest Bylaw staff maintained regular communication with logging contractors to ensure operations were suspended when ground conditions were not favourable.

Forest Harvest Summary

The following table breaks down the distribution of 2016 permits by municipality; 12 new Good Forestry Practice permits were issued during the 2016 year.

West Lincoln	5	Grimsby	0
Fort Erie	3	St. Catharines	0
Wainfleet	2	Welland	0
Pelham	1	Niagara Falls	0
Niagara on the Lake	1	Port Colborne	0
Thorold	0	Lincoln	0

Basic statistics of harvest activity by municipality are as follows:

Municipality	Harvest Area		Approx. # of Trees Removed
	Hectares	Acres	
Fort Erie	39	96.4	1160
Grimsby	0	0	0
Lincoln	0	0	0
Niagara Falls	0	0	0
Niagara on the Lake	2.5	6.2	50
Pelham	4.8	11.9	287
Port Colborne	0	0	0
St Catharines	0	0	0
Thorold	0	0	0
Wainfleet	10	24.7	532
Welland	0	0	0
West Lincoln	30	74.1	677
Totals	86.3	213.3	2696

These tables exclude the permit renewals. Permit renewal statistics will always be included in the year in which the original permit was issued.

Inspections

Generally each permit site is inspected at least twice, many sites were visited multiple times. The first inspection occurs upon receiving the application. NPCA Bylaw staff visit the site and inspect the tree marking to ensure it follows good forestry practices. Any concerns with the tree marking and prescription will be noted and followed up with the landowner and/or certified tree marker. The permit may not be approved until any concerns are addressed. At this time NPCA staff also assesses the site conditions (soil) and any environmental values present which may be impacted by the harvest operation such as stick nests and streams. This will affect conditions that may be stipulated on the permit.

The operation may be inspected again while the work is underway and the crew is onsite. This gives NPCA Bylaw staff the opportunity to observe the precautions being taken and ensure that the permit conditions are being met.

Lastly the site is inspected again when the work has been completed. At this time NPCA Bylaw staff is able to verify that only trees that were marked have been removed and that all permit conditions are satisfied.

The result is that NPCA staff made approximately 70 site inspections on permits during 2016.

Education

In 2016 the NPCA continued to educate the public as well as groups and public agencies regarding the Bylaw.

Much of the educational activity takes place when members of the public phone or drop into the NPCA office and ask questions. Staff also conducted site visits when requested by the land owner to provide forestry knowledge and make them aware of Bylaw requirements. Staff is always available to answer questions and often spend considerable time going over the details of the bylaw and management strategies to deal with Emerald Ash Borer.

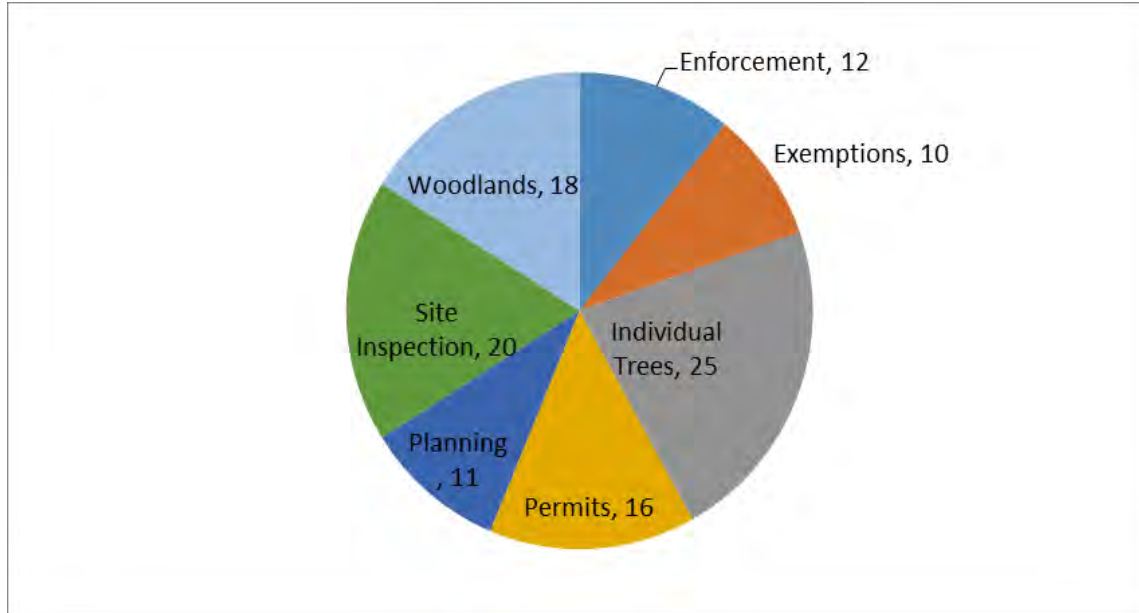
The Forestry section on the NPCA website was enhanced in 2016. Emphasizes was put on Good Forestry Practices and the latest strategies for managing woodlots for Emerald Ash Borer.

Bylaw Inquiries

Bylaw inquiries occur when Bylaw staff responds to an issue either presented by a member of the public or outside agency, or an issue initiated based on observations of Bylaw staff. Most are made by telephone. NPCA staff track inquiries for reporting purposes.

In 2016, Bylaw staff responded to 112 bylaw inquiries. Chart 1 indicates the number of inquiries by program area. The majority of the inquiries were about woodlands followed by site inspections and then permits. A brief explanation of program area's follows.

Chart 1: Number of Inquiries by Program Area



Program Area Descriptions

Enforcement: Any enforcement related matters which required action by Bylaw staff.

Exemptions: Inquiries regarding exemptions which required evaluation by Bylaw staff.

Individual Trees: Inquiries regarding individual trees on private property, most of which are outside the jurisdiction of the Bylaw.

Permits: Matters regarding reviewing or issuing permits.

Public Outreach: Inquires about by-law & other educational materials. Mail out of educational materials.

Woodlands: Issues and inquiries centered on the application of the Bylaw to woodlands.

Site Inspections: Post-harvest site inspection.

Planning: Land use planning inquiries

Chart 2: Number of Inquiries by Interest Group

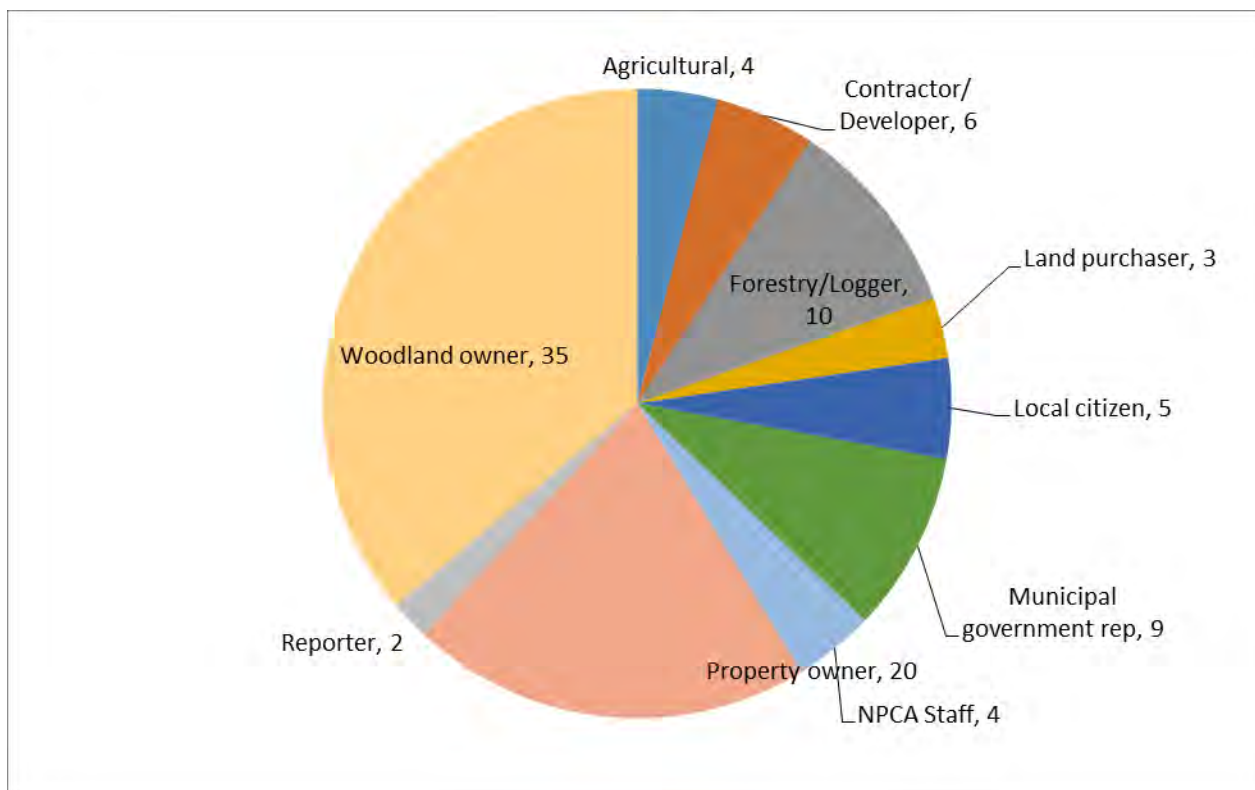


Chart 2 is a break down of the types of people that make the inquiries to the NPCA office. The majority of the inquiries are from woodlot owners, followed by property owners & then foresters & loggers.

Enforcement and Charges

Should it become necessary to initiate charges resulting from Bylaw violations, it is done under Part III of the Provincial Offences Act. This is referred to as commencement by information.

There were two occurrences of Bylaw infractions in which Part III Information's were filed in March and November of 2016 for properties in Thorold and Niagara Falls.

Since all these matters are still in the courts they cannot be discussed in detail. However it is the intention that the outcomes will be presented in future annual reports once the matters are finalized.

Training and Development

The Bylaw staff conducted independent learning in order to remain current with respect to the practice of forestry in the region and the application of the Bylaw. Staff will attend applicable training opportunities when available.

Particular attention was made towards learning about forest management strategies for dealing with Emerald Ash Borer in Niagara's woodlands.

Advisory Committee

The Tree and Forest Conservation By-law Advisory Committee did not meet during 2016, as there were no issues brought up by NPCA that required additional meetings. The role of the committee is to review and provide advice or recommendations on matters of tree and forest conservation as requested by the NPCA.

Conclusion

2016 was the eighth full year in which the Bylaw was being administered by the NPCA. There were no issues with the NPCA's ability to carry out the role of administering the Bylaw for the Region. All aspects of the Bylaw, from managing Good Forestry Practice permits, enforcement and public education were conducted in a professional manner.

Woodlot management strategies to deal with Emerald Ash Borer will continue to be a main concern in 2017. Current strategies will be used in woodlots that have a significant component of ash.

Report To: Board of Directors

Subject: 2017 Q1 Forestry and Tree Conservation By-law Status

Report No: 48-17

Date: April 26, 2017

RECOMMENDATION:

THAT Report No. 48-17 regarding the status of NPCA Forestry activities and the Tree and Forest Conservation By-law be RECEIVED for information.

PURPOSE:

To provide an update on the status of Tree & Forest Conservation By-law and forestry activities being conducted by the NPCA Forester in Q1 2017.

BACKGROUND:

By-law issues/main activities in Q1 2017 include:

- Harvest operations were suspended throughout January, February and March due to unseasonal mild weather conditions. Good Forestry Practices (GFP) permits in 3 woodlots located in Wainfleet were postponed due to unfavourable operating conditions. Operations will commence upon direction from the NPCA Forester to ensure conformance with permit conditions and operating conditions are suitable.
- Conducted final inspection in a woodlot located in Niagara on the Lake harvested under a GFP permit. Operations were conducted during favourable weather conditions in late fall 2016. Soil disturbance was minimal throughout the woodland and was confined to main skid trails. Operations were well conducted in accordance with Good Forestry Practices as outlined in the permit.
- Approved GFP permit applications for a woodlot in Lincoln. Operations are planned for late spring/summer 2017.
- Conducted a site visit with woodlot owners in Lincoln and Pelham interested in managing/harvesting their hardwood forest. Provided forestry advice on what steps could be taken and gave them instructions on how to obtain a Good Forestry Practices permit.
- Dealt with and prepared reports in response to complaints surrounding tree clearing work conducted at a property in Niagara on the Lake. Complaints focused on the removal of dead/dying ash trees (less than 25 years old) for the expansion of vineyards.

- Dealt with several tree cutting complaints for properties in Welland, St. Catharines, Niagara Falls and Niagara-on-the-Lake. Tree clearing work involved the removal of dead/dying second growth ash trees. There were no compliance issues involved with the operations.
- Participated in the Niagara Enviro-thon as a presenter in the Forestry module
- Continue to work with Region legal counsel on two Bylaw charges.
- Assisted NPCA planning staff on determining if forested areas on properties in Grimsby, Thorold and St. Catharines are considered woodlands under the Bylaw. All properties are covered by the Bylaw therefore they required an exemption to be obtained prior to tree clearing for development.
- Commenced work on an inventory project to locate and assess hazard trees located on NPCA properties adjacent to private residential lots. The project will determine the scope of work needed to address hazard tree removal. The majority of the hazard trees will be dead soon and declining ash trees impacted by Emerald Ash Borer (EAB). The assessment will include the level of risk each tree or groups of trees pose to private property. A high risk assessment would involve a large diameter dead tree(s) leaning towards a private property within a distance that could cause damage to a nearby structure and/or pose a safety risk. The inventory will be summarized in the work report (NPCA Ash Removal Program) and provided to NPCA operations staff to create a work plan to remove identified hazard trees. This inventory is ongoing and will be completed by the end of Q2 2017.
- Completed the 2016 Annual Report to satisfy a condition in the Service Level Agreement between the Region and the NPCA.

FINANCIAL IMPLICATIONS:

None

Prepared by:

Dan Drennan

Dan Drennan, R.P.F.
Forester

Submitted by:



Peter Graham
Acting Chief Administrative Officer & Secretary Treasurer

REPORTS FOR CONSIDERATION

❖ **REPORT 49-17 DRAFT Audited Financial Statements**



❖ **REPORT 50-17 Living Landscape – Draft Policy
PRESENTATION By: Dillon Consulting**

❖ **REPORT 51-17 Reg#1 – Governance & Administration – Draft Amendment**

❖ **REPORT 52-17 Reg#2 – Meeting Procedures – Draft Amendment**

❖ **REPORT 53-17 BoarderPass Canada Facility Use Agreement**

❖ **REPORT 54-17 Long Beach CA RFQ for stairs and AODA ramp**

April 26, 2017 Full Authority Meeting

Report To: Board of Directors

Subject: 2016 DRAFT Audited Financial Statements

Report No: 49-17

Date: April 26, 2017

RECOMMENDATION:

That the NPCA Board APPROVE the 2016 DRAFT Audited Financial Statements (Appendix 1), as prepared by the accounting firm Grant Thornton; and, that the approved financial statements be distributed to the Watershed Municipalities and Provincial Government.

BACKGROUND:

The NPCA Audit Committee met April 11, 2017 and has recommended the Board approve the 2016 DRAFT Financial Statements.

DISCUSSION:

The report confirms that the financial statements present fairly, in all material respects, the financial position of the NPCA, as at December 31, 2016. Further, the results of its operations, changes in net debt and cash flows for the year ended are in accordance with Canadian public sector accounting standards.

RELATED REPORTS AND APPENDICES:

Appendix 1 – DRAFT Audited Financial Statements as of December 31, 2016

Appendix 2 – Internal Control Letter with Management Response - April 26, 2017

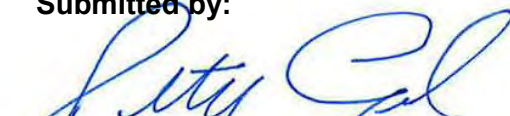
Appendix 3 – Communication of audit results - April 26, 2017

Prepared by:



David Barrick
Director of Corporate Services

Submitted by:



Peter Graham
Acting CAO / Secretary Treasurer

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



Financial Statements

Niagara Peninsula Conservation Authority

December 31, 2016

DRAFT

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Independent Auditor's Report

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To the Members of
Niagara Peninsula Conservation Authority

We have audited the accompanying financial statements of the Niagara Peninsula Conservation Authority, which comprise the statement of financial position as at December 31, 2016, and the statements of operations, changes in net financial assets (debt), continuity of reserve and reserve funds and cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's responsibility for the financial statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the organization's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the organization's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Independent Auditor's Report (continued)

Opinion

In our opinion, the financial statements present fairly, in all material respects, the financial position of the Niagara Peninsula Conservation Authority as at December 31, 2016, and the results of its operations, changes in net financial assets (debt), continuity of reserve and reserve funds and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.

Emphasis of matter

We draw attention to Note 2 to the financial statements which describes the correction in the current period of an error in the prior period.

St. Catharines, Canada
March 29, 2017

Chartered Professional Accountants
Licensed Public Accountants

Niagara Peninsula Conservation Authority

Statement of Financial Position

As at December 31

2016
(As restated)
(Note 2)

Financial assets

Cash and cash equivalents	\$ 4,409,704	\$ 4,224,450
Portfolio investments (Note 3)	4,003,563	3,119,300
Accounts receivable		
Government transfers	216,643	122,483
Niagara Peninsula Conservation Foundation	5,248	100,000
Other	268,041	218,127
	<u>489,932</u>	<u>440,610</u>
	<u>8,903,199</u>	<u>7,784,360</u>

Liabilities

Accounts payable and accrued liabilities	1,275,816	386,335
Employee future benefits (Note 4)	146,000	153,000
Deferred revenue - Other	602,241	505,972
Deferred revenue -		
Welland River restoration (Ontario Power Generation)	1,736,981	1,906,616
Long-term debt (Note 5)	<u>2,443,130</u>	<u>3,581,840</u>
	<u>6,204,168</u>	<u>6,533,763</u>

Net financial assets

2,699,031 1,250,597

Non-financial assets

Prepaid expenses	43,630	24,000
Tangible capital assets (Note 6)	<u>19,563,286</u>	<u>18,923,086</u>

Accumulated surplus

\$22,305,947 \$20,197,683

Accumulated surplus consists of the following:

Reserves and reserve funds (Page 6)

Capital reserves	\$ 4,543,925	\$ 4,033,559
Operating reserves and reserve funds	<u>641,863</u>	<u>822,878</u>
	5,185,788	4,856,437

Net assets invested in tangible capital assets (Note 9)

17,120,159 15,341,246
\$22,305,947 \$20,197,683

Approved on behalf of the Authority

Chair

Chief Administrative Officer

Niagara Peninsula Conservation Authority

Statement of Operations

Year ended December 31	2016 Budget	2016 Actual	2015 Actual (As restated) (Note 2)
Revenues			
Government transfers			
Province of Ontario - Ministry of Natural Resources and Forestry	\$ 174,500	\$ 174,496	\$ 174,496
Province of Ontario - Other	330,000	380,756	360,112
Government of Canada	480,000	271,033	214,253
Municipal levies			
General	6,010,610	6,010,610	6,010,610
Special	2,792,333	2,792,333	2,792,333
Authority generated			
User fees, sales and admissions	1,379,495	1,612,548	1,450,140
Niagara Peninsula Conservation Foundation	70,000	13,500	100,000
Administration fees	355,000	393,255	463,940
Interest	60,000	73,872	114,616
Land contribution (Note 6)	-	-	112,500
Other	230,474	541,971	403,361
	<u>11,882,412</u>	<u>12,264,374</u>	<u>12,196,361</u>
Expenses			
Corporate services (Page 16)	2,964,066	3,140,111	2,955,389
Watershed (Page 17)	3,225,585	3,342,824	3,056,086
Operations (Page 23)	2,903,384	2,985,890	2,763,269
	<u>9,093,035</u>	<u>9,468,825</u>	<u>8,774,744</u>
Annual surplus before amortization	2,789,377	2,795,549	3,421,617
Amortization	687,285	687,285	640,147
Annual surplus	<u>\$ 2,102,092</u>	<u>\$ 2,108,264</u>	<u>\$ 2,781,470</u>
Accumulated surplus			
Beginning of year	20,197,683	20,197,683	17,416,213
Annual surplus	<u>2,102,092</u>	<u>2,108,264</u>	<u>2,781,470</u>
End of year	<u>\$22,299,775</u>	<u>\$22,305,947</u>	<u>\$20,197,683</u>

Niagara Peninsula Conservation Authority **Statement of Changes in Net Financial Assets (Debt)**

Year ended December 31

	2016 Budget	2016 Actual	2015 Actual (As restated) (Note 2)
Annual surplus	\$ 2,102,092	\$ 2,108,264	\$ 2,781,470
Changes in non-financial assets			
Acquisition of tangible capital assets	(1,405,876)	(1,327,485)	(1,815,689)
Disposal of tangible capital assets	-	-	-
Amortization	687,285	687,285	640,147
Increase in prepaid expenses	-	(19,630)	-
	1,383,501	1,448,434	1,605,928
Net financial assets (debt)			
Beginning of year	1,250,597	1,250,597	(355,331)
End of year	<u>\$ 2,634,098</u>	<u>\$ 2,699,031</u>	<u>\$ 1,250,597</u>

Niagara Peninsula Conservation Authority

Statement of Continuity of Reserves and Reserve Funds

Year ended December 31

2015 Appropriations (As restated) (Note 2) From Operations To Appropriations Operations 2016

Capital reserves

Equipment	\$ 349,835	\$ 33,555	\$ -	\$ 383,390
Flood protection services	483,978	-	79,628	404,350
Niagara levy differential	347,000	427,469	-	774,469
Land acquisition - Hamilton	800,000	100,000	-	900,000
Land acquisition - Niagara	298,174	500,000	-	798,174
General capital	<u>1,754,572</u>	<u>104,847</u>	<u>575,877</u>	<u>1,283,542</u>
	<u>\$ 4,033,559</u>	<u>\$ 1,165,871</u>	<u>\$ 655,505</u>	<u>\$ 4,543,925</u>

Operating reserves and reserve funds

General operating	\$ 740,507	\$ 75,997	\$ 257,012	\$ 559,492
Tree bylaw agreement	<u>82,371</u>	<u>-</u>	<u>-</u>	<u>82,371</u>
	<u>\$ 822,878</u>	<u>\$ 75,997</u>	<u>\$ 257,012</u>	<u>\$ 641,863</u>

Niagara Peninsula Conservation Authority

Statement of Cash Flows

Year ended December 31

2016 2015
(As restated)
(Note 2)

Increase (decrease) in cash and cash equivalents

Operating activities

Annual surplus	\$ 2,108,264	\$ 2,781,470
Adjustments for non-cash items		
Amortization of tangible capital assets	687,285	640,147
Contributed tangible capital assets	-	(112,500)
(Gain) loss on disposal of tangible capital assets	-	(14,095)
Employee future benefits	(7,000)	31,000
	<u>2,788,549</u>	<u>3,326,022</u>
Changes in non-cash working capital		
Accounts receivable	(49,322)	(175,706)
Accrued interest on investments	(873)	826
Prepays	(19,630)	-
Accounts payable and accrued liabilities	889,481	(39,411)
Deferred revenue - Other	96,269	84,967
Deferred revenue - Welland River restoration (Ontario Power Generation)	(169,635)	(33,086)
	<u>3,534,839</u>	<u>3,163,612</u>

Investing activities

Proceeds from sale of investments	3,116,610	3,055,500
Purchases of investments	(4,000,000)	(3,116,610)
	<u>(883,390)</u>	<u>(61,110)</u>

Capital activities

Purchases of tangible capital assets	(1,327,485)	(1,703,189)
Proceeds from disposal of tangible capital assets	-	14,095
Payments on long-term debt	(1,138,710)	(1,243,603)
	<u>(2,466,195)</u>	<u>(2,932,697)</u>

Increase in cash and cash equivalents

185,254 169,805

Cash and cash equivalents

Beginning of year	<u>4,224,450</u>	<u>4,054,645</u>
End of year	<u>\$ 4,409,704</u>	<u>\$ 4,224,450</u>

Niagara Peninsula Conservation Authority

Notes to the Financial Statements

December 31, 2016

1. Nature of operations

The Niagara Peninsula Conservation Authority ("the Authority") is established under The Conservation Authorities Act of Ontario to further the conservation, restoration, development and management of natural resources. It is exempt from income taxes under section 149(1)(c) of the Income Tax Act.

2. Significant accounting policies

Management responsibility

The financial statements are the responsibility of and prepared by management in accordance with Canadian public sector accounting standards. The preparation of financial statements necessarily involves the use of estimates based on management's judgement, particularly when transactions affecting the current accounting period cannot be finalized with certainty until future periods.

The significant accounting policies used are as follows:

Basis of accounting

Revenues and expenditures are reported on the accrual basis of accounting. The accrual basis of accounting recognizes revenues as they become available and measurable; expenditures are recognized as they are incurred and measurable as a result of receipt of goods or services and the creation of a legal obligation to pay.

Cash and cash equivalents

Cash and temporary investments include cash on hand, balances with banks and guaranteed investment certificates that mature within one year.

Portfolio investments

Portfolio investments are valued at the lower of cost and market value. Interest income is reported as revenue in the period earned.

Deferred revenue

Deferred revenues represent government transfers and user fees which have been collected but for which related expenditures or related services have yet to be performed. These amounts will be recognized as revenues in the year the expenditures are made or services provided.

Tangible capital assets

Tangible capital assets are recorded at cost. Cost includes all directly attributable expenses in the acquisition, construction, development and/or betterment of the asset required to install the asset at the location and in the condition necessary for its intended use. Contributed tangible capital assets are capitalized at their estimated fair value upon acquisition.

Niagara Peninsula Conservation Authority

Notes to the Financial Statements

December 31, 2016

2. Significant accounting policies (continued)

Leases are classified as capital or operating leases. Leases that transfer substantially all benefits incidental to ownership are accounted for as capital leases. All other leases are accounted for as operating leases and the related lease payments are charged to expenses as incurred.

Amortization is calculated on a straight-line basis to write-off the net cost of each asset over its estimated useful life for all classes except land. Land is considered to have an infinite life without amortization. Residual values of assets are assumed to be zero with any net gain or loss arising from the disposal of assets recognized in the Statement of Operations as "Other" revenue. Full-year amortization is charged in the year of acquisition and disposal. Assets under construction are not amortized until the asset is available for productive use.

Amortization is based on the following classifications and useful lives:

Land improvements	20 years
Buildings	30 years
Dams	15 to 100 years
Gauge stations	15 to 30 years
Equipment	10 years
Vehicles	5 years
Office equipment	5 years

Vehicles and equipment

The Authority maintains reserves for replacement of vehicles and equipment. Internal charges for the use of the vehicles and equipment are made to the various projects and programs of the Authority. The internal charges are designed to recover the costs of operating equipment including replacement.

Reserves

Reserves for future expenditures and contingencies are established as required at the discretion of the board of directors of the Authority. Increases or decreases in these reserves are made by appropriations from or to operations.

Revenue recognition

a) Government transfers

Government transfers are recognized as revenue in the period in which the events giving rise to the transfer occur, providing the transfers are authorized, any eligibility criteria have been met and reasonable estimates of the amounts can be made.

b) Municipal levies

Municipal levies are recognized as revenue in the period in which the levy is issued.

c) Authority generated

User fees, sales and admissions are recognized when the services are performed or goods are delivered and there is reasonable assurance of collection. Other revenues are recorded when they are earned and collection is reasonably assured.

Niagara Peninsula Conservation Authority

Notes to the Financial Statements

December 31, 2016

2. Significant accounting policies (continued)

Use of estimates and measurement uncertainty

The preparation of financial statements in accordance with Canadian public sector accounting standards requires management to make estimates that affect the reported amounts of assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenditures during the reporting period. Actual results could differ from management's best estimates as additional information becomes available in the future. One area in which management makes an estimate is with regards to obligations for employee benefits.

Prior period adjustment

In 2016, management became aware that amounts were recorded in error for the year ended December 31, 2015. Government transfers and interest in the amount of \$214,547 were recorded as deferred revenue at December 31, 2015, but it was subsequently identified that the expenses related to the funding had been incurred and recorded incorrectly within the general ledger. Therefore, the deferred revenue had satisfied the stipulations for reporting as revenue. In addition, accounts receivable greater than one year old in the amount of \$14,175 were removed to more accurately reflect amounts owing. The correction of these errors has been presented by retrospectively restating the comparative figures as follows:

	<u>Increase/(Decrease)</u>
<u>Statement of Financial Position</u>	
Accounts receivable - Other	\$(14,175)
Deferred revenue	(214,547)
Operating reserves	200,372
<u>Statement of Operations</u>	
<u>Revenues</u>	
Government transfers	
Province of Ontario - Other	134,694
Government of Canada	53,571
Authority generated	
Interest	26,282
<u>Expenses</u>	
Corporate services	14,175
<u>Accumulated surplus</u>	200,372

3. Portfolio investments

Portfolio investments consist of a bank guaranteed investment certificates bearing interest ranging from 1.5% to 1.85% maturing in December 2017. Interest is receivable on maturity. Carrying value approximates market value.

Niagara Peninsula Conservation Authority

Notes to the Financial Statements

December 31, 2016

4. Employee future benefits

The Authority provides extended life, health and dental benefits for early retirees to age 65 which will require funding in future periods. The Authority recognizes these post-retirement costs in the period in which the employees rendered the services. The accrued benefit liability at December 31, 2016 was estimated by management to be \$146,000 (2015 - \$153,000).

5. Long-term debt

	<u>2016</u>	<u>2015</u>
The Authority has assumed responsibility for the payment of principal and interest charges on long-term debt issued by the Region of Niagara. The debt bears interest at 5%. At the end of the year, the outstanding principal amount of this debt is:	<u>\$ 2,443,130</u>	<u>\$ 3,581,840</u>

Principal repayments in each of the next four years are due as follows:

2017	\$ 982,670
2018	760,429
2019	483,705
2020	216,326

The Authority paid \$164,468 (2015 - \$218,891) in interest on long-term debt during the year.

Niagara Peninsula Conservation Authority

Notes to the Financial Statements

December 31, 2016

6. Tangible capital assets

	Cost Beginning of Year	Additions	Disposals	Cost End of Year	Accumulated Amortization Beginning of Year	Amortization	Disposals	Accumulated Amortization End of Year	Net Book Value 2016
Land	\$8,504,865	\$ -	\$ -	\$8,504,865	\$ -	\$ -	\$ -	\$ -	\$ 8,504,865
Land improvements	4,468,402	316,166	-	4,784,568	2,317,523	189,532	-	2,507,055	2,277,513
Buildings	5,506,991	146,025	-	5,653,016	1,762,436	179,701	-	1,942,137	3,710,879
Dams	4,986,642	-	-	4,986,642	1,535,786	59,086	-	1,594,872	3,391,770
Gauge stations	377,774	25,577	-	403,351	141,785	21,090	-	162,875	240,476
Equipment	1,200,516	218,643	-	1,419,159	707,215	119,406	-	826,621	592,538
Vehicles	210,176	-	-	210,176	184,349	17,747	-	202,096	8,080
Office equipment	557,526	151,245	-	708,771	311,384	100,723	-	412,107	296,664
Work-in-progress	70,672	530,854	61,025	540,501	-	-	-	-	540,501
	<u>\$25,883,564</u>	<u>\$1,388,510</u>	<u>\$ 61,025</u>	<u>\$27,211,049</u>	<u>\$6,960,478</u>	<u>\$ 687,285</u>	<u>\$ -</u>	<u>\$7,647,763</u>	<u>\$19,563,286</u>

	Cost Beginning of Year	Additions	Disposals	Cost End of Year	Accumulated Amortization Beginning of Year	Amortization	Disposals	Accumulated Amortization End of Year	Net Book Value 2015
Land	\$7,471,796	\$1,033,069	\$ -	\$8,504,865	\$ -	\$ -	\$ -	\$ -	\$8,504,865
Land improvements	4,349,554	118,848	-	4,468,402	2,139,151	178,372	-	2,317,523	2,150,879
Buildings	5,401,414	105,577	-	5,506,991	1,587,602	174,834	-	1,762,436	3,744,555
Dams	4,986,642	-	-	4,986,642	1,476,701	59,085	-	1,535,786	3,450,856
Gauge stations	344,602	33,172	-	377,774	121,400	20,388	3	141,785	235,989
Equipment	997,722	203,094	300	1,200,516	604,512	103,003	300	707,215	493,301
Vehicles	231,176	-	21,000	210,176	177,820	27,529	21,000	184,349	25,827
Office equipment	303,130	254,396	-	557,526	234,448	76,936	-	311,384	246,142
Work-in-progress	3,139	70,672	3,139	70,672	-	-	-	-	70,672
	<u>\$24,089,175</u>	<u>\$1,818,828</u>	<u>\$ 24,439</u>	<u>\$25,883,564</u>	<u>\$6,341,634</u>	<u>\$ 640,147</u>	<u>\$ 21,303</u>	<u>\$6,960,478</u>	<u>\$18,923,086</u>

During the year the Authority received a donation related to a land purchase. The donated value of \$112,500 has been added to the cost of the land and reported in revenue as a land contribution.

7. Credit facility

The Authority's credit facility includes an overdraft lending account of \$800,000 bearing interest at prime. No amount was outstanding as at the year end. The facility is secured by a general security agreement.

Niagara Peninsula Conservation Authority

Notes to the Financial Statements

December 31, 2016

8. Pension plan

The Authority makes contributions to the Ontario Municipal Employees Retirement System ("OMERS"), which is a multi-employer plan, on behalf of the 59 (2015 - 58) members of its staff. The plan is a defined benefit plan that specifies the amount of the retirement benefit to be received by the employees based on the length of service and rates of pay. Employees and employers contribute jointly to the plan.

Since OMERS is a multi-employer pension plan, the Authority does not recognize any share of the pension plan deficit of \$2.3 billion (2015 - \$5.3 billion) based on the fair market value of the Plan's assets, as this is a joint responsibility of all Ontario municipal entities and their employees. Contributions were made in the 2016 calendar year at rates ranging from 9.0% to 15.8% depending on the member's designated retirement age and level of earnings. Employer contributions for current and past service are included as an expense in the Statement of Operations. Employer contributions to OMERS for 2016 current and past service was \$462,855 (2015 - \$420,250) and were matched by employee contributions in a similar amount.

9. Net assets invested in tangible capital assets

The net assets invested in tangible capital assets is represented by:

	<u>2016</u>	<u>2015</u>
Tangible capital assets net book value	\$19,563,286	\$18,923,086
Less: Past capital levy due to the Region (Note 5)	<u>(2,443,130)</u>	<u>(3,581,840)</u>
	<u>\$17,120,156</u>	<u>\$15,341,246</u>

10. Economic interest in Niagara Peninsula Conservation Foundation

The Authority has an economic interest in the Niagara Peninsula Conservation Foundation ("Foundation"). The Foundation is incorporated under the laws of Ontario to assist in the cultivation and advancement of conservation by actively seeking support for conservation projects and programs through fundraising efforts and by serving as custodian for the donations and gifts. The Foundation is an independent organization and a Registered Charity that is exempt from income tax under the Income Tax Act. The Authority is the main beneficiary of the Foundation's externally restricted and unrestricted funds. The Foundation follows Canadian accounting standards for non-profit organizations and its accounts are not consolidated in these financial statements.

During 2016, the Foundation contributed \$13,500 (2015 - \$100,000) to fund projects and programs carried out by the Authority. At December 31, 2016, the amount due from the Foundation to the Authority to fund projects and programs is \$Nil (2015 - \$100,000).

Niagara Peninsula Conservation Authority

Notes to the Financial Statements

December 31, 2016

11. Comparative figures

Certain of the comparative figures have been reclassified to conform with the financial statement presentation adopted for the current year.

12. Budget

The budget adopted by the Authority on October 21, 2015 was not prepared on a basis consistent with that used to report actual results in accordance with Canadian public sector accounting standards. The budget was prepared on a modified accrual basis while Canadian public sector accounting standards require a full accrual basis. As a result, the budget figures presented in the statement of operations and statement of changes in net debt represent the budget adopted by the Authority with the following adjustments:

Budgeted annual surplus	\$	-
Add:		
Acquisition of tangible capital assets		1,405,876
Repayment of long term debt		1,185,532
Transfers to reserves		1,027,469
Less:		
Transfers from reserves		(829,500)
Amortization of tangible capital assets		<u>(687,285)</u>
Budgeted surplus per statement of operations	\$	<u>2,102,092</u>

13. Contingencies

The Authority is involved from time to time in litigation, which arises in the normal course of business. In respect of any outstanding claims, the Authority believes that insurance coverage is adequate and that no material exposure exists on the eventual settlement of such litigation, therefore no provision has been made in the accompanying financial statements.

Niagara Peninsula Conservation Authority

Notes to the Financial Statements

December 31, 2016

14. Segmented information

The Authority provides a wide range of services which are categorized by department. Certain departments that have been separately disclosed in the segmented information, along with the services they provide, are as follows:

Corporate services

Corporate services is comprised of the administration of the offices.

Watershed

The watershed department is the umbrella for three divisions dedicated to monitoring, regulating, protecting and improving the health and safety of our watershed.

Operations

The operations department is the umbrella for three divisions dedicated to conservation land management, conservation land programming and development and managing the Authority's vehicles and equipment. Conservation land management is the administration department for the conservation areas. Conservation land programming and development is responsible for maintenance and improvements to the conservation areas. The vehicles and equipment department accounts for the cost of maintaining the vehicles and equipment.

For each reported segment, revenues and expenses represent both amounts that are directly attributable to the segment and amounts that are allocated on a reasonable basis.

Niagara Peninsula Conservation Authority
Corporate Services
Schedule of Segment Disclosure

Year ended December 31

	2016 Budget	2016 Actual	2015 Actual (As restated) (Note 2)
Revenues			
Government transfers			
Province of Ontario - Ministry of Natural Resources and Forestry	\$ 75,800	\$ 75,796	\$ 70,196
Municipal levies			
General	2,935,634	2,935,634	2,224,995
Special	1,563,133	1,563,133	1,563,133
Authority generated			
Niagara Peninsula Conservation Foundation	70,000	-	100,000
Interest	60,000	73,872	114,616
Other	-	34,634	32,767
	<u>4,704,567</u>	<u>4,683,069</u>	<u>4,105,707</u>
Expenses			
Corporate services	643,310	655,082	357,872
Office services	767,094	832,441	930,214
Financial services	273,937	366,646	277,339
Human resources	117,590	111,552	78,764
Information technology/GIS	511,324	505,969	516,757
Corporate communications	325,738	314,928	453,160
CAO & board expenses	325,073	353,493	341,283
	<u>2,964,066</u>	<u>3,140,111</u>	<u>2,955,389</u>
Annual surplus	1,740,501	1,542,958	1,150,318
<i>Acquisition of tangible capital assets</i>	<i>182,500</i>	<i>141,403</i>	<i>254,396</i>
<i>Principal payments on long-term debt</i>	<u><i>1,185,532</i></u>	<u><i>1,185,532</i></u>	<u><i>1,243,603</i></u>
<i>Annual surplus (deficit) after acquisition of tangible capital assets and principal payments on long-term debt</i>	<u><i>\$ 372,469</i></u>	<u><i>\$ 216,023</i></u>	<u><i>\$ (347,681)</i></u>

Niagara Peninsula Conservation Authority
Watershed
Schedule of Segment Disclosure

Year ended December 31

	2016 Budget	2016 Actual	2015 Actual (As restated) (Note 2)
Revenues			
Government transfers			
Province of Ontario - Ministry of Natural Resources and Forestry	\$ 98,700	\$ 98,700	\$ 104,300
Province of Ontario - Other	330,000	376,756	360,112
Government of Canada	235,000	157,402	211,605
Municipal levies			
General	1,628,441	1,628,441	1,346,456
Special	497,200	497,200	479,200
Authority generated			
Administration fees	355,000	393,255	463,940
Other	81,244	294,310	163,556
	<u>3,225,585</u>	<u>3,446,064</u>	<u>3,129,169</u>
Expenses			
Watershed management	326,785	568,531	333,443
Plan review and regulations (Page 18)	1,119,381	1,135,276	1,011,445
Watershed projects (Page 19)	1,779,419	1,639,017	1,711,198
	<u>3,225,585</u>	<u>3,342,824</u>	<u>3,056,086</u>
Annual surplus (deficit)	-	103,240	73,083
<i>Acquisition of tangible capital assets</i>	<u>112,500</u>	<u>234,159</u>	<u>33,172</u>
<i>Annual (deficit) surplus after acquisition of tangible capital assets</i>	<u>\$ (112,500)</u>	<u>\$ (130,919)</u>	<u>\$ 39,911</u>

Niagara Peninsula Conservation Authority

Plan Review and Regulations

Schedule of Segment Disclosure

Year ended December 31	2016 Budget	2016 Actual	2015 Actual
Revenues			
Government transfers			
Province of Ontario - Ministry of Natural Resources and Forestry	\$ 60,000	\$ 60,000	\$ 28,100
Municipal levies			
General	211,998	211,998	465,000
Special	309,500	309,500	309,500
Authority generated			
Administration fees	355,000	393,255	463,940
Other	-	22,515	27
	<u>936,498</u>	<u>997,268</u>	<u>1,266,567</u>
Expenses			
Municipal plan input and review	199,358	216,177	160,565
Development plan input and review	341,318	356,136	335,513
Construction permit review and compliance	190,790	178,425	174,027
Forest by law	103,927	101,986	101,328
Watershed biology	283,988	282,552	240,012
	<u>1,119,381</u>	<u>1,135,276</u>	<u>1,011,445</u>
Annual (deficit) surplus	(182,883)	(138,008)	255,122
<i>Acquisition of tangible capital assets</i>	<u>-</u>	<u>-</u>	<u>-</u>
<i>Annual (deficit) surplus after acquisition of tangible capital assets</i>	<u>\$ (182,883)</u>	<u>\$ (138,008)</u>	<u>\$ 255,122</u>

Niagara Peninsula Conservation Authority
Watershed Projects
Schedule of Segment Disclosure

Year ended December 31

	2016 Budget	2016 Actual	2015 Actual (As restated) (Note 2)
Revenues			
Government transfers			
Province of Ontario - Ministry of Natural Resources and Forestry	\$ 38,700	\$ 38,700	\$ 76,200
Province of Ontario - Other	330,000	376,756	360,112
Government of Canada	235,000	157,402	211,605
Municipal levies			
General	1,089,658	1,089,658	871,456
Special	187,700	187,700	169,700
Authority generated			
Other	81,244	271,795	163,529
	<u>1,962,302</u>	<u>2,122,011</u>	<u>1,852,602</u>
Expenses			
Restoration and remedial action plan (Page 20)	892,533	859,100	911,530
Source water protection, engineering and water quality (Page 21)	611,629	511,233	509,617
Flood protection, control structures and special projects (Page 22)	275,257	268,684	290,051
	<u>1,779,419</u>	<u>1,639,017</u>	<u>1,711,198</u>
Annual surplus	182,883	482,994	141,404
<i>Acquisition of tangible capital assets</i>	<u>112,500</u>	<u>234,159</u>	<u>33,172</u>
<i>Annual surplus after acquisition of tangible capital assets</i>	<u>\$ 70,383</u>	<u>\$ 248,835</u>	<u>\$ 108,232</u>

Niagara Peninsula Conservation Authority

Restoration and Remedial Action Plan

Schedule of Segment Disclosure

Year ended December 31

	2016 Budget	2016 Actual	2015 Actual (As restated) (Note 2)
Revenues			
Government transfers			
Province of Ontario - Other	\$ 95,000	\$ 144,795	\$ 59,205
Government of Canada	235,000	157,402	211,605
Municipal levies			
General	521,033	521,033	271,456
Special	-	-	150,000
Authority generated			
Other	81,244	99,781	100,144
	<u>932,277</u>	<u>923,011</u>	<u>792,410</u>
Expenses			
12 Mile Creek restoration	135,059	137,805	49,679
20 Mile Creek restoration	134,658	131,677	49,825
Lake Erie Northshore restoration	30,000	28,103	19,228
Niagara-on-the-Lake creeks restoration	134,059	118,012	50,991
Welland River restoration	125,500	100,506	130,064
General restoration	242,757	263,262	480,321
Well decommissioning program	12,500	13,394	10,595
Niagara River remedial action plan co-ordination	78,000	66,341	120,827
	<u>892,533</u>	<u>859,100</u>	<u>911,530</u>
Annual surplus (deficit)	39,744	63,911	(119,120)
<i>Acquisition of tangible capital assets</i>	<u>15,000</u>	<u>-</u>	<u>-</u>
<i>Annual surplus (deficit) after acquisition of tangible capital assets</i>	<u>\$ 24,744</u>	<u>\$ 63,911</u>	<u>\$ (119,120)</u>

Niagara Peninsula Conservation Authority
Source Water Protection, Engineering and Water Quality
Schedule of Segment Disclosure

Year ended December 31

2016
Budget

2016
Actual

2015
Actual
(As restated)
(Note 2)

Revenues

Government transfers			
Province of Ontario - Ministry of Natural Resources and Forestry	\$ 38,700	\$ 38,700	\$ -
Province of Ontario - Other	235,000	231,961	298,363
Municipal levies			
General	333,829	333,829	375,000
Special	187,700	187,700	-
Authority generated			
Other	-	17,431	11,839
	<u>795,229</u>	<u>809,621</u>	<u>685,202</u>

Expenses

Source water protection	128,500	126,185	161,667
Water resources engineering	127,417	134,205	105,555
Water quality monitoring program	355,712	250,843	241,795
Other monitoring programs	-	-	600
	<u>611,629</u>	<u>511,233</u>	<u>509,617</u>

Annual surplus

183,600 298,388 175,585

Acquisition of tangible capital assets

- - -

*Annual surplus after acquisition
of tangible capital assets*

\$ 183,600 \$ 298,388 \$ 175,585

Niagara Peninsula Conservation Authority **Flood Protection, Control Structures and Special Projects** **Schedule of Segment Disclosure**

Year ended December 31	2016 Budget	2016 Actual	2015 Actual
Revenues			
Government transfers			
Province of Ontario - Ministry of Natural Resources and Forestry	\$ -	\$ -	\$ 76,200
Province of Ontario - Other	-	-	2,544
Municipal levies			
General	234,796	234,796	225,000
Special	-	-	19,700
Authority generated			
Other	-	154,583	51,546
	<u>234,796</u>	<u>389,379</u>	<u>374,990</u>
Expenses			
Flood forecasting and warning	128,313	122,076	122,785
Flood control structures	-	-	44,293
Special projects	<u>146,944</u>	<u>146,608</u>	<u>122,973</u>
	<u>275,257</u>	<u>268,684</u>	<u>290,051</u>
Annual surplus (deficit)	(40,461)	120,695	84,939
<i>Acquisition of tangible capital assets</i>	<u>97,500</u>	<u>234,159</u>	<u>33,172</u>
<i>Annual (deficit) surplus after acquisition of tangible capital assets</i>	<u>\$ (137,961)</u>	<u>\$ (113,464)</u>	<u>\$ 51,767</u>

Niagara Peninsula Conservation Authority

Operations

Schedule of Segment Disclosure

Year ended December 31	2016 Budget	2016 Actual	2015 Actual
Revenues			
Government transfers			
Province of Ontario - Other	\$ -	\$ 4,000	\$ -
Government of Canada	245,000	113,631	2,648
Municipal levies			
General	1,446,535	1,446,535	2,439,159
Special	732,000	732,000	750,000
Authority generated			
User fees, sales and admissions	1,379,495	1,612,548	1,450,140
Niagara Peninsula Conservation Foundation	-	13,500	-
Land contribution (Note 6)	-	-	112,500
Other	149,230	213,027	207,038
	<u>3,952,260</u>	<u>4,135,241</u>	<u>4,961,485</u>
Expenses			
Land management (Page 24)	1,057,021	1,110,485	855,400
Land programming and development (Page 26)	1,645,863	1,704,233	1,826,604
Vehicles and equipment (Page 29)	200,500	171,172	81,265
	<u>2,903,384</u>	<u>2,985,890</u>	<u>2,763,269</u>
Annual surplus	1,048,876	1,149,351	2,198,216
<i>Acquisition of tangible capital assets</i>	<u>1,110,876</u>	<u>944,384</u>	<u>1,484,475</u>
<i>Annual surplus (deficit) after acquisition of tangible capital assets</i>	\$ <u>(62,000)</u>	\$ <u>204,967</u>	\$ <u>713,741</u>

Niagara Peninsula Conservation Authority **Conservation Land Management** **Schedule of Segment Disclosure**

Year ended December 31	2016 Budget	2016 Actual	2015 Actual
Revenues			
Government transfers			
Province of Ontario - Other	\$ -	\$ 4,000	\$ -
Municipal levies			
General	703,641	703,641	638,997
Special	132,000	132,000	150,000
Authority generated			
User fees, sales and admissions	262,295	246,822	253,223
Niagara Peninsula Conservation Foundation	-	13,500	-
Other	117,730	90,967	32,170
	<u>1,215,666</u>	<u>1,190,930</u>	<u>1,074,390</u>
Expenses			
Operations management	457,673	546,757	709,447
Strategic initiatives (Page 25)	599,348	563,728	145,953
	<u>1,057,021</u>	<u>1,110,485</u>	<u>855,400</u>
Annual surplus	158,645	80,445	218,990
<i>Acquisition of tangible capital assets</i>	<u>-</u>	<u>-</u>	<u>-</u>
<i>Annual surplus after acquisition of tangible capital assets</i>	<u>\$ 158,645</u>	<u>\$ 80,445</u>	<u>\$ 218,990</u>

Niagara Peninsula Conservation Authority
Strategic Initiatives
Schedule of Segment Disclosure

Year ended December 31	2016 Budget	2016 Actual	2015 Actual
Revenues			
Municipal levies			
General	\$ 349,053	\$ 349,053	\$ -
Special	132,000	132,000	150,000
Authority generated			
User fees, sales and admissions	262,295	246,353	244,013
Niagara Peninsula Conservation Foundation	-	13,500	-
Other	97,730	7,665	11,187
	<u>841,078</u>	<u>748,571</u>	<u>405,200</u>
Expenses			
Management	372,968	325,253	-
Ball's Falls Christmas program	3,725	13,885	7,002
Envirothon	5,550	8,577	6,450
Binbrook ice fishing	6,555	3,034	910
Niagara Children's Water festival	90,900	93,939	25,744
Thanksgiving festival	119,650	119,040	105,847
	<u>599,348</u>	<u>563,728</u>	<u>145,953</u>
Annual surplus	241,730	184,843	259,247
<i>Acquisition of tangible capital assets</i>	<u>-</u>	<u>-</u>	<u>43,646</u>
<i>Annual surplus after acquisition of tangible capital assets</i>	<u>\$ 241,730</u>	<u>\$ 184,843</u>	<u>\$ 215,601</u>

Niagara Peninsula Conservation Authority **Conservation Land Programming and Development** **Schedule of Segment Disclosure**

Year ended December 31	2016 Budget	2016 Actual	2015 Actual
Revenues			
Government transfers			
Government of Canada	\$ 245,000	\$ 113,631	\$ 2,648
Municipal levies			
General	622,394	622,394	1,667,562
Special	600,000	600,000	600,000
Authority generated			
User fees, sales and admissions	1,117,200	1,365,726	1,196,917
Land contribution (Note 6)	-	-	112,500
Other	31,500	121,958	148,869
	<u>2,616,094</u>	<u>2,823,709</u>	<u>3,728,496</u>
Expenses			
Programming (Page 27)	1,645,863	1,704,233	1,754,659
Development (Page 28)	-	-	71,945
	<u>1,645,863</u>	<u>1,704,233</u>	<u>1,826,604</u>
Annual surplus	970,231	1,119,476	1,901,892
<i>Acquisition of tangible capital assets</i>	<u>1,110,876</u>	<u>944,384</u>	<u>1,457,288</u>
<i>Annual surplus (deficit) after acquisition of tangible capital assets</i>	<u>\$ (140,645)</u>	<u>\$ 175,092</u>	<u>\$ 444,604</u>

**Niagara Peninsula Conservation Authority
Conservation Land Programming
Schedule of Expenses**

Year ended December 31	2016 Budget	2016 Actual	2015 Actual
Conservation Land Programming			
Ball's Falls	\$ 401,517	\$ 382,921	\$ 464,288
Binbrook	322,283	311,162	294,770
Chippawa Creek	307,241	336,000	300,938
Long Beach	<u>311,751</u>	<u>353,734</u>	<u>346,570</u>
	1,342,792	1,383,817	1,406,566
Central workshop maintained areas	<u>303,071</u>	<u>320,416</u>	<u>348,093</u>
Expenses for the year	1,645,863	1,704,233	1,754,659
<i>Acquisition of tangible capital assets</i>			
<i>Expenses for the year</i>	<u>\$ 1,645,863</u>	<u>\$ 1,704,233</u>	<u>\$ 1,754,659</u>

Niagara Peninsula Conservation Authority Conservation Land Development Schedule of Expenses

Year ended December 31	2016 Budget	2016 Actual	2015 Actual
Conservation Land Development			
Ball's Falls Heritage	\$ -	\$ -	\$ 7,955
Binbrook	-	-	1,473
Chippawa Creek	-	-	21,631
Long Beach	-	-	3,625
	<u>-</u>	<u>-</u>	<u>34,684</u>
Central workshop maintained areas			
Land acquisition	-	-	10,971
Ecological projects	-	-	13,893
Gainsborough	-	-	12,397
	<u>-</u>	<u>-</u>	<u>37,261</u>
Expenses for the year	-	-	71,945
<i>Acquisition of tangible capital assets</i>	<u>1,110,876</u>	<u>944,384</u>	<u>1,457,288</u>
<i>Expenses for the year</i>	<u>\$ 1,110,876</u>	<u>\$ 944,384</u>	<u>\$ 1,529,233</u>

**Niagara Peninsula Conservation Authority
Vehicles and Equipment
Schedule of Segment Disclosure**

Year ended December 31	2016 Budget	2016 Actual	2015 Actual
Revenues			
Municipal levies			
General	\$ 120,500	\$ 120,500	\$ 132,600
Authority generated			
Other	<u>-</u>	<u>102</u>	<u>25,999</u>
	<u>120,500</u>	<u>120,602</u>	<u>158,599</u>
Expenses			
Operations			
Fuel	26,000	30,353	23,764
Maintenance and repairs	170,000	139,213	53,779
Supplies and small tools	4,500	1,606	2,629
Insurance	<u>-</u>	<u>-</u>	<u>1,093</u>
	<u>200,500</u>	<u>171,172</u>	<u>81,265</u>
Annual (deficit) surplus	(80,000)	(50,570)	77,334
<i>Acquisition of tangible capital assets</i>	<u>-</u>	<u>-</u>	<u>27,187</u>
<i>Annual (deficit) surplus after acquisition of tangible capital assets</i>	<u>\$ (80,000)</u>	<u>\$ (50,570)</u>	<u>\$ 50,147</u>

Niagara Peninsula Conservation Authority

Schedule of Segment Disclosure by Object

Year ended December 31

	Corporate Services	Watershed	Operations	2016 Total
Revenues				
MNRF transfers	\$ 75,796	\$ 98,700	\$ -	\$ 174,496
Other transfers	-	534,158	117,631	651,789
Municipal levies	4,498,767	2,125,641	2,178,535	8,802,943
User fees, sales and admissions	-	-	1,612,548	1,612,548
NPCF	-	-	13,500	13,500
Administration fees	-	393,255	-	393,255
Interest	73,872	-	-	73,872
Land contribution	-	-	-	-
Other	34,634	294,310	213,027	541,971
	<u>\$ 4,683,069</u>	<u>\$ 3,446,064</u>	<u>\$ 4,135,241</u>	<u>\$ 12,264,374</u>
Expenses				
Salaries and benefits	\$ 1,632,421	\$ 2,600,430	\$ 2,007,000	\$ 6,239,851
Materials and supplies	971,702	321,696	814,277	2,107,675
Contracted services	163,792	420,698	72,982	657,472
Rent and financial expenses	207,728	-	91,631	299,359
Debt service	164,468	-	-	164,468
Intersegment transfers	-	-	-	-
	<u>3,140,111</u>	<u>3,342,824</u>	<u>2,985,890</u>	<u>9,468,825</u>
Annual surplus	<u>\$ 1,542,958</u>	<u>\$ 103,240</u>	<u>\$ 1,149,351</u>	<u>\$ 2,795,549</u>

	Corporate Services	Watershed	Operations	2015 (As restated) (Note 2) Total
Revenues				
MNRF transfers	\$ 70,196	\$ 104,300	\$ -	\$ 174,496
Other transfers	-	571,717	2,648	574,365
Municipal levies	3,788,128	1,825,656	3,189,159	8,802,943
User fees, sales and admissions	-	-	1,450,140	1,450,140
NPCF	100,000	-	-	100,000
Administration fees	-	463,940	-	463,940
Interest	114,616	-	-	114,616
Land contribution	-	-	112,500	112,500
Other	32,767	163,556	207,038	403,361
	<u>\$ 4,105,707</u>	<u>\$ 3,129,169</u>	<u>\$ 4,961,485</u>	<u>\$ 12,196,361</u>
Expenses				
Salaries and benefits	\$ 1,462,076	\$ 2,262,222	\$ 2,036,284	\$ 5,760,582
Materials and supplies	868,190	347,370	621,168	1,836,728
Contracted services	203,638	446,015	75,232	724,885
Rent and financial expenses	202,594	479	30,585	233,658
Debt service	218,891	-	-	218,891
Intersegment transfers	-	-	-	-
	<u>2,955,389</u>	<u>3,056,086</u>	<u>2,763,269</u>	<u>8,774,744</u>
Annual surplus	<u>\$ 1,150,318</u>	<u>\$ 73,083</u>	<u>\$ 2,198,216</u>	<u>\$ 3,421,617</u>



April 26, 2017

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Dear Members of the Board of Directors:

In connection with our audit of Niagara Peninsula Conservation Authority (the “Authority”) financial statements as of December 31, 2016 and for the year then ended, the Canadian Auditing Standards require that we advise management and the board of directors (hereinafter referred to as “those charged with governance”) of the following internal control matters identified during our audit.

Our responsibilities

Our responsibility, as prescribed by the Canadian Auditing Standards, is to plan and perform our audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether caused by error or fraud. An audit includes consideration of internal control over financial reporting (hereinafter referred to as “internal control”) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of identifying deficiencies in internal control or expressing an opinion on the effectiveness of the Authority’s internal control. Accordingly, we express no such opinion on internal control effectiveness.

Identified deficiencies in internal control

We identified the following internal control matters as of the date of this letter that are of sufficient importance to merit your attention.

Significant deficiencies

Our consideration of internal control would not necessarily identify all deficiencies in internal control that, individually or in combination, may be material weaknesses or significant deficiencies.

A deficiency in internal control (“control deficiency”) exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Authority’s annual or interim financial statements will not be prevented or detected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control over financial reporting that is less severe than a material weakness, yet important enough to merit attention by those responsible for oversight of the Authority’s financial reporting (also referred to as those charged with governance).

We consider the following identified control deficiencies to be significant deficiencies.

Information Technology

Segregation of Duties and Assignment of Administrator Rights

The following weaknesses have been identified in the information technology system, specifically relating to the assignment of responsibilities and network administrator rights:

- The Manager of Finance has been assigned administrator rights in the financial reporting application. This individual has unrestricted access to all modules of this application, with the exception of the payroll module. This results in a lack of segregation of duties as the Manager of Finance is responsible for the Authority’s financial reporting. Although our audit procedures did not identify any unauthorized or unusual transactions recorded in the financial application by this individual, the potential exists for unauthorized transactions to be recorded by the administrator and go undetected.

As noted in the prior year management letter, segregation of duties is a key control designed to prevent employees from both being able to commit and conceal errors or irregularities in the normal course of their duties. The ideal segregation of duties occurs when different employees:

- a) initiate transactions
- b) authorize transactions
- c) record transactions
- d) verify transactions
- e) report assets and transactions, and
- f) have custody of assets

Supervision acts as a compensating control in some cases where, because of the size of the organization, complete segregation of duties is not possible. The Authority is a small entity with limited bookkeeping staff and assistance provided by the external auditor at year end.

The following roles and responsibilities with respect to the information system should be segregated from staff members who are involved in the financial reporting process:

- Assignment of administrator rights over the network and financial applications

Management Response

To mitigate risk's identified in the 2015 year-end audit, management took steps to segregate payroll administration between Human Resources and Finance staff in consultation with Grant Thornton. Management also implemented additional controls in the way of random verification of personnel included on the part time or seasonal payroll at various points in time during the operating season. This verification was done after consultation with Grant Thornton. It should also be noted that in the Communication of audit results document included in the 2016 audit package from Grant Thornton, it is noted on page 2 that there was nothing identified under the "summary of misstatements" or "other adjustments", where there were significant amounts shown here in prior years. In the Findings section on page 4 of that same document, there are no findings related to fraud or illegal acts (consistent with past years). Further steps have been taken in 2017 to address the concern brought up again in 2016 regarding "access to all modules" in the system by the Manager of Finance. In consultation with Grant Thornton further restrictions were implemented using a third party software consultant to actually implement the changes in attempt to achieve further segregation of duties to the satisfaction of Grant Thornton.

While the ultimate scenario would be to have full segregation of duties, the current organizational structure and fiscal constraints do not allow for full segregation to occur. Further steps were taken with the hiring of an administrative support staff person to assist in the segregation of duties to get the organization to point which achieves practicality while adequate compensating controls remain in place to further mitigate risk. A further compensating control which is in place is the monthly review of financial results by the Board at their monthly meetings. These results provide departmental operating, capital and reserve activities.

It should also be noted that the Sage financial software which is currently and has been in use for the last several years is robust regarding audit trail of transactions posted into the system. Electronic files containing each line item of all transactions is provided to Grant Thornton as part of the audit requirements working documents used during the course of their audit.

The Sage financial software will be upgraded in April 2017 to its most recent version which will allow NPCA to take full advantage of additional security features.

Management response

The management's written response to the internal control matters identified herein has not been subjected to our audit procedures and accordingly, we express no opinion on it.

This communication is intended solely for the information and use of management, those charged with governance, and others within the Authority and is not intended to be and should not be used by anyone other than these specified parties.

Yours sincerely,

Grant Thornton LLP



Randy Momot, CPA, CA
RJ Momot Professional Corporation
Partner



Report to those charged with governance - Communication of audit results

Niagara Peninsula Conservation Authority

For the year ended **December 31, 2016**



April 26, 2017

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To the Members of the Audit Committee of:
Niagara Peninsula Conservation Authority

We are pleased to report that we have now substantially completed our audit of the financial statements (hereinafter the "financial statements") of the Niagara Peninsula Conservation Authority (hereinafter the "entity") for the year ended December 31, 2016. We enclose our Report to those charged with governance - Communication of audit results to continue our dialogue with the committee on the audit of the entity. This report provides an overview of the results of our audit including comments on misstatements, significant accounting policies, sensitive accounting estimates, and other matters that may be of interest to the committee.

This communication has been prepared to comply with the requirements outlined in CAS 260 *Communication with those Charged with Governance*. The information in this document is intended solely for the information and use of the Audit Committee, Board of Directors and management. It is not intended to be distributed or used by anyone other than these specified parties.

We express our appreciation for the cooperation and assistance received from the management and staff of the entity during the course of our audit.

If you have any particular comments or concerns, please do not hesitate to raise them at our scheduled meeting.

Yours sincerely,

Grant Thornton LLP

Randy Momot, CPA, CA
RJ Momot Professional Corporation
Partner

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Status of the audit

Outstanding items

We have substantially completed our audit of the financial statements of the entity for the year ended December 31, 2016 and the results of that audit are included in this report.

We have attached our draft auditor's report in the appendices. We will finalize the report once the Board of Directors has approved the draft financial statements. The following items were outstanding as at the date of this report:

- Approval of the financial statements by the Board of Directors;
- Receipt of bank confirmations;
- Receipt of signed management representation letter (draft has been attached in the appendices);
- Procedures regarding subsequent events; and
- Responses from legal inquiries.

Audit results

Summary of misstatements

We have no non-trivial unadjusted misstatements to report.

Summary of disclosure matters

Our audit did not identify any unadjusted non-trivial misstatements from disclosure matters.

Reportable matters

Internal control

Management is responsible for the design and operation of an effective system of internal control that provides reasonable assurance that the accounting system provides timely, accurate and reliable financial information, and safeguards the assets of the entity.

The audit is designed to express an opinion on the financial statements. Our understanding of internal control is sufficient to enable us to plan the audit and to determine the nature, timing and extent of tests to be performed. If we become aware of a deficiency in your internal controls systems, auditing standards requires us to communicate to the audit committee those deficiencies we consider significant or material. However, a financial statement audit is not designed to provide assurance on internal control.

During the course of performing our audit, we identified areas of improvement in internal control. Our comments on the matter have been provided in an internal control letter to management dated April 26, 2017.

Significant findings from the audit

As part of the audit, we identified the following significant items we wanted to discuss:

Significant findings	Considerations and results
Significant new accounting policies	None.
Acceptable alternative accounting policies	None.
Significant transactions	None.
Sensitive accounting estimates and disclosures	<p>The provision for post-employment benefits of approximately \$ 146,000</p> <p>Management calculates the liability for employees who have taken early retirement based on the current annual benefits and the number of years until the employees turn 65. Management estimates the benefits for employees who may take early retirement in the future by creating an estimate of the number of people that will retire early based on historical retirement rates.</p> <p>Management has recognized liabilities in the financial statements for future employee benefits. The objective is to recognize a liability in the reporting period in which employees have provided the services that give rise to the benefits. Management's estimate is reasonable in the context of the financial statements taken as a whole. Management's calculation is detailed and supported by historical evidence.</p>
Fraud and illegal acts	None.

Technical updates

Accounting standards

Accounting standards issued by the Accounting Standards Board which may affect your entity for the current and future years have been summarized in Appendix C

Auditing standards

Changes to auditing standards during the 2016 period are included in Appendix D.

If you have any questions about these changes we invite you to contact us and we will be pleased to address your concerns.

Appendix A – Draft auditor's report

Independent auditor's report

To the Audit Committee of
Niagara Peninsula Conservation Authority

We have audited the accompanying financial statements of the Niagara Peninsula Conservation Authority, which comprise the statement of financial position as at December 31, 2016, and the statements of operations, changes in net financial assets (debt) and cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's responsibility for the financial statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

Report to those charged with governance – Communication of audit results
Niagara Peninsula Conservation Authority
For the year ended December 31, 2016

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements present fairly, in all material respects, the financial position of the Niagara Peninsula Conservation Authority as at December 31, 2016, and the results of its operations, changes in net financial assets (debt), continuity of reserve and reserve funds and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.

Emphasis of matter

We draw attention to Note 2 to the financial statements which describes the correction in the current period of an error in the prior period.

St. Catharines, Canada

_____, 2017

Chartered Professional Accountants
Licensed Public Accountants

Appendix B – Draft Management representation letter

Management Representation Letter

_____, 2017

Grant Thornton LLP
Chartered Professional Accountants
80 King Street, Suite 200
St. Catharines, ON
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Dear Sirs:

We are providing this letter in connection with your audit of the financial statements of the Niagara Peninsula Conservation Authority (“the Authority”) as of December 31, 2016, and for the year then ended, for the purpose of expressing an opinion as to whether the financial statements present fairly, in all material respects, the financial position, results of operations, and cash flows of the Authority in accordance with Canadian public sector accounting standards.

We acknowledge that we have fulfilled our responsibilities for the preparation of the financial statements in accordance with Canadian public sector accounting standards and for the design and implementation of internal controls to prevent and detect fraud and error. We have assessed the risk that the financial statements may be materially misstated as a result of fraud, and have determined such risk to be low. Further, we acknowledge that your examination was planned and conducted in accordance with Canadian generally accepted auditing standards (GAAS) so as to enable you to express an opinion on the financial statements. We understand that while your work includes an examination of the accounting system, internal controls and related data to the extent you considered necessary in the circumstances, it is not designed to identify, nor can it necessarily be expected to disclose, fraud, shortages, errors and other irregularities, should any exist.

Certain representations in this letter are described as being limited to matters that are material. An item is considered material, regardless of its monetary value, if it is probable that its omission from or misstatement in the financial statements would influence the decision of a reasonable person relying on the financial statements.

We confirm, to the best of our knowledge and belief, as of _____, 2017, the following representations made to you during your audit.

Financial statements

- 1 The financial statements referred to above present fairly, in all material respects, the financial position of the entity as at December 31, 2016 and the results of its operations and its cash flows for the year then ended in accordance with Canadian public sector accounting standards, as agreed to in the terms of the audit engagement.

Completeness of information

- 2 We have made available to you all financial records and related data and all minutes of the meetings of the Authority, as agreed in the terms of the audit engagement. Summaries of actions of recent meetings for which minutes have not yet been prepared have been provided to you. All significant Authority actions are included in the summaries.
- 3 We have provided you with unrestricted access to persons within the entity from whom you determined it necessary to obtain audit evidence.
- 4 There are no material transactions that have not been properly recorded in the accounting records underlying the financial statements.
- 5 The restatements made to correct material misstatements in the prior period financial statements have been properly recorded, are approved by us, and will be recorded on the books of the entity.
- 6 We are unaware of any known or probable instances of non-compliance with the requirements of regulatory or governmental authorities, including their financial reporting requirements.
- 7 We are unaware of any violations or possible violations of laws or regulations the effects of which should be considered for disclosure in the financial statements or as the basis of recording a contingent loss.
- 8 We have disclosed to you all known deficiencies in the design or operation of internal control over financial reporting of which we are aware.
- 9 We have identified to you all known related parties and related party transactions, including sales, purchases, loans, transfers of assets, liabilities and services, leasing arrangements guarantees, non-monetary transactions and transactions for no consideration.
- 10 You provided a non-attest service by assisting us with drafting the financial statements and related notes. Further, we accept adjustments made to the reported budget made by you in arriving at the budget used for financial reporting purposes. In connection with this non-attest service, we confirm that we have made all management decisions and performed all management functions, have the knowledge to evaluate the accuracy and completeness of the financial statements, and accept responsibility for such financial statements.

Fraud and error

- 11 We have no knowledge of fraud or suspected fraud affecting the entity involving management; employees who have significant roles in internal control; or others, where the fraud could have a non-trivial effect on the financial statements.

- 12 We have no knowledge of any allegations of fraud or suspected fraud affecting the entity's financial statements communicated by employees, former employees, analysts, regulators or others.
- 13 We acknowledge our responsibility for the design, implementation and maintenance of internal control to prevent and detect fraud.

Recognition, measurement and disclosure

- 14 We believe that the significant assumptions used by us in making accounting estimates, including those used in arriving at the fair values of financial instruments as measured and disclosed in the financial statements, are reasonable and appropriate in the circumstances.
- 15 We have no plans or intentions that may materially affect the carrying value or classification of assets and liabilities, both financial and non-financial, reflected in the financial statements.
- 16 All related party transactions have been appropriately measured and disclosed in the financial statements.
- 17 The nature of all material measurement uncertainties has been appropriately disclosed in the financial statements, including all estimates where it is reasonably possible that the estimate will change in the near term and the effect of the change could be material to the financial statements.
- 18 All outstanding and possible claims, whether or not they have been discussed with legal counsel, have been disclosed to you and are appropriately reflected in the financial statements.
- 19 All liabilities and contingencies, including those associated with guarantees, whether written or oral, have been disclosed to you and are appropriately reflected in the financial statements.
- 20 With respect to environmental matters:
 - a) at year end, there were no liabilities or contingencies that have not already been disclosed to you;
 - b) liabilities or contingencies have been recognized, measured and disclosed, as appropriate, in the financial statements; and
 - c) commitments have been measured and disclosed, as appropriate, in the financial statements.
- 21 The authority has satisfactory title to (or lease interest in) all assets, and there are no liens or encumbrances on the entity's assets nor has any been pledged as collateral.
- 22 We have disclosed to you, and the entity has complied with, all aspects of contractual agreements that could have a material effect on the financial statements in the event of non-compliance, including all covenants, conditions or other requirements of all outstanding debt.
- 23 The Harmonized Sales Tax (HST) transactions recorded by the entity are in accordance with the federal and provincial regulations. The HST liability/receivable amounts recorded by the entity are considered complete.
- 24 Employee future benefit costs, assets, and obligations have been determined, accounted for and disclosed in accordance with the requirements of Section 3250 Retirement Benefits, of the Canadian Institute of Chartered Accountants (CICA) Public Sector Accounting.

- 25 There have been no events subsequent to the statement of financial position date up to the date hereof that would require recognition or disclosure in the financial statements. Further, there have been no events subsequent to the date of the comparative financial statements that would require adjustment of those financial statements and related notes.

Other

- 26 We have considered whether or not events have occurred or conditions exist which may cast significant doubt on the Authority's ability to continue as a going concern and have concluded that no such events or conditions are evident.

Yours very truly,

Peter Graham, Acting Chief Administrative Officer

John Wallace, Manager of Finance

Appendix C – PSAB

Accounting developments

Public Sector Accounting Board – [updated December 31, 2016]	Effective date
<p>Introduction to the PSA Handbook</p> <p>The Introduction to the PSA Handbook has been amended to add a new type of public sector entity called a government component. A government component is an integral part of a government, such as a department, ministry or fund, that is not a separate entity with the power to contract in its own name and that can sue and be sued. Government components that want to prepare general purpose financial statements must apply the standards for governments in the PSA Handbook.</p> <p>As a result of adding the definition of a government component, the definition of a government organization was amended. A government organization is any organization controlled by a government that is a separate entity with the power to contract in its own name and that can sue and be sued. Government organizations include government business enterprises (GBEs), government not-for-profit organizations (GNFPOs) and other government organizations (OGOs). As a result of the change in the definition of a government organization, some entities that were formerly classified as GNFPOs or OGOs may now be classified as government components which may result in a change in the accounting framework that they are required to apply.</p> <p>Government business partnerships (GBPs) between two or more public sector entities that want to issue general purpose financial statements must apply the standards for PAEs in Part I of the CPA Canada Handbook – Accounting – IFRS.</p> <p>Non-business government partnerships between two or more public sector entities that want to issue general purpose financial statements would normally apply the PSA Handbook, unless it does not meet the needs of the partnership's financial statement users. In that case the partnership can apply the standards applicable to PAEs in Part I of the CPA Canada Handbook – Accounting – IFRS. Factors to consider in assessing users' needs include, but are not limited to, whether the partnership:</p> <ul style="list-style-type: none"> • has issued, or is in the process of issuing, debt or equity instruments that are, or will be, outstanding and traded in a public market; • holds assets in a fiduciary capacity for a broad group of outsiders as one of its primary businesses; • has commercial-type operations and substantially derives its revenue from these activities; and • receives limited government assistance on an ongoing basis. <p>Government components and government partnerships that adopt the PSA Handbook must account for the transition retroactively, with the restatement of prior periods in accordance with Section PS 2125 <i>First-time adoption</i>.</p>	<p>Government components that adopt the PSA standards – Fiscal periods beginning on or after January 1, 2017. Earlier adoption is permitted.</p> <p>GBPs that adopt the standards applicable to PAEs – Fiscal periods beginning on or after January 1, 2017. Earlier adoption is permitted.</p> <p>Government partnerships, other than GBPs, that determine the standards applicable to PAEs are most appropriate for their partnership – Fiscal periods beginning on or after January 1, 2017. Earlier adoption is permitted.</p> <p>Government components, GBPs and other government partnerships that expect to change their basis of accounting must disclose this fact in the periods preceding the period the change becomes effective.</p>
<p>Section PS 3450 Financial instruments, Section PS 2601 Foreign currency translation, Section PS 1201 Financial statement presentation, and PS 3041 Portfolio investments</p> <p>PS 3450 <i>Financial instruments</i> is a new Section that establishes standards for recognizing and measuring financial assets, financial liabilities and non-financial derivatives.</p>	<p>The new requirements are all required to be applied at the same</p>

Public Sector Accounting Board – [updated December 31, 2016]	Effective date
<p>PS 2601 <i>Foreign currency translation</i> revises and replaces Section PS 2600 <i>Foreign currency translation</i>.</p> <p>PS 1201 <i>Financial statement presentation</i> revises and replaces Section PS 1200 <i>Financial statement presentation</i>.</p> <p>PS 3041 <i>Portfolio investments</i> revises and replaces Section PS 3040 <i>Portfolio investments</i>.</p> <p>The issuance of these new sections also includes consequential amendments to</p> <ul style="list-style-type: none"> • <i>Introduction to accounting standards that apply only to government not-for-profit organizations</i> • PS 1000 <i>Financial statement concepts</i> • PS 1100 <i>Financial statement objectives</i> • PS 2125 <i>First-time adoption by government organizations</i> • PS 2500 <i>Basic principles of consolidation</i> • PS 2510 <i>Additional areas of consolidation</i> • PS 3050 <i>Loans receivable</i> • PS 3060 <i>Government partnerships</i> • PS 3070 <i>Investments in government business enterprises</i> • PS 3230 <i>Long-term debt</i> • PS 3310 <i>Loan guarantees</i> • PS 4200 <i>Financial statement presentation by not-for-profit organizations</i> <p>PSG-6 <i>Including results of organizations and partnerships applying fair value measurement</i> was withdrawn as a result of the issuance of these sections.</p>	<p>time.</p> <p>For governments - Fiscal years beginning on or after April 1, 2019. This effective date was amended in September 2015.</p> <p>For government organizations that applied the CPA Canada Handbook – Accounting prior to their adoption of the CPA Canada Public Sector Accounting Handbook - Fiscal years beginning on or after April 1, 2012.</p> <p>For all other government organizations - Fiscal years beginning on or after April 1, 2019. This effective date was amended in September 2015.</p> <p>Earlier adoption is permitted.</p>
<p>Section PS 2200 Related party disclosures</p> <p>This Section defines a related party. It also establishes the disclosures required for related party transactions, including disclosure of information about an entity's related party transactions and the relationship between the related parties when the transactions:</p> <ul style="list-style-type: none"> • have occurred at a value different from that which would have been arrived at if the parties were unrelated; or • have or could have, a material financial effect on the financial statements. <p>As a result of the issuance of this Section, at its June 2015 meeting, the Public Sector Accounting Board (PSAB) approved an Exposure Draft proposing the withdrawal of Section PS 4260 <i>Disclosure of related party transactions by not-for-profit organizations</i>. This proposal would require not-for-profit organizations to apply Section PS 2200. PSAB will also propose amendments to the transitional provisions of Section PS 2200 for not-for-profit organizations applying the 4200 series.</p>	<p>Fiscal years beginning on or after April 1, 2017.</p> <p>Earlier adoption is permitted.</p>
<p>Section PS 3420 Inter-entity transactions</p> <p>This Section establishes how to account for and report transactions between public sector entities that comprise a government's reporting entity from both a provider and recipient perspective (i.e., related parties within a government reporting entity). The main features of the new Section are:</p> <ul style="list-style-type: none"> • Transactions are measured at their carrying amounts, except in specific circumstances. • Transactions occurring on similar terms and conditions as an arm's length transaction are measured at the exchange amount. • Cost allocation and recovery is the allocation of costs of activities associated with providing goods or services to another entity and the recovery of the costs incurred from the other entities. Under a policy of cost allocation, revenues and expenses are recognized on a gross basis at their exchange amount. • Unallocated costs are the cost of resources recorded by the providing 	<p>Fiscal years beginning on or after April 1, 2017.</p> <p>Earlier adoption is permitted.</p>

Report to those charged with governance – Communication of audit results
 Niagara Peninsula Conservation Authority
 For the year ended December 31, 2016

Public Sector Accounting Board – [updated December 31, 2016]	Effective date
<p>entity in its operating activities that are incurred on behalf of a recipient entity. A recipient may choose to recognize unallocated costs for the provision of goods and services and measure them at their carrying amount, fair value or other amount dictated by policy, accountability structure or budget practice.</p> <ul style="list-style-type: none"> • The transfer of an asset or liability for nominal or no consideration is measured by the provider at its carrying amount and by the recipient at its carrying amount or fair value. • Inter-entity transactions must be disclosed in accordance with Section PS 2200 <i>Related party disclosures</i>. 	
<p>Section PS 3210 Assets</p> <p>This new Section provides guidance for applying the definition of an asset set out in Section PS 1000 <i>Financial statement concepts</i> and establishes general disclosure standards for assets.</p> <p>Disclosure of information about the major categories of assets that are not recognized is required. When an asset is not recognized because a reasonable estimate of the amount involved cannot be made, the reason(s) for this should be disclosed.</p>	<p>Fiscal years beginning on or after April 1, 2017.</p> <p>Earlier adoption is permitted.</p>
<p>Section PS 3380 Contractual rights</p> <p>This new Section defines and establishes disclosure standards on contractual rights. Contractual rights are rights to economic resources arising from contracts or agreements that will result in both an asset and revenue in the future.</p> <p>Disclosure of information about contractual rights is required, including a description about their nature and extent and the timing.</p>	<p>Fiscal years beginning on or after April 1, 2017.</p> <p>Earlier adoption is permitted.</p>

Appendix D – Auditing developments

Canadian Auditing Standards (CASs) and other Canadian Standards issued by the AASB	Effective date
<p>CSRS 4460 – Reports on Supplementary Matters Arising from an Audit or a Review Engagement</p> <p>The development of CSRS 4460 was undertaken to address an increasing tendency for various third parties, including regulators, to place responsibility on the practitioner to report on supplementary matters beyond the scope of the audit or review of an entity's financial statements. The objectives of the standard are to:</p> <ul style="list-style-type: none"> • improve consistency of practitioners' responses to requests for reports on supplementary matters; and • ensure that any communications issued by practitioners on supplementary matters have an appropriate basis and clearly communicate the extent of the practitioner's association with the supplementary matter. <p>The new standard will have an effect on the wording of the practitioner's report. Whereas previously practitioners may have issued reports that were written by third parties, under the new standard all reports will be required to follow the reporting requirements of the standard.</p> <p>The CSRS addresses reporting on supplementary matters to a third party, such as a regulator (often referred to as "derivative reporting"). The implementation of this standard has resulted in the withdrawal of the following Assurance and Related Services Guideline: AuG-13, Special Reports on Regulated Financial Institutions.</p>	<p>CSRS 4460 is effective for reports dated on or after April 1, 2016.</p>
<p>Replacement of the Joint Policy Statement Concerning Communications with Law Firms Regarding Claims in Connection with the Preparation and Audit of Financial Statements and AuG-46, Communication with Law Firms under New Accounting and Auditing Standards</p> <p>The existing joint policy statement, which is appended to CAS 501, <i>Audit Evidence – Specific Considerations for Selected Items</i>, is based on the terminology and accounting requirements of Part II of the CPA Canada Handbook. The existing joint policy statement is being replaced with a revised statement of the same name that will incorporate the following fundamental changes:</p> <ul style="list-style-type: none"> • expanding the scope of the revised Statement to apply to in-house legal counsel who are acting in a legal capacity by performing a role that commonly would be performed by external legal counsel; • providing a more detailed discussion on the legal concept of privilege; • structuring the revised Statement to be accounting framework neutral so that it can be used regardless of the applicable financial reporting framework applied by management to evaluate the entity's claims and possible claims; and • updating guidance with respect to the timing of issuance of the inquiry and response letters. <p>The implementation of this Policy Statement has resulted in the withdrawal of Au-G 46 Communications with Law Firms under new Accounting and Auditing Standards.</p>	<p>The revisions are effective for communication letters issued on or after December 1, 2016.</p>

Canadian Auditing Standards (CASs) and other Canadian Standards approved by the AASB but not issued	Effective date
<p>Amendments to CAS's related to the subject of Addressing Disclosures in the Audit of Financial Statements</p> <p>The AASB has approved certain changes to the standards that clarify how auditors should address the audit of financial statement disclosures. The changes include:</p> <ul style="list-style-type: none"> • Clarifying the meaning of "Disclosure"(CAS 200) • Providing guidance to auditors to address audit considerations relating to disclosures early in the Audit (CAS 210, 260, 300) • Disclosure considerations in identifying, assessing and responding to risks of material misstatement (CAS 240, 315, 320 and 330) • Clarifying and elaborating on expectations of the auditor when evaluating misstatements and forming an opinion (CAS 450 and 700) <p>The standard is expected to be issued in conjunction with the auditor reporting standards.</p>	<p>The comment period has ended. The standard will be approved in conjunction with auditor reporting standards.</p>
<p>Replacement of Section 5020, Association with CSOA 5000, Use of the Practitioner's Communication or Name</p> <p>The AASB has approved the replacement of Section 5020 with a new standard to address a number of issues that were raised by practitioners and other Canadian stakeholders. The key issues that are now addressed in CSOA 5000 include:</p> <ul style="list-style-type: none"> • Determining the meaning of "association"; • Identifying when a practitioner becomes associated with information; • Establishing the work effort required and the communications needed in the context of the nature and extent of the practitioner's association with information; and • Determining how this standard should interrelate with other standards. <p>The AASB has approved CSOA 5000 and expects to issue it in the January 2017 CPA Canada Handbook update.</p>	<p>CSOA 5000 is effective for consents provided on or after June 1, 2017 with early adoption permitted.</p>
Proposed Canadian Auditing Standards (CASs) and other Canadian Standards currently in Exposure Draft	Comment period ends
<p>Canadian Amendments to ISA 700 and other standards pertaining to Reporting on Audited Financial Statements and adoption of ISA 701 as CAS 701, Communicating Key Audit Matters in the Independent Auditor's Report</p> <p>The IAASB has made changes to ISA 700 and other standards pertaining to reporting on audited financial statements, and has introduced a new standard, ISA 701, <i>Communicating Key Audit Matters in the Independent Auditor's Report</i>. The new ISA's are effective for audits of financial statements for periods ending on or after December 15, 2016. The key changes were as follows:</p> <ul style="list-style-type: none"> • Adoption of a new standard requiring the auditor of a listed entity to describe the matters judged to be most significant to the audit in the audit report (ISA 701) • Expanded disclosures regarding management's responsibilities related to going concern, specifically: the responsibility to assess the entity's ability to continue as a going concern and whether the use of the going concern basis of accounting is appropriate as well as disclosing, if applicable, matters relating to going concern. • Expanded disclosures regarding the auditor's responsibilities related to going concern, specifically: the requirement to conclude on the appropriateness of management's use of the going concern basis of accounting and, if based on the audit evidence obtained, whether the auditor concludes a material uncertainty exists related to events or conditions that may cast significant doubt on the entity's ability to continue as a going concern. If the auditor concludes that a material uncertainty exists, the auditor is required to draw attention in their report to the related disclosures. 	<p>The comment period has ended. Standards are awaiting approval.</p>

Report to those charged with governance – Communication of audit results
 Niagara Peninsula Conservation Authority
 For the year ended December 31, 2016

Proposed Canadian Auditing Standards (CASs) and other Canadian Standards currently in Exposure Draft	Comment period ends
<ul style="list-style-type: none"> Disclosure of the engagement partner's name in auditor's reports for audits of listed entities, and changes to the descriptions of the responsibilities of management, the auditor and those charged with governance, including a reference to who within the entity is responsible for overseeing the reporting process (ISA 700) <p>It is believed that these changes will enhance the communicative value of the auditor's report and also improve the overall quality of the audit and financial reporting.</p> <p>The AASB intends to adopt the ISA's with limited amendments. It is anticipated that the Canadian standards will become effective at the earliest for periods ending on or after December 15, 2018, because the AASB wishes to obtain greater clarity about the direction and timing of PCAOB standards on auditor reporting before finalizing the Canadian reporting standards.</p>	
<p>Canadian Amendments in respect of ISA 720 (Revised), <i>The Auditor's Responsibilities Relating to Other Information</i></p> <p>In April 2015, the IASSB issued a revised version of ISA 720. The AASB is currently considering issues relating to the adoption of ISA 720 (Revised) as CAS 720 in Canada. The changes to the ISA included:</p> <ul style="list-style-type: none"> (i) expansion in the scope of the standard; (ii) expansion of the objectives of the standard; and (iii) expansion of the auditor's work effort under the standard. <p>Due to proposed changes in scope, certain documents that are currently outside the scope of extant 720 may be within the scope of CAS 720 (Revised). Responses to the exposure draft are being considered. The standard is expected to be issued in conjunction with the auditor reporting standards.</p>	<p>The comment period has ended. The standard will be approved in conjunction with auditor reporting standards.</p>

Report To: Board of Directors

Subject: NPCA Policy Review - Draft for Public Consultation

Report No: 50-17

Date: April 26, 2017

RECOMMENDATION:

1. That the NPCA Board approve the release of the DRAFT Living Landscape document for public consultation.
2. That the public be requested to provide comments by June 30, 2017.
3. That a copy of Report No. 50-17 and Appendix 1 be forwarded to the municipalities within the NPCA Watershed municipalities, Niagara Area Planners, Core Working Group, Community Liaison Advisory Committee (CLAC) and Watershed Floodplain Advisory Committee members.

PURPOSE:

To seek the NPCA Board's authorization to release the Draft Living Landscape document (Appendix 1) for public consultation.

BACKGROUND:

As a reminder, *The Living Landscape* (www.thelivinglandscape.ca) is the name given to this project, with its primary objective 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*.

This policy review and update is also an important element of the NPCA Strategic Plan (2014-2017) to develop streamlined, efficient delivery of its development approvals process. As noted, the updated "NPCA policy document should clearly distinguish between broader planning guidance and regulatory/permit requirements".

In September 2016, NPCA Board Report 97-16 provided a summary of the activities for this initiative and highlighted the parties that have been informed and consulted at various stages in the process.

Summary of Activities

Since last fall, Dillon consulting has been working on drafting the new policy document. Discussions with a variety of stakeholders has taken place, including:

- December 2016 – NPCA Planning, Regulation and Water Resources staff
- January 2017 – NPCA Floodplain Committee regarding floodplain policies
- March 2017 – CLAC
- March 2017 - Core Working Group (representatives from the watershed municipalities)
- March 2017 - Niagara Area Planners

REPORT:

The draft document is intended to more closely align the NPCA's Policy Document with approved legislation and current practice. It focuses on clarity, consistent language and flexibility, based on the nature of the hazard and the tests under the Conservation Authorities Act.

At the September 2016 NPCA Board meeting (Report 97-16) the Consultation program for the NPCA Policy Review was approved by the Board. At that time the Board approved four (4) public open house events. These events will be approximately two (2) hours in the evening, and include a short presentation, along with display panels and some facilitated workshop activities designed to obtain feedback on the draft Policy Document. The proposed Open House times and locations are noted below:

Date	Location	Time
May 16, 2017	Wellandport Community Centre, West Lincoln	6 pm – 8:30 pm
May 25, 2017	Balls Falls Centre for Conservation, Lincoln	6 pm – 8:30 pm
May 29, 2017	Welland Community Wellness Centre, Welland	6 pm – 8:30 pm
June 1, 2017	McBain Centre, Niagara Falls	6 pm – 8:30 pm

The staff report also noted two pop up events to promote the open house events, raise awareness about the draft Policy document and drive traffic to the website. These dates will be confirmed once this staff report is approved by the Board.

The Niagara Area Planners has also requested an opportunity for a working session on the draft policies. It is scheduled to take place on May 26, 2017.

This report and the draft policies will be circulated to the Watershed municipalities, Core Working Group (CWG), CLAC, Watershed Floodplain Advisory Committee and the Niagara Area Planners Group. The report will also be posted on the project website with links to it provided on the NPCA website. The public will be asked to submit comments by June 30, 2017. A final document is proposed to be presented to the NPCA Board in the fall of 2017.

FINANCIAL IMPLICATIONS:

The cost associated with the public consultation are included within the 2017 NPCA budget.

RELATED REPORTS AND APPENDICES:

1. **Appendix 1 – The Living Landscape – draft Policy document (April 2017)**
2. **Report 63-15 NPCA Policy Review – Consultant Selection (referenced only)**
3. **Report 97-16 NPCA Policy Review – Consultation Program (referenced only)**

Prepared by: Suzanne McInnes, MCIP, RPP; Acting Director, Watershed Management

Submitted by:



**Peter Graham; P.Eng MBA;
Acting Chief Administrative Officer / Secretary Treasurer**



NIAGARA PENINSULA
CONSERVATION
AUTHORITY



THE LIVING LANDSCAPE

POLICIES, PROCEDURES AND
GUIDELINES FOR ADMINISTRATION OF
ONTARIO REGULATION 155/06

Draft

April 2017

Document Notes

The following document is considered to be the first draft of the NPCA's updated Policy Document. This Document has been prepared for NPCA Board and is intended to be used for public and stakeholder engagement. The expectation is that further modifications to the policies will be required as a result of public and stakeholder engagement.

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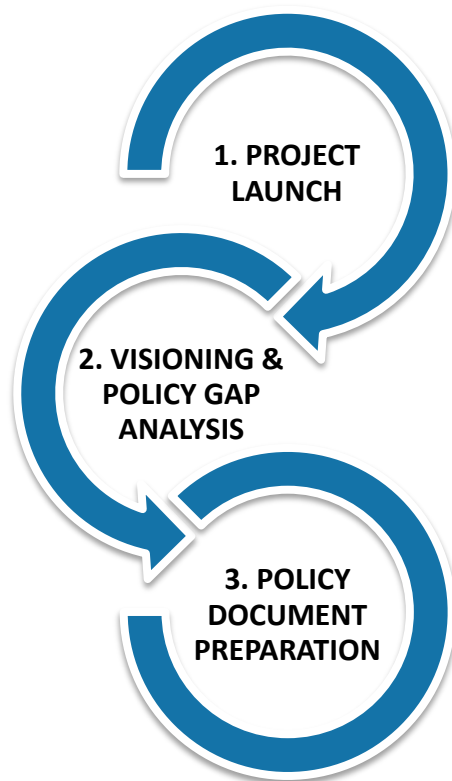
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1.0 INTRODUCTION

1.1 THE LIVING LANDSCAPE PROCESS

The Niagara Peninsula Conservation Authority (NPCA) fulfills a broad range of functions towards promoting the ultimate goal of conserving the environment and supporting sustainable development practices across the watershed. In September 2015, the NPCA initiated a process to review and update its main policy document, previously titled '*Policies, Procedures and Guidelines for the Administration of Ontario Regulation 155/06 and Land Use Planning Policy Document*', through a project called the Living Landscape. This document represents the first draft results of the process (see **Figure 1.1**).

Figure 1.1: The Living Landscape Process



1. PROJECT LAUNCH

- Consultation program & work plan finalization
- Data collection
- Website launch
- Project brand development
- Formal project launch (NPCA Board, CLAC and Area Planners sessions)

2. VISIONING & POLICY GAP ANALYSIS

- Background review (plans, policies, etc.)
- Community Vision survey
- Public Roadshow Series #1
- Issues and gap policy analysis
- Staff workshop
- CWG Meeting
- CLAC#2 Meeting
- Draft & Final Discussion Paper

3. POLICY DOCUMENT PREPARATION

- Draft 1 of Policy Document
- Public Roadshow Series #2 & Open House
- Series of workshops with agencies and stakeholders, CWG, CLAC
- Finalization of Policy Document
- Consultation Report
- NPCA Board Approval

1.2 PURPOSE AND OBJECTIVES

The following document provides the principles, objectives, and policies for the administration of the NPCA's legislative mandate under Ontario Regulation 155/06, as well as its delegated roles and responsibilities within the planning and approvals process. This document is intended as a guide for decision-making for NPCA staff, landowners, developers and residents. The overall objectives of the Living Landscape Policies are to:

1. Provide transparency and clarity in decision-making.
2. Implement the provincial planning framework and clearly communicate policy direction for areas within the NPCA's mandate.
3. Promote collaboration amongst the various agencies and governments within the watershed.
4. Provide a set of implementation policies and tools to manage change within the watershed.

1.3 HOW TO USE THIS DOCUMENT

1.3.1 Organization

Chapters 1 and 2 of this document provide an overview of the background, planning and legislative framework of the Living Landscape Policies. Chapters 1 and 2 are provided for context purposes and are intended to summarize the general basis and background for the policies.

Chapter 3 describes the overall vision for the watershed. Chapter 3 provides a series of high-level statements which correlate to the legislative underpinnings of the Living Landscape Policies. Given the complex and integrated nature of watershed planning, Chapter 3 helps to frame the policies found in Chapters 4-13.

Chapters 4, 5, 6 and 7 provide the detailed policies for natural hazards, including flooding hazards, Great Lakes and Niagara River shoreline hazard, valleyland erosion hazards and hazardous sites (e.g. unstable soils).

Chapters 8 and 9 cover development and interference with wetlands and watercourses.

Chapters 10, 11 and 12 cover a set of discrete policies for fill placement, stormwater management and municipal drains.

Chapter 13 addresses climate change and a number implementation and process related policies.

Chapter 14¹ provides the key definitions. The common meaning of non-italicized terms applies, except for the following instances:

- Development: The definition of development as used in this document pertains to the particular legislative act which is being applied – for example, when issuing a permit under the *Conservation Authorities Act*, staff would use the definition from the CA Act and when providing comments to a municipality on a municipal planning matter, staff would refer to the definition of development provided in the *Provincial Policy Statement*.

The Living Landscape document also includes the following technical appendices which form the guideline element of the “policies, procedures and guidelines” of this document:

- Appendix A: Section 28(3) Conservation Authorities Act Hearing Guidelines.
- Appendix B: MNR Delegation of Natural Hazards to Conservation Authorities.

1.3.2 A Note about Language

The following document uses very specific language and terminology. When reading this document, be advised of the following:

- The terms “shall”, “will” and “must” are used to describe instances where a policy is to be applied so as to fulfill a specific legislative obligation. The use of these three terms means that there is no flexibility (unless otherwise stated) as to the policy’s application.
- The terms “may” and “should” are used to describe instances where a policy is to be applied to fulfill a specific legislative objective. The use of these two terms means that there is flexibility as to the application of the policy.

1.4 AUTHORITY

The policies within this document have been prepared under authority of several acts, including but not limited to, the Conservation Authorities Act, Ontario Regulation 155/06 and the Planning Act. Modifications to the policies in Chapter 3-13 require Board approval.

¹ Note that this version does not include “italicized” fonts for defined terms. This will be addressed in subsequent drafts.

Modifications to Chapters 1 and 2 do not require Board approval, as the content of these sections is provided for context purposes. Refer to Chapter 5 for more details on the process for modifications.

1.5 THE NPCA AND THE WATERSHED

The NPCA was formed in 1959 under the authority of the *Conservation Authorities Act*, and is responsible for undertaking a variety of responsibilities under the Act. As one of 36 conservation authorities across the Province, the NPCA's mandate is to establish and undertake programs designed to further the conservation, restoration, development and management of natural resources across the watershed.

1.5.1 Role of the NPCA

As a corporate body created through provincial legislation as well as a registered charitable organization with several different functions, the NPCA's roles can be broadly categorized as follows:

- **Regulatory Authority:** *Section 28 of the Conservation Authorities Act* empowers conservation authorities to prohibit, restrict, regulate or give permission for certain activities in and adjacent to watercourses, including valleylands, wetlands, shorelines and other hazardous lands. In this capacity, the NPCA acts as an approval authority for development within its regulated areas.
- **Representative of the Province of Ontario:** Conservation Authorities have delegated provincial interest for Section 3.1 of the *Provincial Policy Statement* (Natural Hazards) and act on behalf of the Province. In this capacity, the NPCA is responsible for providing comments on municipal policies (Official Plans) and zoning by-laws, as well as development applications submitted under the *Planning Act*.
- **Resource Management Agency:** Sections 20 and 21 of the *Conservation Authorities Act* empower conservation authorities to develop programs that reflect local resource management needs within the watershed. These programs and/or policies are approved by the conservation authority board.
- **Public Commenting Body:** Under the *Planning Act*, conservation authorities are considered a public commenting body and, as such, are to be notified of municipal policy plan changes and development applications. The NPCA provides comments within the context of their board-approved policies (Policy Document).
- **Service Provider:** Conservation authorities may enter into agreements with other levels of government to undertake regulatory or approval responsibilities. The NPCA acts as a

service provider to a number of area municipalities within the watershed through Memoranda of Understanding signed with Niagara Region, the City of Hamilton, and Haldimand County respectively.

- **Landowner:** Conservation authorities are also landowners, and can be involved in the planning and development process as either a proponent or as a landowner impacted by adjacent development.

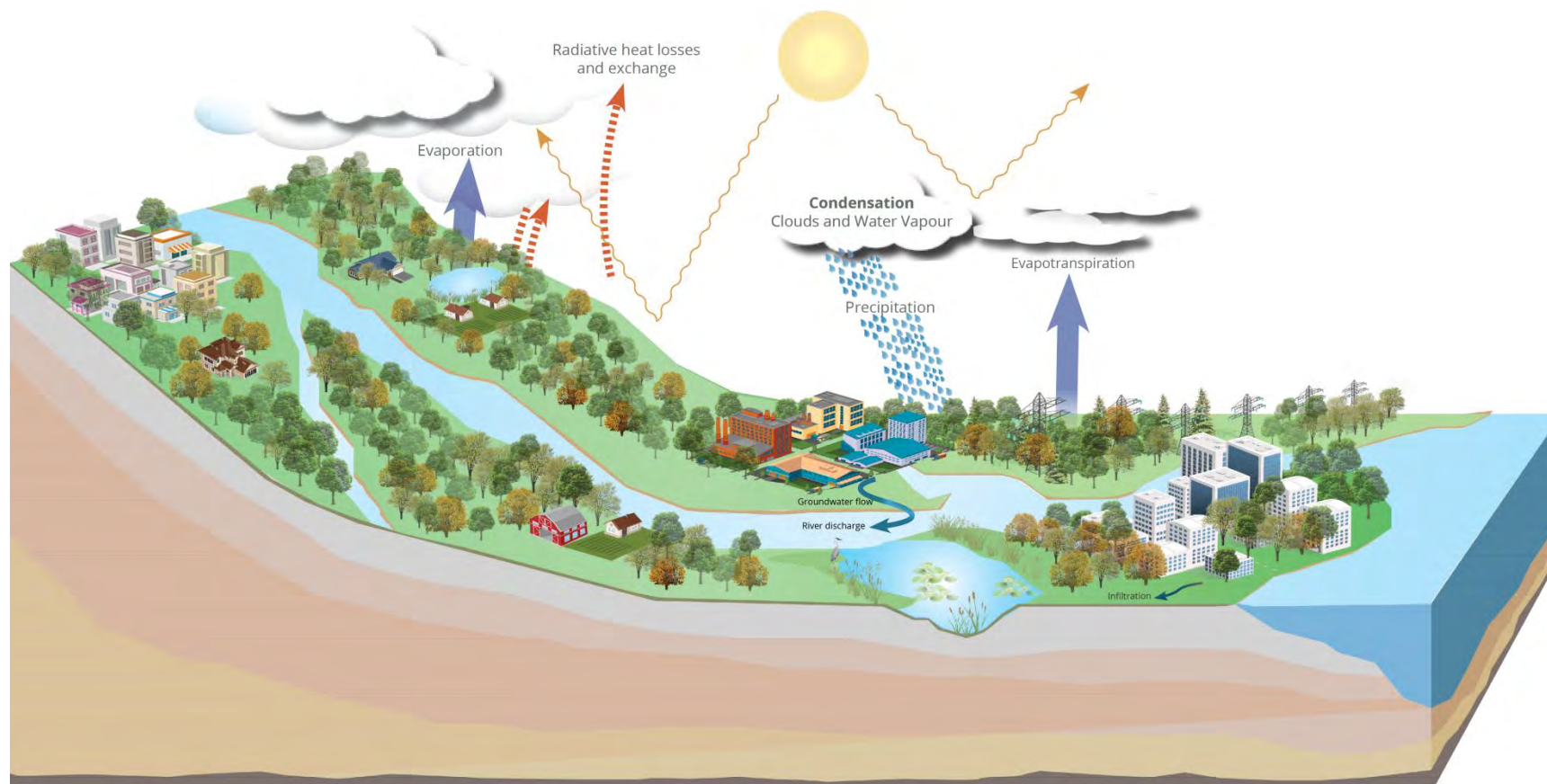
1.5.2 Our Watershed

A watershed is an area of land that catches rain and snow and drains or seeps into a marsh, stream, river, lake or groundwater. Watersheds include farms, cottages, forests, small towns, big cities, forests, rivers, lakes and a host of other physical elements. Some watersheds cross municipal, provincial and international borders. They come in all shapes and sizes and can vary from millions of acres, like the land that drains into the Great Lakes, to a few acres that drain into a pond (adapted from Conservation Ontario). **Figure 1.2** below provides a simple illustration showing the different elements within a watershed function.

The Niagara Peninsula watershed is bounded by Lake Ontario to the north, Lake Erie to the south, the Niagara River to east and Grand River and Hamilton watersheds to the west. The Niagara Peninsula watershed area covers an area of over 2,430 square kilometers and includes lands in the Region of Niagara, as well as portions within the City of Hamilton and the County of Haldimand. **Figure 1.3** shows the limits of the Niagara Peninsula watershed.

The watershed area is incredibly diverse, and is home to a complex interconnected system of environmental, social and economic networks. There are over 460,000 people living in over 30 cities and small towns. The area includes a number of well-known unique features, including the Niagara Escarpment, the Wainfleet Bog and the Willoughby Marsh, as well as a variety of other significant landforms (such as the Fonthill Kame ice contact-delta complex) and plant communities (alvars, prairies, Great Lakes shorelines, bogs and fens, etc.). The Niagara Peninsula watershed features a number of micro-climates, which has improved its biodiversity and also provides a rich environment for farmers. The area boasts one of the Province's most productive agricultural systems, including vineyards, tender fruit orchards, livestock and a variety of specialty crops (greenhouses for flowers, vegetables, sod farms and mushroom farms). From a land use perspective, approximately 64% of the watershed is estimated to be used for agricultural activities; 21% is estimated to be wooded or in a natural state; the remaining 15% is comprised of urban uses (Niagara Source Protection Assessment Report, 2013).

Figure 1.2: Watershed Diagram



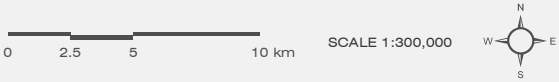


**NIAGARA PENINSULA
CONSERVATION AUTHORITY**

**WATERSHED PLANNING AREAS
AND SUBWATERSHEDS**

FIGURE 1.3

- FREEWAY / EXPRESSWAY / HIGHWAY
- WATERSHED PLANNING AREA BOUNDARY
- SUBWATERSHED BOUNDARY
- LOCAL MUNICIPAL BOUNDARY
- WATERBODY



MAP DRAWING INFORMATION:
DATA PROVIDED BY NPCA, MNR AND ESRI

MAP CREATED BY: PFM
MAP CHECKED BY: CF
MAP PROJECTION: NAD 1983 UTM Zone 17N

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PROPOSAL
STATUS: FINAL
DATE: 4/1/2016

2.0 PLANNING AND LEGISLATIVE CONTEXT

2.1 INTEGRATED WATERSHED MANAGEMENT

The NPCA has adopted an *Integrated Watershed Management* (IWM) approach to watershed planning. The IWM approach recognizes that water is a valuable resource which should be managed in a sustainable manner. Conservation Ontario defines IWM as “the process of managing human activities and natural resources on a watershed basis, taking into account social, economic, and environmental issues, as well as community interests in order to manage water resources sustainably” (*Conservation Ontario*, 2012). For the NPCA, this means adopting the IWM lens when it acts as a land owner, resource management agency, regulator, delegated provincial responsibility, commenting body and a service provider. **Figure 2.1** provides a snapshot of the IWM approach as adopted by the NPCA, and the various roles that the NPCA holds.

The NPCA derives its authority from several pieces of provincial legislation (see **Figure 2.2**), which are further described in the following sections.

Figure 2.1: Integrated Watershed Management and Roles of the NPCA**NIAGARA PENINSULA CONSERVATION AUTHORITY**

The objects of an Authority (under the CA Act, Section 20) 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.

INTEGRATED WATERSHED MANAGEMENT

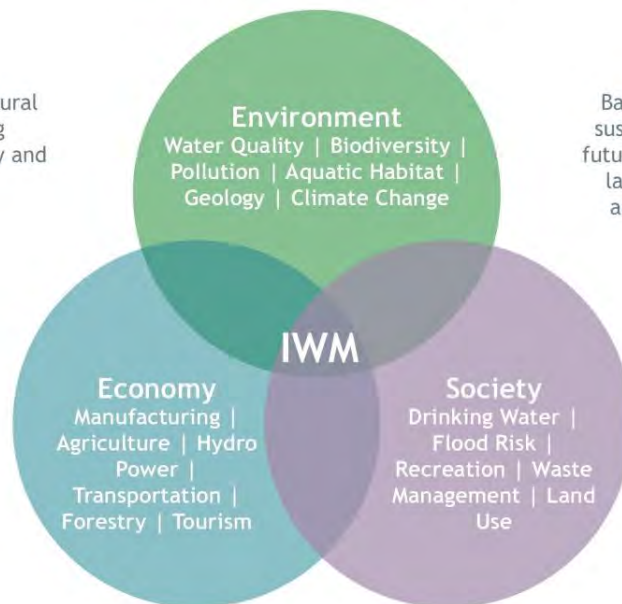
“The process of managing human activities and natural resources on a watershed basis, taking into account social, economic, and environmental issues, as well as community interests in order to manage water resources sustainably” (Conservation Ontario, 2012).

Our Mission

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

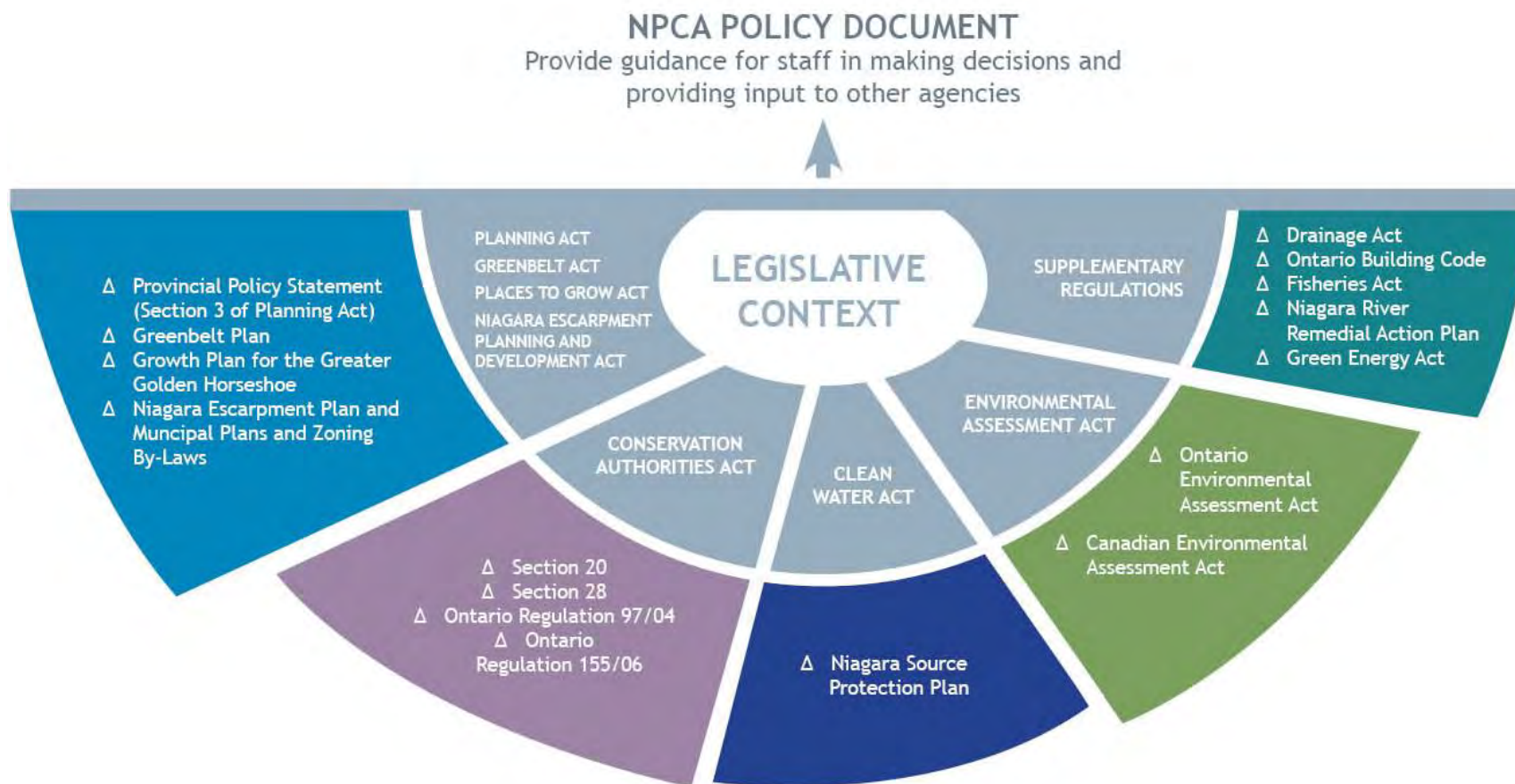
Our Vision

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

**NPCA Roles Through the IWM Lens**

Land Owner	Resource Management Agency <i>CA Act, Section 20</i>	Regulator <i>CA Act, Section 28 Regulation 97/04 Regulation 155/06</i>	Provincial Delegated Responsibility <i>Planning Act PPS, Section 3.1</i>	Service Provider <i>MOUs</i>
Property Management	Conservation, Restoration, Natural Resource Management, Development, Application of Science & Tools	Regulation	Environmental Planning	Environmental Planning
<ul style="list-style-type: none"> Management of NPCA-owned properties 	<ul style="list-style-type: none"> Source Water Planning Watershed Planning Ground- and Surface Water Quality Program Flood Protection Conservation Lands Stewardship Environmental Information: GIS/NAI 	<ul style="list-style-type: none"> Flooding Erosion Pollution Dynamic Beach Conservation of Land 	<ul style="list-style-type: none"> Flooding Erosion Hazardous Lands Great Lakes Shoreline Climate Change 	<ul style="list-style-type: none"> Niagara MOU <ul style="list-style-type: none"> - Natural Hazards - Natural Heritage & Water Hamilton MOU <ul style="list-style-type: none"> - Natural Hazards - Water Haldimand MOU <ul style="list-style-type: none"> - Under Review

Figure 2.2: Legislative Context for the Policy Document



2.2 THE CONSERVATION AUTHORITIES ACT

The *Conservation Authorities (CA) Act* was passed in 1946 in order to provide direction on how to manage issues of erosion and flooding from a watershed perspective. Section 20 of the Act states:

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

Conservation Authorities are empowered under the Act (Section 21) to undertake a variety of initiatives, including the power to “study and investigate the watershed and to determine a program whereby natural resources of the watershed may be conserved, restored, developed and managed” (21a). In addition, Section 28-1 of the Act provides the basis for the NPCA’s permitting and development regulation function, stating that conservation authorities may (subject to approval from the Minister) create regulations within its jurisdiction:

- a) *Restricting and regulating the use of water in or from rivers, streams, inland lakes, ponds, wetlands and natural or artificially constructed depressions in rivers or streams.*
- b) *Prohibiting, regulating or requiring the permission of the authority for straightening, changing, diverting or interfering in any way with the existing channel of a river, creek, stream or watercourse, or for changing or interfering in any way with a wetland.*
- c) *Prohibiting, regulating or requiring the permission of the authority for development if, in the opinion of the authority, the control of flooding, erosion, dynamic beaches or pollution or the conservation of land may be affected by the development.*
- d) *Providing for the appointment of officers to enforce any regulation made under this section or section 29.*
- e) *Providing for the appointment of persons to act as officers with all of the powers and duties of officers to enforce any regulation made under this section. 1998, c. 18, Sched. I, s. 12.*

Item 28-1(c), noted above is of particular importance, as it highlights the five tests for development proposed within an area regulated by a conservation authority. Through Section 28-1(c), conservation authorities have the power to prohibit, regulate or require permission for development, where the following elements may be affected by the development:

- a) Flooding;

- b) Erosion;
- c) Dynamic beaches;
- d) Pollution; and,
- e) The conservation of land.

The definition of development under the *Conservation Authorities Act* is as follows:

- a) *The construction, reconstruction, erection or placing of a building or structure of any kind.*
- b) *Any change to a building or structure that would have the effect of altering the use or potential use of the building or structure, increasing the size of the building or structure or increasing the number of dwelling units in the building or structure.*
- c) *Site grading.*
- d) *The temporary or permanent placing, dumping or removal of any material originating on the site or elsewhere.*

It should be noted that the above definition is applied when the NPCA is acting under the authority of the *Conservation Authorities Act* and the *Planning Act* definition is used when the NPCA is acting under the authority of the *Planning Act*. The PPS definition of development is different than the definition under the *Conservation Authorities Act* (see next section on the *Planning Act* for further discussion on the definition of development).

The *Conservation Authorities Act* also includes several explicit limitations on the power of conservation authorities. These limitations are provided under Section 28.10 and state that no regulation shall be made/applied which:

- Limits the use of water for domestic or livestock purposes.
- Interferes with any rights or powers conferred upon a municipality in respect of the use of water for municipal purposes.
- Interferes with any rights or powers of any board or commission that is performing its functions for or on behalf of the Government of Ontario.
- Interferes with any rights or powers under the *Electricity Act* or the *Public Utilities Act*.

Section 28.11 also limits the role of conservation authorities in regards to aggregate resource extraction, stating that “a requirement for permission of an authority in a regulation made under clause 28(1) (b) or (c) does not apply to an activity approved under the *Aggregate Resources Act*”.

2.3 THE PLANNING ACT

The purpose of the *Planning Act* is to promote sustainable economic development in a healthy natural environment through a policy-led system whose processes are fair, open, cooperative and efficient. The *Planning Act* provides the basis for land use planning in Ontario, identifying tools for managing how, where and when land use change occurs. The *Planning Act* is designed to recognize the decision-making authority and accountability of municipal councils in planning. Municipalities are responsible for preparing Official Plans and zoning by-laws and are also responsible for approving new development. Within this system, the Province's principle tool for ensuring that matters of provincial interests are implemented across the Province is the *Provincial Policy Statement*.

Specific responsibilities under the *Planning Act* have been delegated to conservation authorities. In 1995, the Province of Ontario delegated responsibility for flood plain management, hazardous slopes, Great Lakes shorelines, unstable soils and erosion (*Provincial Policy Statement*, Section 3.1). This means that the NPCA is responsible for representing the provincial interest on the above-noted matters:

- Conservation authorities review policy documents and development proposals which are processed under the Planning Act to ensure that the proposal is consistent with Section 3.1 of the PPS.
- Upon request from the Ministry of Municipal Affairs and Housing, conservation authorities provide comments to the Ministry on planning matters as part of the one-window review process.
- Where required, conservation authorities initiate appeals to the Ontario Municipal Board.

2.3.1 The Provincial Policy Statement

The Provincial Policy Statement (PPS, 2014) is of particular relevance for conservation authorities, as the *Planning Act* states that all decisions and advice shall be consistent with PPS and provincial plans. The NPCA also extends this consistency to comments provided under Service Agreements on development applications within its jurisdiction. Any comments provided by the NPCA need to be consistent with the PPS. The PPS includes a variety of policies related to Natural Heritage, Water, and Natural Hazards. The NPCA is responsible for providing comments on planning applications through the vehicle of a Memorandum of Understanding (MOU), and is bound by two different types of MOUs:

1. MOU between the Ministry of Natural Resources and Forestry, and Conservation Authorities in Ontario CAs (January 2001) regarding delegated Provincial Responsibility.
2. MOUs between the NPCA and the three main upper tier/single tier municipalities within our watershed, namely the City of Hamilton, Haldimand County, and Niagara Region. Each individual MOU is specific to the area and context it applies to. In general, these three MOUs identify the NPCA's role and function for implementing the above-noted sections of the PPS through the development review process.

As noted previously, there are some nuances between definitions used under the Conservation Authorities Act and those used in the PPS. The definition of development under the PPS is:

“the creation of a new lot, a change in land use, or the construction of buildings and structures requiring approval under the Planning Act, but does not include:

1. *activities that create or maintain infrastructure authorized under an environmental assessment process;*
2. *works subject to the Drainage Act; or,*
3. *for the purposes of policy 2.1.4(a), underground or surface mining of minerals or advanced exploration on mining lands in significant areas of mineral potential in Ecoregion 5E, where advanced exploration has the same meaning as under the Mining Act. Instead, those matters shall be subject to policy 2.1.5(a).²”*

One of main differences between the Conservation Authorities Act definition of development and the PPS definition is that the PPS definition does not include site grading, and accordingly, the tools and processes under the *Planning Act* distinguish between development and site alteration (as two distinct things). The PPS also considers lot creation as a form of development, whereas the *Conservation Authorities Act* does not. These differences in definition are perhaps subtle, but are of importance for conservation authorities because they have functions under both *the Conservation Authorities Act* and the *Planning Act*, meaning that conservation authorities need to use the appropriate definition of development when making decisions and providing comments. Hence, Chapter 14 of this document includes both definitions.

² Note that policy references within the definition pertain to PPS policies.

2.3.2 Provincial Plans

2.3.2.1 *Greenbelt Act and Greenbelt Plan*

The Greenbelt Plan came into effect in 2005 and provides a policy framework for protecting the natural and agricultural systems in the Greater Golden Horseshoe by identifying where urbanization should not occur. The Greenbelt Plan was prepared under the authority of the Greenbelt Act (2005), which designates the Greenbelt Area that the Plan applies to, and lays out the key components and objectives for the Greenbelt area as described in the Plan. The Greenbelt Plan lays out a strategy and policies for protecting natural and agricultural resources and framework builds on the framework established in the PPS (and other provincial plans such as the Oak Ridges Moraine Plan and the Niagara Escarpment Plan).

The Greenbelt Plan is of particular relevance as the northern portion of the NPCA's watershed falls within the limits of the Plan Area. The Plan is intended to be read and applied in conjunction with a range of other applicable plans, policies and legislation, including regulations under the Conservation Authorities Act. In instances where there is a conflict between a particular policy in the Greenbelt Plan and a policy in the NPCA's Policy Document, the Greenbelt Plan states that the more restrictive policy shall apply.

2.3.2.2 *Places to Grow: The Growth Plan for the Greater Golden Horseshoe*

Places to Grow: The Growth Plan for the Greater Golden Horseshoe (2005) works in parallel with the Greenbelt Plan (and other provincial plans). The Growth Plan was developed as a means to strategically direct and coordinate growth across the 118 municipalities which make up the mega-region known as the Greater Golden Horseshoe and was prepared under the authority of the Places to Grow Act (2005). The Growth Plan provides policies to support compact, transit-supportive and pedestrian-friendly forms of intensification and greenfield development. Generally speaking, municipalities are primarily responsible for implementing the policies of the Growth Plan through Official Plans and zoning by laws. The NPCA needs to consider the policies of the Growth Plan when issuing permits and/or commenting on development applications³.

³ In instances where there is a potential conflict between a policy within the Growth Plan and other provincial plans/policies, the Growth Plan shall prevail, except for policies related to the natural environment and public safety (in those matters, the policies of the PPS prevail).

2.3.2.3 *Niagara Escarpment Plan*

The Niagara Escarpment Plan (2017) was created to protect and preserve the Niagara Escarpment, one of eighteen (18) UNESCO World Biosphere Reserves in Canada. The Plan was prepared under the authority of the Niagara Escarpment Planning and Development Act (1973) and includes policies for seven designations within the Escarpment: Natural, Protection, Rural, Recreation, Urban, Minor Urban and Mineral Resource Extraction. The Niagara Escarpment Commission is responsible for regulating development in the Plan Area, which skirts the northern portion of the NPCA's watershed. The NPCA is responsible for reviewing and providing comments on development proposals which fall within the Plan Area and the NPCA's regulations also apply within the Niagara Escarpment Plan Area⁴.

Figure 2.3 highlights the areas within the NPCA jurisdiction that are designated under the Niagara Escarpment Plan and the Greenbelt Plan.

2.3.3 Regional and Local Plans

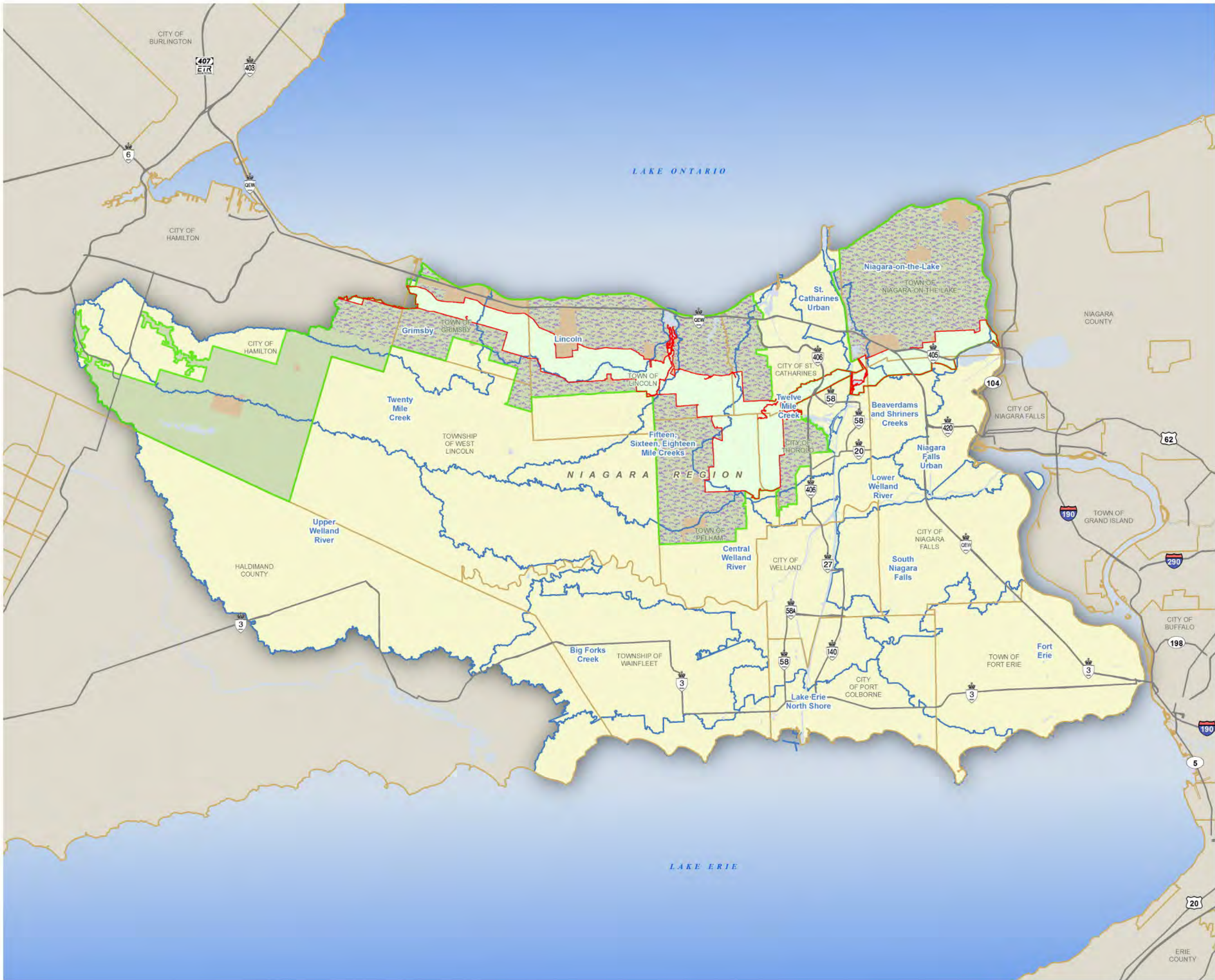
The NPCA takes on an advisory role in interacting with Upper and Lower Tier municipal policies and plans that apply within their watershed, providing input on the development of these tools and their application. The types of local municipal and Regional plans that apply within the NPCA jurisdiction include Regional and local Official Plans, Zoning By-Laws, Site Plan Control, strategic plans, and municipal development and design guidelines.

2.4 ENVIRONMENTAL ASSESSMENT ACTS

2.4.1 Ontario Environmental Assessment Act

The purpose of the Environmental Assessment Act is “the betterment of the people of the whole or any part of Ontario by providing for the protection, conservation and wise management in Ontario of the environment” (2). The Act applies to provincial ministries and agencies, municipalities such as towns, cities, and counties, as well as public bodies such as conservation authorities for infrastructure projects such as (but not limited to):

⁴ Note that the NEC does not maintain specific EIS guidelines and accordingly the NPCA relies on municipal EIS guidelines when reviewing NEC permits.



**NIAGARA PENINSULA
CONSERVATION AUTHORITY**

**PROVINCIAL PLAN DESIGNATED AREAS
WITHIN THE NPCA WATERSHED**

FIGURE 2.3

- NIAGARA ESCARPMENT PLAN BOUNDARY
- GREENBELT OUTER BOUNDARY
- NIAGARA ESCARPMENT PLAN
- PROTECTED COUNTRYSIDE
- TENDER FRUIT AND GRAPE LANDS
- HAMLETS
- TOWNS AND VILLAGES
- FREEWAY / EXPRESSWAY / HIGHWAY
- WATERSHED PLANNING AREA BOUNDARY
- LOCAL MUNICIPAL BOUNDARY



MAP DRAWING INFORMATION:
DATA PROVIDED BY NPCA, CITY OF HAMILTON, NIAGARA REGION, MNR
AND ESRI

MAP CREATED BY: PFM
MAP CHECKED BY: CF
MAP PROJECTION: NAD 1983 UTM Zone 17N

London -> G:\GIS\Proposals\NPCA Proposal\NPCA Provincial Plan Areas.mxd



PROPOSAL
STATUS: FINAL
DATE: 8/15/2016

- Public roads and highways;
- Transit projects;
- Waste management projects;
- Water and wastewater projects;
- Resource management; and,
- Flood protection projects.

The NPCA is responsible for commenting on infrastructure projects within the watershed led by public or private sector proponents. The NPCA is also responsible for adhering to the Act when it acts as the proponent under the act (e.g. undertaking flood protection projects). When acting as a proponent for certain types of projects, the NPCA is subject to Conservation Ontario's Class Environmental Assessment for Remedial Flood and Erosion Control Projects.

2.4.2 Canadian Environmental Assessment Act

The Canadian Environmental Assessment Act (CEAA 2012) is generally similar to the Ontario Environmental Assessment Act, focusing on potentially adverse environmental effects within federal jurisdiction, including:

- Fish and fish habitat;
- Other aquatic species;
- Migratory birds;
- Federal lands;
- Effects that cross provincial or international boundaries;
- Effects that impact on Aboriginal peoples, such as their use of lands and resources for traditional purposes; and,
- Changes to the environment that are directly linked to or necessarily incidental to any federal decisions about a project.

Where Federal EAs are undertaken within the Niagara Peninsula watershed, the NPCA provides comments through the CEAA process.

2.5 OTHER RELEVANT LEGISLATION

There are a number of additional legislative acts that guide decision-making at the NPCA with respect to development and site alteration. These include, but are not limited to:

- **The Building Code Act** governs the structural, safety, and liability characteristics of developments. For development applications within its regulated areas, the Building Code recognizes the conservation authority regulations that are applicable by law. The Building Code Act requires NPCA permission to be provided prior to issuance of development approvals in accordance with any applicable regulations under the Conservation Authorities Act. The NPCA provides location approval and/or recommends technical investigations and site control measures in line with conservation best practices.
- **The Drainage Act** provides direction to municipalities for the maintenance and repair of municipal drainage projects and, under certain circumstances, municipalities can be held liable where prescribed duties are not performed. Under the Conservation Authorities Act, conservation authorities are responsible for regulating development within watercourses and wetlands. The Ontario Ministry of Agriculture, Food and Rural Affairs maintains a Drainage Act and Regulations Team (DART) protocol which provides guidance to municipalities and conservation authorities on how to ensure the objectives of both acts are met. The DART protocol identifies the circumstances where a full permit is required under the Conservation Authorities Act and where a standard compliance requirement (SCR) is recommended⁵.
- **The Federal Fisheries Act** provides for the prevention of serious harm to fish as a result of human activity.
- **The Federal Migratory Birds Act** provides protection for over 450 species of migratory birds through a series of regulations.
- **The Ontario Water Resources Act** covers both groundwater and surface resources. The Act regulates sewage disposal and “sewage works” and includes regulations which prohibit the discharge of polluting materials that may negatively impact water quality. In addition to this, the Act also requires permits from the Ministry of Environment and Climate Change to take more than 50,000 liters of water per day from ground or surface

⁵ Standard Compliance Requirements under the DART protocol are activities which can proceed without a full permit under the Conservation Authorities Act.

water sources. The NPCA is notified of any applications to take water within the watershed and provides comments on permit requests.

- **The Ontario Clean Water Act** is concerned with the protection of drinking water through a multi-pronged approach to source water protection. The issue of municipal drinking water protection within the NPCA watershed is addressed through the establishment of the Niagara Peninsula Source Protection Area (NPSPA), which was established in 2007 and covers the same geographic extent as the NPCA Watershed. The Niagara Peninsula Source Protection Plan was approved effective October 2014 to protect vulnerable municipal drinking water supplied by surface water resources.
- **The Federal Species at Risk Act (SARA)** prevents species from disappearing, promotes the recovery of species that have been extirpated, provides protection for species that are endangered or threatened as a result of human activity, and prevents species of special concern from becoming endangered or threatened. SARA is integrated into the NPCA's review of development applications particularly where the modification of wetland boundaries is concerned.
- **The Niagara River Remedial Action Plan** - The Great Lakes Water Quality Agreement (1972) was signed by Canada and the U.S. to restore and maintain the integrity of the Great Lakes Basin ecosystem, which had come under significant pressure from a variety of sources (mainly the effects of extensive urbanization and industrialization). In 1987, an amendment to the Agreement allowed for the implementation of Remedial Action Plans (RAPs) to restore ecosystem health in 43 identified Areas of Concern (AOCs) located within the Great Lakes Basin. The Niagara River was designated as one of the 43 AOCs. The purpose of the Niagara River RAP is to identify significant water quality concerns and take actions to resolve them. The NPCA acts as the Coordinator for the Niagara River Remedial Action Plan on behalf of the Province of Ontario and the Federal Government.

3.0 GUIDING PRINCIPLES AND GENERAL POLICIES

3.1 ABOUT THE PRINCIPLES

The following principles describe the NPCA's vision for integrated watershed management. These principles were developed as part of the Living Landscape process and help to underpin a number of the more detailed, complex policies found in Chapters 4-5. When making decisions on applications or commenting on other planning matters, Staff and the Board should consider the above-noted principles, in addition to the detailed policies found within this document.

3.2 GUIDING PRINCIPLES

- a) Recognize that healthy communities require a sustainable balance between environmental, social and economic priorities, interests and uses.
- b) Acknowledge that protecting natural systems over the long term is best achieved through a science-based approach that manages human activities and natural resources across the watershed.
- c) Consider the impacts of climate change on people, property and the environment.
- d) Avoid the potential for negative impacts to people, property and the environment by directing development and site alterations away from natural features.
- e) Work with landowners, stakeholders and municipal, provincial and federal partners to develop appropriate policies that meet the requirements of all relevant legislation.
- f) Continuously pursue practical approaches to the management of water and natural resources based on the application of sound science, creativity, and innovation.
- g) Learn from and inform watershed residents, member municipalities, partners and clients about the value of the watershed, its features and functions.
- h) Minimize the potential for risk of harm to people and property resulting from flooding, erosion and slope instability.

3.3 GENERAL POLICIES

3.3.1 Regulated Areas

Through section 28 of the Conservation Authorities Act and Ontario Regulation 155/06 the NPCA has the authority to regulate and approve development within its Regulated Areas. The NPCA's regulated areas are comprised of the following:

- a) Lands adjacent to or close to the shoreline of the Great Lakes-St. Lawrence River System that may be affected by flooding, erosion or dynamic beaches;
- b) River or stream valleys that have depressional features associated with a river or stream, whether or not they contain a watercourse;
- c) hazardous lands;
- d) wetlands; and,
- e) other areas where development could interfere with the hydrologic function of a wetland, including areas up to 120 metres of all provincially significant wetlands and wetlands greater than 2 hectares in size, and areas within 30 metres of wetlands less than 2 hectares in size.⁶

3.3.2 Detailed Mapping of Regulated Areas

Detailed mapping of the limits of the NPCA's regulated areas is available on-line and can also be viewed at the offices of the NPCA. Where there is a discrepancy between the NPCA's mapping and the definitions provided in Ontario Regulation 155/06, the Regulation prevails.

3.3.3 Activities Subject to a Development Permit

3.3.3.1 *Development Permit Authority*

Unless otherwise stated in this document, no work shall be undertaken within the NPCA's regulated areas without a development permit issued by the NPCA.

⁶ Refer to Ontario Regulation 155/06, section 2 for additional details.

3.3.3.2 Typical Activities Subject to Development Permits

Permits are required for any proposed development (as defined under the Conservation Authorities Act), including but not limited to the construction, reconstruction, erection or placing of a building or structure, any change to a building or structure which would increase its size (or the number of units), site grading or the placement of fill material. The following lists some of the typical forms of development which are subject to a permit from the NPCA:

- a) Construction of all buildings, building additions and structures including modification or reconstruction of foundations which support existing buildings;
- b) Breakwalls, revetments, rubble groynes and jetties;
- c) Headland beach system and artificial nourishment (beach, berm or dune);
- d) Docks;
- e) Stairs, decks, gazebos;
- f) Boat ramps, boat storage structures;
- g) Dredging;
- h) Swimming pools;
- i) Temporary or permanent placement of fill, grading, removal of fill, or site alteration;
- j) Retaining walls;
- k) Trailers and mobile homes;
- l) Municipal drains;
- m) Certain forms of infrastructure, such as but not limited, bridges, crossings, roads and other types of infrastructure which have received an approval under the Environmental Assessment Act.

The above-noted list is not considered to be exhaustive and is provided for explanatory purposes only.

3.3.4 Activities which do not require a Development Permit

3.3.4.1 Agricultural Lands outside of Regulated Areas

Agricultural activities outside of the NPCA's regulated areas are not subject to regulation under the Conservation Authorities Act and do not require a permit.

3.3.4.2 Agricultural Lands within the NPCA's Regulated Areas

Agricultural uses within regulated areas generally do not require a permit. The following activities are not considered development and do not require a permit unless they would interfere with a watercourse or wetland:

- a) Non-structural activities associated with an existing agricultural use, such as cropping, livestock management, tilling, fence row clearing;
- b) Non-structural activities that would not result in alterations to the existing grade gardens/landscaping, shrub/tree planting nurseries, woodlot management;
- c) Routine maintenance and/or upkeep of existing agricultural buildings or structures which do not change the existing footprint, square footage, height and/or use. This could include, but is not limited to, window or roof repair, siding, etc.

Certain forms of value-added, agri-tourism uses may require a permit from the NPCA, depending on the nature of the application and any considerations related to the five tests under the Conservation Authorities Act. Note that agricultural activities which require a building permit from a local municipality may also require a permit from the NPCA (where the proposed developed is within an area regulated by the NPCA).

3.3.4.3 Fill not Exceeding 25m³ of Material

The placement of inert fill less than 25m³ may be permitted where the placement of fill:

- a) Is placed in a manner which will not impact the control of flooding;
- b) Does not interfere with a watercourse, wetland, valleyland or shoreline; and,
- c) Includes re-vegetation of any disturbed areas and is protected from erosion.

Notwithstanding the above, in special circumstances, the NPCA retains the right to require a permit for the placement of fill less than 25m³.

3.3.4.4 Landscaping

Generally, a development permit is not required for the addition of top soil to lawns or the augmentation of soil mixtures for landscaping purposes, to a maximum thickness of 50 mm. The raising of grades to allow for changing the landscape characteristics of a property is considered development in the flood plain. This policy is not applicable to the placement of fill within a wetland for landscaping (or any other) purposes. No fill placement is permitted within a wetland.

3.3.5 Use of Native Plant Species

The NPCA recognizes the importance of a natural approach to landscaping through the use of native, non-invasive and locally appropriate species. In some instances, a proposal for development may require re-vegetation for disturbed areas and in these instances, the NPCA

will encourage re-vegetation plans and landscaping projects to include an appropriate mix of native, non-invasive and locally appropriate plantings.

4.0 FLOODING HAZARDS

4.1 WHAT ARE FLOODING HAZARDS?

4.1.1 What are Flooding Hazards?

4.1.1.1 *Flood Plains and Flooding Hazards*

To mitigate the potential risks to public health, safety and property, the Province of Ontario, through various regulations and policies (such as Ontario Regulation 155/06 and 97/04, as well as the Provincial Policy Statement) limits the amount of potential development in flood plains. Flood plains are usually low lands adjoining a watercourse which has been or may be subject to flooding. Lands which are subject to flooding or may be subject to flooding are referred to as flooding hazards.



4.1.1.2 *River and Stream Flood Hazard vs. Great Lakes Flood Hazard*

This Policy Document distinguishes between the flooding hazard associated with rivers and streams and the flooding hazard associated with the Great Lakes Shoreline. The policies of this section apply to flooding hazards associated with rivers and streams. Refer to section 5.0 for details related to the Great Lakes Shoreline flooding hazard.

4.1.1.3 *River and Stream Flood Hazard Defined*

In most cases, the Niagara Peninsula Conservation Authority defines the flood hazard as the 100 year flood event. The 100 year flood event is a frequency-based flood event that is determined through analysis of precipitation, snow melt, or a combination thereof, having a return period of once every 100 year on average (or having a 1% chance of occurring or being exceeded in any given year). The 100 year flood event is the minimum acceptable standard (in Ontario) for defining the regulatory flood plain.

4.1.1.4 *Policy Concepts for Flood Hazards*

The NPCA recognizes the following concepts for planning and regulating development within the river and stream flooding hazard:

- a) One zone concept;
- b) Two zone concept; and,
- c) Special Policy Area concept.

4.1.2 The One Zone Concept

4.1.2.1 *Preference for One-Zone Concept*

In most cases, the NPCA shall implement a one-zone concept to flood plain management. This means that generally, most forms of development or site alteration are prohibited within the regulated flood plain. Where a one zone concept is in place, the entire flood plain defines the floodway.

4.1.2.2 *One-Zone Concept*

Under the one-zone concept, the regulatory flood plain shall be defined as follows (**Figure 4.1**):

- a) Where 100 Year Flood information is available, the 100 Year Flood shall be used for the purposes of delineating the flood plain; or,
- b) Where no flood plain information is available and the Authority has a flooding concern, the landowner shall be requested to determine the limits of the 100 Year Flood.

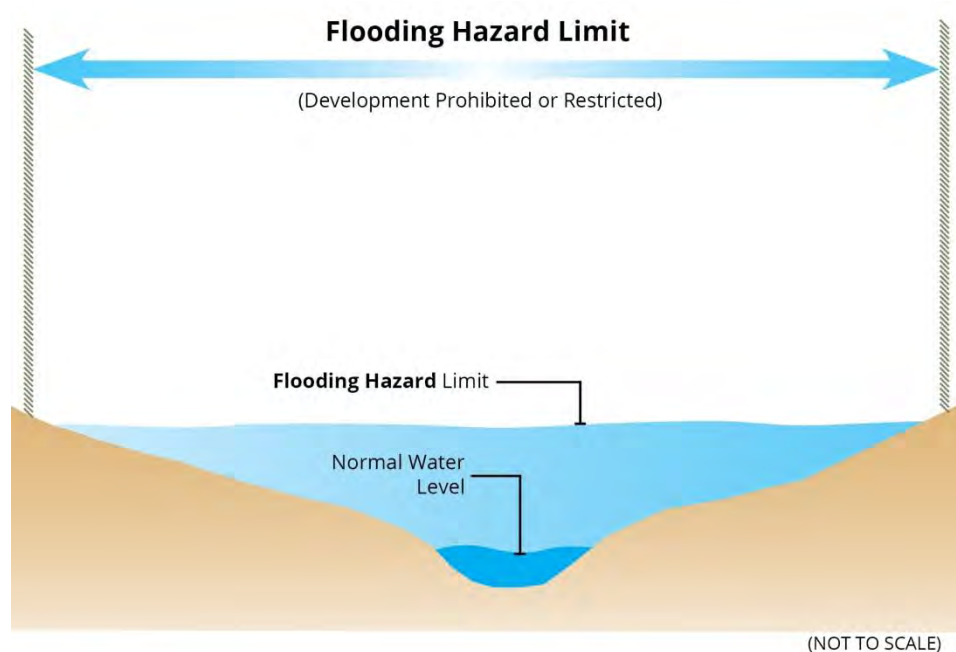


Figure 4.1: One Zone Concept

4.1.2.3 Exceptions to using the 100 Year Flood

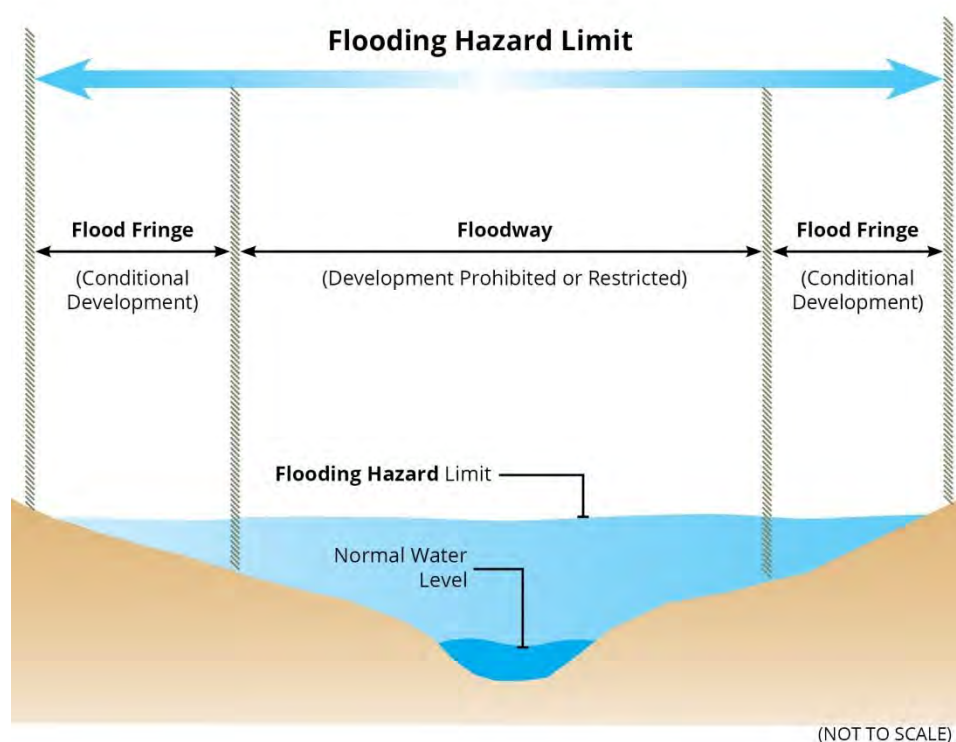
Notwithstanding the policy 4.1.2.2, the Regional Flood shall be used to determine the flood plain limits for the following watercourses:

- a) Beaverdams Creek (Niagara Falls);
- b) Shriner's Creek (Niagara Falls); and,
- c) Ten Mile Creek (Niagara Falls).

4.1.3 The Two Zone Concept

The two zone concept (**Figure 4.2**) identifies a floodway and a flood fringe within the flooding hazard. The floodway refers to the portion of the flood plain where development and site alteration is prohibited due to potential risks associated with public health and safety and property damage. The floodway is the inner portion of the flood plain, representing the area required for the safe passage of flood flow and/or that area where flood depth and/or velocities are considered to pose a potential threat to life and/or property damage. The flood fringe is the outer portion of the flood hazard that could potentially be safely developed, subject to certain conditions being met (see Policy 4.1.3.1).

Figure 4-2: Two Zone Concept



4.1.3.1 Considerations for Applying the Two Zone Concept

At present, there are no two zone areas in the watershed. The NPCA shall only consider a two zone concept where a request is put forward by a municipality within the flood plain. The onus is on the municipality to demonstrate that the one-zone policies are too stringent and would adversely impact the economic viability of the municipality. The Ministry of Natural Resources and Forestry should be consulted for technical advice in any area whether the two zone concept is being considered.

The two zone concept should only be applied within or immediately adjacent to a settlement area and where the risks associated with flooding can be adequately mitigated within the flood fringe. When making decisions related to the applicability of a two zone concept, the NPCA will consider the following elements as described in the Province's Technical Guide for River and Stream Flooding Hazard Limits and summarized below in **Table 4-1**. **Table 4-1** provides a summary of the MNR's recommended criteria for considering a two zone concept.

Table 4-1: Factors to be considered in the Application of a Two Zone Concept

Criteria	Description
Frequency of flooding	<ul style="list-style-type: none"> Caution should be exercised in applying the two zone concept for chronic problem areas. While development in such areas could adequately be floodproofed, maintenance and upkeep would continuously be required to ensure floodproofing measures and local services remain effective.
Physical characteristics of the valley	<ul style="list-style-type: none"> Steepness of valley slopes, instability of banks and poor soil conditions in flood fringe areas can physically render the flood fringe unsuitable for development. Adopting the two zone concept would show more promise for areas with a flatter bank walls and shallow flow. Topography varies, so evaluation is necessary on a local basis in determining suitability.
Local need	<ul style="list-style-type: none"> Suitability of flood fringe areas for development can be influenced by municipal planning considerations including availability of developable land elsewhere in the municipality. In urban areas where land values are high and pressure for development is usually the greatest, the concept shows promise. Lot sizes are usually larger in rural areas, and it is generally possible to locate development outside the flood plain. Therefore, proposed application of the two zone concept in rural/agricultural areas will require detailed rationale/justification.
Impacts on proposed development	<ul style="list-style-type: none"> Encroachment within the flood fringe area usually results in an increase in flood levels. The extent of potential increases will be dependent on a number of factors in watershed characteristics and the degree to which the two zone concept is to be applied. As a result, it may be necessary to recalculate for the flood standard the flood levels for floodproofing purposes and identify and assess the upstream and downstream impacts where the two zone concept is being considered. This is particularly true where the two zone concept is to be applied over extensive areas.
Feasibility of floodproofing	<ul style="list-style-type: none"> One of the major factors in determining if a flood fringe area is suitable for development is the feasibility and cost of floodproofing.
Constraints to the provision of services	<ul style="list-style-type: none"> Flood fringe areas are low-lying and it is often difficult and expensive to provide necessary services (watermains, sewers, drainage works, etc.) to serve the developments. Drainage systems should provide protection against the flood standard and it may be difficult to provide outlets above the level of flood standard. In these situations, it may be necessary to provide pumping facilities which would result in some additional expense in new developments. Private services located within the flooding hazard can also pose a risk to pollution during flood events.
Ingress/egress	<ul style="list-style-type: none"> Major accessways to development potentially located in the flood fringe must be examined. It is not acceptable to have development isolated during the flood conditions because roads and escape routes are not passable. For example, flood depths greater than 0.3 metres and/or flood velocities greater than 1 metre per second may prevent evacuation during a flood. Standards may vary depending on local emergency requirements.
Changes in land use	<ul style="list-style-type: none"> Land use is a key factor considered in flood plain studies and the calculation of flood lines. Proposed development, not anticipated in these calculations, could create increased flood risks and thus reduce the effectiveness of flood plain management programs. It is therefore imperative that municipalities discuss proposed changes in land use with the NPCA.
Administrative capability	<ul style="list-style-type: none"> Staff availability and expertise to examine and implement the various factors and conditions for a two zone area should be considered.

For additional details refer to Appendix 4: Application of the Two Zone Concept, Factors to be Considered (Technical Guide, River and Stream Systems: Flood Hazard Limit, Government of Ontario, 2002)

4.1.3.2 *Delineation of Floodway*

The extent of the floodway shall be determined based on local watershed conditions, such as, but not limited to critical flow depth and velocity, existing and proposed development and the potential for upstream and downstream impacts.

4.1.3.3 *Policy Requirements for Two Zone Concept*

Where a two zone concept is undertaken, no development and site alteration shall be permitted within the floodway area. Limited development and site alteration may be permitted in the flood fringe area, subject to floodproofing requirements and safe access and egress (vehicular and pedestrian) and other considerations (as noted in Table 4-1). Municipal requests for final approval of a two zone policy area designation shall be supported by:

- a) Official Plan policies specific to the review and approval of development and site alteration applications within the proposed two zone policy area, including development control criteria for the flood fringe and floodway areas and, if applicable, the implementation program for any flood control measures in relation to the timing and phasing of development;
- b) A Zoning By-law that will implement the Official Plan policies; and
- c) A Flood Emergency Management and Response Plan.

4.1.4 **Special Policy Area Concept**

4.1.4.1 *Special Policy Area Concept*

A Special Policy Area may only be proposed by lower tier or single tier municipalities (the proponent). The proponent is responsible for funding and preparing all mapping, studies, reports and official plan policies/amendments. Special Policy Areas require the approval of both the Minister of Natural Resources and the Minister of Municipal Affairs. The process for undertaking a Special Policy Area is outlined in the Ministry of Natural Resources Technical Guide for River and Stream Systems, Flooding Hazard Limit Appendix 5 Special Policy Areas (as amended in 2009) and includes:

- a) Pre-consultation with the Ministry and the NPCA;
- b) Phase 1: Request for Approval in Principle for Special Policy Area Status;
- c) Phase 2: Application for Final Approval of Special Policy Area; and,
- d) Phase 3: Post Approval Requirements.

4.1.4.2 *Great Lakes Shoreline and the Niagara River*

Special Policy Areas are not applicable to the flooding hazards associated with the Lake Erie and Lake Ontario shorelines as well as any connecting channels, such as the Niagara River.

4.1.4.3 *Development Approvals*

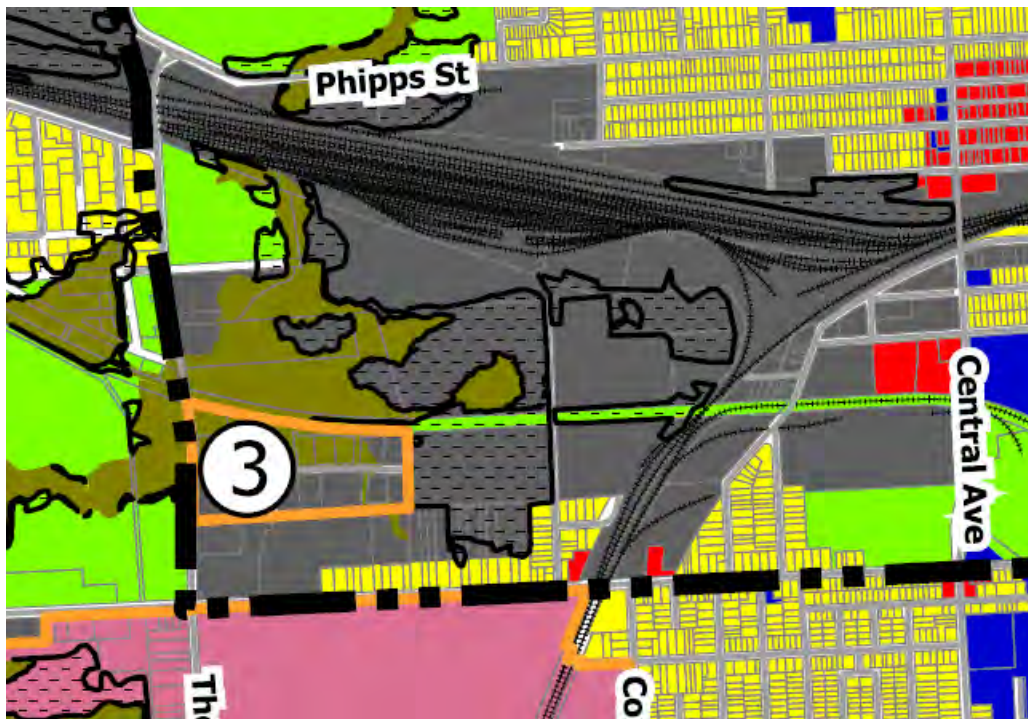
No development shall proceed within a Special Policy Area until the SPA has been approved by the Province and all necessary implementation tools are in place, such as Local Official Plan Amendments (and where applicable, Regional Official Plan Amendments) and implementing zoning by-law amendments are in place. Where a permit is required from the NPCA, no permit shall be issued until the above-noted policy and regulatory changes have been implemented.

4.1.4.4 *Fort Erie Industrial Park Special Policy Area*

In 1985, the Ministry of Municipal Affairs approved Fort Erie Official Plan Amendment 32 that included provisions for a Special Policy Area for the Fort Erie Industrial Park to recognize that parts of the approved Industrial Park were located within the 1 in 100 year flood plain of Frenchman's Creek and site specific policies apply. The Town's Official Plan includes site specific policies for this area (referred to as Site Specific Policy Area #3 and illustrated in **Figure 4-3**) and includes the following policies:

- a) No new buildings or structures other than those required for flood erosion control or flood management purposes shall be permitted in the Hazard area (1 in 100 year flood plain) as determined by the Niagara Peninsula Conservation Authority as generally shown on Schedule "C1";
- b) Extensions, enlargements or reconstructions of existing buildings and structures may be permitted within the 1 in 100 year flood plain provided they are protected up to the 1 in 100 year flood level;
- c) Prior to the issuance of any building permit within the 1 in 100 year flood plain, the Town shall consult with the Niagara Peninsula Conservation Authority regarding the administration of the Authority's fill and construction regulations to address any proposed flood damage reduction measures which may include such matters as building setbacks, basement elevations, the strength of foundation walls, the placement of fill and control of building opening elevations; and,
- d) Any amendment to the Zoning By-law affecting the "Fort Erie Industrial Park" shall conform to the provisions of this subsection. In this regard the Town may, in consultation with the Niagara Peninsula Conservation Authority, incorporate flood reduction measures in the by-law relating to such matters as building setbacks, minimum heights of openings to buildings and maximum lot coverage.

Figure 4-3: Excerpt from the Town of Fort Erie's Official Plan



Refer to Fort Erie Official Plan for more details.

4.2 POLICIES FOR PLANNING AND REGULATING FLOOD HAZARDS

4.2.1 Objectives

The objectives of the flood hazard policies are to:

- a) Prevent loss of life;
- b) Minimize property damage and social disruption;
- c) Reduce the potential for incurring public costs associated with the impacts of flooding hazards;
- d) Manage existing risks and reduce the potential for future risks;
- e) Promote the conservation of land and a co-ordinated approach to the management of water.

4.2.2 Permitted Uses within the Flood Hazard

Permitted uses within the flood hazard shall be consistent with the objectives of the Conservation Authorities Act and subject to the Regulation 155/06. The following are permitted uses within the flood plain:

- a) Agriculture uses that do not require permanent, closed structures or any major alteration of the landscape;
- b) Additions or extensions, including new structures, to existing primary agricultural operations which are not likely to incur flood damages, impede flows, reduce flood storage, or cause pollution to a watercourse as a result of a flooding event;
- c) Reconstruction or minor additions to the existing structures and accessory structures outlined in Policies 4.2.4-4.2.6;
- d) Flood, erosion and sediment control measures;
- e) Open space uses and recreational uses, such as boat docks, marina facilities, parks, trails, gardens, nurseries and other passive recreational and open space uses;
- f) In ground swimming pools, subject to Policy 4.2.6;
- g) Parking lots, driveways and private roads, subject to Policy 4.2.7;
- h) Raw materials and equipment storage, subject to Policy 4.2.8;
- i) Infrastructure which is subject to an approval under the Environmental Assessment Act, such as but not limited to, railroads, streets, bridges, public services and pipelines for transmission and distribution of water, gas, oil and electricity, provided that the approved engineering designs recognize and, where necessary, address the flooding potential at the site;

- j) Works constructed under the Drainage Act; and,
- k) Other uses not likely to incur or create damage from floodwaters.

4.2.3 Uses Prohibited within the Flood Hazard

The following uses are prohibited within the flood hazard:

- a) Sensitive uses, such as hospitals, nursing homes, day-cares/pre-schools and schools;
- b) Emergency services facilities;
- c) Uses associated with the disposal, treatment, manufacturing/processing or storage of hazardous substances;
- d) Any other use or development deemed to be inappropriate based on the objectives stated in 4.2.1.

4.2.4 Replacement and Relocation of Existing Buildings and Structures

Any building or structure which is located in the flood plain and has been destroyed for reasons other than flooding may be allowed to be rebuilt, provided the building cannot be relocated to an area outside of the flood plain, as determined by the Conservation Authority. All of the following criteria must be achieved through the reconstruction proposal:

- a) The existing flood depths do not exceed 0.8 metres, the velocity does not exceed 1.7 metres/second and the product of depth and velocity is not greater than 0.4 square metres/second under a Regulatory Flood event (based on Ministry of Natural Resources and Forestry Policy and Water Survey of Canada "Hydrometric Field Manual (1981)");
- b) All openings of the building are to be located above the regulatory flood elevation;
- c) Vehicular and pedestrian ingress/egress is not to be flooded to a depth greater than 0.3 metres (1 foot) under the Regulatory Flood event;
- d) Other landowners, upstream and downstream of the proposal, will not be adversely affected by the Reconstruction;
- e) There is no increase in the number of dwelling units; and,
- f) The replacement structure does not exceed the size of the original ground floor area or, where expansions are proposed, the proposal complies with Policy 4.2.5.

4.2.5 Minor Additions to Existing Buildings

Minor additions to existing buildings may be permitted provided that:

- a) They are of a peripheral nature (such as decks, patios, open porches) and they are properly anchored to prevent flotation, are not subject to major damage by flooding and flood flows and flood water storage are not impeded; or,
- b) Any addition to the ground floor area of an existing building shall not exceed 50 per cent of the original ground floor area or 46.5 square metres, whichever is the lesser. Subsequent requests for additions which will cumulatively exceed 50 per cent of the original floor area or 46.5 square metres, whichever is the lesser, will not be considered under this section. Proposed additions greater than the above shall be regarded as 'major' additions and shall not be permitted;
- c) The existing flood depths do not exceed 0.8 metres, the velocity does not exceed 1.7 metres/second and the product of depth and velocity is not greater than 0.4 square metres/second under a Regulatory Flood event (based on Ministry of Natural Resources Policy and Water Survey of Canada "Hydrometric Field Manual (1981)");
- d) All openings in the ground floor of the building are to be located above the regulatory flood elevation;
- e) Vehicular and pedestrian Ingress/egress is not to be flooded to a depth greater than 0.3 metres (1 foot) under the Regulatory Flood event;
- f) Other landowners, upstream and downstream of the proposal, will not be adversely affected by the addition; and,
- g) There is no increase in the number of dwelling units.

4.2.6 Accessory Structures

Non-habitable accessory structures which are less than 10 metres square do not require a permit from the NPCA. Non-habitable accessory structures which are greater than 10 metres square, such as garages, tool sheds, gazebos and decks are permitted within the flood hazard provided that the following are met:

- a) There is no reasonable alternative location outside of the flood hazard on the site and the site is not subject to frequent flooding;
- b) Proposed development and site alteration is not located within the hydraulic floodway;
- c) Development and site alteration will not result in unacceptable impacts to flood storage and there are no upstream or downstream impacts; and,
- d) For in-ground swimming pools, adequate hydrostatic pressure relief is incorporated in the design and excavated material is removed from the site.

4.2.7 Parking Lots, Driveways and Private Roads

Parking lots, driveways and private roads which are primarily used for vehicular traffic are permitted provided that:

- a) The flood depths under the regulatory flood event do not exceed 0.3 metres (based on the technical criteria development the PPS Natural Hazards Training Manual);
- b) The depth criteria noted in item (i) above is not achieved through the placement of fill material (beyond 25m³).

4.2.8 Raw Materials and Equipment Storage

Where the storage of raw materials is subject to a municipal approval, the storage of raw material and equipment storage is permitted, provided that:

- a) They are properly anchored to prevent flotation;
- b) They are not subject to major damage by flooding;
- c) They are not of a polluting nature; and,
- d) Flood flows or flood water storage are not impeded.

4.2.9 Replacement of Existing Watercourse Crossings

Where replacement of an existing watercourse crossing is proposed, NPCA staff will encourage the municipality to have the crossing upgraded (where appropriate) in order to provide full access and egress under regulatory storm conditions.

4.2.10 Fencing not Subject to a Permit

Fencing is normally considered exempt from permission required under Ontario Regulation 155/06; however, the NPCA generally discourages fencing in natural hazard and natural heritage areas. Where fencing is necessary, such as agricultural fields, it must be constructed in such a fashion that it does not impede conveyance of flow of watercourses and does not require the use of fill within the flood plain.

4.2.11 Where Fencing May Require a Permit

There may be instances where a permit may be required, for example, if a fence is proposed to cross a watercourse or forms a solid barrier that would impede conveyance of flood flows. Fencing may be permitted in flooding hazards provided no fill placement/removal is required. Staff will work with the applicant to review other options in order to avoid fencing within the

flood hazard. The placement of fill or changing of grades within a regulated area would be subject to formal approval under Ontario Regulation 155/06 as per other policies in this document.

4.2.12 Septic Systems (Riverine Flood Hazard)

Septic systems shall not be located within the flooding hazard. Where an existing septic system is already located in the flooding hazards and is being replaced, the proponent shall locate the replacement system outside of the flood hazard, where feasible. The feasibility of relocation shall be assessed on a case by case basis.

4.2.13 Balanced Cut and Fill

Cut and fill is a technique that is used to balance flood storage losses resulting from the placement of fill within a flood plain. This is achieved by removing a volume of earth at the appropriate elevation and location to offset areas within the flood plain to be filled. The suitability of cut and fill operations is extremely site-specific. It should be recognized that, in conducting a cut and fill, additional flood-free lands are not obtained. A cut and fill will only serve to transfer floodwaters from one area to another as a result of the manipulation of the land's contours. In reviewing applications that will require cut and fill, the following policies will be applicable.

4.2.13.1 General Balanced Cut and Fill Policies

Any proposals that will require cut and fill operations within the jurisdiction of the Authority and within the flooding hazard limit must be in accordance with the following policies and guidelines and must be to the satisfaction of the Authority.

- a) There are no negative impacts on the ecological or hydrological function of wetlands, valleylands, or significant features as a result of the cut and fill proposal.
- b) All earth removed (cut) shall be required to be moved to an area that is outside of the flood plain.
- c) The amount of earth removed (cut) must be equal to or greater than the volume of fill proposed for placement within the flood plain.
- d) Cut and fill must be balanced in 0.3 m (1 foot) increments. An excess of cut volume may be permitted at any given increment; however, inadequate cut volume will not be permitted at any given increment.
- e) No negative impacts on the hydraulic conveyance capabilities of the watercourse will be permitted.

- f) Depending on the location of the proposed development and site alteration, a geotechnical evaluation may be required in order to ensure the long-term stability of the works.
- g) A cut and fill plan must be submitted demonstrating consistency with the policies of this document.

4.2.13.2 *Cut and Fill Plan Requirements*

At a minimum, all plans and calculations for cut and fill operations shall be prepared by a qualified engineer or surveyor and are required to contain the following criteria:

- a) Detailed calculations for incremental and total cut and fill volumes;
- b) Cross-sectional plots to scale showing existing and proposed flood lines and ground elevations;
- c) Detailed contour/topographic plan to scale showing existing conditions (including grades) and all proposed development and site alterations (and changes in elevation);
- d) Adequate erosion and sediment control measures will be implemented on-site, both during and after construction, and must be in accordance with the policies of this document;
- e) A hydraulic analysis may be required as deemed necessary by the Authority (i.e. HEC-RAS modelling); and,
- f) A geotechnical analysis may be required as deemed necessary by the Authority.

4.2.14 Flood Plain Spill Areas

4.2.14.1 *Spill Areas*

There are several areas within NPCA's watershed in which flood plain spills occur, generally in the areas north of the Niagara Escarpment. Spill areas are locations where hydraulic modeling and mapping of the flooding hazards indicates that flood waters may leave the flood plain and "spill" into surrounding lands that are outside of the regulated flooding hazard limits. Generally, the depth of flooding cannot be precisely/readily determined as the flood depths that may occur depend on a number of factors such as the local (and downgradient) topography and storage volume as well as the amount of spill flow that would occur. Typically spills would occur only during the higher flow rates of the storm and hence the volume and depth of flood water is dependent also on the duration of the storm and the foregoing factors.

4.2.14.2 Approach to Spill Areas

Development may be permitted, but is subject to a permit, within spill zones where the NPCA is satisfied that there are no negative upstream or downstream flood impacts and that safe egress and access is available. Minor development and site alteration may be permitted without a permit. The NPCA will determine on an application by application basis where mitigation measures are required, in consultation with the affected municipality (or municipalities as the case may be).

4.2.14.3 Potential Mitigation Measures for Development within Spill Areas

Where mitigation measures are required for lands within a spill zone, buildings and structures may be permitted provided that adequate floodproofing measures are undertaken. Mitigation for development proposed within a spill area could include (but is not limited to):

- a) Raising the elevation of proposed buildings or structures above the anticipated flood level; and/or,
- b) Raising the lands within the spill location to prevent its occurrence.



5.0 GREAT LAKES AND NIAGARA RIVER SHORELINE HAZARD

5.1 WHAT ARE SHORELINE HAZARDS?

5.1.1 What are Shoreline Hazards?

5.1.1.1 *Shoreline Hazards*

The shorelines along Lake Ontario, Lake Erie and the Niagara River are dynamic places, as they are in a state of constant flux. Shoreline areas are made up of an accumulation of detritus material such as sediment that is continually being transported and deposited by wave action, currents and wind. The composition of sediments varies from clay and silt to sand and gravel, to cobbles or even boulders. As a result, shorelines are constantly being shaped and re-shaped. These changes can range from a period of a few hours to days or even years and decades in response to the changes in waves, winds, water levels currents and the movement and accumulation of ice. The NPCA is responsible for regulating activities within the Lake Ontario,

Lake Erie and Niagara River shoreline hazard areas to minimize risks to life, property damage, social disruption and adverse environmental impacts. The shoreline hazard area includes the following natural hazards:

- a) Shoreline flooding hazard;
- b) Shoreline erosion and slope stability hazard; and,
- c) Dynamic beach hazard.

5.1.2 Niagara River Policy Framework

The NPCA does not regulate the flooding hazard on the Niagara River, except for 350 metres from the mouth of the Niagara River at Lake Ontario and an area at the head of the Niagara River within the 100 year flood elevation of 177.11 m GSC of Lake Erie (an area which includes lands around the Peace Bridge and within the urban area of the Town of Fort Erie).

Figure 5.1 illustrates the regulation area for the Niagara River and Lake Ontario and the Niagara River and Lake Erie. These



areas are regulated under the shoreline hazard policies of this section. “The Boundary Waters Treaty of 1909 requires that the United States and Canada, together, approve projects that affect the levels and flows of water along their common boundary, including the Niagara River. Water diversions in the Niagara River for hydroelectric power projects in both countries were approved by the 1950 Niagara Treaty. Water diverted from the river above Niagara Falls is returned to the river below the Falls.” (IJC Fact Sheet, no date).

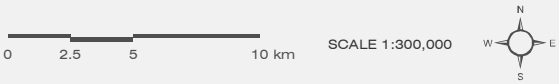
Planning Act applications and building permit applications along the Niagara River will be reviewed by the NPCA to address erosion hazards associated with steep slopes (slope height greater than or equal to 3m) and flooding hazards where the Niagara River meets Lake Erie and Lake Ontario. Consideration will be given to the International Joint Commission Study on the Great Lakes water levels and any international agreements which govern the watercourse. Ontario Power Generation (OPG) highwater levels have been provided to the NPCA for certain sections of the Niagara River.



**NIAGARA PENINSULA
CONSERVATION AUTHORITY**

Figure 5.1: Regulated Shoreline Area

- FREEWAY / EXPRESSWAY / HIGHWAY
- REGULATED SHORELINE AREA
- LOCAL MUNICIPAL BOUNDARY



MAP DRAWING INFORMATION:
DATA PROVIDED BY NPCA, MNR AND ESRI

MAP CREATED BY: PFM
MAP CHECKED BY: CF
MAP PROJECTION: NAD 1983 UTM Zone 17N

London --> G:\GIS\Proposals\NPCA Proposal\NPCA Regulated Shoreline Area.mxd



PROPOSAL
STATUS: FINAL
DATE: 2/10/2017

5.1.3 Great Lakes and Niagara River Shoreline Flooding Hazard

5.1.3.1 Flooding Hazard Limits along the Great Lakes

Flooding has historically and repeatedly caused considerable damage along shorelines. Shorelines may experience various magnitudes and durations of shoreline flooding as the result of a combination of:

- Higher, lake wide, static water levels due to abnormally high levels of precipitation and runoff and the annual lake level fluctuations;
- Short-term, storm induced wind setups; and,
- Wave action which rushes up the shore and other water related hazards, including wave overtopping, ice jamming and piling.

5.1.3.2 Approach to Flood Hazards along the Great Lakes

In general, development is restricted within the shoreline flood hazard and is subject to mitigation measures. Certain forms of development are prohibited. The flood hazard within NPCA's regulated areas shall be mitigated prior to development approval.

5.1.3.3 100-Year Flood Level

The 100-year flood level is the sum of the mean lake level and storm surge with a combined probability of a 100-year return period (i.e., on average, has a 1 percent probability of occurring in any given year or on average once in 100 years).

5.1.3.4 100-Year Flood Levels for Lake Erie

The 100 Year Flood levels for Lake Erie are illustrated in **Table 5.1** below (figures derived from Lake Erie Shoreline Management Plan, 2010):

Table 5.1: 100 Year Flood Levels for Lake Erie		
Location	100 Year Flood Elevation (m GSC)	Floodproofing Elevation (m GSC)
• Sector E-21 Mohawk Point (SMP reaches 1-1 and 1-2)	176.7	177.0
• Sector E-22 Port Colborne (SMP reaches 2-1 to 7-4)	176.8	177.3
• Sector E-23 Port Abino (SMP reaches 7-4 and 7-9)	176.9	177.3

Table 5.1: 100 Year Flood Levels for Lake Erie

Location	100 Year Flood Elevation (m GSC)	Floodproofing Elevation (m GSC)
<ul style="list-style-type: none"> Sector E-24 Crystal Beach (SMP reaches 8-1 and 9-3) 	177.0	177.4
<ul style="list-style-type: none"> Sector E-25 Fort Erie (SMP reaches 10-1 and 10-10) 	177.1	177.6

5.1.3.5 100-Year Flood Levels for Lake Ontario

The 100 Year Flood levels for Lake Ontario are illustrated in **Table 5.2** below (figures derived from Lake Ontario Shoreline Management Plan, 2009):

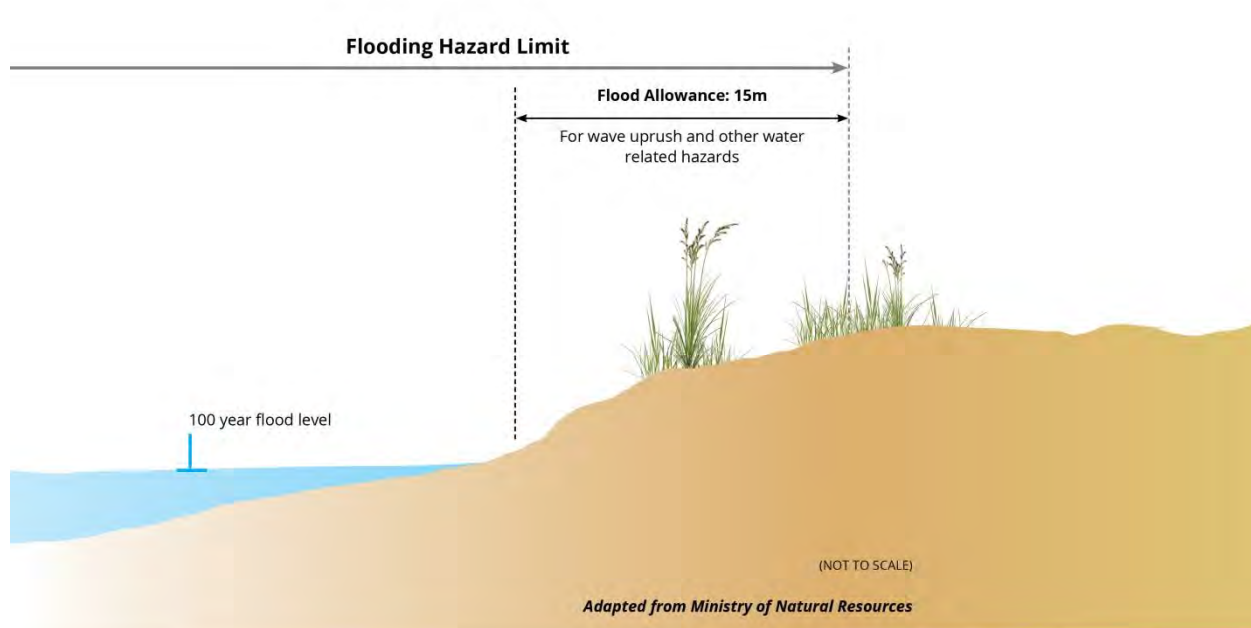
Table 5.2: 100 Year Flood Levels for Lake Ontario

Location	100 Year Flood Level (metres GSC)	Floodproofing Elevation (m GSC)
<ul style="list-style-type: none"> Fifty Point to Port Weller, reaches 0 to 36 	76.01	76.50
<ul style="list-style-type: none"> Port Weller to Mississauga Point , reaches 37 to 58 	76.15	76.62

5.1.3.6 Flood Hazard Area along the Great Lakes Shoreline

The shoreline policies restrict (except as permitted in accordance with the policies of this document) development within the flooding hazard. The flooding hazard limit considers the cumulative impact of the 100-year flood level, wave uprush and other water related hazards. Specifically, the flooding hazard combines the 100-year flood level (i.e., static water level, storm surge, and wind setup), and a flood allowance for wave uprush and other water related hazards. In the absence of a site-specific wave uprush assessment, a 15 m horizontal setback shall be applied as a conservative estimate of wave uprush. A reduction to this setback shall only be considered if an engineering analysis (completed by the applicant and approved by the NPCA) justifies the reduction. **Figure 5.2** illustrates the shoreline flood hazard.

Figure 5.2: Great Lakes Shoreline Flooding Hazard



5.1.3.7 Wave Action and Wave Uprush

Winds can drive water farther inland. The extent of the wave uprush can be influenced by a range of site-specific factors, such as the presence of shore protection works or other structures. For planning purposes, the generic allowance for wave uprush is 15 metres to be measured horizontally from the 100 year flood level. However, given the potential variability along the shorelines, a site-specific analysis completed by a qualified engineer may be required to determine the appropriate wave uprush allowance on a specific site.

5.1.4 Great Lakes and Niagara River Erosion Hazard

5.1.4.1 Approach to Erosion Hazards along the Great Lakes

In general, development is restricted within the erosion hazard and is subject to mitigation measures prior to development approval. Certain forms of development are prohibited.

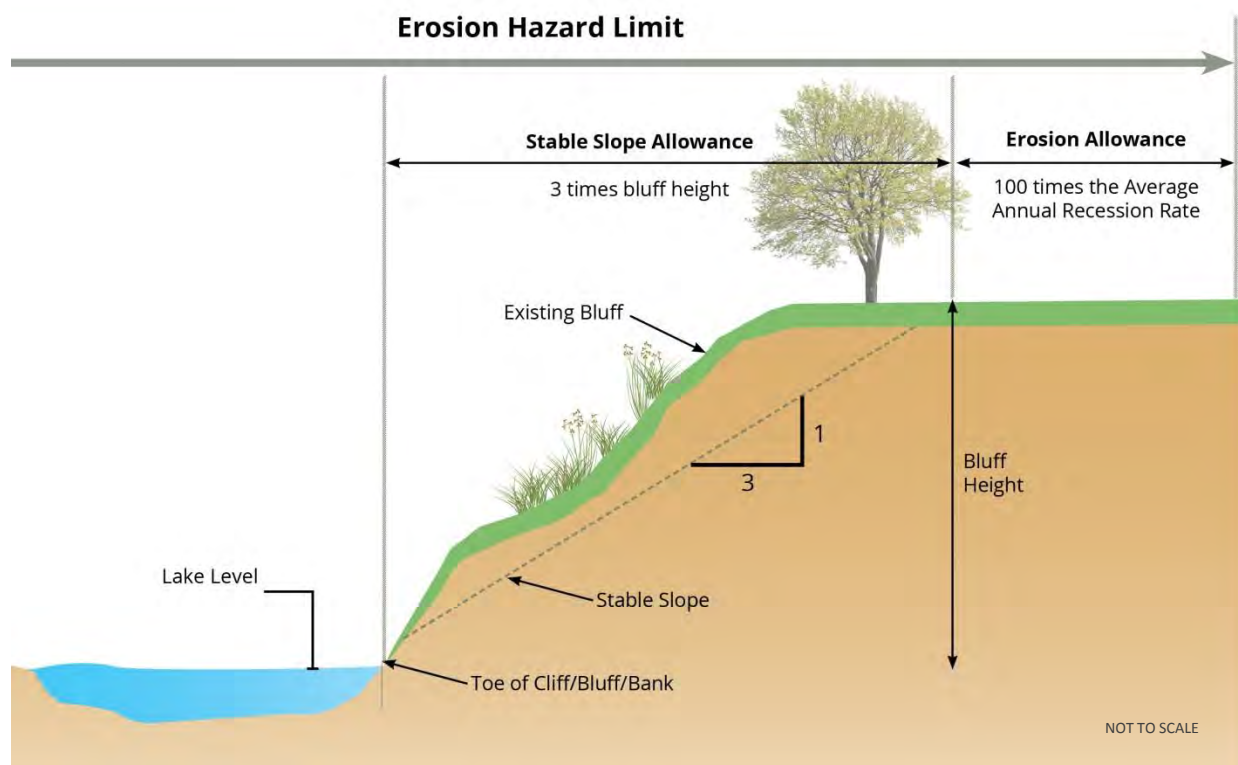
5.1.4.2 Erosion Allowance and Slope Stability Allowance

Shoreline lands along the Great Lakes shoreline and at the mouth of the Niagara River are the lands that are subject to erosion and in some cases, slope stability issues. Erosion is the loss of soil/rock at the ground surface, while slope failure consists of large masses of soil/rock sliding along a planer surface. The erosion hazard is determined by the sum of the following elements:

- a. Erosion allowance; and,
- b. Stable slope allowance.

Figure 5.3 illustrates the Great Lakes shoreline erosion hazard.

Figure 5.3: Great Lakes Shoreline Erosion Hazard



5.1.4.3 *Erosion Allowance*

The erosion allowance varies along the shoreline based on the annual recession rate and the presence of shore protection. The erosion allowance, measured from the limits of the stable slope allowance, shall be calculated based on the recession rate times 100 years. If shore protection exists, the erosion allowance can be reduced by the approximate remaining functional life of the shore protection.

5.1.4.4 *Stable Slope Allowance*

The stable slope allowance along the Great Lakes shoreline is 3:1 (horizontal to vertical) in the absence of a site specific geotechnical study.

5.1.4.5 *Technical Studies*

Technical studies undertaken by a qualified coastal engineer and/or geotechnical engineer may be required to determine the exact extents of the of the shoreline erosion hazard limits.

5.1.5 Great Lakes Dynamic Beach Hazard

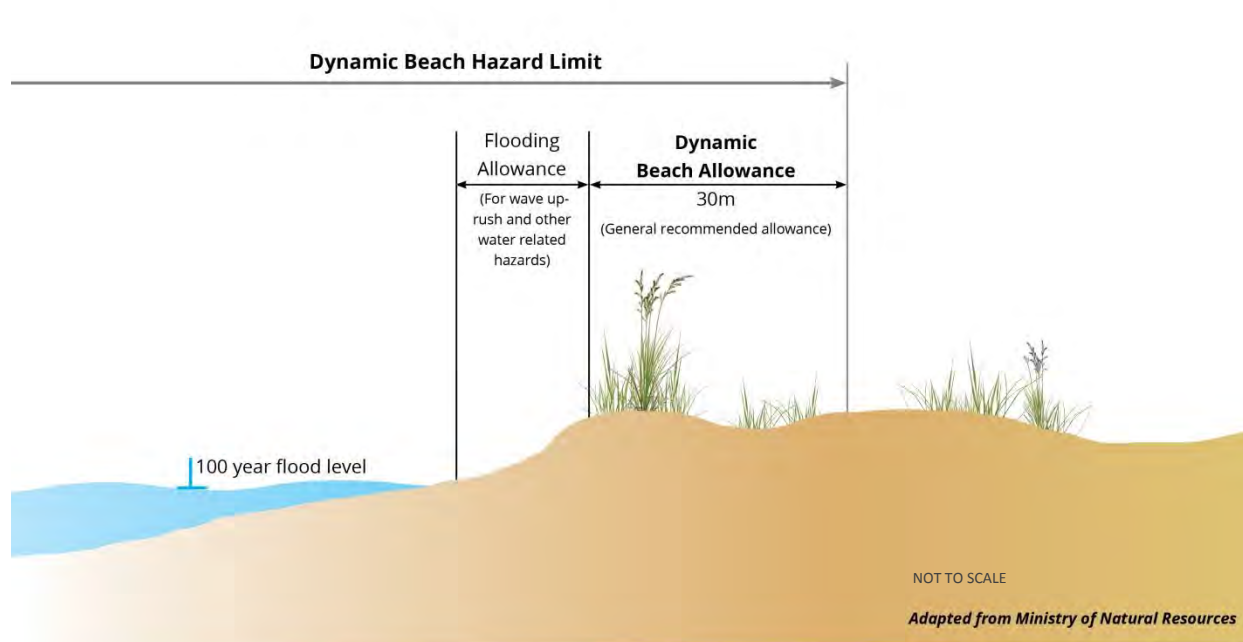
5.1.5.1 *Approach to Dynamic Beach Hazard*

The dynamic beach hazard is the area of unstable accumulation of shoreline sediments along the Great Lakes. The dynamic beach hazard within NPCA's regulated areas shall be mitigated prior to development approval. There are 23 dynamic beaches along the shores of Lake Erie and 10 located along the shores of Lake Ontario. In general, development is restricted within dynamic beach hazard and is subject to mitigation measures, including non-structural and structural protection measures (refer to the current Lake Erie and Lake Ontario Shoreline Management Plans, as amended from time to time). Certain forms of development are prohibited.

5.1.5.2 *Defining the Hazard*

A dynamic beach is defined where the beach deposit is at least 30 cm in thickness, 10 metres in width and 100 metres in length based on provincial standards. The generic setback for development along the Great Lakes shoreline should be 30 metres from the limits of the shoreline flood hazard (**Figure 5.4**). A site-specific analysis completed by a qualified engineer may be completed to determine the extent of the dynamic beach hazard.

Figure 5.4: Dynamic Beach Hazard



5.2 POLICIES FOR PLANNING AND REGULATING SHORELINE HAZARDS

5.2.1 Objectives

The objectives for the shoreline hazard policies are to:

- Prevent loss of life and minimize potential for property damage and social disruption;
- Reduce the potential for incurring public costs associated with the impacts of shoreline hazards;
- Manage existing risks and reduce the potential for future risks;
- Promote the conservation of land and a co-ordinated approach to the management of the shoreline; and,
- Reduce the potential for adverse impacts, including pollution, on the ecological function of shorelines.

5.2.2 Development within the Shoreline Hazard Area

Development shall not be permitted within the limits of the Great Lakes shorelines hazard area, unless otherwise permitted in the policies of this section.

5.2.3 Prohibited Uses

Notwithstanding the policies of this section, the following uses are prohibited within the Great Lakes shoreline hazard area:

- a) Sensitive uses, such as hospitals, nursing homes, day-cares/pre-schools and schools;
- b) Emergency services facilities;
- c) Uses associated with the disposal, treatment, manufacturing/processing or storage of hazardous substances;
- d) Any other use or development deemed to be inappropriate based on the objectives stated in 5.2.1.

5.2.4 Repairs, Maintenance and Interior Alterations to Existing Buildings and Structures

Repairs and maintenance, including interior alteration to existing buildings and structures within the flood hazard, dynamic beach hazard, the stable slope allowance and the erosion allowance are permitted. The NPCA will advise the applicant of the potential risks associated with the site, including any potential risks related to flooding, slope failure and erosion. Replacement of a roof or exterior siding is also permitted.

5.2.5 New Habitable Buildings and Additions

5.2.5.1 *New Habitable Building and Ground Floor Additions*

New habitable buildings/structures, including redevelopment and ground floor additions:

- a) Are not permitted within the stable slope allowance or the dynamic beach hazard.
- b) May be permitted within the flooding hazard provided:
 - i. Means are provided to mitigate the wave uprush hazard (i.e. shutters installed on windows).
 - ii. Means are provided to mitigate the 100 year flood hazard (i.e. no openings are constructed within the structure below the regulatory 100 year flood elevation).

- iii. The NPCA is satisfied that no practical alternative exists to locate the proposed structure outside of the flooding hazard.
- c) May be permitted within the erosion allowance provided:
 - i. It meets the requirements of the shore protection work standard to the maximum extent and level possible based on site-specific conditions;
 - ii. It utilizes maximum lot depth and width;
 - iii. Uses a setback from the stable slope allowance of 7.5 metres. At the discretion of the NPCA, any setback that is proposed to be less than 7.5 metres may be required to be supported by a geotechnical report.
 - iv. The NPCA is satisfied that no practical alternative exists to locate the proposed structure outside of the erosion hazard.

5.2.5.2 Additional Storeys

Proposals for additional storeys to existing development located within the shoreline flood hazard and/or the erosion allowance may be permitted provided:

- a) The proposed addition does not result in any increased risks associated with shoreline hazards;
- b) No new dwelling units are created as a result of the addition;
- c) Other proposed improvements required to accommodate additional storeys, such as a replacement to an existing septic system, comply with the policies of this document.

5.2.6 Replacement and Relocation of Existing Habitable Buildings

The following policies apply to the replacement or relocation of existing habitable buildings including those structures where the ground floor area is proposed to be expanded:

- a) Buildings destroyed by flood and/or erosion forces will not be permitted to be reconstructed at the same location unless it can be conclusively demonstrated that the Great Lakes Hazards can be adequately mitigated to the satisfaction of the NPCA.
- b) Buildings destroyed by forces other than flood and erosion may be reconstructed/relocated within the erosion allowance provided:
 - i. Adequate shore protection is in place;
 - ii. Uses a setback from the stable slope allowance of 7.5 metres. At the discretion of the NPCA, any setback that is proposed to be less than 7.5m may be required to be supported by a geotechnical report.

- iii. The NPCA is satisfied that no practical alternative exists to locate the proposed structure outside of the erosion hazard; and,
- iv. The proposed development meets all other relevant policies of this Document.
- c) Buildings destroyed by forces other than flood and erosion may be reconstructed/relocated within the stable slope allowance provided:
 - i. The building/structure is of the same use, the same size or smaller than the original building/structure and contains the same number of dwelling units;
 - ii. The NPCA is satisfied that no practical alternative exists to locate the proposed structure outside of the stable slope allowance;
 - iii. Adequate shore protection is in place;
 - iv. A supporting geotechnical report is provided indicating that the proposed development will not be negatively impacted by the adjacent slope; and,
 - v. The proposed development meets all other relevant policies of this Document.
- d) Buildings destroyed by forces other than flood and erosion may be reconstructed/relocated within the Dynamic Beach Hazard provided:
 - i. the proposed building/structure is of the same use, the same size or smaller than the original building/structure that was destroyed and contains the same number of dwelling units;
 - ii. the design minimizes impact on the dynamic beach (to the satisfaction of the NPCA);
 - iii. the NPCA is satisfied that no practical alternative exists to locate the proposed structure outside of the dynamic beach hazard; and,
 - iv. The proposed development meets all other relevant policies of this Document.

5.2.7 Non-Habitable Major Structures

The following policies apply to non-habitable structures greater than 10 m²:

- a) Major structures are not permitted within the stable slope allowance or the dynamic beach hazard.
- b) Major structures may be permitted within the flooding hazard provided it incorporates flood-proofing to the full flood protection standard.
- c) Major structures may be permitted within the erosion allowance provided:
 - i. Adequate shore protection exists;
 - ii. It utilizes the maximum lot depth and width; and,
 - iii. Uses a setback from the stable slope allowance of 7.5 metres. At the discretion of the NPCA, any setback that is proposed to be less than 7.5 metres may be required to be supported by a geotechnical report.

5.2.8 Decks and Non-Habitable Minor Structures

The following policies apply to decks (which are not enclosed) and non-habitable structures less than 10 m²:

- a) Minor structures are not permitted within the stable slope allowance or the dynamic beach hazard.
- b) Minor structures may be permitted within the flooding hazard provided safety concerns due to flood hazards are addressed.
- c) Minor structures may be permitted within the erosion allowance provided:
 - i. Adequate shore protection exists; and,
 - ii. The location of the structure does not obstruct maintenance access to and along existing shoreline protection works.

5.2.9 Swimming Pools

Swimming pools are not permitted within the shoreline flooding hazard, stable slope allowance or dynamic beach hazard. Swimming pools may be permitted within the shoreline erosion allowance provided:

- a) Adequate shore protection exists;
- b) Uses a setback from the stable slope allowance of 7.5 metres. At the discretion of the NPCA, any setback that is proposed to be less than 7.5 metres may be required to be supported by geotechnical report.
- c) Drainage impacts are addressed; and,
- d) The location of the pool does not obstruct maintenance access to and along existing shoreline protection works.

5.2.10 Boardwalks and Other Structures

The following policies apply to boardwalks and other structures:

- a) Boardwalks are not permitted within the dynamic beach hazard, except as dune cross-overs at selected points.
- b) Boardwalks are not permitted along the shore within the stable slope allowance. Only perpendicular access to the shoreline is permitted.
- c) Boardwalks may be permitted within the flooding hazard provided safety concerns due to flood hazards are addressed.
- d) Boardwalks may be permitted within the erosion allowance provided the structure is not at risk to erosion hazard for 10 years (3 metres).

- e) Buildings or structures which, by the nature of their use, are located in close proximity to water, such as docks and boathouses, may be permitted within the shoreline hazard area. Detailed site specific evaluations with respect to erosion, flooding and dynamic beach hazards will be required to permit development.

5.2.11 Septic Systems (Great Lakes Shoreline Hazard)

New septic systems are not permitted within the shoreline hazard area. The replacement of septic systems which are associated with an existing use may be permitted within the shoreline hazard area if it has been demonstrated to the satisfaction of the NPCA and the municipal approval authority under the Ontario Building Code, that the control of flooding, erosion, pollution, dynamic beaches or the conservation of land will not be increased. Where feasible, the location of the replacement septic system shall be located outside of the shoreline hazard area or the shoreline hazard shall be mitigated.

5.2.12 Ecosystems Approach to Shoreline Protection Works

Shoreline protection works are generally defined as a combination of structural works with landform modifications designed, and constructed, to address the impacts of flooding and other water related hazards and to arrest the landward retreat of shorelines subject to erosion. The shoreline zone is characterized by a complex interaction of short-term and long-term water level variations, waves and currents, morphology, sediments and protection structures. An ecosystem approach which considers ecological function and features should be incorporated to ensure that the conservation of land is taken into consideration when designing shoreline treatment. Shoreline protection works should consider natural coastal processes and be effective against long-term erosion, preserve cobble/shingle beaches, protect/regenerate aquatic and terrestrial habitat, and not negatively impact neighbouring shoreline.

There may be circumstances when ecological considerations may require either specialized shore protection methods or consideration for zones of no shoreline protection to allow for natural processes to occur (ecological function). Many species (including some that are species at risk) depend on changing dynamic beach processes and shoreline protection alternatives which allow for these beach processes to continue should be considered.

Where possible, proposed shoreline protection works shall conform to the recommendations of the Lake Erie and Lake Ontario Shoreline Management Plans, as amended from time to time.

5.2.13 Shoreline Protection Works

The design and installation of the protection works should be such that access to the shoreline protection works by heavy machinery for regular maintenance purposes and/or to repair the protection works, should failure occur, should not be prevented. The shoreline policy requires a minimum 5 metre wide access to, and along, the shoreline protection works. The following outlines the requirements for applicants proposing shoreline protection works:

- a) The purpose or objective of the proposed works must be clearly defined;
- b) The shoreline works must be designed according to accepted scientific coastal engineering principles, and shall conform to the recommendations of the appropriate Shoreline Management Plans;
- c) The works may be required to be designed and the installation supervised by a professional engineer with experience and qualifications in coastal engineering;
- d) Slope stability may be required to be assessed by a professional geotechnical engineer;
- e) The ownership of land, where the protection works are proposed, must be clearly established by the applicant;
- f) Where the applicant does not own the land, written permission shall be obtained from the landowner (be it a private citizen, corporation, municipality of the Crown) allowing for the construction of the proposed shore protection;
- g) The design and installation of protection works must allow for a 5.0m wide access corridor to and along the protection works for equipment and machinery in order to undertake maintenance and repair of the protection works should failure occur (where shore protection works are shared across properties, a shared access route may be provided);
- h) The protection works should address and consider the conservation of land;
- i) The works should not aggravate existing hazards and/or create new hazards at updrift or downdrift properties;
- j) In areas of existing development, protection works should be coordinated with adjacent properties; and,
- k) All works should be located above the 80th percentile of the High Water Mark as defined by Fisheries and Oceans Canada: Lake Erie 174.62m and Lake Ontario 75.32m (IGLD 1985).

5.2.14 Changes in Use

When commenting on applications for a change in land use which is within the shoreline hazard area, the NPCA will consider the following:

- a) Potential for increased risks associated with shoreline hazards, including flooding, erosion and dynamic beaches;
- b) Potential opportunities for mitigation of shoreline hazards;
- c) Potential for adverse impacts related to the conservation of land and ecological functions;
- d) Potential for adverse impacts associated with pollution; and,
- e) Other relevant aspects based on the site specifics.



6.0 VALLEYLAND EROSION HAZARD

6.1 WHAT ARE VALLEYLAND EROSION HAZARDS?

6.1.1 Valleys

Valleys are depressional features associated with a river or stream, which may or may not contain a watercourse. Where a watercourse is present, the watercourse may be either permanent or intermittent. The boundaries of a valley are defined by the primary top of bank on each side of the landform depression.

The valleyland resources within the NPCA jurisdiction can be categorized by - steep 'V' shaped valleys and broad 'U' shaped stream corridors. Generally, the steep valley systems are found north of the Niagara Escarpment in the western portions of Niagara-on-the-Lake and St. Catharines, as well as the eastern portion of the Town of Lincoln. The broader stream corridors

are found south of the Escarpment, in Fort Erie, Port Colborne and Wainfleet and Haldimand County.

6.1.2 Valleyland Erosion Hazard

6.1.2.1 *Erosion Hazard*

Erosion hazard refers to the loss of land, due to human or natural processes, that poses a threat to life and property. The erosion hazard limit is determined using considerations that include the 100 year erosion rate (the average annual rate of recession extended over a one hundred year time span), an allowance for slope stability, and an erosion/erosion access allowance. (PPS, 2014). The erosion hazard limit includes two different elements: erosion; and slope stability.

6.1.2.2 *Erosion*

Erosion means the process of gradual washing away of soil by water movement or seepage which may occur in one of the following ways:

- a) Rainfall or snowmelt and surface runoff (sheet, rill or gully erosion);
- b) Internal seepage and piping;
- c) Water flow (banks or base of river, creek, channel); and
- d) Wave Action (shorelines of ponds, lakes and bays)

Erosion impacts soil at the particle level by dislodging and removing the particles from the parent mass (with water being the transporting agent). Wind and frost may also weather and transport soil particles.

6.1.2.3 *Slope Instability*

Slope instability is the sudden movement or sliding of a large mass of soil over a failure plane. Slope instability can occur in many ways, such as:

- a) Changes in slope configuration, such as steepness or inclination;
- b) Increases in loading on or near the slope, such as structures or filling;
- c) Changes in groundwater conditions or soil drainage (e.g. heavy rainfall, spring melt, drainage blocked by filling, broken watermain, etc.);
- d) Loss of vegetation cover and root systems; and,
- e) Slope erosion (MNR Technical Guide, River and Stream Systems: Erosion Hazard Limit, 2002).

Certain valleys in Niagara have, in recent years, exhibited slope failure problems. These problems have been aggravated by historical development situated in very close proximity to, or on, the top of valley slopes. This situation, in combination with varied soil characteristics, groundwater hydraulics/movement and historical fill placement (for example), has created damaging and dangerous situations. The Twenty Mile Creek Valley in Lincoln and the Twelve Mile Creek Valley in St. Catharines are two such areas. Historic development patterns have created situations where homes and businesses are now experiencing great risk of major damages due to slope instability problems. Solving these types of problems through 'structural' means can be cost prohibitive and may also negatively impact the ecological integrity of the valley system. As a result, a comprehensive 'non-structural' approach to deal effectively with development in these situations is of great importance.





6.1.3 The Ecological Importance of Valleylands

It is also important to recognize that valleylands have important ecological functions. Some valleylands connect natural areas over large distances, providing corridors for terrestrial, aquatic and avian species. Valleylands can also promote biodiversity, as they have the ability to support a diverse range of habitats resulting from microclimate variations. Accordingly, the policy framework for regulating development in and near valleylands considers aspects related to the erosion hazard and also potential for adverse impacts on ecological features and functions associated with the valleyland (in these instances, the policies refer to the conservation of land).

6.1.4 Defining the Valleyland Erosion Hazard

6.1.4.1 *Regulated Valleylands*

The policies of this Document apply to erosion hazards associated with apparent valleys where the bank height is equal to or greater than 3 metres in height (approximately 10 feet), the slope is steeper than 3 (horizontal) to 1 (vertical), and includes adjacent lands.

6.1.4.2 *Physical Top of Slope*

The physical top of slope is defined as the evident transition point between the plateau lands and the face of the slope. Where the physical top of slope is required to be established, site inspections with the applicant and Authority staff are to be undertaken. The NPCA approved physical top of slope shall be marked in the field. The applicant will then submit drawings indicating the surveyed location of the 'NPCA approved' physical top of slope for NPCA review and approval.

6.1.4.3 *Stable Top of Slope*

The physical top of slope and the stable top of slope may be coincident. However, in some cases, due to specific on-site conditions (such as slope inclination, proximity of the watercourse to the toe of slope, soil conditions, erosion, etc.) the stable top of slope may not be located at the physical top of slope, but rather may be located landward from the physical top of slope.

The stable top of slope is to be established by a professional geotechnical engineer utilizing the guidelines and manuals outlined in chapter 12, to the satisfaction of NPCA staff. Where no geotechnical assessment has been undertaken, the stable top of slope is based on a line projected upwards from the base of the slope at a 3:1 (horizontal to vertical) angle. In addition to the requirements outlined in Section 12, the geotechnical assessment must take into consideration, and make recommendations pertaining to: construction equipment/access; limit of work area; vegetation protection; sediment and erosion controls; drainage; etc.

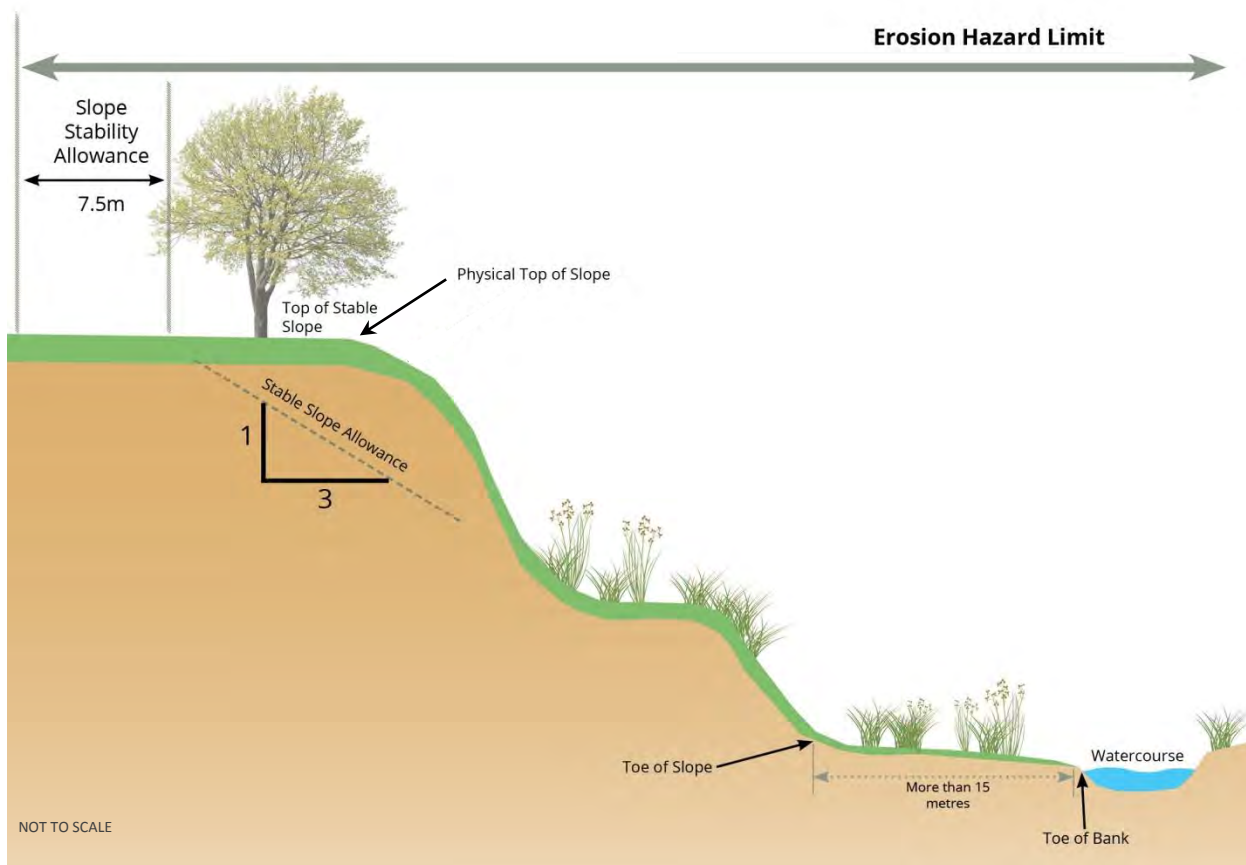
6.1.4.4 *Defining the Erosion Hazard*

The erosion hazard shall be the sum of the following elements (**Figure 6.1**):

- a) The location of the stable top of slope or the physical top of slope, whichever is determined to be further landward on the plateau;
- b) A slope stability allowance of 7.5 metres from the most landward location of either of the stable top of slope or the physical top of slope; and,

- c) The toe erosion allowance, where a watercourse is located less than 15 metres from the toe of slope.

Figure 6.1: Valleyland Erosion Hazard



6.1.4.5 Stable Slopes

Stable slopes are slopes which have been previously defined as such through geotechnical investigation or have been confirmed to be stable through a field investigation and do not reveal evidence of any of the following:

- a) Bare slopes absent of any vegetation;
- b) Outward tilting of trees;
- c) Toe erosion at the base of the slope;

- d) Slumping, gullyng or other visible erosion processes;
- e) The addition of fill material;
- f) Containing an easily eroding soil type (i.e. Short Hills area of Pelham contains soil types which are highly erodible and easily susceptible to gully erosion); or,
- g) Where the angle of the slope is gentler than 3(horizontal):1 (vertical).

In the absence of a previous geotechnical investigation and despite the presence of the above noted conditions, depending on the scope, nature, and location of the proposed development, the NPCA may still require that a geotechnical investigation be undertaken to confirm the location of the stable top of slope.

6.1.4.6 *Unstable Slopes*

Unstable slopes are slope which have evidence of any of the following:

- a) Bare slopes absent of any vegetation;
- b) Outward tilting of trees;
- c) Toe erosion at the base of the slope;
- d) Slumping, gullyng or other visibly erosion processes;
- e) The addition of fill material;
- f) The presence of a watercourse within 15 metres of the toe of slope;
- g) Containing an easily eroding soil type (i.e. Short Hills area of Pelham contains soil types which are highly erodible and easily susceptible to gully erosion); or,
- h) Where the angle of the slope is steeper than 3(horizontal):1 (vertical).

Unstable slopes shall require a geotechnical investigation to determine the extent of the erosion hazard and determine appropriate development setbacks.

6.1.4.7 *Toe Erosion Allowance*

A toe erosion allowance may be required where a watercourse is located less than 15 metres from the toe of a slope to address the potential for erosion along the bank of the watercourse which may increase the risk of slumping and slope failure. The toe erosion allowance shall be defined as one of the following:

- a) The average annual recession rate, based on 25 years of data to determine the toe erosion allowance over a 100 year period;
- b) A 15 metre toe erosion allowance to be measured inland horizontally and perpendicular to the top of the watercourse slope;

- c) Toe erosion allowance based on a geotechnical study completed by a qualified professional engineer; or,
- d) Toe erosion allowance based on soil types and hydraulic processes as illustrated in **Table 6.1** (from MNR Technical Guide, River and Stream Systems: Erosion Hazard Limit).

Table 6.1: Minimum Toe Erosion Allowance, Where a Watercourse is Less than 15 metre from the Toe of Slope

Type of Material (native soil structure)	Evidence of Active Erosion or where the bankfull flow is greater than competent flow velocity	No Evidence of Active Erosion		
		Bankfull Width		
		< 5m	5-30m	>30 m
Hard Rock (e.g. granite)	0-2m	0m	0m	1m
Soft Rock (e.g. shale, limestone), cobbles, boulders	2-5m	0m	1m	2m
Clays, clay-silt, gravels	5-8m	1m	2m	4m
Sand, silt	8-15m	1-2m	5m	7m

6.1.4.8 Geotechnical Study

The NPCA may request that the applicant undertake a geotechnical study, completed by a qualified professional geotechnical engineer, to confirm the location of the top of stable slope and/or the potential for slope failure on lands which have evidence of unstable slopes. The results of the geotechnical study shall define the extent of the erosion hazard, taking into account the specific site characteristics and the nature of the proposed development. Geotechnical studies should be based on the MNR's Technical Guide for River and Stream Systems: Erosion Hazard Limit (2002) and must demonstrate that there is no increased risk to life or property. An appropriate factor of safety should be incorporated into all designs/analysis based on the consequences or risks to land use or life in the event of slope failure. The recommended minimum factors of safety are provided in **Table 6.2** (from the MNR's Technical Guide).

The NPCA reserves the right to have any and all studies peer reviewed at the expense of the applicant. The NPCA also reserves the right to have studies updated where the time of the report is considered to be out-dated.

Table 6.2: Design Minimum Factors of Safety

Land Use	Design Minimum Factor of Safety
PASSIVE; no buildings near slope; farm field, bush, forest, timberland, woods, wasteland, badlands, tundra	<ul style="list-style-type: none"> • 1.10
LIGHT; no habitable structures near slope; recreational parks, golf courses, buried small utilities, tile beds, barns, garages, swimming pools, sheds, satellite dishes, dog houses	<ul style="list-style-type: none"> • 1.20 to 1.30
ACTIVE; habitable or occupied structures near slope; residential, commercial, and industrial buildings, retaining walls, storage/warehousing of non-hazardous substances	<ul style="list-style-type: none"> • 1.30 to 1.50
INFRASTRUCTURE and PUBLIC USE; public use structures or buildings (i.e., hospitals, schools, stadiums), cemeteries, bridges, high voltage power transmission lines, towers, storage/warehousing of hazardous materials, waste management areas	<ul style="list-style-type: none"> • 1.40 to 1.50

Source: Technical Guide - River and Stream Systems: Erosion Hazard Limit 2002, Ontario Ministry of Natural Resources

6.2 POLICIES FOR PLANNING AND REGULATING VALLEYLAND EROSION HAZARDS

6.2.1 Objectives

The objectives of the erosion hazard policies are to:

- a) Prevent the loss of life;
- b) Minimize property damage;
- c) Reduce the potential for incurring public costs associated with the impacts of erosion hazards;
- d) Manage existing risks and reduce the potential for future risks;
- e) Promote the conservation of land through the protection from adverse impacts on ecological features and functions of valleylands.

6.2.2 Permitted Uses

Generally, development within valleyland erosion hazard limits shall not be permitted, except in accordance with the policies of this Document. Notwithstanding the limitations on development, the following forms of development may be permitted at discretion of the NPCA:

- a) Structures associated with erosion and sediment control, as well as any flood protection works;
- b) Infrastructure approved through an environmental assessment process may be permitted where it has been demonstrated that the control of erosion, flooding, pollution and the conservation of land will not be affected or can be mitigated;
- c) Minor removal (less than 25 m³) and placement of fill and site grading within the erosion hazard (but not below the physical top of slope) may be permitted where it has been demonstrated to the satisfaction of the NPCA that the control of erosion, flooding, pollution and conservation of land will not be affected; and,
- d) Development associated with existing uses located within the erosion hazard area in accordance with policy 6.2.4.
- e) Passive public recreational uses, such as trails and pathways, as well as any associated structures, such as steps, staircases and lookouts in accordance with policy 6.2.6.

6.2.3 Prohibited Uses

Notwithstanding the policies of this section, the following uses are prohibited within the erosion hazard area:

- a) Sensitive uses, such as hospitals, nursing homes, day-cares/pre-schools and schools;
- b) Emergency services facilities;
- c) Uses associated with the disposal, treatment, manufacturing/processing or storage of hazardous substances;
- d) Any other use or development deemed to be inappropriate based on the objectives stated in 6.2.2.

6.2.4 Existing Development, Additions and Replacement Structures

6.2.4.1 *Existing Development Located within 15 metres of the Stable Top of Slope*

Replacements of existing buildings and structures, as well as additions to existing buildings and structures may be permitted where they exist within 15 metres of the stable top of slope. In this circumstance, the following policies will apply:

- a) the replacement or addition shall not encroach any closer to the stable top of slope than the existing development at its closest point;
- b) even if existing development is closer than 7.5 metres to the stable top of slope, no new development is permitted within 7.5 metres of the stable top of slope in order to provide for an erosion access allowance as per the Provincial Policy Statement;
- c) a geotechnical assessment by a qualified engineer (at the expense of the applicant), may be required to determine the location of the stable top of slope and to determine if the proposed development would have a negative impact on slope stability; and,
- d) In cases where the building or structure can be reasonably relocated outside of the setback the applicant will be encouraged to do so.

6.2.4.2 *Existing Lots of Record*

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

A reduction in this setback will only be considered in cases of unusual circumstances where an existing lot of record contains insufficient depth to accommodate required setbacks and a geotechnical investigation reveals that some infringement within the setback area, together with mitigative measures can be accommodated on-site while maintaining bank stability and will result in no adverse long term environmental impacts. In no case shall the setback reduction be such that development is allowed beyond the physical top of slope. In this circumstance, the setback shall be no less than 3 metres to allow for access.

6.2.4.3 *Existing Development Located on the Valley Wall and Valley Floor*

In specific cases where buildings, structures or private access roads already exist on a valley wall or valley floor, reconstruction or alteration may be permitted subject to the following:

- a) Best efforts must be undertaken to relocate the existing structure outside of the valley and associated tableland regulation limit;
- b) No increase in the size of building will be permitted for the reconstruction of a structure on the valley wall or valley floor;
- c) Notwithstanding 6.2.4.3.b, a maximum addition of 28 square metres may be permitted, subject to meeting 6.2.4.3.d-i;
- d) A qualified professional must complete a geotechnical study to determine the risk of the proposed work. The study will include an assessment of the stability of the valley wall, rate of erosion or recession of the valley wall, access issues and an assessment of the construction technique on the valley wall. The design of any works must ensure that the long-term stability of the valley wall is maintained and that no risk to life or property damage is anticipated;
- e) There is no change in land use and no increase in the number of dwelling units;
- f) Adequate existing safe ingress and egress exists;
- g) The proposed development does not result in a need to increase the size or location of a private subsurface sewage disposal system;
- h) No adverse environmental impacts to existing ecological features and functions and the conservation of land is maintained; and,
- i) There is no increase in risk associated with the five tests under the Conservation Authorities Act.

6.2.5 New Development

6.2.5.1 *Erosion Access Allowance*

A minimum setback of 7.5 metres (25 feet) from the NPCA approved physical top of slope (surveyed by the applicant in accordance with the policies of this document) or the location of the Stable Top of Slope (whichever is furthest landward) shall be required, to ensure perpetual stability of the slope and for the purposes of conservation of land, for all development including swimming pools, subsurface sewage disposal system and the placement of fill. The valley shall be maintained in a natural state and there shall be no disturbance of grades or vegetation below the physical top of slope or within the 7.5m setback.

6.2.5.2 *Lot Creation Guidance*

For newly created lots through plan of subdivision or NPCA approved consent applications which are being developed in greenfield or brownfield situations, the rear lot lines or side lot lines (as the case may be) should be set back 7.5m from the NPCA approved physical top of slope or the location of the stable top of slope (whichever is furthest landward). The NPCA will consult with the local municipality in "infilling" situations to discuss site specific constraints which may necessitate a lesser setback, including but not limited to:

- a) Location of development (within urban area/part of an intensification corridor);
- b) Finding and recommendations of a geotechnical study; and,
- c) A minimum 3 metre access for maintenance purposes.

6.2.6 Passive Recreational Uses within Valleyland Erosion Hazard

It is recognized that certain forms of passive recreational uses can be appropriate for public within a valleyland setting. Passive recreational development applications within or adjacent to erosion hazard limits and valleylands will be considered subject to the following criteria:

- a) There are no adverse impacts on ecological features or functions;
- b) No new buildings or structures are located within the erosion hazard limits, apart from those exceptions noted in item c below;
- c) All new development is set back from stable top of slope or toe of slope in accordance with the policies of this section, apart from access routes and lookouts; and,
- d) Proposed access routes and lookouts may require a supporting geotechnical investigation to be undertaken; and,
- e) A re-vegetation plan is submitted for review and approved by the NPCA, demonstrating that there is no net loss of natural vegetation.

6.2.7 Overland Drainage

Overland drainage shall be directed away from valley slopes. Where this is not possible, means shall be provided to convert concentrated flows (i.e. from downspouts and swales) into sheet flow prior to discharge over the physical top of slope. Swimming pool drainage and backwash water shall be prohibited from being discharged over the physical top of slope.

6.2.8 Fencing

In order to prevent encroachment into valleylands past the surveyed physical top of slope, a permanent 1.8 metre high continuous fence (no gates), as approved by the Conservation

Authority, shall be established at the property line (between the development and publicly owned land) by the proponent of development prior to construction. Where applicable, the height of the fence may be less than 1.8 metres where a local municipal by-law provides an alternative standard. Bollards, or similar markers to delineate property lines, may be used to identify a top of bank when the establishment of a fence will result in the removal of an inordinate amount of vegetation.

6.2.9 Valleyland Policy Direction for Official Plans and Zoning By-Laws

Local municipalities are encouraged to zone all valleylands and stream corridors in their zoning by-laws in a manner which recognizes their inherent environmental characteristics and limitations to development and which incorporates a minimum setback from the stable top of slope of 7.5 metres (25 feet). The zoning shall be in conformity with the official plans.

All lands located within the setback area defined above shall be surveyed and zoned in the appropriate "Open Space", "Hazard" or "Greenspace" category. Wherever possible, existing vegetation should be maintained in the setback areas. Any development and site alteration within a setback area will be reviewed and approved by the Conservation Authority. In some situations, enhancement by natural landscaping and additional native planting to create a vegetative buffer area may be required. The native vegetation in the setback area develops an extensive root network which binds and stabilizes the bank and protects it from erosive forces of rainfall and runoff. bioengineering may be used to stabilize erosion prone areas.



7.0 HAZARDOUS SITES

7.1 WHAT ARE HAZARDOUS SITES?

7.1.1 Hazardous Sites and Hazardous Lands

The Provincial Policy Statement defines hazardous sites as lands that could be unsafe for development due to naturally occurring hazards. These may include unstable soils (sensitive marine clays [leda], organic soils) or unstable bedrock (karst topography). The Conservation Authorities Act uses a similar term, referring to hazardous lands, which are lands that are unsafe to development due to naturally occurring processes. Naturally occurring processes includes flooding, erosion, dynamic beaches and unstable soils. In the context of the Conservation Authorities Act, the term hazardous lands is used as a general term, referring to a full range of natural hazards (i.e. flooding, erosion, unstable soils) . Earlier chapters in this document address hazardous lands associated with flooding (Chapter 4), dynamic beaches (Chapter 5), erosion and unstable slopes (Chapter 6). The following chapter provides guidance for hazardous lands

associated with unstable soils, such as sensitive marine clays (leda clays), organic soils and unstable bedrock, such as karst formations (such as sinkholes and caves). The term hazardous site is used in this chapter to refer to naturally occurring hazards associated with unstable soils and unstable bedrock (similar in definition to the term hazardous sites which is used in the PPS to describe a similar feature). This chapter also provides guidance for unstable soils associated with back-dunes areas.

7.1.2 Defining and Assessing Hazardous Site

Hazardous sites are considered to be part of the NPCA's regulated areas. Due to the site specific nature of areas of unstable soil or unstable bedrock, it is difficult to identify these hazards without detailed mapping and studies. The potential for catastrophic failures in some areas of unstable soil and unstable bedrock warrant site specific studies to determine the extent of these hazardous sites, and therefore the appropriate limits of the hazard and regulation limits. The regulated area will be based on the conclusions and recommendations of such studies, to the satisfaction of NPCA. Accordingly, the limits for hazardous lands, such as leda clays, organic soils and karst formations, shall be determined on a site-specific basis according to the Ministry of Natural Resources Technical Guide for Hazardous Sites (1996). The policies of this provide additional context and guidance for two specific types of hazardous sites which are known to existing within the watershed:

- a) Karst formations; and,
- b) Back-dune areas.

7.1.3 Karst Formations

Karst is a landform that develops on or in limestone, dolomite, or gypsum by dissolution and is characterized by the presence of features such as sinkholes, underground (or internal) drainage through solution-enlarged fractures (joints) and caves. Karst formations can be significant geologic hazards. Sudden collapse of an underground opening of a sinkhole can cause surface subsidence that can severely damage overlying structures such as buildings, bridges or highways. Improperly backfilled sinkholes are prone to both gradual and sudden subsidence and similarly threaten overlying structures. Sewage, animal wastes and agricultural, industrial and ice control chemicals entering sinkholes as surface drainage are conducted directly and quickly into the groundwater/surface water systems.

There are at least five known locations within the watershed with Karst formations:

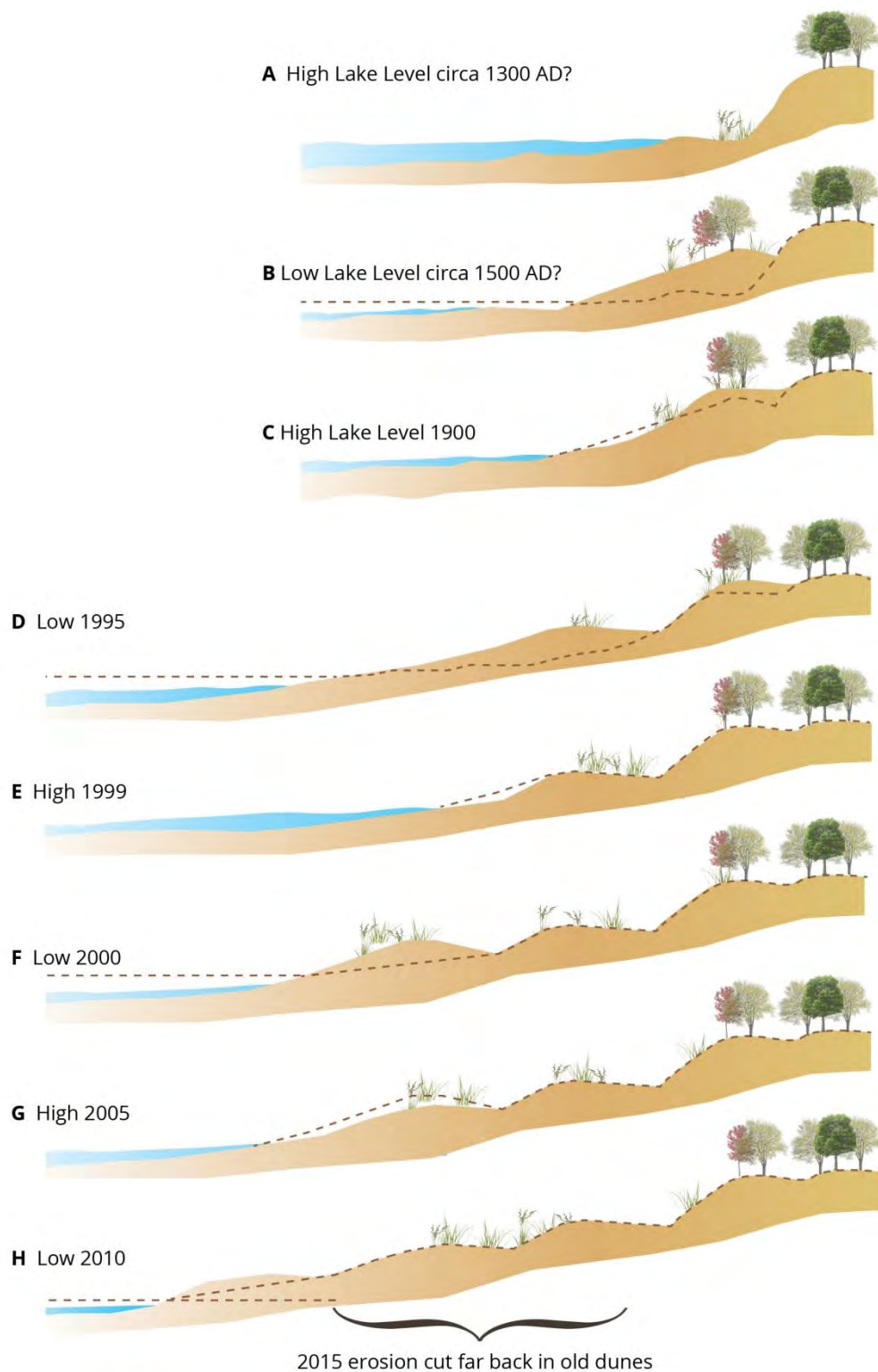
- a) The Stoney Creek "Mountain" Area;

- b) The Smithville Area;
- c) The Gavora Drain and Balls Falls Area in Vineland,
- d) The Brow of the Niagara Escarpment Area; and
- e) The Onondaga Escarpment Area.

(Geologic Hazard Mapping Study, Karst Topography, Phase I, NPCA Watershed Area, Terra Dynamics, 2006)

7.1.4 Back-Dune Areas

There are a number of back-dune areas located in-land from shorelines of Lake Erie and Lake Ontario. Back dune areas are considered to be a natural hazard, as these are locations which may be susceptible to slope failure and erosion, but may not be part of an apparent valleyland or part of the shoreline hazard area (as overtime they receded beyond the extent of the shoreline area). Back dunes form as a result of long term changes of lake levels and a gradual recession of dune areas from the shoreline area. **Figure 7.1** illustrates back-dune formation. The NPCA maintain mapping for back-dune areas and will evaluate the potential risks associated with development on back-dunes on a case by case basis.

Figure 7.1: Back-Dune Formation

Adapted from Olson, J.S., 1958d. Lake Michigan dune development 3: lake-level, beach, and dune oscillations. *J. Geol.* 66, 473 – 483

7.2 POLICIES FOR PLANNING AND REGULATING HAZARDOUS SITES

7.2.1 Objectives

The objectives of the hazardous sites policies are to:

- a) Prevent the loss of life;
- b) Minimize property damage;
- c) Reduce the potential for incurring public cost associated with the impacts of hazardous lands; and,
- d) Manage existing risks and reduce the potential for future risks.

7.2.2 Development Regulation on Hazardous Site

Generally, development and/or site alteration shall not be permitted on or near hazardous lands. However, development may be permitted subject to the completion of geotechnical study completed by a qualified engineer which demonstrates that all hazards and risks associated with the site have been addressed. An EIS may also be required to ensure that there are no negative impacts on the ecological function of natural features. In addition, development and/or site alternation may be permitted on or near hazardous sites where the effects and risk to public safety are minor and can be mitigated by addressing the following items:

- a) Applicable provincial standards related to floodproofing, protection works and access can be met and are implemented;
- b) Vehicles and people have a way of safely entering and exiting the area during times of flooding, erosion and other emergencies;
- c) Existing hazards are not aggravated;
- d) New hazards are not created;
- e) There are no negative impacts on ecological features or functions; and,
- f) All other relevant site development concerns are addressed to the satisfaction of the NPCA.

7.2.3 Development within 50 metres of a Hazardous Site

7.2.3.1 *Development within 50 metre of a Hazardous Site*

Development and/or site alteration shall not be permitted within 50 metres of a hazardous site unless it can be demonstrated through the submission of an EIS and/or geotechnical study (as the case may be) that there are no negative impacts on the natural features or their ecological function and there are no impacts related the control of flooding, erosion, pollution or the conservation of land.

7.2.4 Prohibited Uses

Notwithstanding the policies of this section, the following uses are prohibited within hazardous lands:

- a) Sensitive uses, such as hospitals, nursing homes, day-cares/pre-schools and schools;
- b) Emergency services facilities;
- c) Uses associated with the disposal, treatment, manufacturing/processing or storage of hazardous substances;
- d) Any other use or development deemed to be inappropriate based on the objectives stated in policy 7.2.1.

7.2.5 Infrastructure

Notwithstanding the policies of this section, infrastructure approved through an environmental assessment may be permitted within hazardous lands associated with unstable soil or bedrock, where it has been demonstrated to the satisfaction of the NPCA that the five tests under the Conservation Authorities Act have been addressed. Infrastructure approved through an environmental assessment process shall require a permit to develop from the NPCA.

7.2.6 Water Wells

Water wells shall be installed as far away as possible from any visible sinkholes. The NPCA may require an assessment of the draw down impact of the well on the water table and may decline approval where the draw down has the potential to destabilize karst topography.



8.0 WETLANDS

8.1 WHAT ARE WETLANDS?

8.1.1 Defining Wetlands

Wetlands are “lands that are seasonally or permanently covered by shallow water, as well as lands where the water table is close to or at the surface. In either case, the presence of abundant water has caused the formation of hydric soils and has favoured the dominance of either hydrophytic plants or water tolerant plants. The four major types of wetlands are swamps, marshes, bogs and fens” (PPS, 2014). The Conservation Authorities Act provides a similar definition of wetlands:

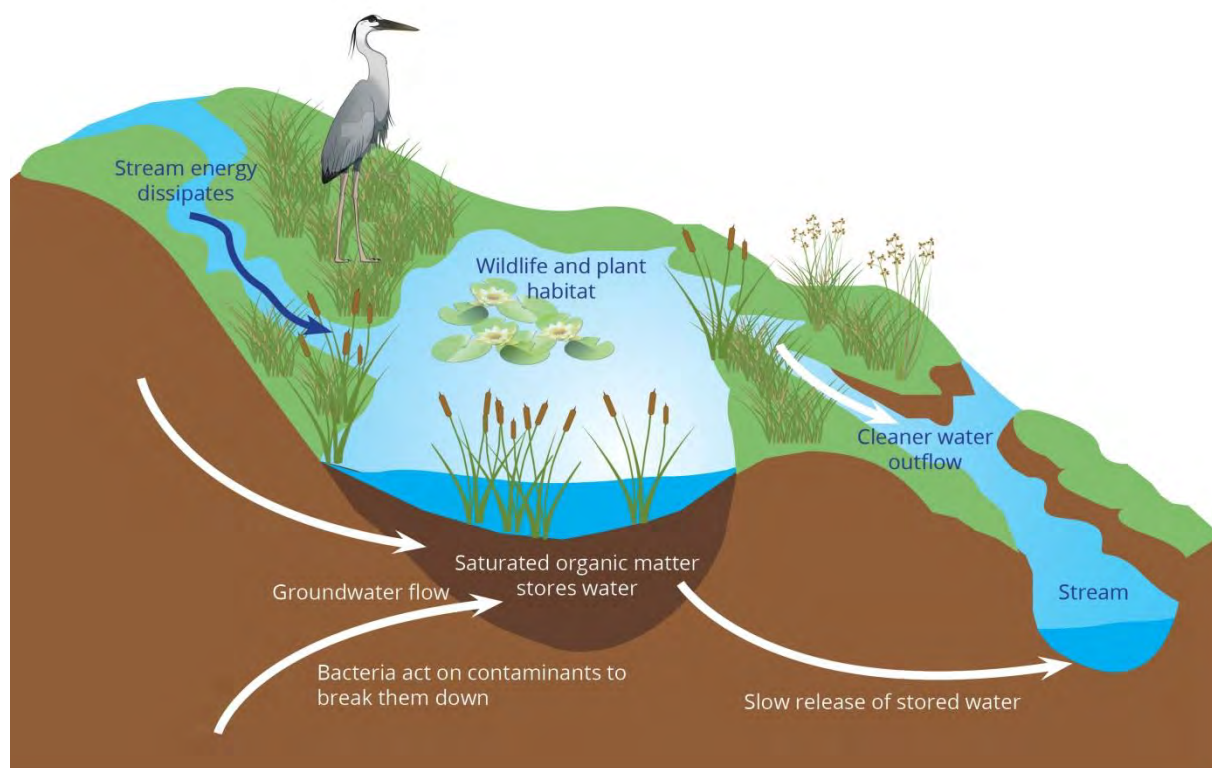
“means land that:



- a) is seasonally or permanently covered by shallow water or has a water table close to or at its surface;
- b) directly contributes to the hydrological function of a watershed through connection with a surface watercourse;
- c) has hydric soils, the formation of which has been caused by the presence of abundant water; and,
- d) has vegetation dominated by hydrophytic plants or water tolerant plants, the dominance of which has been favoured by the presence of abundant water, but does not include periodically soaked or wet land that is used for agricultural purposes and no longer exhibits a wetland characteristic referred to in clause c) or d)”.

Regardless of the language used to precisely define the term, wetlands are widely recognized as an important part of the ecosystem. Wetlands are among the most productive and biologically diverse habitats in the world. They play a multi-dimensional role in the hydrologic cycle acting as a source for flood attenuation, groundwater recharge and the improvement of water quality. Wetlands are an incredible source of biodiversity, offering a multitude of habitats for plants, birds, reptiles, amphibians, fish and other species. They also provide opportunities for recreation and have potential to play a significant role in climate change adaptation and mitigation strategies (see **Figure 8.1**).

Figure 8.1: Wetland Function



8.1.2 Classification of Wetlands

The policy framework within this Document recognizes several classes of wetlands:

- a) Provincially significant wetlands;
- b) Non-Provincially significant wetlands; and,
- c) Coastal wetlands.

8.1.2.1 Provincially Significant Wetlands

The majority of identified wetlands within the NPCA's watershed are classified as Provincially Significant Wetlands (PSWs). PSWs are wetlands which have been identified by the Province of Ontario using evaluation methodology established by the Province. PSWs are determined by a science-based ranking system known as the Ontario Wetland Evaluation System (OWES). This methodology features a standardized method of assessing wetland functions and societal

values, which enables the Province to rank wetlands relative to one another. This information is provided to Conservation Authorities and municipalities to support decision-making in the planning process. A wetland that has been evaluated using the criteria outlined in the OWES is known as an evaluated wetland. Refer to the OWES manual for additional details on the criteria for classifying wetlands.

8.1.2.2 Non-Provincially Significant Wetlands

The term non-provincially significant wetland is used to describe any other evaluated wetland which does not meet the score to be considered Provincially Significant.

8.1.2.3 Coastal Wetlands

Coastal wetlands are a unique type of wetland which is located in close proximity to the shores of Lake Erie, Lake Ontario and the Niagara River and are connected by surface water to the Great Lakes system. Coastal wetlands are defined in the PPS as:

- a) Any wetland that is located on one of the Great Lakes or their connecting channels (Lake St. Clair, St. Marys, St. Clair, Detroit, Niagara and St. Lawrence Rivers);
- b) Any other wetland that is on a tributary to any of the above-specified water bodies and lies, either wholly or in part, downstream of a line located 2 kilometres upstream of the 1:100 year floodline (plus wave run-up) of the large water body to which the tributary is connected.

Not all coastal wetlands are considered to be Provincially Significant Wetlands. A coastal wetland is scored in the same manner through OWES and must meet the scoring criteria for significance to be classified as a Provincially Significant (coastal) Wetland.

8.1.2.4 Unevaluated Wetlands

Some wetlands within the watershed have not been evaluated and classified under the OWES. Prior to development on a property with an unevaluated wetland, a wetland evaluation shall be required and approved by the MNRF.

8.1.3 Defining the Limits of Wetlands and Area of Interference

8.1.3.1 Wetland Boundary Delineation

Wetland boundaries are often found in areas of gradual ecological change, where changes in soil moisture results in transitions from upland to wetland plant species. The wetland boundary is established where 50% of the plant community consists of upland plant species (i.e. the

percentage of area covered by upland plant species, not to the number of different upland plant species). Topography and soil data also provides guidance for where the wetland boundary should be drawn. Wetland boundary mapping is typically generalized from aerial imagery and other secondary source materials. Field visits by qualified biologists are required to accurately define the wetland boundary for development purposes.

8.1.3.2 *Area of Interference*

The areas adjacent to wetlands where development could impact the hydrologic function of the wetland are referred to as areas of interference. The areas of interference are considered to be a regulated area under the Ontario Regulation 155/06. The area of interference differs, depending on the classification of the wetland:

- a) For Provincially Significant Wetlands the area of interference can be up to 120 metres from the boundary of the wetland.
- b) For non-provincially significant wetlands the area of interference is 30 metres.

Where detailed hydrological studies have been undertaken, a more precise area of interference may be also established.

8.1.4 Environmental Impact Study

Depending on the nature of the proposed development, the NPCA may request that the applicant undertake an Environmental Impact Study (EIS) study, completed by a qualified biologist, to confirm the potential impacts on a wetland or other elements of the natural heritage system. Chapter 13 provides additional direction for undertaking an EIS.

8.1.5 Hydrological Study

Depending on the nature of the proposed development, the NPCA may request that the applicant undertake a hydrological study to confirm potential impacts on the hydrologic function the wetland. Refer to Chapter 13 for additional details.

8.2 POLICIES FOR PLANNING AND REGULATING DEVELOPMENT AND INTERFERENCE WITH WETLANDS

8.2.1 Objectives

The objectives of the wetland policies are to:

- a) Promote the conservation of land through the protection of wetlands;
- b) Maintain and where appropriate, enhance wetland ecological and hydrological functions and features;
- c) Promote the maintenance, restoration and enhancement of wetlands; and,
- d) Provide a policy framework which aligns with Provincial standards for wetland protection, including guidance for decision-making related to the interference of wetlands.

8.2.2 Development and Interference within a Wetland

8.2.2.1 *Development and Interference within a Wetland*

Unless otherwise stated in this Document, no development and/or site alteration shall be permitted within a wetland.

8.2.2.2 *Replacement Structures*

Replacement structures may be permitted within a wetland subject to the following:

- a) In all cases, the viability of locating the structure on a portion of the property outside of the area of interference of the wetland must be examined and applied;
- b) The structure is restored to its original form (i.e. same dimensions or smaller, square footage, and building footprint location); and,
- c) Where applicable, floodproofing measures will be required.

8.2.2.3 *Accessory Structures and Building Additions*

Accessory structures and building additions are not permitted within wetlands.

8.2.2.4 *Ponds*

Ponds will generally not be permitted within any wetland. Ponds will only be permitted if it can be demonstrated through the appropriate studies (as determined by the NPCA), that the proposed pond will not have any impact to the existing hydrological function or hydrological regime of the wetland and improve the overall ecological function of the wetland and adjacent lands.

8.2.2.5 *Conservation and Restoration Projects*

Conservation and restoration projects may be permitted where it has been demonstrated to the satisfaction of the NPCA that the proposed development and site alteration will enhance the

overall ecological and hydrological function of the wetland. Depending on the nature of the proposed development and site alteration, the NPCA may require an EIS to demonstrate how the hydrological and ecological features/functions will be protected, created, restored and/or enhanced.

8.2.2.6 Passive Recreational Uses within a Wetland

Ideally, passive recreational uses should be located on adjacent lands. However, it is acknowledged that in some circumstances it may be appropriate for passive recreational uses to be located within a wetland. Passive recreational development intended to promote the conservation of land, such as wilderness trails, boardwalks and lookouts may be permitted within wetlands, subject to the following:

- a) The risk to public safety from natural hazards, including flooding, erosion and shoreline hazards is not increased;
- b) The area of construction disturbance is minimized;
- c) The existing topography is maintained to the extent possible;
- d) Trails are established on pervious surface;
- e) The removal of trees is avoided and/or minimized;
- f) A re-vegetation plan is approved and there is no net loss of natural vegetation; and,
- g) The overall ecological and hydrological functions of the wetland are maintained.

An EIS may be required to establish any passive recreational use within a wetland.

8.2.2.7 Wetland Reconfiguration and Compensation Context

At the time of drafting the policies of this Document, the Province of Ontario was undertaking a review of its wetland policy framework. The NPCA will continue to monitor the provincial policy framework for wetlands and update the policies of this section based on guidance provided by the Province. Note that NPCA's existing policy framework for wetlands includes policy guidance for the reconfiguration of non-provincially significant wetlands (see Policy 8.2.2.8 for details).

8.2.2.8 *Wetland Reconfiguration and Compensation for Non-Provincially Significant Wetlands⁷*

Where no reasonable alternative exists to locate a proposed development, site alteration or other activity outside of a non-provincially significant wetland or adjacent lands, the NPCA may require that an area of wetland be created that is equivalent to the area of wetland and adjacent lands disturbed. Any required wetland creation should be located in close proximity to the area disturbed or in an area to be determined by the Authority. All wetlands created under this policy will be added to the NPCA regulated area and identified on appropriate screening maps. The Authority may permit the reconfiguration of wetland boundaries to maximize a development area provided:

- a) The wetland to be reconfigured has not been evaluated as a PSW;
- b) The wetland boundary reconfiguration or the proposed development area will not have an impact on any sensitive species or species at risk;
- c) The wetland boundary reconfiguration or the proposed development will not have a significant impact on the hydrological or ecological function of the wetland;
- d) The wetland boundary reconfiguration will not significantly reduce the area of wetland within the wetland feature or complex; and,
- e) Any proposal to reconfigure the boundary of a wetland must be supported by an accepted EIS or similar study which addresses, but is not limited to, the above items. All proposals to reconfigure a wetland boundary will be assessed by NPCA and may require final approval of the NPCA Board of Directors.

8.2.3 Development in Areas of Interference

8.2.3.1 *Development within 30 metres of a Wetland*

Unless otherwise stated in this Document, no development and site alteration shall be permitted within 30 metres of a wetland.

8.2.3.2 *Permitted Uses within 30 metres of a Wetland*

Notwithstanding Policy 8.2.3.1, the following uses may be permitted within 30 metres of a wetland:

⁷ See Policy 3.24.1.e, Policies, Procedures and Guidelines for the Administration of Ontario Regulation 155/06 and Land Use Planning Document, 2007 (and amended in 2009, 2010, 2011)

- a) Infrastructure in accordance with policy 8.2.4;
- b) Conservation and restoration projects in accordance with policy 8.2.2.5
- c) Passive recreational uses in accordance with policy 8.2.2.6;
- d) Replacement structures, accessory structures and minor additions in accordance with policy 8.2.3.3;
- e) Other forms of development and site alteration which do not adversely impact the ecological and hydrological function of the wetland, and where the proposed development meets the five tests under the Conservation Authorities Act and is evaluated in accordance with policy 8.2.3.3.

8.2.3.3 Replacement Structures, Accessory Structures and Minor Additions within 30 metres of a Wetland

Where replacement structures, accessory structures, and minor additions cannot be located outside of 30 metres of a wetland due to lack of available building area outside of 30 metres, reductions will be considered based on a site specific evaluation by NPCA staff to determine whether a reduction is warranted, which will include consideration of:

- a) The nature of the proposed development/site alteration;
- b) The proximity to the wetland of existing structures;
- c) Adjacent land use;
- d) The condition of the 30 metre Regulated area;
- e) The extent of existing natural buffer;
- f) Restoration of buffer functions;
- g) Other ecological or hydrological function considerations specific to the site;
- h) That no development or site alteration be permitted within 5 metres of a wetland; and
- i) A determination of whether an Environmental Impact Study or Hydrologic Study will be required. Such studies will be reviewed by NPCA staff to ensure that there will be no negative impact on the hydrologic and ecological functions of the wetland as a result of the proposed development and/or site alteration.

8.2.3.4 Lot Creation within 30 metres

Lot creation (unless for technical reasons) should not be permitted within 30 metres of a wetland. However lot line adjustments may be permitted between 30 and 15 metres of a wetland where items the policies of 8.2.3.3 are addressed. New lot creation within 15 metres of a wetland shall not be permitted.

8.2.3.5 Proposed New Development within 30 metres of a Wetland

Where no development exists within 30m of any wetland:

- a) No new septic systems are permitted within 30m of any wetland.
- b) Development shall not be permitted within 30m of any wetland, unless it can be demonstrated through an EIS that there are no negative impacts on the ecological and hydrological function of the wetland.

8.2.3.6 Development Between 30 metres and 120 metres of a Provincially Significant Wetland

In general, development is permitted between 30 metres and 120 metres of Provincially Significant Wetlands. The NPCA reserves the right to regulate development within 30 metres and 120 metres of a Provincially Significant Wetland on a site by site basis, where the nature of the proposed development merits consideration of the five tests under the Conservation Authorities Act and/or there exists potential interference with the ecological or hydrological function of the wetland.

8.2.3.7 Permit Requirements

Any development or site alteration deemed by the NPCA to require a permit may require an EIS or similar study and/or a hydrological assessment, prepared by qualified professionals, that identifies whether the proposed development and/or site alteration will cause a negative hydrologic or ecological impact to the wetland features/ functions.

8.2.4 Infrastructure

The Authority may permit the construction or development of infrastructure (roads, pipelines, sewers and associated appurtenances, other than stormwater management facilities) within a wetland, provided:

- a) The proposed infrastructure is supported by the completion of an appropriate Environmental Assessment or a Comprehensive EIS to the satisfaction of the Authority;
- b) No reasonable alternate location for the infrastructure exists outside of the wetland;
- c) Any impacts to flood flows, flood storage or groundwater movement are mitigated; and,
- d) The proposed infrastructure is designed to minimize impacts to the existing hydrological function, hydrological regime and ecological function of the wetland and adjacent lands.
- e) Infrastructure approved through an environmental assessment process shall require a permit to develop from the NPCA.

8.2.5 Wetland Conservation

The Authority will encourage local municipalities to continue to identify wetlands through the preparation and completion of municipal planning documents (e.g. Official Plans, Zoning By-Laws, neighbourhood plans, and sub-watershed plans) and to develop conservation policies for wetland areas and adjacent lands. The Authority will recommend that municipalities seek the dedication of wetlands to a public agency to protect the wetland and its features when applications for a plan of subdivision are reviewed.



9.0 WATERCOURSES

9.1 WHAT ARE WATERCOURSES?

9.1.1 Watercourses

A watercourse is an identifiable depression in the ground in which a flow of water regularly or continuously occurs (Conservation Authorities Act). Watercourses are complex, multi-functional, living systems. They transport water, sediment and energy. They are ecosystems, providing habitat for fish, amphibians, invertebrates, birds, plants and other species. Watercourses provide drinking water for communities, wildlife and livestock. Watercourses are also highly valued socio-economic resources, offering recreational opportunities, food, hydro generation, land drainage and educational experiences.

The health of a watercourse, including the quality of the water and the adjacent lands can be influenced by a range of factors, including channel morphology, sediment characteristics and the nature of the riparian vegetation both on the overbank and the bed of the watercourse.

Changes to any of these elements can have significant impacts on other parts of the watercourse. For example, a loss in riparian vegetation along the bank can facilitate increased pollutant loads resulting from higher volumes of run-off, which in turn can impact water quality and also result in higher flood levels downstream. Impacts on water quality could have consequences on fish and other species living in the watercourse, as well as those who rely on the watercourse for resource purposes.

9.1.2 Need for an EIS

An EIS and/or hydrological study may be required to confirm the location and limits of a watercourse, as well as any potential impacts of the proposed development on the hydrological and ecological features and functions. An EIS may also be required to confirm the extent of any natural buffers (refer to policy 9.2.5 for additional details) or for morphological assessments or any impacts on established natural buffers.

9.2 POLICIES FOR WATERCOURSE INTERFERENCE

9.2.1 Objectives

The objectives of the watercourse policies are to:

- a) Protect and improve the health of watercourses within the watershed;
- b) Protect and enhance hydrologic features and ecological functions within the watershed;
- c) Provide policy direction for development which may impact watercourses within the NPCA watershed; and,
- d) Promote the conservation and restoration of watercourses.

9.2.2 Interference with a Watercourse

In general, interference with a watercourse shall not be permitted, except in accordance with the policies of this Document. All proposed development shall meet the five tests under the Conservation Authorities Act.

9.2.3 Watercourse Alterations

9.2.3.1 *Watercourse Alterations*

The NPCA may allow the alteration of a watercourse for the following works:

- a) Channel realignments and vegetation alteration/spot removal of sediment accumulation;
- b) Full or partial diversions;
- c) Retaining wall;
- d) Revetments;
- e) Bridges;
- f) Culverts;
- g) Docks;
- h) Pipeline crossings;
- i) Erosion control measures; and,
- j) Storm sewer outlets.

9.2.3.2 Criteria for Assessing Watercourse Alterations

The following matters shall be addressed when proposing a watercourse alteration:

- a) The need for the watercourse alteration has been demonstrated to the satisfaction of the NPCA;
- b) The proposed watercourse alteration is in accordance with NPCA standards;
- c) The do not increase flood plain elevations, flood frequency, erosion rates or erosion frequency along either side of the watercourse, upstream and/or downstream of the proposed watercourse alteration;
- d) The proposed watercourse alteration is designed to ensure that the storage capacity of the flood plain is maintained;
- e) The proposed watercourse alteration will not adversely affect the ecological and hydrological function of the watercourse and riparian zone;
- f) Adequate erosion protection measures are utilized when required;
- g) Sediment control measures are incorporated during the construction phase to the satisfaction of the NPCA; and,
- h) They are considered minor development and/or site alteration as defined in this Document and meet the five tests under the Conservation Authorities Act.

9.2.3.3 Alterations to Existing Water Control Structures

Alterations to existing water control structures may be permitted where it can be demonstrated to the satisfaction of the NPCA that the items noted in 9.2.3.2 have been addressed.



9.2.4 Watercourse Crossings

Watercourse crossings, including infrastructure which goes over a watercourse or underneath it, such as bridges, culverts, pipelines, channel enclosures of less than 20 metres and causeways may be permitted, subject to the following:

- a) There are no reasonable alternatives to the crossing;
- b) Where physical alterations to the watercourse are required, they are in accordance with policy 9.2.3.2;
- c) Where feasible, crossings avoid any bends in the watercourse;
- d) The preferred location for crossings is in areas which are already disturbed, making use of existing impacted or open areas on the channel bank or valley slope;
- e) The risk for increased flooding as a result of the crossing, either upstream or downstream, is mitigated;
- f) Risks associated with erosion are addressed;
- g) The design minimizes impacts on the ecological and hydrological functions and features, with a preference for open bottom structures (which allow for fish passage and

- accommodation of bankfull flows, etc.) and where appropriate, restoration measures are included to the satisfaction of the NPCA; and,
- h) Maintenance requirements are minimized.

9.2.5 Watercourse Buffer Composition

9.2.5.1 *Buffer Requirements*

Where development and site alteration is proposed adjacent to a watercourse, the NPCA shall require the establishment of a natural buffer of between 15 metres and 30 metres based on the following:

- a) A 30 metre natural buffer for watercourses containing permanent flow, coldwater systems or specialized aquatic or riparian habitat (such as but not limited to fish spawning areas, species of concern habitat, forested riparian areas);
- b) A 15 metre natural buffer for watercourses containing intermittent flow, warmwater systems or general/impacts aquatic or riparian habitat; and,
- c) Other considerations which may impact pollution or the conservation of land.

Development setbacks associated with flooding (4), erosion (6) and dynamic beaches (5) are addressed in their respective chapters.

9.2.5.2 *Reductions in Buffer Requirements*

Reductions of these buffer requirements will only be considered in special circumstances based on a site specific evaluation by NPCA staff to determine whether a reduction is warranted, which will include consideration of:

- a) The nature of the proposed development/site alteration;
- b) Adjacent land use;
- c) The condition of the lands within the riparian area;
- d) The extent of existing natural buffer;
- e) Restoration of watercourse/riparian function;
- f) Proximity to the watercourse of any existing structures;
- g) Other ecological function considerations specific to the site; and,
- h) A determination of whether an Environmental Impact Study will be required to support a reduction in the buffer.

Notwithstanding the above, no development or site alteration be permitted within 5 metres of a watercourse.

9.2.6 Infrastructure

Notwithstanding the policies of this section, infrastructure approved through an environmental assessment may be permitted within a watercourse, where it has been demonstrated to the satisfaction of the NPCA that the five tests under the Conservation Authorities Act have been addressed. Infrastructure approved through an environmental assessment process shall require a permit to develop from the NPCA.

9.2.7 Conservation and Restoration Projects

9.2.7.1 *Conservation and Restoration of Watercourses*

Notwithstanding the policies of this section, conservation projects, such as stream rehabilitation projects intended to improve and enhance ecological and hydrological function of the watercourse may be permitted, subject to the following:

- a) The proposed ecological and hydrological improvements are demonstrated to the satisfaction of the NPCA;
- b) The proposed rehabilitation project uses best management practices;
- c) The need for future maintenance is minimized;
- d) Stream bank stability is addressed, and where appropriate, enhanced;
- e) Channel design techniques are in accordance with NPCA standard; and,
- f) Considerations for the control of flooding, erosion, dynamic beaches, pollution and the conservation of land are addressed.

9.2.7.2 *Re-Naturalization of Channels*

The NPCA encourages municipalities to consider opportunities for the re-naturalization of watercourses which have been urbanized.

10.0 FILL PLACEMENT

10.1 WHAT IS FILL?

10.1.1 Fill Placement and Authority to Regulate Fill Placement

Fill is any material that can be placed, dumped or removed originating from the site or elsewhere, such as earth, sand, gravel or rubble, which is used to raise, lower or alter the existing grade. Fill is considered to be a form of development defined in Conservation Authorities Act, as site grading and the placement/removal of any material from a site are both examples of development (Conservation Authorities Act, Section 28(25c,d)). Accordingly, the placement of fill within the areas regulated by the Niagara Peninsula Conservation Authority are subject to five tests listed under Section 28(1c) of the Act. The placement of fill outside of the NPCA's regulated areas are subject to local site alteration by-laws, meaning that in some cases, the placement of fill requires a shared regulatory framework, whereby the NPCA regulates the placement of fill within regulated areas and the local municipalities regulate the placement of fill elsewhere on the site (where the lands are outside of the NPCA's regulated areas).

10.1.2 Exceptions

The policies of this chapter generally do not apply to the following items:

- a) Approved development applications under the Planning Act;
- b) Fill activities proposed in accordance with a site licence under the Aggregate Resources Act; or
- c) Projects under the Ontario Environmental Assessment Act.

Other policies of this document may apply to the above-noted items.

10.2 POLICIES FOR THE PLACEMENT OF FILL

10.2.1 Objectives

The objectives of the fill placement policies are to:

- a) Provide policy guidance for the placement of fill within the NPCA's regulated areas;

- b) Promote the conservation of land through the avoidance of adverse impacts on ecological and hydrological features and functions;
- c) Avoid and mitigate any adverse impacts on the control of flooding, erosion and dynamic beaches; and,
- d) Avoid pollution resulting from the placement of fill.

10.2.2 Placement of Fill

10.2.2.1 *The Placement of Fill*

The placement of fill is prohibited within wetlands, valleylands, watercourses, dynamic beaches, flood plains or other hazardous lands or their allowances.

10.2.2.2 *The Placement of Fill Less than 25m³*

The placement of inert fill less than 25m³ may be permitted where the placement of fill:

- d) Is placed in a manner which will not impact the control of flooding;
- e) Does not interfere with a watercourse, wetland, valleyland or shoreline; and,
- f) Includes re-vegetation of any disturbed areas and is protected from erosion.

Notwithstanding the above, in special circumstances, the NPCA retains the right to require a permit for the placement of fill less than 25m³.

10.2.2.3 *The Placement of Fill Less than 250m³*

The placement of fill less than 250m³ may be permitted and shall require a permit from the NPCA and is subject to the following policies:

- a) The fill is inert and meets appropriate provincial standards, including any regulations under the Environmental Protection Act;
- b) The placement of fill shall not interfere with a watercourse or wetland;
- c) The placement of fill shall not negatively affect the control of flooding, erosion and dynamic beaches within the NPCA's regulated areas;
- d) The placement of fill has no negative impact the conservation of land, including no negative impacts on significant features and ecological and hydrological functions;
- e) There are no impacts on the control of pollution;
- f) The placement of fill satisfies the requirements and standards of municipal by-laws (where the placement of fill is proposed to cover lands which are subject to both the Conservation Authorities Act and a local site alteration by-law); and,

- g) The placement of fill may be seasonally restricted.

10.2.2.4 *Supporting Studies*

The NPCA may require the submission of a soils report to support any permit request for filling less than 250m³. As a condition of approval, the NPCA may request the applicant to prepare a survey prepared by a qualified engineer after the works have been completed to demonstrate that the placement of fill conforms to the permit conditions.

10.2.3 Large Scale Fill Placement

10.2.3.1 *The Placement of Fill Greater than 250m³*

The following policies are not intended to limit the movement of earthworks associated with subdivision or urban development (which are subject to grading plans/policies prepared under the Planning Act). The intent of the following policies is to address issues arising from the placement and storage of fill. The placement of fill greater than 250m³ shall require a permit and shall only be permitted in accordance with the following policies:

- a) The fill is inert and meets appropriate provincial standards, including any regulations under the Environmental Protection Act;
- b) The placement of fill shall not interfere with a watercourse or wetland;
- c) The placement of fill shall not negatively affect the control of flooding, erosion and dynamic beaches;
- d) The placement of fill has no negative impact the conservation of land, including no negative impacts on significant features and ecological and hydrological functions;
- e) There are no impacts on the control of pollution and sedimentation and erosion during and post-development are avoided;
- f) The placement of fill satisfies the requirements and standards of municipal by-laws (where the placement of fill is proposed to cover lands which are subject to both the Conservation Authorities Act and a local site alteration by-law);
- g) The placement of fill may be seasonally restricted;
- h) The risk to public safety is not increased;
- i) There are no negative impacts on groundwater quality, quantity, flow or functions (recharge or discharge);
- j) A minimum setback of 30 metres from Provincially Significant Wetlands and wetlands larger than 2 hectares and a minimum setback of 15 metres from all other wetlands is maintained; and,

- k) The site is graded during the fill operation and stabilized as soon as possible subsequent to fill placement and final grading.

10.2.3.2 *Supporting Studies*

The placement of large fill may require the following studies, subject to scoping during the pre-consultation process:

- a) Environmental Impact Study;
- b) Hydrogeological Study;
- c) Geotechnical Study;
- d) Hydraulic Analysis;
- e) Stormwater Management Plan; and,
- f) Other supporting studies as required.

10.2.3.3 *Conformity with Municipal By-Laws*

Prior to the issuance of a permit, the NPCA may require written consent from the municipality where the proposed site is to be located, demonstrating that municipal interests have been satisfied, including site access, haul routes, dust control, landscaping requirements and other items as appropriate.⁸

10.2.3.4 *Large Fill Placement Procedures*

Notwithstanding the policies of this Document, the NPCA reserves the right to prepare detailed procedures and guidelines for the placement of large fill.

⁸ At the time of the drafting of this Document, the Province had introduced Bill 68 Modernizing Ontario's Municipal Legislation Act, 2016. The Bill proposes to repeal Subsection 142(8) of the Municipal Act, resulting in municipal site alteration by-laws applying to CA regulated areas. Subsection 142(8) applies to site alteration and states "if a regulation is made under section 28 of the Conservation Authorities Act respecting the placing or dumping of fill, removal of topsoil or alteration of the grade of land in any area of the municipality, a by-law passed under this section is of no effect in respect of that area". The policies of this section shall be undated after the proposed legislation comes into force and affect to ensure alignment with municipal site alteration by-laws.

11.0 STORMWATER MANAGEMENT

11.1 WHAT IS STORMWATER MANAGEMENT?

Stormwater runoff is part of the natural hydrologic cycle. Precipitation (in the form of either rainfall or snow melt) falls onto the ground, flows across the landscape, through drainage systems and ultimately into natural areas such as creeks, lakes, and wetlands.

In undeveloped conditions, this stormwater runoff can be absorbed into natural areas such as forests and meadows, detained in low, wet areas, evaporated off bodies of water, and transpired from vegetation as part of their lifecycle. In developed conditions, stormwater runs off hard surfaces (such as rooftops, driveways, parking lots, roads, etc.) at a faster rate and at a greater volume as less stormwater is absorbed into the landscape. This increase in the rate and volume of stormwater discharge can result in downstream flooding and a degradation of the quality of the surface water from urbanization. Stormwater Management is the method whereby these negative impacts of urbanization are addressed.

The NPCA is responsible for reviewing Planning Act applications which have potential for negative impacts due to stormwater runoff. The NPCA reviews an application's stormwater management strategy primarily through a Memorandum of Understanding with the Region of Niagara (and select functions with the City of Hamilton and County of Haldimand).

11.2 POLICIES FOR STORMWATER MANAGEMENT

11.2.1 Objectives

The objectives of the NPCA, as it relates to stormwater management, are to work with its municipal partners, developers and landowners to:

- a) Ensure that sufficient stormwater management controls are implemented to reduce, and eventually eliminate, if possible, the undesirable impacts of flooding, pollution, surface erosion and the ensure the conservation of land;
- b) Implement mechanisms in a proposed development to re-establish, as close as possible, the area's natural hydrologic cycle; and,

- c) Protect and enhance water quality in the Niagara Region and the NPCA's water sources in a manner that balances emphasizes environmental, social, and economic considerations.

11.2.2 NPCA Stormwater Management Guidelines

When reviewing development applications, the NPCA will use its Stormwater Management Guidelines. The NPCA's Stormwater Management Guidelines provide a long-term plan to guide the safe and effective management of runoff in urban and urbanizing areas, while sustaining the health of local rivers and streams. The Guidelines provide detailed stormwater management (SWM), erosion and sediment control policies and criteria for existing and proposed development in the NPCA watershed. A summary of the Guideline's main elements are described in **Table 11-1**. Applicants should review the NPCA's Stormwater Management Guidelines in their entirety when preparing an application.

11.2.3 Relationship between NPCA's Stormwater Management Guidelines and the Ministry of the Environment and Climate Change Policies

The NPCA Stormwater Management Guidelines are meant to be used as a companion to the latest edition of the Ministry of the Environment and Climate Change's 'Stormwater Management Planning and Design Manual'. It is not meant to supersede Provincial criteria. Rather, the intent of the Guideline is to provide a consistent 'made-in-Niagara' approach to stormwater management planning on a watershed and sub-watershed basis for all municipalities within the NPCA watershed.

11.2.4 Relationship between NPCA's Stormwater Management Guidelines and Local Policies

The NPCA Stormwater Management Guidelines are meant to be used as a companion to local municipal stormwater management policies and guidelines. It is not meant to supersede local municipal technical requirements or design criteria (i.e. storm sewer size, manhole specification, etc.). Rather, the intent of the NPCA Guideline are to provide a consistent approach to stormwater management planning on a Watershed and Sub-watershed basis for all municipalities within the NPCA watershed.

Table 11-1: Summary of Stormwater Management Policies and Technical Guidelines

Topic	General Policy Statement	Technical Guidelines
Stormwater Management Control	Sufficient SWM controls are required by the NPCA to ensure that flooding, pollution, surface erosion and conservation of land impacts due to development do not occur.	<p><u>Flooding/Quantity Control</u></p> <ul style="list-style-type: none"> • Generally, the SWM controls required are to match or reduce post development peak flows to pre-development peak flows for a range of design storm events (2, 5, 25 and 100-year storm events, unless directed otherwise). • Different design storm distributions and durations shall be assessed in order to determine the critical storm that yields the lowest predevelopment peak flow and the highest post-development peak flow. • At a minimum, the 3-hour Chicago, 12-hour AES and 24-hour SCS distributions should be considered. • All SWM plans are to assess the capacity of the receiving system in order to identify hydraulic constraints or existing flooding hazards. These existing constraints/risks may require additional quantity controls over and above the typical post to pre peak flow controls. • Consideration may be given to not requiring peak flow controls if the assessment of receiving system capacity demonstrates little or no benefit to such controls. This would include scenarios such as discharge to major river systems or directly to a Lake. Pre-consultation with the NPCA and additional approval requirements are necessary for this to be considered. • Major overland flow routes are to be designed to have sufficient capacity for the Regulatory event (100-year or Regional storm event, as applicable). <p><u>Quality Control - TSS</u></p> <ul style="list-style-type: none"> • A minimum of “Normal” level of water quality treatment, as defined in the MOE design guidelines (2003) is required for all SWM facilities. This is equivalent to a 70% TSS reduction. • “Enhanced” level of water quality treatment (80% TSS reduction) will be required on all watercourses containing Type 1 – critical fish habitat. • A detailed assessment of the receiving system will be mandatory for any proposed reduction in the level of water quality treatment required on a development site. The assessment contents must be appraised and approved by the NPCA prior to completion. <p><u>Quality Control – Temperature</u></p> <ul style="list-style-type: none"> • The SWMP for a development site is required to include measures to eliminate or mitigate adverse temperature impacts due to the increase in impervious surfaces and the ponding of water in SWM facilities. Particular attention is to be given to those systems discharging to coolwater or coldwater receiving systems. • Post-development water temperature regime is to mimic or enhance the pre-development regime.

Topic	General Policy Statement	Technical Guidelines
		<p><u>Quality Control - Total Phosphorous</u></p> <ul style="list-style-type: none"> Phosphorus removal targets will be typically provided for in the TSS removal targets, unless specific targets are developed through a management strategy. <p><u>Quality Control - Spills</u></p> <ul style="list-style-type: none"> SWM facility outlets are to be designed to allow the outlet to facilitate the containment of a spill. Ensure sufficient access to SWM facility to allow spills to be cleaned <p><u>Water Balance</u></p> <ul style="list-style-type: none"> As per the SWM Design Manual (MOE, 2003), water balance impacts should be evaluated during the design of a site stormwater management system. All efforts should be made to match pre- and post-development infiltration volumes in order to maintain groundwater recharge. Hydrogeologically sensitive areas shall be identified as part of the SWM plan. Untreated stormwater shall be prevented from being directly infiltrated. <p><u>Erosion/Geomorphologic Considerations</u></p> <ul style="list-style-type: none"> Quantity control to detain and release the 25mm, 4-hour Chicago design storm over a 24-hour period shall be provided for all receiving systems that are demonstrated to be stable watercourses or for proposed development that comprise less than 10% of the total area that drains to the receiving system. The geomorphologic assessments and criteria contained in the SWM Design Manual (MOE, 2003) shall be used for all receiving systems that are unstable under existing conditions or for proposed developments that comprise a significant proportion of the total area draining to the receiving system. Criteria identified in larger-scale studies that have directly evaluated the receiving systems, such as Subwatershed Studies or Master Drainage Plans, shall take precedence over the criteria presented herein. <p><u>Construction Erosion and Sediment Control</u></p> <ul style="list-style-type: none"> All applicants must include an Erosion and Sediment Control plan demonstrating that fish habitat and water quality are not affected by sediment from the property during or following site construction. Guidelines and strategies to develop Erosion and Sediment Control plans can be found in the Erosion and Sediment Control Guidelines for Urban Construction manual (GGHA CA, 2006). <p><u>Planting Considerations</u></p> <ul style="list-style-type: none"> As part of SWM facility designs, planting strategies are required to address functional treatment

Topic	General Policy Statement	Technical Guidelines
		<p>aspects, including operations, public safety, and to help the facility blend in with the natural environment.</p> <ul style="list-style-type: none"> • Native vegetation is to be used in the facility design (see Appendix S for the approved plant species list). • Consideration of nearby natural heritage features should be made in developing a planting strategy. • The different moisture zones within a SWM facility should be considered in choosing vegetation species: deep water, shallow water, shoreline/fringe zone (extended detention), flood fringe and upland areas. <p><u>Oil/Grit Separators</u></p> <ul style="list-style-type: none"> • Oil/grit separators for stormwater treatment are discouraged for use in Greenfield residential development. • The use of oil/grit separators may be considered for commercial, industrial, or infill developments. • Consultation with the NPCA and the municipality is required in order to consider the use of oil/grit separators.
Location of Stormwater Facilities	<p>The NPCA does not support the following SWM practices:</p> <ol style="list-style-type: none"> 1. On-line SWM facilities for water quality; 2. Using natural wetlands as a SWM facility; 3. Locating SWM facilities in natural hazard areas, such as flood plains or erosion hazards, except outlets; and, 4. Locating SWM facilities in Significant Natural Heritage Features 	<ul style="list-style-type: none"> • The discouragement of locating SWM facilities within natural hazard/regulated areas arises from the fact that SWM facilities are considered development, and as such are subject to the same development regulatory processes. Outlet works are the sole exception, since they must be located close to a receiving waterbody, most likely within its flood plain. • In certain circumstances, the NPCA is prepared to acknowledge that due to technical, economic and/or environmental considerations and constraints, SWM facilities may be required to be located within or close to natural hazard areas. Such an allowance would depend on the demonstration that the SWM facility would not impact the natural hazard area (i.e., no increase to flooding risks, etc.) and that the hazard area would not impact the function or lifespan of the SWM facility. Note that these facilities may be subject to additional detailed design requirements above and beyond those described in this manual or prescribed by the municipality. • SWM facilities are not permitted to be located within the 100-year flood plain or the hydraulic floodway, whichever is greater.
Large-scale Stormwater Planning	<p>The planning and implementation of SWM systems are encouraged by the NPCA to be performed on a catchment-scale basis, through the completion of Subwatershed Plans, Master Drainage Plans or other such strategies.</p>	<ul style="list-style-type: none"> • Large-scale stormwater planning at the watershed, subwatershed or community plan level facilitate the most effective management strategies to reduce the impact of development on the natural environment. These studies can guide future development in ways that protect surface water features, groundwater features and natural areas. Refer to Section 2.3 and 2.4 of the SWM Design Manual (MOE, 2003) for an overview of the contents and benefits of large-scale SWM planning.

12.0 MUNICIPAL DRAINS

12.1 WHAT ARE MUNICIPAL DRAINS?

Municipal drains are an important piece of infrastructure for rural and agricultural land management, providing drainage systems which manage the impacts of flooding. Municipal Drains are created under the Drainage Act and municipalities are required to maintain and repair existing municipal drains and also make decisions for applications for new drains. Generally, municipal drains are considered watercourses as defined under the Conservation Authorities Act.

12.2 POLICIES FOR MUNICIPAL DRAINS

12.2.1 Objectives

The objectives of the following municipal drain policies are to:

- a) Ensure that maintenance of existing municipal drains is undertaken in conformity with the Conservation Authorities Act and provincial standards, and that, where applicable, the five tests under the Act are met;
- b) Provide guidance for evaluating the impacts of new municipal drains;
- c) Promote coordination and collaboration with municipal partners and provincial agencies.

12.2.2 Maintenance Policies Approved by MNRF/OMAFRA/CA

The Province provides direction for municipalities and conservation authorities to guide decision-making and permit process for municipal drains. When making decisions related to municipal drains which fall within the NPCA's regulated areas, the NPCA will use the Province's most up to date standards for the maintenance of municipal drains. In the absence of any approved protocols, the normal Conservation Authorities Act permitting process shall apply.

12.2.3 Municipal Drainage Activities not subject to a Permit from the NPCA

Standard compliance elements are required for the following activities, as outlined in the Province's most up to date standards for municipal drain maintenance. Provided these forms of development and site alteration do not occur within a wetland or wetland boundary, a permit will not be required by the NPCA:

- a) Brushing bank slope;
- b) Brushing top of bank;
- c) Debris removal and beaver dam removal;
- d) Spot clean-out;
- e) Culvert replacement;
- f) Bank repair or stabilization and pipe outlet repair;
- g) Dyke maintenance and repair;
- h) Water control structure maintenance and repair;
- i) Pump station maintenance and repair;
- j) Bottom only cleanout (outside of regulated wetland limits);
- k) Bottom cleanout plus one bank slope (outside of regulated wetland limits); and,
- l) Full cleanout (outside of regulated wetland limits).

12.2.4 Municipal Drainage Activities subject to a Permit from the NPCA

Any proposed maintenance within a wetland or wetland boundary shall be submitted to the NPCA for review and may require a permit.

12.2.5 New Municipal Drains, Extensions and Alterations

As per the Drainage Act, any works (physical or adjustment of the assessment schedule) proposed on a municipal drain shall be submitted to the conservation authority for review. New drains or extensions/alterations to the original engineers report may require a permit from the NPCA depending on location and any potential impacts under the five tests of the Conservation Authorities Act. Any proposed construction not deemed maintenance within a wetland or wetland boundary, shall not be permitted. Important morphological features or ecological functions of the watercourse may need to be incorporated into the design of the drain.

13.0 OTHER POLICIES AND TOOLS

13.1 CLIMATE CHANGE

13.1.1 Climate Change

Climate change refers to “changes in long-term weather patterns caused by natural phenomena and human activities that alter the chemical composition of the atmosphere through the build-up of greenhouse gases which trap heat and reflect it back to the earth’s surface” (Government of Canada, 2013). Climate change impacts have the potential to be wide-reaching, affecting ecosystems, agriculture, infrastructure, water supply, energy, transportation systems, tourism and recreation, human health and well-being, and ultimately the economy. The Government of Ontario, through the PPS directs planning authorities to consider the impacts of climate change and the NPCA has a role to play in implementing provincial policy on this matter.

13.1.2 Climate Change Impacts within the Watershed

Within the watershed, the impacts of climate change have been experienced at various levels, most visibly through changes in annual seasonality and temperature shifts. Niagara Region has experienced changes in the climate including (Penney, 2012):

- a) 1.3°C increase in annual average temperature in the last 40 years;
- b) Trend towards more days with temperatures over 30°C and more heat waves of 3 or more consecutive hot days;
- c) Longer growing season, with May and September significantly warmer;
- d) Increase in average number of frost-free days with 10 more per year compared to 1970;
- e) Small increase in annual precipitation, with most of the increase coming in winter;
- f) More rain and less snow in winter;
- g) More summer droughts and dry spells;
- h) Increased numbers of freeze-thaw cycles; and,
- i) And increase in heavy rain events.

It is projected that by 2050, average annual temperatures in Niagara Region will increase 3-4°C, freeze-free days will increase by 30 days, summer rainfall will decrease by 20%, an increase in

freeze-thaw cycles and likely an increase in heavy rains, lighting strikes, high winds, hailstorms and tornados.

13.1.3 Considerations for Climate Change

13.1.3.1 Climate Change Adaptation

Adaptation efforts minimize the level of damage, hazard and risks associated with climate change, while also recognizing new opportunities presented with our changing climate (Conservation Ontario, 2015), including: flood management programs, ecosystem enhancements, water quality and quantity, municipal plan review/input, local climate change monitoring and modelling, information management, green infrastructure/stormwater management, low water, carbon and water trading and offsets.

13.1.3.2 Climate Change Mitigation

Mitigation efforts are focused on reducing greenhouse gas emissions and other causes that negatively and rapidly influence weather patterns and climatic conditions (Conservation Ontario, 2015). They include: green building technologies and retrofits (e.g., LEED), energy conservation, renewable energy, reforestation, carbon sequestration (e.g., wetlands), low impact development and sustainable transportation.

13.1.3.3 Directions to Support a Resilient Watershed

A number of the NPCA's current policies and programs help to mitigate the impacts of climate change and also assist with adaptation. The NPCA will continue to undertake programs and initiatives which assist with adaptation and mitigation. Through a future study or update to the Strategic Plan, the NPCA will seek to develop a comprehensive approach for climate change, including any new policies or programs which assist with adaption and mitigation.

13.2 LAND USE AND ENVIRONMENTAL PLANNING REVIEW

13.2.1 The NPCA's Role in Planning

13.2.1.1 Mandate

The NPCA is responsible for commenting and reviewing Planning Act applications. In fulfilling this function, the NPCA provides comments based on:

- a) The NPCA's regulatory role, identifying the need for any permits under the Conservation Authorities Act;
- b) Delegated responsibilities from the Province to the NPCA for reviewing and commenting on any natural hazard planning issues associated with a given application;
- c) Municipal planning advisory services where the NPCA has an arrangement with its watershed municipalities to provide advice and technical expertise related to natural hazards and natural heritage matters;
- d) The NPCA's role as a watershed agency, providing comments to municipalities on the implications of development proposals from a watershed perspective, typically pertaining to matters of natural heritage planning, natural hazard planning and water resources management; and,
- e) From time to time, the NPCA will also provide comments from a landowner's perspective, either as a proponent or adjacent landowner.

13.2.1.2 Planning Act Review

When reviewing Planning Act applications, the NPCA will:

- a) Provide comments on particular aspects of the application based on the particular role/function noted in policy 13.2.1.1;
- b) Identify the need for and review (as required) any associated technical reports; and,
- c) Provide recommendations for conditions of approval, as required.

13.2.1.3 Memorandums of Understanding

The NPCA maintains the following memorandums of understanding with municipalities in the watershed:

- a) Niagara Region, including all lower tier municipalities within Niagara Region;
- b) City of Hamilton; and,
- c) The County of Haldimand.

Each MOU is different, with the NPCA providing varying degrees of technical support.

13.2.1.4 Objectives for Planning Act Reviews

The objectives of the NPCA's municipal plan review process are as follows:

- a) To minimize the potential for loss of life, property damage and social disruption and to create a safer and healthier environment for everyone who lives in the watershed;

- b) To reduce the need for public and private expenditures for emergency operations, evacuation, and restoration of properties which may be impacted by flooding and erosion;
- c) To increase public awareness about the potential risks to development as a result of the physical conditions associated with hazardous areas;
- d) To use an ecosystem planning approach for identifying the environmental implications of Development applications in order to maintain, protect, preserve and enhance natural heritage resources and natural resources;
- e) To screen development applications and proposals to identify where a Provincial or watershed interest may be impacted;
- f) To specify conditions of approval which satisfy the afore-noted objectives;
- g) To serve as an information centre for inquiries from landowners, potential landowners, lawyers, municipalities, and community groups interested in environmental legislation, approvals and stewardship;
- h) To advise and inform potential applicants (and/or their consultants) to consult with NPCA Staff prior to submitting their Development proposals in order to identify potential concerns that could result in delays to the planning process, as well as for the need to prepare and submit technical reports and supporting information required to undertake the review and approval of applications;
- i) To provide responses to site-specific inquiries in a timely manner through the continued expansion of data bases (e.g. natural heritage data bases and inventories) and other information management systems; and
- j) To continue to liaise with other agencies, county/regional and municipal governments and departments, consultants, developers and watershed residents to ensure continued co-operation in achieving effective management of natural resources.

13.2.2 Coordination with Area Municipalities and Agencies

13.2.2.1 *General Coordination on Planning Act Applications*

When reviewing complete applications under the Planning Act, the NPCA will communicate and coordinate with municipal planning on an application-by-application basis in accordance with the applicable MOU.

13.2.2.2 Official Plan Reviews and New Official Plans

Where a municipality within the watershed is updating its Official Plan or drafting a new Official Plan, the NPCA will work closely with the municipality to ensure that the most accurate and up-to-date natural heritage and natural hazard policies are in place.

13.2.2.3 Zoning By-Laws

Where a municipality within the watershed is updating its Zoning by-law or drafting a new Zoning by-law, the NPCA will work closely with the municipality to ensure that the most accurate and up-to-date natural heritage and natural hazard regulations are in place.

13.2.2.4 Secondary Plans and Community Improvement Plans

Where a municipality within the watershed is updating a secondary plan/community improvement plan or drafting a new secondary plan/community improvement plan, the NPCA will work closely with the municipality to ensure that any relevant aspects of completed watershed plans, sub-watershed plans or shoreline management plans are addressed and implemented.

13.2.2.5 Participation in Pre-Consultation Meeting under the Planning Act

The NPCA will participate in municipal pre-consultation meetings where development proposals under the Planning Act require input from the Niagara Peninsula Conservation Authority, as either a public body (commenting agency), representative of the Province (delegated authority), service provider (under MOUs) or other relevant roles as the case may be.

13.2.3 Ownership of Natural Hazard and Heritage Lands

The NPCA encourages the public ownership of natural hazard lands and lands within the natural heritage system. The NPCA encourages maintenance natural hazard and natural heritage lands as one contiguous system through the subdivision of land (i.e. consent; subdivision/condominium plans) and the dedication of those lands to the respective municipality or other appropriate agency for conservation (including private not-for-profit agencies which act to protect natural features and functions for the long term).

13.3 NPCA PERMIT PROCESS

13.3.1 The NPCA Permit Process

Before work (Filling, grading/Site Alteration, or construction) can proceed in an area regulated by Niagara Peninsula Conservation Authority, a permit is typically required. Application forms are available at Niagara Peninsula Conservation Authority's Administration Office and on the website (www.npca.ca). Permits must be made by a person having an interest in the land (i.e. owner, purchaser with owner's knowledge and permission, or an authorized agent). Upon submission of an application it will be stamped received and assigned a file number which can be referred to for processing.

13.3.1.1 *Pre-Consultation*

Before submitting plans, all potential applicants are encouraged to consult with Niagara Peninsula Conservation Authority staff to determine if an application is required and, if so, what information should be submitted with the application (e.g., studies, drawings, etc.). Staff will provide pre-application comments or guidelines on proposed development and site alteration; however, a final decision on whether or not a proposal would be supported by Niagara Peninsula Conservation Authority staff can only be provided once an application and detailed plans are submitted.

13.3.1.2 *Permit Application Requirements*

At the time of the formal permit application, details of the proposed development and site alteration must be provided along with site access, construction phasing, sediment and erosion control and re-vegetation plans. All development and site alteration shall adhere to the policies within this document and follow the various municipal, provincial, federal and Niagara Peninsula Conservation Authority guidelines as may be applicable. Works that involve substantial site development should be prepared using the services of professionals from a variety of disciplines.

13.3.1.3 *Supporting Studies*

Supporting studies may be required to support the proposed application. Refer to Section 13.4 for additional details regarding supporting studies.

13.3.1.4 Processing of Application

All applications, as a first step, are reviewed to determine if they conform to the policies set out in this document. Niagara Peninsula Conservation Authority staff may request revisions to plans or reports submitted as part of an application. This is a normal part of the review process and applicants are encouraged to consult with Niagara Peninsula Conservation Authority staff as reports and plans are prepared in order to make the most efficient use of time involved in the design and review process. If, in the opinion of Niagara Peninsula Conservation Authority staff, an application does not conform, the applicant will be advised of options that may be pursued to either bring the application into conformity or of steps that can be taken to seek a formal hearing before the Niagara Peninsula Conservation Authority Board of Directors.

Niagara Peninsula Conservation Authority staff may also contact other review agencies to discuss the proposed project; however, it is the proponent's responsibility to obtain all other necessary approvals from federal, provincial and municipal authorities.

13.3.1.5 Approval of Permit

Section 28(2) of the Conservation Authorities Act allows the authority to delegate decision-making on permits to other bodies. On this basis, the NPCA has established types/classes of applications where approval has been delegated to staff. Applications that conform to the policies set out in this document will be recommended for approval, along with any conditions, and submitted to the CAO or designate of the Niagara Peninsula Conservation Authority or designate for authorization and permit issuance under Ontario Regulation 155/06.

The NPCA CAO or designate may refer applications to the Niagara Peninsula Conservation Authority Board of Directors for review and ruling if deemed warranted by Niagara Peninsula Conservation Authority staff.

In all cases, any approval is only valid upon issuance of a permit on the prescribed form, signed by the NPCA CAO or designate accompanied by drawings stamped and signed by either the Director of Watershed Management or designate.

Any proposed amendments to the approval will require review and approval and may be subject to additional fees.

13.3.1.6 Validity of Permits

The maximum period, including an extension for a permit, is two years from the date of issuance. Projects that, in the opinion of the NPCA cannot reasonably be completed within the

2 year timeline may be granted for a period of up to 5 years (total length of time). Issuance of a permit does not relieve the applicant from the responsibility of acquiring approval from other agencies, or relieve the applicant from compliance with any conditions that other agencies may impose on the work.

13.3.1.7 Hearings and Appeals

If an application does not conform to policy or it does not satisfy technical requirements, or if the applicant does not agree with any recommended condition of permit approval, the application may be recommended for refusal. In such a case, the applicant may request a hearing before the Niagara Peninsula Conservation Authority Board of Directors.

Niagara Peninsula Conservation Authority shall, by personal service or by registered mail, give written notice of the time and place of the hearing of the application, together with a brief explanation of the nature of the application, not less than ten (10) days prior to the day of the hearing to:

- a) the applicant or their designated agent,
- b) all members of the NPCA Board of Directors,
- c) Niagara Peninsula Conservation Authority may at its discretion request representation to the hearing as follows:
 - i. the municipality in which the property is located,
 - ii. any Federal or Provincial Government Representative,
 - iii. any surveyor, consulting engineer or other expert retained by Niagara Peninsula Conservation Authority.
 - iv. Where the Notice of Hearing is given to the applicant or their designated agent by registered mail, it shall be sent to the address given in the application.

Upon hearing evidence submitted by the applicant or their designated agent, and reviewing any other information submitted in support or rejection of the application, the NPCA Board of Directors shall approve (with or without conditions) or refuse the application. Upon refusal of the application or if permission is granted subject to conditions, the Board of Directors shall give written response to the applicant, including reasons, for its decision.

A hearing for refusal of permission cannot proceed unless the applicant or their designated agent is present. If the applicant or agent does not appear at a hearing, the application will be held in abeyance.

The NPCA has adopted hearing guidelines (2005) and may be amended from time to time. A general summary of the hearing guidelines are provided below (refer to Appendix A for details).

13.3.1.8 Appeals

An applicant who has been refused permission or is not in agreement with conditions of an approval may, within thirty (30) days of the receipt of the reasons for the decision, appeal to the Minister of Natural Resources, care of the Mining and Lands Commission, who may dismiss the appeal or grant permission. In all cases, hearings/appeals will be conducted in accordance with the “Procedural Guidelines for Appeals, Under the Conservation Authorities Act”, October 2005 (refer to Appendix 1).

13.3.2 Terms and Conditions

13.3.2.1 Transfer of Permissions

Permission granted by Niagara Peninsula Conservation Authority cannot be changed or transferred without prior written approval by Niagara Peninsula Conservation Authority. Transfers will require the written authorization from the original applicant and confirmation that the details of the project have not changed.

13.3.2.2 Additional Conditions of Approval

Approvals, permits, etc., may be required from other agencies prior to undertaking the work proposed. Niagara Peninsula Conservation Authority’s permission does not exempt the applicant from complying with any or all other approvals, laws, statutes, ordinance, directives, regulations, by-laws, etc., that may affect the property or the use of same.

13.3.2.3 Withdrawal of Permissions

Niagara Peninsula Conservation Authority may, at any time, withdraw any permission given if, in its opinion, the representations contained in the application for permission are not carried out or the conditions of the permit are not complied with.

13.3.3 Fees

Fees for the processing of applications are set by the Board of Directors of the Niagara Peninsula Conservation Authority and must be paid at the time of submitting an application. Fees are non-refundable. For major projects, an additional charge based on actual staff review and inspection time at a rate set by the Board of Directors, may be applied. All fees must be paid

prior to issuance of the permit. The fee schedule is attached to the application form and is available on the NPCA's website.

13.3.4 Enforcement

13.3.4.1 Request for As-Built Drawings

The NPCA may request the submission of as-built drawings to ensure development has been constructed as per the conditions of an NPCA permit, such as but not limited to, the construction of shorewalls, cut and fill projects or instances where a violation has occurred. The drawings shall be prepared by a qualified professional engineer and may include the need for elevation surveys.

13.3.4.2 Unauthorized Works

Any initiators of unauthorized development and/or site alteration that contravene the regulation will be requested to halt the works immediately. Authority staff will advise the offender(s) of the Regulation and its purpose. Works that proceed without the proponent or their agent obtaining any permission required under Ontario Regulation 155/06 may result in charges being laid pursuant to Ontario Regulation 155/06 and the Conservation Authorities Act.

13.3.4.3 Notice of Violation

Normally a "Notice of Violation" will be sent to the landowner, their agent and/or the contractor as well as the Clerk of the respective municipality. This notice will advise that the subject area is regulated, identify the section of the regulation contravened, advise that activities observed require permission and will request that work cease and the respective parties contact Niagara Peninsula Conservation Authority to discuss options for resolution of the matter within fourteen (14) days of issue of the Notice. Should the violator not contact the Authority within the specified time period, legal action may be pursued under Section 28 of the Conservation Authorities Act.

13.3.4.4 Contravention of Other Acts

In cases where other legislation, such as the Fisheries Act, Lakes and Rivers Improvement Act, Ontario Water Resources Act, etc. may also have been contravened, Niagara Peninsula Conservation Authority will notify the appropriate authorities and may carry out a coordinated investigation and prosecution. Once contacted, the Conservation Authority will subsequently review the violation in more detail and notify the offender(s) by registered mail with an

option(s)/recommendation(s) for resolution of the matter. It may be necessary to obtain additional information/details of the violation before options for resolution of the matter can be provided. In this case, specific information will be requested from the offender, by registered mail.

13.3.4.5 Resolution of Violations

If the violation is contrary to the Authority's Regulation Policies, the offender(s) will be requested to remove the works and restore the site to its original condition (i.e. prior to the works being undertaken). If the offender(s) chooses not to remove the violation, the Conservation Authority may elect to pursue legal action under Section 28 of the Conservation Authorities Act.

The offender may apply for a permit for approval of the works (i.e. development and/or site alteration). If they are in conformity with the policies of this document, a permit may be granted. The application will be processed in a normal manner by the Conservation Authority, in accordance to the policies outlined above. The Authority will work with the applicant to ensure that the proposed development and/or site alteration meet all of the criteria for approval outlined in the appropriate sections of this procedure document. If a permit is subsequently approved, the proposed development and/or site alteration may proceed.

If the permit is refused and the violation continues, the Conservation Authority may elect to pursue legal action under Section 28 of the Conservation Authorities Act. In all cases, The Authority will work to resolve violations within a timely manner. If the matter is not resolved within a timely manner, the NPCA may pursue legal action. Legal proceedings must commence within two year from the date of which the NPCA becomes aware of the offense. The provisions of the Conservation Authorities Act and the Provincial Offences Act direct the Niagara Peninsula Conservation Authority staff when investigating a violation.

It is normal that, in addition to any penalty levied by the court upon conviction, Niagara Peninsula Conservation Authority will seek an order for rehabilitation of the site and/or removal of any buildings, fill and/or structures ruled in contravention of Ontario Regulation 155/06. Rehabilitation measures shall be undertaken within a time frame agreed upon by the NPCA and the offender.

13.3.5 Development Officers

In accordance with Section 28 (1) of the Conservation Authorities Act, officers may be appointed to enforce enacted regulations. These officers have the responsibility of liaising with applicants,

inspecting properties upon request, and processing the permit applications. Responsibilities also include investigating and monitoring violation situations as well as undertaking all other enforcement work under the regulation, as directed by senior management of the Authority. Regulation officers carry identification for inspection purposes.

13.4 SUPPORTING STUDIES

In support of an application for development within a regulated area or upon reviewing an application under the Planning Act (or other relevant piece of legislation), the NPCA may request that any of the following supporting studies or plans be completed:

- a) Environmental Impact Study;
- b) Hydrological Study;
- c) Hydrogeological Study;
- d) Geotechnical Study;
- e) Flood plain Study;
- f) Coastal Study;
- g) Stormwater Management Plan;
- h) Erosion and Sediment Control Plan;
- i) Vegetation Plan; and,
- j) Other supporting studies, as required.

13.4.1 General Study Requirements

The following requirements apply to all studies requested by the NPCA:

- a) Studies shall be completed by a suitably qualified professional;
- b) The NPCA reserves the right to have a completed study peer reviewed by an independent qualified professional; and,
- c) Applicants are required to complete a pre-consultation meeting with the NPCA staff to confirm the scope and methods for the study.

13.4.2 Environmental Impact Study (EIS)

13.4.2.1 *Need for an EIS*

An EIS is a tool for objectively assessing the environmental impacts of a proposed development or site alteration, and is both a planning and decision-making tool. An EIS is required where development and site alteration is proposed wholly or partially within, or adjacent to, a natural

heritage feature as defined in Provincial, Regional, local policies and regulations. It is also required where development and site alteration is proposed in the Greenbelt Natural Heritage System and on lands adjacent to key hydrologic features in the Greenbelt.

In the context of an application under the Planning Act, an EIS is required to confirm the impact of the proposed development on a natural heritage feature(s) and functions. An EIS can also be required to support a permit application under the Conservation Authorities Act where proposed development has potential to impact natural and/or hydrological features and functions (i.e. conservation of land, interference with a watercourse or wetland, control of pollution, etc.). Note that not all permit applications under the Conservation Authorities may have been subject to a Planning Act application (hence the need for an EIS under the CA Act).

13.4.2.2 EIS Requirements

There are different standards and requirements for completing an EIS within the watershed. Niagara Region, the City of Hamilton and County of Haldimand each maintain different technical guidelines for conducting an EIS. When preparing an EIS, the applicant and NPCA should refer to the appropriate EIS guideline based on the location of the proposed development. Where a municipality does not have formal EIS guidelines, the NPCA will refer to the Ministry of Natural Resources and Forestry's Natural Heritage Reference Manual.

13.4.2.3 Exceptions

An EIS may not be required where it is determined by the NPCA, in consultation with the appropriate planning authority, that the natural heritage feature or hydrologic feature does not meet the criteria established for designation as significant. This determination may be based on a preliminary review and site visit. The need for an EIS may also be waived where a similar level of analysis has already been completed through an environmental assessment.

13.4.3 Geotechnical Study

A geotechnical study may be required to assess the effect of increases in loading on slope stability/failure, the effect of infiltration of surface water on slope stability/failure, the evaluation of the susceptibility of slopes above or adjacent to a development to collapse and the use of appropriate and environmentally-sound protection works. The scope of geotechnical studies will be determined on a site-specific basis through the pre-consultation process with NPCA staff.

13.4.4 Flood Plain Study and Hydraulic Analysis

A flood plain study may be required for proposed development where there exists no flood plain mapping for the subject site, or where updated flood plain mapping is required. The study may include hydraulic analysis to assess the potential impact on upstream or downstream flooding and erosion potential. The scope of any hydraulic analysis shall be determined and confirmed through pre-consultation with the application. When generating a flood line, the following information is required:

- a) Explanation of how the starting water level was determined;
- b) A description of how/where flow values utilized in the model were determined;
- c) A topographic map showing cross-sections and flood lines;
- d) Hard copy and electronic files of the input and output for existing and proposed conditions; and,
- e) Electronic files as required.

13.4.5 Coastal Study

A coastal study may be required to assess the risks associated with development in or near the shoreline hazard area. The scope of coastal studies will be determined on a site-specific basis through the pre-consultation process with NPCA staff.

13.4.6 Stormwater Management Plans and Hydrological Study

13.4.6.1 *Stormwater Management Plans*

The Stormwater Management Plans should describe the effect of the planned development on the existing drainage area and environment, and include proposed mitigation measures. If a watershed/sub-watershed plan is available for the proposed area of development, then the Plan should refer to those conclusions and recommendations. Stormwater Management Plans should be prepared in alignment with the NPCA's latest set of Stormwater Management Guidelines and relevant Provincial standards.

13.4.6.2 *Hydrological Study*

A hydrologic study may be required to confirm potential impacts on water quality or water quantity. Hydrological studies shall, at a minimum, address the following:

- a) demonstrate that the development or site alteration will have no adverse effects on the hydrologically sensitive feature or on the related hydrological functions;
- b) identify planning, design and construction practices that will maintain and, where possible, improve or restore the health, diversity and size of the hydrologically sensitive feature; and,
- c) determine whether the minimum buffer area is sufficient and, if it is not sufficient, specify the dimensions of the required minimum buffer area and provide for the maintenance and, where possible, improvement or restoration of natural self-sustaining vegetation within it.

13.4.7 Erosion and Sediment Control Plans

An Erosion and Sediment Control Plan may be required to illustrate how a proposed development will address concerns of erosion and sediment control during and after construction. The detailed requirements for erosion and sediment control plans will be determined through pre-consultation with the NPCA. In general, the Plan should be guided by the following principles:

- a) Retain existing vegetation and stabilize exposed soils with new vegetation, where appropriate;
- b) Minimize the duration of soil exposure;
- c) Minimize slope length and gradient of disturbed areas;
- d) Maintain overland sheet flow and avoid concentrated flows;
- e) Store/stockpile soil away (e.g. greater than 15 metres) from watercourses, drainage features and top of steep slopes; and,
- f) Monitor and adjust the Erosion and Sediment Control Plan to adapt to site features.

13.4.8 Landscaping and Vegetation Plans

Landscaping and vegetation plans may be required to illustrate how disturbed areas will be rehabilitated. The detailed requirement for landscaping and vegetation plans will depend on the nature of the application and site conditions. In general, the Plan should be guided by the following principles:

- a) To the extent possible, all existing vegetation and drainage patterns should be maintained;
- b) Site restoration should include native, non-invasive and locally appropriate species;

- c) Where possible, the vegetation and landscaping plans should provide opportunities for connections to adjacent features, with a particular emphasis on improving connections to the natural heritage system;
- d) The plans should support biodiversity; and,
- e) The plans should conform to any applicable municipal tree preservation by-laws.

13.5 WATERSHED AND SUBWATERSHED PLANS

13.5.1 Purpose and Intent of Watershed and Sub-watershed Plans

A watershed is an area of land from which surface runoff (water, sediments, nutrients and contaminants) drain into a common water body, such as the Mill Creek, Elsie Creek which are tributaries to the Welland River. Watersheds include all water and water-dependent features such as wetlands, forests, urban areas, and agriculture. A watershed plan is a proactive document created cooperatively by government agencies and the community to manage the water, land/water interactions, aquatic life and aquatic resources within a particular watershed to protect the health of the ecosystem as land uses change. Watershed and sub-watershed plans provide specific direction for the overall water and resource management of specific creek systems.

13.5.2 Approved Plans

The following watershed and sub-watershed plans have been approved and should be considered when reviewing planning act applications and, where appropriate, permit approvals:

- a) 12 Mile Creek Watershed Plan
- b) 15-16-18 Mile Creek Watershed Plan
- c) 20 Mile Creek Watershed Plan
- d) Central Welland River Watershed Plan
- e) Fort Erie Creeks Watershed Plan
- f) Lake Erie North Shore Watershed Plan
- g) NOTL Watershed Plan
- h) One Mile Creek Watershed Plan
- i) South Niagara Falls Watershed Plan
- j) Upper Welland River Watershed Plan
- k) Port Robinson West Sub-watershed Plan

13.6 TECHNICAL GUIDELINES TO SUPPORT DECISION-MAKING

The policies contained within this Document are intended to implement and complement a number of provincial, regional and local standards, regulations and guidelines. Where required, NPCA staff will make use of provincial standards and guidelines including, but not limited to, the following:

- a) Understanding Natural Hazards: Great Lakes – St. Lawrence River System and Large Inland Lakes, River and Stream System Hazardous Sites (Province of Ontario);
- b) Technical Guide: River and Stream System: Flooding Hazard Limit (Province of Ontario);
- c) Procedural Guidelines for Appeals, Under the Conservation Authorities Act;
- d) Natural Heritage Reference Manual (Province of Ontario);
- e) Drainage Act and Conservation Authorities Act Protocol (Province of Ontario);
- f) Stormwater Technical Guide (Province of Ontario); and,
- g) Other relevant standards and guidelines.

13.7 NPCA POLICY DOCUMENT AMENDMENTS AND UPDATES

13.7.1 Periodic Reviews of the Policy Document

The NPCA will undertake a periodic and comprehensive review of this document at a minimum every ten years to ensure that the policies remain effective and are consistent with the NPCA's mandate under provincial policy and applicable legislation.

13.7.2 Amendments to the Policy Document

13.7.2.1 *Amendment Process*

Where required, the NPCA may prepare amendments to various sections of this document to address emerging issues, changes in provincial legislation and/or modifications to the MOUs between the NPCA and its municipal partners. When preparing amendments to the Policy Document, the NPCA will:

- a) Pre-consult with the Board and its municipal partners to confirm issues, timing and process for the amendment;

- b) Complete an community engagement program to ensure that stakeholders, agencies and landowners within the watershed have the opportunity to participate in the amendment process;
- c) Prepare a discussion paper for public review explaining the key issues to be addressed in the amendment; and,
- d) Prepare a draft and final amendment to be approved by the NPCA Board.

13.7.2.2 *Amendment Index*

Amendments to the Policy Document shall be numbered and listed on the inside cover page of the Policy Document, including a brief explanation of the amendment, noting the date and purpose of the amendment.

13.7.3 Housekeeping Amendments

Minor changes to formatting, numbering, graphics and definitions do not require a formal amendment to this document and may be implemented by Staff as required.

13.7.4 Variances

The NPCA may issue a permit where in the opinion of the Authority the proposed impacts on the control of flooding, erosion and dynamic beaches, conservation of land and pollution are considered to be minor in nature and the proposed development will not result in increase in risks to human health and safety. Variances shall be approved by the NPCA Board.

13.8 INTERPRETATION

The policies of this Document are based on provincial legislation, policies, plans and guidelines. In cases where there is a conflict between a policy within this Document and a provincial plan, the more restrictive policy/standard should apply (unless there is an explicitly stated exception noted in the Document).

14.0 DEFINITIONS

Agriculture Uses: means the growing of crops, including nursery, biomass, and horticultural crops; raising of livestock; raising of other animals for food, fur or fibre, including poultry and fish; aquaculture; apiaries; agro-forestry; maple syrup production; and associated on-farm buildings and structures, including, but not limited to livestock facilities, manure storages, value-retaining facilities, and accommodation for full-time farm labour when the size and nature of the operation requires additional employment. (PPS, 2014)

Accessory: A use, separate building, or structure normally incidental, subordinate, exclusively devoted to and located on the same lot as the principal use, building or structure but does not include a building or structure used for human habitation. (Zoning Dictionary, 2016)

Balanced Cut and Fill: means an engineering technique used to balance flood storage losses resulting from Filling or Development activities within flood plains. An equivalent volume of earth is removed from the flood plain at appropriate elevations and locations to offset areas within flood plains that are Filled or developed. (Current NPCA Policy Document)

Buffer: An area of land which contains vegetation and is intended to separate two adjacent uses. (adapted from Zoning Dictionary, 2016)

Building: means any structure used for the shelter or accommodation of persons, animals, goods or chattels or equipment, having a roof which is supported by columns or wall and including any tents or awnings which are situated on private property. (Zoning Dictionary, 2016)

Climate Change: changes in long-term weather patterns caused by natural phenomena and human activities that alter the chemical composition of the atmosphere through the build-up of greenhouse gases which trap heat and reflect it back to the earth's surface. (Government of Canada, 2013)

Conservation of Land: means the protection, management, or restoration of lands within the watershed ecosystem for the purpose of maintaining or enhancing the natural features and hydrologic and ecological functions within the watershed. (Conservation Ontario, 2008)

Development: in the PPS means the creation of a new lot, a change in land use or the construction of Buildings and Structures which require approval under the Planning Act but does not include:

- a) activities that create or maintain infrastructure authorized under an Environmental Assessment Process;
- b) works subject to the Drainage Act; or
- c) for the purposes of PPS policy 2.1.4 (a), underground or surface mining of minerals or advanced exploration on mining lands in Significant areas of mineral potential in EcoRegion 5E, where advanced exploration has the same meaning as under the Mining Act. Instead those matters shall be subject to policy 2.1.5(a)

Development: under the Conservation Authorities Act means;

- a) the construction, Reconstruction, erection or placing of a Building or Structure of any kind; or
- b) any change to a Building or Structure that would have the effect of altering the use or potential use of the Building or Structure, increasing the size of the Building or Structure, or increasing the number of dwelling units in the Building or Structure; or
- c) site grading; or
- d) the temporary or permanent placing, dumping or removal of any material, originating on the site or elsewhere.

Dynamic Beach: means an area of inherently unstable accumulations of shoreline sediment along the Great Lakes-St. Lawrence River system and large inland lakes, as identified by provincial standards, as amended from time to time. The dynamic beach hazard limit consists of the flooding hazard limit plus a 30 m dynamic beach allowance. (PPS, 2014).

Ecological Function: means the natural processes, products or services that living and non-living environments provide or perform within or between species, ecosystems and landscapes. These may include biological, physical and socio-economic interactions. (PPS, 2014)

Ecosystem Approach: means the linkages and relationships involving air, land, water and living organisms. The approach is adaptive and recognizes the dynamic nature of watersheds and Watercourses and their respective landforms. It is intended to restore and maintain the integrity, quality, productivity and well-being of the watershed and subwatersheds. (NPCA Policy Document)

Erosion Hazard: means the loss of land, due to human or natural processes, that poses a threat to life and property. The erosion hazard limit is determined using considerations that include the 100 year erosion rate (the average annual rate of recession extended over a one hundred year time span), an allowance for slope stability, and an erosion/erosion access allowance. (PPS, 2014)

Evaluated Wetland: A wetland that has been evaluated using the Ontario Wetland Evaluation System (OWES). (new definition)

Existing Lot of Record: means a lot created under The Planning Act prior to the adoption of these policies by the Board of Directors of the Niagara Peninsula Conservation Authority on September 15, 1993 for the purposes of the top of bank setback. For the purposes of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation 155/06 regulation, the effective date for an Existing Lot of Record is the date of the adoption of this Manual by the NPCA Board of Directors (December 12, 2007). (NPCA Policy Document)

Fill: Is a form of development under the Conservation Authorities Act and includes earth, sand, gravel, rubble, rubbish, garbage, or any other matter whether similar to or different from any of the aforementioned materials, whether originating on the site or elsewhere, used or capable of being used to raise, lower, or in any way effect the existing grade (does not include herbaceous or woody plant material). (Hybrid Definition: Conservation Halton/Kawartha Lakes Conservation Authority, Large Fill Procedural Guideline, 2013).

Five Tests: The five tests of a permit application under the NPCA's section 28 (Ontario Regulation 155/06) include the control of flooding, erosion, dynamic beaches, pollution, and conservation of land. (Adapted from section 28 of Regulation 155/06)

Flooding Hazard: means the inundation, under the conditions specific below, of areas adjacent to a shoreline or a river or stream systems and not ordinarily covered by water:

- a) Along the shorelines of the Great Lakes-St. Lawrence River System and large inland lake, the flooding hazard limit is based on the one hundred year flood level plus an allowance for wave uprush and other water related hazards;
- b) Along river, stream and small inland lake systems, the flooding hazard limit is defined as the one hundred year flood (adapted for NPCA from PPS, 2014).

Flood Fringe: for river, stream and small inland lake systems, means the outer portion of the flood plain between the floodway and the flooding hazard limit. Depths and velocities of flooding are generally less severe in the flood fringe than those experienced in the floodway. (PPS, 2014)

Flood Line: means an engineered line delineating the potential extent of flooding, by elevation, as a result of a specific flood event. (Current NPCA Policy Document)

Flood plain: for a river, stream and small inland lake systems, means the area, usually low lands adjoining a watercourse, which has been or may be subject to flooding hazards. (PPS, 2014)

Flood plain Mapping: means the process whereby floodlines are produced and plotted on suitable base maps using procedures approved by the Province of Ontario. The use of computers allows for the detailed identification and consideration of local watershed features, such as drainage areas, soils, land use, flow constrictions, and topography when determining flows and flood levels. (Current NPCA Policy Document)

Floodproofing: means the combination of measures incorporated into the basic design and/or construction of buildings, structures, or properties to reduce or eliminate flooding hazards, wave uprush and other water-related hazards along the shorelines of the Great Lakes - St. Lawrence River System and large inland lakes, and flooding hazards along river, stream and small inland lake systems. (PPS, 2014)

Floodway: for river, stream and small inland lake systems, means the portion of the flood plain where development and site alteration would cause a danger to public health and safety or property damage. Where the one zone concept is applied, the floodway is the entire contiguous flood plain. Where the two zone concept is applied, the floodway is the contiguous inner portion of the flood plain, representing that area required for the safe passage of flood flow and/or that area where flood depths and/or velocities are considered to be such that they pose a potential threat to life and/or property damage. Where the two zone concept applies, the outer portion of the flood plain is called the flood fringe. (PPS, 2014)

Habitable: means any building or structure used, or intended to be used, for living, sleeping or the preparation of food. (adapted from Zoning Dictionary, 2016)

Hazardous Lands: When applying the Conservation Authorities Act, hazardous land means land that could be unsafe for development because of naturally occurring processes associated with flooding, erosion, dynamic beaches or unstable soil or bedrock. (Conservation Authorities Act)

Hazardous Lands: When applying the Planning Act, means property or lands that could be unsafe for development due to naturally occurring processes. Along the shorelines of the great lakes - St. Lawrence River system, this means the land, including that covered by water, between the international boundary, where applicable, and the furthest landward limit of the flooding hazard, erosion hazard or dynamic beach hazard limits. Along the shorelines of large inland lakes, this means the land, including that covered by water, between a defined offshore distance or depth and the furthest landward limit of the flooding hazard, erosion hazard or dynamic beach hazard limits. Along river, stream and small inland lake systems, this means the land,

including that covered by water, to the furthest landward limit of the flooding hazard or erosion hazard limits. (PPS, 2014)

Hazardous Site: means property or lands that could be unsafe for development and site alteration due to naturally occurring hazards. These may include unstable soils (sensitive marine clays [leda], organic soils) or unstable bedrock (karst topography). (PPS, 2014)

Hydraulic Floodway: the inner portion of the flood plain where flood depths and velocities are generally higher and faster flowing than those experienced in the outer or fringe portion of the overall flood plain. The floodway represents that area required for the safe passage of flood flow and/or that area where flood depths and/or velocities are considered to be such that they pose a significant threat to life and/or property damages.

Hydrologic Function: means the functions of the hydrological cycle that include the occurrence, circulation, distribution and chemical and physical properties of water on the surface of the land, in the soil and underlying rocks, and in the atmosphere, and water's interaction with the environment including its relation to living things. (PPS, 2014)

Inert: In the context of fill means earth or rock fill or waste of a similar nature that contains no putrescible materials or soluble or decomposable chemical substances. (Kawartha Lakes Conservation Authority, 2013)

Infrastructure: means physical structures (facilities and corridors) that form the foundation for development and includes:

- a) Sewage and water systems;
- b) Septage treatment systems;
- c) Stormwater management systems;
- d) Waste management systems;
- e) Electricity generation facilities;
- f) Electricity transmission and distribution systems;
- g) Transportation corridors and facilities; and,
- h) Oil and gas pipelines and associated facilities.

(PPS, 2014).

Intermittent Watercourse: Intermittent systems flow continuously for only a portion of the year, or are consistently dry, during the summer months. If a watercourse flows during brief periods (usually during the spring and/or fall), or for brief periods following storm events during the summer months, or has a defined channel but is dry for at least three months of the year, it

should be considered intermittent. If the watercourse is categorized as an intermittent system, but habitats are present within the drain where there are known sensitive species, the drain cannot be considered intermittent. (Stream Permanency Handbook for South-Central Ontario, 2013)

Large Fill: Includes the placement of fill which is greater than 250m³. (new definition)

Minor Works: means a category of Development within the flood plain which has relatively small economic value and will not lead to significant economic hardship if lost in times of severe flooding. The construction of Minor Works does not require detailed Floodproofing measures and therefore there is an assumption of risk associated with the Development. (Current NPCA Policy Document)

Municipal Drain: A “drainage works” as defined under the Drainage Act. Under the Act, a drainage works is defined as a drain constructed by any means, including the improving of a natural watercourse, and includes works necessary to regulate the water table or water level within or on any lands or to regulate the level of the waters of a drain, reservoir, lake or pond, and includes a dam, embankment, wall, protective works or any combination thereof. To be a municipal drain, there must be a municipal by-law that adopts an engineer’s report that defines the drainage system and states how the cost of the system is to be shared among property owners. (Drainage Act and Conservation Authorities Act Protocol, 2012)

100 Year Flood: means a flood which has a one percent probability of occurring or being exceeded in any given year. This flood is likely to occur or be exceeded on an average of once every one hundred years. It is the flood used for regulatory purposes in the Niagara Peninsula with the exception of three watersheds located within the City of Niagara Falls. (PPS, 2014)

100 Year Flood limit (for the shorelines of the Great Lakes): means the peak instantaneous stillwater level, resulting from combinations of mean monthly lake levels and wind setups that have a 1% chance of being equaled or exceeded in any given year. (PPS, 2014)

Original Ground Floor Area: means the ground floor area of a Building at current grade, measured by the total dimensions of the exterior face of the Structure. For purposes of the Authority’s cumulative exceedence requirements), original floor area of Building would be the floor area of a Building that existed on or after December 8, 1988 for the purposes of Buildings in the flood plain. For Buildings in Wetlands, the effective date is the adoption of the Environmental Planning Manual. (Current NPCA Policy Document)

Passive Recreational Uses: means recreational activities that occur in a natural setting which require minimal development or facilities, and the importance of the environment or setting for the activities is greater than in developed or active recreation settings. (Zoning Dictionary, 2016)

Permanent Watercourse: Permanent systems flow year round, or are consistently wet. If a watercourse continues to flow (in an average year), or is consistently wet, during the dry summer months, it should be considered permanent. (Stream Permanency Handbook for South-Central Ontario, 2013)

Provincially Significant Wetland: an area identified as provincially significant by the Ontario Ministry of Natural Resources using evaluation procedures established by the Province, as amended from time to time. (Conservation Ontario Guidelines, 2008)

Pollution: means any deleterious physical substance or other contaminant that has the potential to be generated by development in an area to which a regulation made under Section 28 of the Conservation Authorities Act. (Section 28, Conservation Authorities Act)

Regional Storm: The Regional Storm used for this part of Ontario is the Hurricane Hazel storm. This storm occurred over the Humber River watershed in October, 1954. This storm is used for regulatory purposes for three watersheds located within the City of Niagara Falls. A more technical definition of the Regional Storm is outlined in Ontario Regulation 99/91, which is appended to this document. (Current NPCA Policy Document)

Reconstruction: The restoration of a building or structure to its original form (i.e. same dimensions, square footage and building footprint). (NPCA Policy Document)

Regulatory Flood: means the Regulatory Flood is the 100 Year Flood for the entire Niagara Peninsula Conservation Authority with the exception of three watersheds located within the City of Niagara Falls. The Regional Storm is the Regulatory Flood for the watersheds associated with Shriner's Creek, Ten Mile Creek and Beaverdam's Creek (including Tributary W-6-5). (Current NPCA Policy Document)

Riparian Vegetation: means the plant communities in the riparian zone, typically characterized by hydrophilic plants. (GRCA Policy)

Riparian Zone: means the interface between land and a flowing surface water body. Riparian is derived from Latin ripa meaning river bank. (GRCA Policy)

Runoff: That part of precipitation, snow melt, or irrigation water that runs off the land into streams or other surface water. It can carry pollutants from the air and land into the receiving waters. (NPCA, Stormwater Management Guidelines, 2010)

Setback: A horizontal distance measured at right angles from the edge of a given feature to demarcate the limits of development. Setback distances vary from feature to feature. (adapted from Zoning Dictionary, 2016)

Special Policy Area: means an area within a community that has historically existed in the flood plain and where site-specific policies, approved by both the Ministers of Natural Resources and Municipal Affairs and Housing, are intended to provide for the continued viability of existing uses (which are generally on a small scale) and address the significant social and economic hardships to the community that would result from strict adherence to provincial policies concerning development. The criteria and procedures for approval are established by the Province. A Special Policy Area is not intended to allow for new or intensified development and site alteration, if a community has feasible opportunities for development outside the flood plain. (PPS, 2014)

Species of concern: means any species that is listed or categorized as a special concern species on the Ontario Ministry of Natural Resources official Species at Risk list or that is designated as a special concern species by the Committee on the Status of Wildlife in Canada (COSEWIC) or that is not included on those lists but has been given a ranking of S3 imperiled or higher by the Ontario Natural Heritage Information Centre, as updated from time to time. (Niagara Region Official Plan)

Stormwater: Includes stormwater runoff, snow melt runoff, surface runoff and drainage. It excludes infiltration. (NPCA, Stormwater Management Guidelines, 2010)

Stormwater Management (SWM): Practices implemented to protect natural waterways and receiving waters from urban impacts. Controls used include peak flow control for flood control, peak flow and volume control to mitigate erosion impacts and water quality controls for water quality impacts. (NPCA, Stormwater Management Guidelines, 2010)

Structure: means that which is built and can include, but is not limited to, dwellings or other Buildings or partial Building, all of which require footings or foundation support, as well as retaining walls, septic systems, private roads, parking lots, berms, swimming pools and decks. (Current NPCA Policy Document)

Valleylands: means a natural area that occurs in a valley or other landform depression that has water flowing through or standing for some period of the year. (PPS, 2014)

Watercourse: means an identifiable depression in the ground in which a flow of water regularly or continuously occurs. (Conservation Authorities Act)

Wave uprush: means the rush of water up onto a shoreline or structure following the breaking of a wave; the limit of wave uprush is the point of furthest landward rush of water onto the shoreline. (PPS, 2014)

Watershed: means an area that is drained by a river and its tributaries. (PPS, 2014)

Wetland, under the Conservation Authorities Act: means land that a) is seasonally or permanently covered by shallow water or has a water table close to or at its surface, b) directly contributes to the hydrological function of a watershed through connection with a surface watercourse, c) has hydric soils, the formation of which has been caused by the presence of abundant water, and d) has vegetation dominated by hydrophytic plants or water tolerant plants, the dominance of which has been favoured by the presence of abundant water, but does not include periodically soaked or wet land that is used for agricultural purposes and no longer exhibits a wetland characteristic referred to in clause c) or d). (Conservation Authorities Act)

Wetland, under the Planning Act (Provincial Policy Statement): means lands that are seasonally or permanently covered by shallow water, as well as lands where the water table is close to or at the surface. In either case, the presence of abundant water has caused the formation of hydric soils and has favoured the dominance of either hydrophytic plants or water tolerant plants. The four major types of wetlands are swamps, marshes, bogs and fens. (PPS, 2014)

APPENDIX A

SECTION 28(3) CONSERVATION AUTHORITIES ACT HEARING GUIDELINES

SECTION 28 (3)

CONSERVATION AUTHORITIES ACT

HEARING GUIDELINES

October 2005

Amended for use by NPCA, October, 2011



**Ministry of Natural Resources
Ministère des Richesses naturelles**

SECTION 28 (3)

CONSERVATION AUTHORITIES ACT

HEARING GUIDELINES

October 2005

Peter Krause, Chairman
Conservation Ontario

Gail L. Beggs, Deputy Minister
Ministry of Natural Resources

Section 28 (12), Conservation Authorities Act - Hearing Guidelines

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Appendices

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1.0 PURPOSE OF HEARING GUIDELINES:

The purpose of the Hearing Guidelines is to reflect the changes to the 1998 Conservation Authorities Act. The Act requires that the applicant be party to a hearing by the local Conservation Authority Board, or Executive Committee (sitting as a Hearing Board) as the case may be, for an application to be refused or approved with contentious conditions. Further, a permit may be refused if in the opinion of the Authority the proposal adversely affects the control of flooding, pollution or conservation of land, and additional erosion and dynamic beaches. The Hearing Board is empowered by law to make a decision, governed by the Statutory Powers Procedures Act. It is the purpose of the Hearing Board to evaluate the information presented at the hearing by both the Conservation Authority staff and the applicant and to decide whether the application will be approved with or without conditions or refused.

These guidelines have been prepared as an update to the October 1992 hearing guidelines and are intended to provide a step-by-step process to conducting hearings required under Section 28 (12), (13), (14) of the Conservation Authorities Act. Similar to the 1992 guidelines, it is hoped that the guidelines will promote the necessary consistency across the Province and ensure that hearings meet the legal requirements of the Statutory Powers Procedures Act without being unduly legalistic or intimidating to the participants.

2.0 PREHEARING PROCEDURES

2.1 Apprehension of Bias

In considering the application, the Hearing Board is acting as a decision-making tribunal. The tribunal is to act fairly. Under general principles of administrative law relating to the duty of fairness, the tribunal is obliged not only to avoid any bias but also to avoid the appearance or apprehension of bias. The following are three examples of steps to be taken to avoid apprehension of bias where it is likely to arise.

- (a) No member of the Authority taking part in the hearing should be involved, either through participation in committee or intervention on behalf of the applicant or other interested parties with the matter, prior to the hearing. Otherwise, there is a danger of an apprehension of bias which could jeopardize the hearing.
- (b) If material relating to the merits of an application that is the subject of a hearing is distributed to Board members before the hearing, the material shall be distributed to the applicant at the same time. The applicant may be afforded an opportunity to distribute similar pre-hearing material.
- (c) In instances where the Authority (or Executive Committee) requires a hearing to help it reach a determination as to whether to give permission with or without conditions or refuse a permit application, a final decision shall not be made until such time as a hearing is held. The applicant will be given an opportunity to attend the hearing before a decision is made; however, the applicant does not have to be present for a decision to be made.

Individual Conservation Authorities shall develop a document outlining their own practices and procedures relating to the review and reporting of Section 28 applications, including the role of staff, the applicant and the Authority or Executive Committee as well as, the procedures for the hearing itself. Such policy and procedures manual shall be available to the members of the public upon request. These procedures shall have regard for the above information and should be approved by the Conservation Authority Board of Directors.

2.2 Application

The right to a hearing is required where staff is recommending refusal of an application or where there is some indication that the Authority or Executive Committee may not follow staff's recommendation to approve a permit or the applicant objects to the conditions of approval. The applicant is entitled to reasonable notice of the hearing pursuant to the Statutory Powers Procedures Act.

2.3 Notice of Hearing

The Notice of Hearing shall be sent to the applicant within sufficient time to allow the applicant to prepare for the hearing. To ensure that reasonable notice is given, it is recommended that prior to sending the Notice of Hearing, the applicant be consulted to determine an agreeable date and time based on the local Conservation Authority's regular meeting schedule.

The Notice of Hearing must contain the following:

- (a) Reference to the applicable legislation under which the hearing is to be held (i.e., the Conservation Authorities Act).
- (b) The time, place and the purpose of the hearing.
- (c) Particulars to identify the applicant, property and the nature of the application which are the subject of the hearing.

Note: If the applicant is not the landowner but the prospective owner, the applicant must have written authorization from the registered landowner.

- (d) The reasons for the proposed refusal or conditions of approval shall be specifically stated. This should contain sufficient detail to enable the applicant to understand the issues so he or she can be adequately prepared for the hearing.

It is sufficient to reference in the Notice of Hearing that the recommendation for refusal or conditions of approval is based on the reasons outlined in previous correspondence or a hearing report that will follow.

- (e) A statement notifying the applicant that the hearing may proceed in the applicant's absence and that the applicant will not be entitled to any further notice of the proceedings.

Except in extreme circumstances, it is recommended that the hearing not proceed in the absence of the applicant.

- (f) Reminder that the applicant is entitled to be represented at the hearing by counsel, if desired.

It is recommended that the Notice of Hearing be directed to the applicant and/or landowner by registered mail. Please refer to **Appendix A** for an example Notice of Hearing.

2.4 Presubmission of Reports

If it is the practice of the local Conservation Authority to submit reports to the Board members in advance of the hearing (i.e., inclusion on an Authority/Executive Committee agenda), the applicant shall be provided with the same opportunity. The applicant shall be given two weeks to prepare a report once the reasons for the staff recommendations have been received. Subsequently, this may affect the timing and scheduling of the staff hearing reports.

2.5 Hearing Information

Prior to the hearing, the applicant shall be advised of the local Conservation Authority's hearing procedures upon request.

3.0 HEARING

3.1 Public Hearing

Pursuant to the Statutory Powers Procedure Act, hearings are required to be held in public. The exception is in very rare cases where public interest in public hearings is outweighed by the fact that intimate financial, personal or other matters would be disclosed at hearings.

3.2 Hearing Participants

The Conservation Authorities Act does not provide for third party status at the local hearing. While others may be advised of the local hearing, any information that they provide should be incorporated within the presentation of information by, or on behalf of, the applicant or Authority staff.

3.3 Attendance of Hearing Board Members

In accordance with case law relating to the conduct of hearings, those members of the Authority who will decide whether to grant or refuse the application must be present during the full course of the hearing. If it is necessary for a member to leave, the hearing must be adjourned and resumed when either the member returns or if the hearing proceeds, even in the event of an adjournment, only those members who were present after the member left can sit to the conclusion of the hearing.

3.4 Adjournments

The Board may adjourn a hearing on its own motion or that of the applicant or Authority staff where it is satisfied that an adjournment is necessary for an adequate hearing to be held.

Any adjournments form part of the hearing record.

3.5 Orders and Directions

The Authority is entitled to make orders or directions to maintain order and prevent the abuse of its hearing processes. A hearing procedures example has been included as **Appendix B**.

3.6 Information Presented at Hearings

- (a) The Statutory Powers Procedure Act, requires that a witness be informed of his right to object pursuant to the Canada Evidence Act. The Canada Evidence Act indicates that a witness shall be excused from answering questions on the basis that the answer may be incriminating. Further, answers provided during the hearing are not admissible against the witness in any criminal trial or proceeding. This information should be provided to the applicant as part of the Notice of Hearing.
- (b) It is the decision of the hearing members as to whether information is presented under oath or affirmation. It is not a legal requirement. The applicant must be informed of the above, prior to or at the start of the hearing.
- (c) The Board may authorize receiving a copy rather than the original document. However, the Board can request certified copies of the document if required.
- (d) Privileged information, such as solicitor/client correspondence, cannot be heard. Information that is not directly within the knowledge of the speaker (hearsay), if relevant to the issues of the hearing, can be heard.
- (e) The Board may take into account matters of common knowledge such as geographic or historic facts, times measures, weights, etc or generally recognized scientific or technical facts, information or opinions within its specialized knowledge without hearing specific information to establish their truth.

3.7 Conduct of Hearing

3.7.1 Record of Attending Hearing Board Members

A record shall be made of the members of the Hearing Board.

3.7.2 Opening Remarks

The Chairman shall convene the hearing with opening remarks which generally; identify the applicant, the nature of the application, and the property location; outline the hearing procedures; and advise on requirements of the Canada Evidence Act. Please reference **Appendix C** for the Opening Remarks model.

3.7.3 Presentation of Authority Staff Information

Staff of the Authority presents the reasons supporting the recommendation for the refusal or conditions of approval of the application. Any reports, documents or plans that form part of the presentation shall be properly indexed and received.

Staff of the Authority should not submit new information at the hearing as the applicant will not have had time to review and provide a professional opinion to the Hearing Board.

Consideration should be given to the designation of one staff member or legal counsel who coordinates the presentation of information on behalf of Authority staff and who asks questions on behalf of Authority staff.

3.7.4 Presentation of Applicant Information

The applicant has the opportunity to present information at the conclusion of the Authority staff presentation. Any reports, documents or plans which form part of the submission should be properly indexed and received.

The applicant shall present information as it applies to the permit application in question. For instance, does the requested activity affect the control of flooding, erosion, dynamic beach or conservation of land or pollution? The hearing does not address the merits of the activity or appropriateness of such a use in terms of planning.

- The applicant may be represented by legal counsel or agent, if desired
- The applicant may present information to the Board and/or have invited advisors to present information to the Board
- The applicant(s) presentation may include technical witnesses, such as an engineer, ecologist, hydrogeologist etc.

The applicant should not submit new information at the hearing as the Staff of the Authority will not have had time to review and provide a professional opinion to the Hearing Board.

3.7.5 Questions

Members of the Hearing Board may direct questions to each speaker as the information is being heard. The applicant and /or agent can make any comments or questions on the staff report.

Pursuant to the Statutory Powers Procedure Act, the Board can limit questioning where it is satisfied that there has been full and fair disclosure of the facts presented. Please note that the

courts have been particularly sensitive to the issue of limiting questions and there is a tendency to allow limiting of questions only where it has clearly gone beyond reasonable or proper bounds.

3.7.6 Deliberation

After all the information is presented, the Board may adjourn the hearing and retire in private to confer. The Board may reconvene on the same date or at some later date to advise of the Board's decision. If the hearing is adjourned to another date, only members present during the previous hearing(s) may participate in discussion and/or decision. The Board members shall not discuss the hearing with others prior to the decision of the Board being finalized.

4.0. DECISION

The applicant must receive written notice of the decision. The applicant shall be informed of the right to appeal the decision within 30 days upon receipt of the written decision to the Minister of Natural Resources.

It is important that the hearing participants have a clear understanding of why the application was refused or approved. The Board shall itemize and record information of particular significance which led to their decision.

4.1 Notice of Decision

The decision notice should include the following information:

- (a) The identification of the applicant, property and the nature of the application that was the subject of the hearing.
- (b) The decision to refuse or approve the application. A copy of the Hearing Board resolution should be attached.

It is recommended that the written Notice of Decision be forwarded to the applicant by registered mail. A sample Notice of Decision and cover letter has been included as **Appendix D**.

4.2 Adoption

A resolution advising of the Board's decision and particulars of the decision should be adopted.

5.0 RECORD

The Authority shall compile a record of the hearing. In the event of an appeal, a copy of the record should be forwarded to the Minister of Natural Resources/Mining and Lands Commissioner. The record must include the following:

- (a) The application for the permit.
- (b) The Notice of Hearing.
- (c) Any orders made by the Board (e.g., for adjournments).
- (d) All information received by the Board.
- (e) The minutes of the meeting made at the hearing.
- (f) The decision and reasons for decision of the Board.
- (g) The Notice of Decision sent to the applicant

Appendix A

NOTICE OF HEARING

IN THE MATTER OF

The Conservation Authorities Act,
R.S.O. 1990, Chapter 27

AND IN THE MATTER OF an application by

FOR THE PERMISSION OF THE CONSERVATION AUTHORITY

Pursuant to Regulations made under
Section 28, Subsection 12 of the said Act

TAKE NOTICE THAT a Hearing before the Executive Committee of the Conservation Authority will be held under Section 28, Subsection 12 of the Conservation Authorities Act at the offices of the said Authority (ADDRESS), at the hour of , **on the day of , 2001**, with respect to the application by (**NAME**) to permit development within an area regulated by the Authority in order to ensure no adverse affect on (***the control of flooding, erosion, dynamic beaches or pollution or conservation of land./alter or interfere with a watercourse, shoreline or wetland***) on Lot , Plan/Lot , Concession , (**Street**) in the City of , Regional Municipality of , River Watershed.

TAKE NOTICE THAT you are invited to make a delegation and submit supporting written material to the Executive Committee for the meeting of (**meeting number**). If you intend to appear, please contact (**name**) . Written material will be required by (**date**), to enable the Committee members to review the material prior to the meeting.

TAKE NOTICE THAT this hearing is governed by the provisions of the Statutory Powers Procedure Act. Under the Act, a witness is automatically afforded a protection that is similar to the protection of the Ontario Evidence Act. This means that the evidence that a witness gives may not be used in subsequent civil proceedings or in prosecutions against the witness under a Provincial Statute. It does not relieve the witness of the obligation of this oath since matters of perjury are not affected by the automatic affording of the protection. The significance is that the legislation is Provincial and cannot affect Federal matters. If a witness requires the protection of the Canada Evidence Act that protection must be obtained in the usual manner. The Ontario Statute requires the tribunal to draw this matter to the attention of the witness, as this tribunal has no knowledge of the affect of any evidence that a witness may give.

AND FURTHER TAKE NOTICE that if you do not attend at this Hearing, the Executive Committee of the Conservation Authority may proceed in your absence, and you will not be entitled to any further notice in the proceedings.

DATED the ____ day of , _____200X

The Executive Committee of the
Conservation Authority

Per:
Chief Administrative Officer/Secretary-Treasurer

Appendix B

HEARING PROCEDURES

1. Motion to sit as Hearing Board.
2. Roll Call followed by the Chair's opening remarks.
3. Staff will introduce to the Hearing Board the applicant/owner, his/her agent and others wishing to speak.
4. Staff will indicate the nature and location of the subject application and the conclusions.
5. Staff will present the staff report included in the Authority/Executive Committee agenda.
6. The applicant and/or his/her agent will speak and also make any comments on the staff report, if he/she so desires.
7. The Hearing Board is open to the public and therefore, the Hearing Board will allow others to speak, and, if necessary, the applicant in rebuttal.
8. The Hearing Board will question, if necessary, both the staff and the applicant/agent.
9. The Hearing Board may move into camera.
10. Members of the Hearing Board will move and second a motion.
11. A motion will be carried which will culminate in the decision.
12. The Hearing Board will move out of camera.
13. The Chairman or Acting Chairman will advise the owner/applicant of the Hearing Board decision.
14. If decision is "to refuse", the Chairman or Acting Chairman shall notify the owner/applicant of his/her right to appeal the decision to the Minister of Natural Resources within 30 days of receipt of the reasons for the decision.
15. Motion to move out of Hearing Board and sit as Executive Committee.

Appendix C

CHAIR'S REMARKS WHEN DEALING WITH HEARINGS WITH RESPECT TO ONTARIO REGULATION 158

We are now going to conduct a hearing under section 28 of the Conservation Authorities Act in respect of an application by _____: , for permission to:_____

The Authority has adopted regulations under section 28 of the Conservation Authorities Act which requires the permission of the Authority for development within an area regulated by the Authority in order to ensure no adverse affect on (the control of flooding, erosion, dynamic beaches or pollution or conservation of land) or to permit alteration to a shoreline or watercourse or interference with a wetland.

The Staff has reviewed this proposed work and a copy of the staff report has been given to the applicant.

The Conservation Authorities Act (Section 28 [12]) provides that:

"Permission required under a regulation made under clause (1) (b) or 8) shall not be refused or granted subject to conditions unless the person requesting permission has been given the opportunity to require a hearing before the authority or, if the authority so directs, before the authority's executive committee."

In holding this hearing, the Authority Board/Executive Committee is to determine whether or not a permit is to be issued. In doing so, we can only consider the application in the form that is before us, the staff report, such evidence as may be given and the submissions to be made on behalf of the applicant.

The proceedings will be conducted according to the Statutory Powers Procedure Act. Under Section 5 of the Canada Evidence Act, a witness may refuse to answer any question on the ground that the answer may tend to criminate the person, or may tend to establish his/her liability to a civil proceeding at the instance of the Crown or of any person.

The procedure in general shall be informal without the evidence before it being given under oath or affirmation unless decided by the hearing members.

If the applicant has any questions to ask of the Hearing Board or of the Authority representative, they must be directed to the Chair of the board.

Appendix D

(Date)

BY REGISTERED MAIL

(name)

(address)

Dear:

RE: NOTICE OF DECISION

Hearing Pursuant to Section 28(12) of the Conservation Authorities Act

Proposed Residential Development

Lot , Plan ; ?? Drive City of

(Application #)

In accordance with the requirements of the Conservation Authorities Act, the (**name**) Conservation Authority provides the following Notice of Decision:

On (**meeting date and number**), the Hearing Board/Authority/Executive Committee refused/approved your application/approved your application with conditions. A copy the Boards/Committee's resolution # has been attached for your records. Please note that this decision is based on the following reasons: (**the proposed development/alteration to a watercourse or shoreline adversely affects the control of flooding, erosion, dynamic beaches or pollution or interference with a wetland or conservation of land**).

In accordance with Section 28 (15) of the Conservation Authorities Act, An applicant who has been refused permission or who objects to conditions imposed on a permission may, within 30 days of receiving the reasons under subsection (14), appeal to the Minister who may refuse the permission; or grant permission, with or without conditions. For your information, should you wish to exercise your right to appeal the decision, a letter by you or your agent/counsel setting out your appeal must be sent within 30 days of receiving this decision addressed to:

The Honourable David Ramsay
Minister of Natural Resources
Queen's Park, Whitney Block
99 Wellesley Street West, 6th Floor, Room 6630
Toronto, Ontario M7A 1W3
TEL: (416) 314-2301 FAX: (416) 314-2216

Should you require any further information, please do not hesitate to contact (**staff contact**) or the undersigned.

Yours truly,

Chief Administrative Officer/Secretary Treasurer

Enclosure

APPENDIX B

MNR DELEGATION OF NATURAL HAZARDS TO CONSERVATION AUTHORITIES



Ministry of
Natural
Resources

Minister

Ministère des
Richesses
naturelles

Ministre

Queen's Park
Toronto, Ontario
M7A 1W3
416 / 314-2301

[Handwritten signature]
☐ Dir. Gen. Mgt.
☐ Dir. W.
☐ Dir. Fin. & Adm.
☐ Dir. Communications
☐ Dir. Land Mgt.
☐ Co-od Info. Sys.

☐ Chairman
☐ Secretary
☐ Reception
☐ File
☐ Exec. Dir. Found.
☐ Accounts

N.P.C.A.

'95 APR 21 AM 11 25

APR 19 1995

95-01252-MIN

Mr. Charles Ort
Niagara Peninsula Conservation Authority
2358 Centre Street
Allanburg, Ontario
L0S 1A0

Dear Mr. Ort:

This letter is with regard to the responsibilities of Conservation Authorities in commenting on development proposals.

The Government of Ontario is continuing to move forward on reforms promoting greater local involvement in decision-making, streamlining of municipal planning and other approval processes, and improved environmental protection. Ontario's Conservation Authorities continue to be important partners in this process.

In 1983, Conservation Authorities were delegated commenting responsibility on flood plain management matters. This was followed in 1988 by a similar delegation of commenting responsibility for matters related to flooding, erosion, and dynamic beaches along the shorelines of the Great Lakes-St. Lawrence River system.

At present, the Ministry and Conservation Authorities continue to independently review and provide input to municipalities and the Ministry of Municipal Affairs on development matters related to riverine erosion, slope, and soil instability. Although Authorities and the Ministry share similar objectives, this overlap and duplication of efforts have occasionally led to differences in comments which, in turn, have sometimes resulted in confusion, delays and expense for development proponents. As part of the current Planning Reform initiative, there is an opportunity to clarify the roles and responsibilities related to these important hazard management issues.

... 2

Through their flood plain, watershed and Great Lakes-St. Lawrence River shoreline management planning initiatives, Conservation Authorities have made good progress in streamlining approval processes and strengthening provincial-municipal partnerships. By extension, I believe that it would be appropriate to recognize the well-developed expertise and capabilities of Conservation Authorities in the evaluation of riverine erosion, slope and soil instability matters and to formally confirm Conservation Authorities as the lead commenting agency. This would result in further streamlining of approval processes, the promotion of environmentally sound development, and the provision of an economic stimulus for the province.

As of March 29, 1995, Conservation Authorities, where they exist, will have sole commenting responsibilities on development proposed in areas subject to riverine erosion, slope instability and soil instability, such as in areas of high water tables, organic or peat soils, and leda, or sensitive marine clay, soils. Implementation of this policy by authorities would continue to be eligible for provincial grant. Where Conservation Authorities exist, I have asked Ministry staff to focus their comments on all other matters of direct interest and concern to the Ministry. Where Conservation Authorities do not exist, the Ministry will continue its commenting role on these matters.

The Ministry of Natural Resources will continue as lead administrative Ministry having overall Government responsibility for hazard management policies and programs. In this regard, the Ministry will continue to provide leadership, policy direction and advisory assistance to the Conservation Authorities.

Your continued participation in the delivery of this important component of the overall provincial hazard management program will serve to strengthen the partnership between the Ministry and the Conservation Authorities.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Howard Hampton', with a stylized flourish at the end.

Howard Hampton
Minister

CONSERVATION ONTARIO, MINISTRY OF NATURAL RESOURCES & MINISTRY OF MUNICIPAL AFFAIRS AND HOUSING

MEMORANDUM OF UNDERSTANDING ON PROCEDURES TO ADDRESS CONSERVATION AUTHORITY DELEGATED RESPONSIBILITY

1. PURPOSE OF THE MOU

The MOU defines the roles and relationships between Conservation Authorities (CAs), the Ministry of Natural Resources (MNR), and the Ministry of Municipal Affairs and Housing (MMAH) in planning for implementation of CA delegated responsibilities under the Provincial One Window Planning System.

BENEFITS TO SIGNATORY PARTIES

It is beneficial for all parties to enter into this agreement because it clarifies the roles of CAs and the unique status of CAs in relationship to the Provincial One Window Planning System.

DELEGATED RESPONSIBILITY FOR NATURAL HAZARDS

CAs were delegated natural hazard responsibilities by the Minister of Natural Resources. A copy of the delegation letter is attached. This letter (dated April 1995) went to all CAs and summarizes delegations from the MNR including flood plain management, hazardous slopes, Great Lakes shorelines, unstable soils and erosion which are now encompassed by Section 3.1 "Natural Hazards" of the Provincial Policy Statement (1997). In this delegated role, the CA is responsible for representing the "Provincial Interest" on these matters in planning exercises where the Province is not involved. This role does not extend to other portions of the PPS unless specifically delegated or assigned in writing by the Province.

2. ROLES AND RESPONSIBILITIES

Ministry of Natural Resources

- a) MNR retains the provincial responsibility for the development of flood, erosion and hazard land management policies, programs and standards on behalf of the province pursuant to the *Ministry of Natural Resources Act*.
- b) Where no conservation authorities exist, MNR provides technical support to the Ministry of Municipal Affairs and Housing on matters related to Section 3.1 of the Provincial Policy Statement in accordance with the "Protocol Framework – One Window Plan Input, Review and Appeals".
- c) MNR, in conjunction with MMAH, co-ordinates the provincial review of applications for Special Policy Area approval under Section 3.1 of the PPS.

Ministry of Municipal Affairs and Housing

- a) MMAH coordinates provincial input, review and approval of policy documents, and development proposals and appeals to the Ontario Municipal Board in accordance with the "Protocol Framework One Window Plan Input Review and Appeals".
- b) Where appropriate, MMAH will consult conservation authorities as part of its review of policy documents and development proposals to seek input on whether there was "regard to" Section 3.1 of the PPS.
- c) Where there may be a potential conflict regarding a Conservation Authority's comments on a planning application with respect to Section 3.1 of the PPS and comments from provincial ministries regarding other Sections of the PPS, the Ministry of Municipal Affairs and Housing will facilitate discussions amongst the affected ministries and the Conservation Authority so that a single integrated position can be reached.
- d) Where appropriate, MMAH will initiate or support appeals to the OMB on planning matters where there is an issue as to whether there was "regard to" Section 3.1 of the PPS.
- e) MMAH, in conjunction with MNR, coordinates the provincial review of application for Special Policy Area approval under Section 3.1 of the PPS.

Conservation Authorities (CAs)

- a) The CAs will review policy documents and development proposals processed under the *Planning Act* to ensure that the application has appropriate regard to Section 3.1 of the PPS.
- b) Upon request from MMAH, CAs will provide comments directly to MMAH on planning matters related to Section 3.1 of the PPS as part of the provincial one window review process.
- c) Where there may be a potential conflict regarding a Conservation Authority's comments on a planning application with respect to Section 3.1 of the PPS and comments from provincial ministries regarding other Sections of the PPS, the Ministry of Municipal Affairs and Housing will facilitate discussions amongst the affected ministries and the Conservation Authority so that a single integrated position can be reached.
- d) CAs will apprise MMAH of planning matters where there is an issue as to whether there has been "regard to" Section 3.1 of the PPS to determine whether or not direct involvement by the province is required.
- e) Where appropriate, CAs will initiate an appeal to the OMB to address planning matters where there is an issue as to whether there has been "regard to" Section 3.1 of the PPS is at issue. CAs may request MMAH to support the appeal.
- f) CAs will participate in provincial review of applications for Special Policy Area approval.
- g) CAs will work with MMAH, to develop screening and streamlining procedures that eliminate unnecessary delays and duplication of effort.

4. FURTHER CA ROLES IN PLAN INPUT, PLAN REVIEW AND APPEALS

CAs also undertake further roles in planning under which they may provide plan input or plan review comments or make appeals.

1. Watershed Based Resource Management Agency

CAs are corporate bodies created by the province at the request of two or more municipalities in accordance with the requirements of the *Conservation Authorities Act (CA Act)*. Section 20 of the *CA Act* provides the mandate for an Authority to offer a broad resources management program. Section 21 of the *CA Act* provides the mandate to have watershed-based resource



NPCA POLICY DOCUMENT REVIEW

**NPCA Board Presentation
April 2017**

Purpose



The purpose of this presentation is to:

1. Provide an overview of the Living Landscape policy document update
2. Present planned consultation program



PART ONE

Updated Policy Document Context

The Current Policy Document



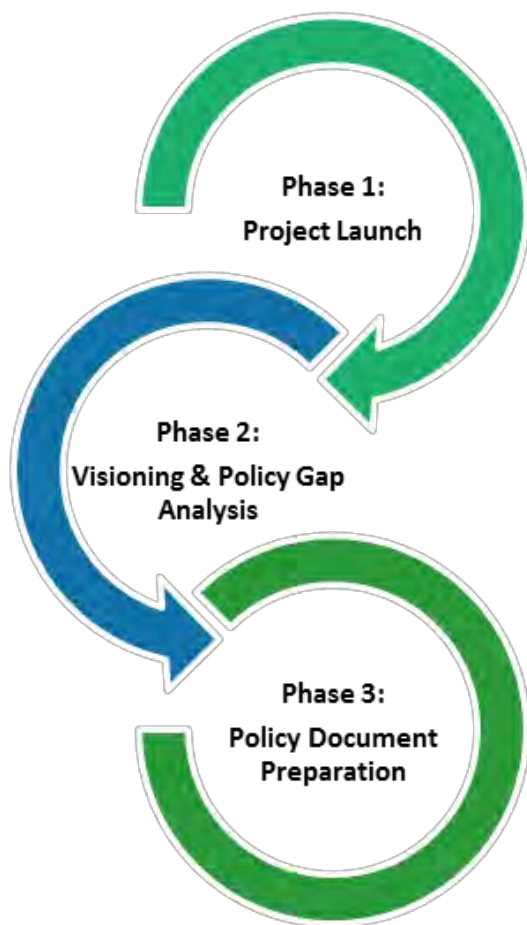
Policies, Procedures and Guidelines for the Administration
of Ontario Regulation 155/06
and
Land Use Planning Policy Document

December 12, 2007 (Original NPCA Board Approval)
December 9, 2009 (Housekeeping Amendments)
September 15, 2010 (Housekeeping Amendments)
October 19, 2011 (Housekeeping Amendments)



- The Policy Document is a decision-making tool used by the NPCA Staff
- The policies are intended to cover a broad range of site alteration and development scenarios which fall under the NPCA's mandate
- The purpose of our work is to update the NPCA's current Policy Document

The Process



- **PHASE 1 (Complete)**
 - ✓ Consultation program & workplan finalization
 - ✓ Data collection
 - ✓ Website launch and project brand development
 - ✓ Formal project launch (NPCA Board, CLAC #1 & Area Planners session)
- **PHASE 2: (Complete)**
 - ✓ Background review (plans, policies, etc.)
 - ✓ Community Vision survey
 - ✓ Public Roadshow Series #1
 - ✓ Issues and gap policy analysis
 - ✓ Staff workshop
 - ✓ Core Working Group (CWG) #1
 - ✓ CLAC #2
 - ✓ Discussion Paper
- **PHASE 3: (on-going)**
 - ✓ Draft Policy Document
 - ✓ CWG Meeting #2 /CLAC Meeting #3
 - ✓ Revised Draft Policy Document
 - **Board Presentation**
 - Public Event Series #2 (4 open houses)
 - Finalization of Policy Document
 - Consultation Summary Report
 - NPCA Board Approval

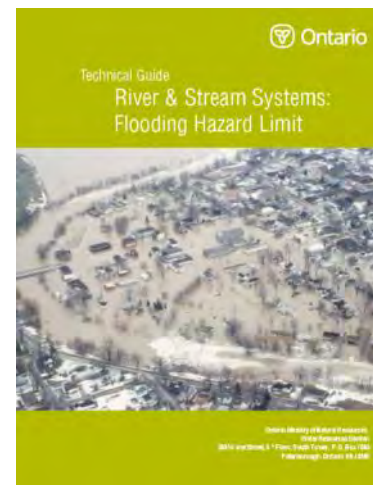
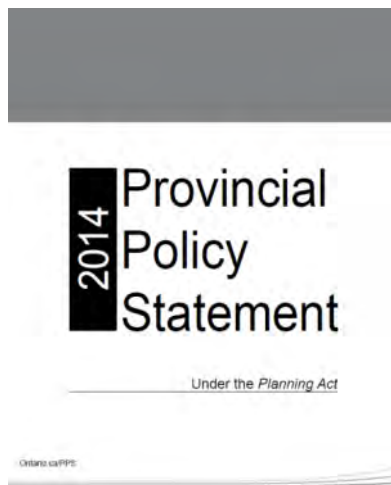
Context for the Update

- The changes are intended to more closely align the NPCA's Policy Document with approved legislation and current practices
 - Alignment with PPS (2014) & other recent legislative changes
 - New policies focus on the NPCA's mandate under Ontario Regulation 155/06
 - Reflect obligations under the Planning Act
 - Attempt to reconcile some of the confusion between Conservation Authorities Act and Planning Act
 - Focus on clarity



Approach

- The updates to the Policy Document (to date) are based on:
 1. Interpretation of Conservation Authorities Act, Planning Act and the PPS
 2. Directions identified in the Living Landscape Discussion Paper (Aug. 2016)
 3. Comparisons of NPCA current policies with a number of benchmark conservation authority policies
 4. Review and analysis of various provincial technical guides
 5. Discussions with Staff, partners, stakeholders and the public



New Document Organization

- Organized around features and specific topics – a number of which are specific to Ontario Regulation 155/06
- Integrates Planning Act and Conservation Authority Act and requires staff to use correct definition of development when making decisions
- Sections have a similar structure
 - What is the feature?
 - Policies for Planning and Regulating the feature

New Document Organization

1. Introduction
2. Planning and Legislative Context
3. Guiding Principles and General Policies
4. Flooding Hazards
5. Great Lakes and Niagara River Shoreline Hazard
6. Valleyland Erosion Hazard
7. Hazardous Sites
8. Wetlands
9. Watercourses
10. Fill Placement
11. Stormwater Management
12. Municipal Drains
13. Other Policies and Tools
14. Definitions



Language and Flexibility

- Draft policies use consistent language:
 - *Should/May*: flexibility, discretion depending on circumstances
 - *Shall/Must* an obligation under the CA Act
- Most of the policies distinguish between:
 - New Development vs. Existing Development
 - Habitable Structures vs. Non-Habitable Structure
 - Ultimately, flexibility varies depending on the nature of the hazard and five tests under the CA Act

• New Development/Habitable Structure

• New Development/Non-Habitable Structure

• Existing Development/Habitable Structure

• Existing Development/ Non-Habitable Structure

Less Flexibility

More Flexibility

Importance of the Five Tests

- Policies draw heavily on the 5 Tests of the CA Act (Section 28-1c):
 - Prohibiting, regulating or requiring the permission of the authority for development if, in the opinion of the authority, the control of flooding, erosion, dynamic beaches or pollution or the conservation of land may be affected by the development.





PART TWO

PUBLIC ENGAGEMENT ON DRAFT POLICIES

Public Engagement

- The first draft is a complete draft of the updated policies
- We are looking to get people engaged and have a range of events/formats to get input
- Planning for:
 - Face to face engagement
 - Web-based engagement



Public Engagement

- Public engagement activities
 - Public events (4 events)
 - West Lincoln May 16th
 - Lincoln, May 25th
 - Welland May 29th
 - Niagara Falls, June 1st
 - 2 pop-up events
 - Stakeholder meetings
 - Web Engagement
 - Document will be uploaded to website
 - Opportunity to comment on the draft policies



Report To: Board of Directors

Subject: Policy Handbook -Regulation # 1 – Governance and Administration Policies
DRAFT Amendment

Report No: 51-17

Date: April 26, 2017

RECOMMENDATION:

That Report No. 51-17 be RECEIVED for information.

That the NPCA Board AMEND the Board of Directors Policy Handbook – Regulation #1, Governance and Administrative Policies to add to section 8.5 regarding Board member involvement at committees as outlined in this report.

PURPOSE:

For the Board to consider clarifying the role of individual Board Members who did not sit on a particular NPCA committee but who may wish to participate. This report aligns with the 2014-2017 Strategic Plan under, 'Transparent Governance & Enhanced Accountability,' specifically, 'develop improved transparency.'

BACKGROUND:

At its January & February 2017 Board of Directors meeting, staff was directed to prepare an updated policy option to assist in clarifying non-committee Board members roles on committees.

Since the Board already has an approved Policy Handbook (Regulation #1 Governance and Administrative Policies), staff is recommending an addition/amendment to the existing policy. Regarding Standing Committees, Section 8.5 and 8.6 of the current policy states:

8.0 Standing Committees

8.5 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.

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.

DISCUSSION:

In order to clarify the role of non-committee Board members on NPCA committees and remain within the current policy framework, staff recommend that section 8.5 be amended as follows:

8.5 Notwithstanding the CLAC 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.

The recommended amendment is consistent with current practice among municipalities within the Watershed.

The Board has the option to make further amendments or do nothing.

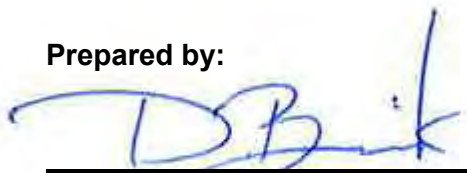
FINANCIAL IMPLICATIONS:

None

RELATED REPORTS AND APPENDICES:

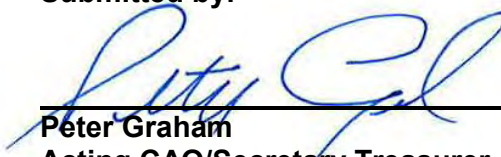
Policy Handbook - Regulation #1 - Governance and Administrative Policies is accessible on *One Drive*.

Prepared by:



David Barrick
Director of Corporate Services

Submitted by:



Peter Graham
Acting CAO/Secretary Treasurer

PROPOSED AMENDMENT
Highlighted in yellow

8.0 STANDING COMMITTEES

8.1 Current

- Community Liaison Advisory Committee
- Niagara Peninsula Conservation Foundation
- Budget Steering Committee
- Audit Committee
- 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 CLAC 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 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 members. Other than the Source Water Protection Authority, the Board of Directors 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 of Directors, where in turn, recommendations are considered for approval.

Report To: Board of Directors

Subject: Policy Handbook - Regulation #2, Meeting Procedures DRAFT Amendment

Report No: 52-17

Date: April 26, 2017

RECOMMENDATION:

That Report No. 52-17 be RECEIVED for information.

That the NPCA Board AMEND the Board of Directors Policy Handbook – Regulation #2, Meeting Procedures to add section 9.3 and 9.4 regarding correspondence and the distribution of other materials to the Board as outlined in this report.

PURPOSE:

For the Board to consider formalizing a process on how it receives correspondence. This report aligns with the 2014-2017 Strategic Plan under, 'Transparent Governance & Enhanced Accountability,' specifically, 'develop improved transparency.'

BACKGROUND:

At the March 29, 2017 Board of Directors meeting staff was directed to prepare a draft policy on how the Board may deal with correspondence; particularly as it relates to meeting agendas.

Since the Board already has an approved Policy Handbook (Regulation #2 Meeting Procedures), staff is recommending an addition/amendment to the existing policy. Regarding Agenda for meetings, Section 9 of the current policy states:

9.0 Agenda for Meetings

9.1 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

9.2 *The agenda for special meetings of the Authority shall be prepared as directed by the Chair.*

DISCUSSION:

In order to formalize the correspondence process and remain within the current policy framework, staff recommend that the following sections be inserted into the current Policy Handbook – Regulation #2 to guide staff moving forward:

9.3 *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 9.1 and within all legislative reporting requirements.*

9.4 *The circulation of reports, letters, memos, etc. outside of the agenda shall be distributed by the Office of the CAO (Administrative Assistant, Office of CAO & Board and/or CAO) to all Board members. Documents should be provided in an electronic format whenever possible.*

The recommended additions are consistent with current practice among municipalities within the Watershed. Any individual Board members wishing to raise an item of business not otherwise on the agenda may do so under the 'New Business/Other Business' section of the agenda as prescribed in section 9.1.


The Board has the option to amend the recommended section 9.3 and 9.4 or do nothing.

FINANCIAL IMPLICATIONS: None

RELATED REPORTS AND APPENDICES:

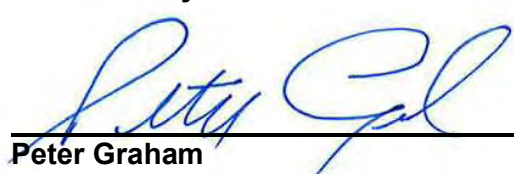
Policy Handbook - Regulation #2 Meeting Procedures is accessible on *One Drive*.

Prepared by:



David Barrick
Director of Corporate Services

Submitted by:



Peter Graham
Acting CAO/Secretary Treasurer

Report To: Board of Directors

Subject: Renewal - BoarderPass Canada – Facility Use Agreement

Report No: 53-17

Date: April 26, 2017

RECOMMENDATION:

That the NPCA Board of Directors Authorize the CAO to enter into another three (3) year Facility Use Agreement with BoarderPass Canada to operate at Binbrook Conservation Area.

PURPOSE:

The existing Facility Use Agreement for BoarderPass Canada at Binbrook Conservation Area has expired. Both Staff and the owners of BoarderPass Canada would like to continue the relationship for an additional three (3) year period.

DISCUSSION:

BoarderPass Canada is a straight-line cable wakeboarding company, the first to be established in Ontario. Straight-line cable wakeboarding is a seasonal activity whereby participants wakeboard while being pulled by a cable and pulley system from one tower (on land) to another (in the water) and back again. There are often a number of “features” or jumps between the two towers. It is essentially skateboarding, but on water or wakeboarding without a boat.

BoarderPass Canada was established in 2010 and currently has three (3) locations across Ontario. Their first location was in Sarnia, in Sarnia Bay. The second location was at the Sugarloaf Marina in Port Colborne, and the third location is at the NPCA’s Binbrook Conservation Area.

BoarderPass Canada was established at Binbrook Conservation Area in the spring of 2013 as a pilot project, for one year. The NPCA Board of Directors extended BoarderPass Canada a full three (3) year contract after that, which ended in 2016.

BoarderPass Canada has been a faithful tenant at Binbrook Conservation Area. The activity has grown in popularity over the years and has attracted additional park patrons, to Binbrook Conservation Area. Patrons do pay the park admission fee and then pay an additional fee to wakeboard.

Participants sign a Release of Liability, Waiver of Claims, Assumption of Risks and Indemnity Agreement that names both BoarderPass Canada and the NPCA. Staff are trained and certified and the company carries \$5 Million Insurance Policy.

NPCA staff would like to see this relationship continue. BoarderPass Canada offers a fresh opportunity for patrons to get wet and enjoy Lake Niapenco. Binbrook Conservation Area, thanks to the Board of Directors, was the first Conservation Area in Ontario to offer this exciting sport. NPCA Staff have seen participants as young as 6 years and as old as 80 years old, participate. BoarderPass Canada has the "BP Guarantee" which says that they guarantee that the guest will get up and ride the wakeboard during their first lesson or they get a full second lesson free of charge to be used anytime and by anyone.

FINANCIAL IMPLICATIONS:

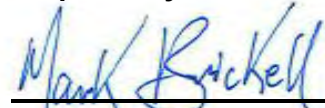
Aside from minimal electrical costs, which is covered by the NPCA, the park receives its monthly rent plus the admission fees and retail revenue from park patrons.

The attached Facility Use Agreement is an updated version of the last agreement.

RELATED REPORTS AND APPENDICES:

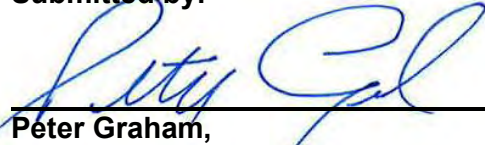
1. BoarderPass Canada Draft Facility Use Agreement (2017 to 2019)

Prepared by:



Mark Brickell
Director, Operations and Strategic Initiatives

Submitted by:



Peter Graham,

Acting Chief Administrative Officer / Secretary Treasurer

THIS FACILITY USE AGREEMENT made in triplicate this Day of 2017.

BETWEEN:

THE NIAGARA PENINSULA CONSERVATION AUTHORITY

Hereinafter called the *AUTHORITY*
OF THE FIRST PART

-and-

BOARDER PASS CANADA

OF THE SECOND PART

WHEREAS Boarder Pass Canada 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 Two-Towered Cable Wakeboarding System from Monday May 15th, 2017 to September 15th, 2017; Monday May 14th, 2018 to Friday September 14th, 2018; and Monday May 13th, 2019 to Friday September 13th, 2019 (3 Summer Operating Seasons – May to September ONLY).

NOW THEREFORE herein contained and subject to the terms and conditions hereinafter set out, the parties agree as follows:

(1) Transfer of Agreement

Boarder Pass shall not assign or transfer this Agreement without consent from the AUTHORITY.

(2) Site Requirements

Boarder Pass shall have use of approximately 575' x 80' feet of waterway space located between the beaches and fishing docks at Binbrook Conservation Area (Binbrook Reservoir/ Lake Niapenco). The location will include one onshore anchor point with an approximate circumference of 18 feet and secured with a non-climbable metal security fence and one water anchor point. The ability to supply features (ramps and jumps) on the course need to be approved by an engineer or technician qualified to design and install such structures as well as the AUTHORITY's Senior Manager, Operations or his/ her designate.

Attached hereto is a map of the designated areas as highlighted as Appendix 'A'.

(3) Electrical Connections

The Niagara Peninsula Conservation Authority at Binbrook Conservation Area will supply an electrical connection to the motor tower from the most convenient location, providing all electrical equipment must have a CAS or UL designation on the device and the electrical contractor must have a contractor's number and be a Master Electrician or work under a Master's supervision. The contractor must have an electrical permit to undertake this work and the work must be inspected by the ESA inspector. A copy of the electrical inspection must be provided to the Park Superintendent.

(4) Capital Investment

Boarder Pass will construct or supply, at their expense, a storage shed/ electrical room on site at a location designated by the AUTHORITY's Manager, Operations and the Park Superintendent or his/ her designate. In addition Boarder Pass Canada will construct and secure a 8' x 10' dock with land anchors from the main pathway. Boarder Pass Canada, upon approval by the AUTHORITY's Manager, Operations and the Park Superintendent or his/ her designate, will have the opportunity to display their products and services in the building provided and will be allowed to operate an outside kiosk.

(5) Amenities

Boarder Pass Canada and its patrons will have use of the Binbrook Conservation Area washrooms and parking lots. Use of the pavilion will be considered when available and with permission from the Park Superintendent or his/ her designate.

(6) Loss or Injury

The AUTHORITY will not accept any responsibility for any injury or loss sustained by any person in the use of the said facilities, or for the loss of any personal property or effects stored or left on premises, Boarder Pass Canada shall and hereby does indemnify the AUTHORITY against any and all claims in respect of any such loss or injury.

Boarder Pass Canada shall amend its Releases attached as Schedule B or add an additional release so that the AUTHORITY is named as a Releasee 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 Boarder Pass Canada's sole

responsibility to insure that their operation can be safely conducted at the site.

(7) Access to site

Any AUTHORITY personnel may at any time enter on the described premises for whatever purpose as deemed necessary by them.

(8) Maintenance

At the commencement of the signing of this Agreement, Boarder Pass Canada 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.

(9) Utilities

The AUTHORITY shall be solely responsible for the payment of all utility bills (electricity only) related to the operations.

(10) Fees

Boarder Pass in consultation with the AUTHORITY shall set the rental rates and shall retain all rental fees collected. Boarder Pass will submit a payment of \$700.00/month of their operating season to the Binbrook Conservation Area Park Superintendent on the 30th day of each operating month starting on JUNE 30th of 2017 Payment dates will be June 30th, July 30th, August 30th, and September 30th, 2017 by posted dated cheques supplied to the Binbrook Conservation Area Park Superintendent prior to May 30th, 2017 for the 2017 operating season. Boarder Pass Canada 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 2018 and 2019 operating seasons as well. The monthly payment rate for 2018 will be \$800/ month and the monthly payment rate for 2019 will be \$900/ month.

(11) Insurance

Boarder Pass Canada 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 Boarder Pass Canada's insurance

Company by MAY 15th of each year.

Boarder Pass Canada agrees to have all its clients sign the insurance paperwork provided by the AUTHORITY prior to the use of Boarder Pass Canada's equipment. Boarder Pass Canada agrees to give the completed and signed hard copies of the insurance and all other paperwork provided by the AUTHORITY to the Binbrook Conservation Area Park Superintendent on the first day of every month, without exception. The AUTHORITY understands that this paperwork duplicates that of the Boarder Pass Canada's Insurance Provider, but knows it is necessary to eliminate liability should a Boarder Pass Canada client be hurt while riding/ using the two-towered cable wakeboard system.

(12) Restoration of site

Upon cancellation or termination of this Agreement, Boarder Pass Canada 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 Senior Manager, Operations and the Binbrook Conservation Area Park Superintendent or his/her designate. In case of default of Boarder Pass Canada 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 Boarder Pass Canada 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 Boarder Pass Canada therefore in any case.

(13) 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.

(14) Notice

And it is further agreed that any notice required to be given to Boarder Pass Canada shall be sufficiently served if left upon the lands and premises 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, Operations at the Niagara Peninsula Conservation Authority Head Office. (250 Thorold Road West, 3rd Floor, Welland, ON, L3C 3W2)

(15) 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.

(16) 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.

(17) Termination Of Agreement

Boarder Pass Canada may at its sole option and discretion, terminate this Agreement by advising The Niagara Peninsula Conservation Authority in writing by September 1st of each year of this Agreement of its intention to terminate this Agreement and vacate the premises known as Binbrook Conservation Area. Boarder Pass Canada 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 Manager, Operations, and the Binbrook Conservation Area Park Superintendent or his/ her designate. In case of default of Boarder Pass Canada to remove their property within a reasonable period as determined by the Manager, Operations, or 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 Boarder Pass Canada therefore in any case.

The Niagara Peninsula Conservation Authority may at its sole option and discretion, terminate this Agreement by Advising Boarder Pass Canada in writing giving them a minimum of 60 days' notice. Boarder Pass Canada shall, within the 60 days or within an agreed upon time frame agreed to in writing by the Manager, Operations, remove all equipment in a timely manner and return the site to its original state to the satisfaction of the Manager, Operations and the Binbrook Conservation Area Park Superintendent. The Niagara Peninsula Conservation Authority agrees to pay 25% of the cost of equipment removal and site restoration if the termination should happen under its direction in 2017.

(18) Renewal

Boarder Pass Canada shall inform the management at the Niagara Peninsula Conservation Authority by September 1st, 2019 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.

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

BOARDER PASS CANADA

Owner

Date

THE NIAGARA PENINSULA CONSERVATION AUTHORITY
CHIEF ADMINISTRATIVE OFFICER/ SECRETARY/ TREASURER

CAO

Date

Report To: Board of Directors

Subject: Long Beach Conservation Area - RFQ for Stairs and an AODA Ramp

Report No: 54-17

Date: April 26, 2014

RECOMMENDATION:

That the NPCA Board of Directors authorize staff to proceed with Contractor Bid #2 to complete the stairs and AODA Compliant Ramp Beach Access Project at Long Beach Conservation Area.

PURPOSE:

The NPCA Procurement Policy requires the NPCA Board to approve all projects valued in excess of \$75,000.

BACKGROUND:

As part of the former Niagara Region Lakefront Enhancement Strategy Program, the NPCA was able to secure matching funds for several projects at Long Beach Conservation Area. One of those projects that was approved was to redo the staircases (up to 4 sets of stairs) and add an Accessible Ramp (AODA Compliant) that all lead from the campground down to the beach. The existing stairs are not to code and are in disrepair.

The beach is an attractive asset to the park. The goal is to make the stairs safer and provide access to the beach for all patrons, regardless of their mobility challenges.

The NPCA Procurement Policy requires the NPCA Board to approve all projects valued in excess of \$75,000.

DISCUSSION:

The RFQ was publicly issued on March 16th, 2017 as per the NPCA purchasing policy. The overall budget, between the NPCA and the Niagara Region, is \$189,000. Two companies responded, both from the Niagara Region.

Company #1 submitted a quote of \$108,700 + HST to redo 4 sets of stairs and the additional Accessible Ramp. Company #1 intends to form and pour concrete for each set of stairs and then add a railing. The additional Accessible Ramp would be excavated and a concrete base would be formed and poured to AODA standards. This also included AODA related railings.

Staff is concerned, however, with the above approach because the newly formed concrete layer that is to be laid upon the existing concrete steps may not adequately bond/ cure.

The existing stairs are a thin layer of concrete that was formed and poured over existing "Gabion Baskets" that were placed along the bank for erosion and stability protection. Access to the beach was originally an after-thought.

Further, to bring in the appropriate amount of concrete, during the Camping Season, would not only cause a tremendous amount of disturbance to park patrons but would mean that very large trucks would need to access the site with very little room to maneuver. Timing wouldn't be an issue normally, however, the agreement with the Niagara Region dictates that the work must be completed by September of 2017.

Company #2 submitted a quote for \$177,835 + HST. This quote was to redo the 4 sets of stairs, but they did not bid on the Accessible Ramp. Company #2 proposed anchoring down pre-fabricated galvanized metal stairs. The stairs would be pinned to the existing concrete steps. Company #2 spent a lot more time onsite, speaking with staff.

Staff has no immediate concerns with Company #2's proposal. The pre-fabricated Galvanized Stairs would easily be removed, if necessary – such as a reconfiguration of the existing campground, and would stand up to the often-fierce weather conditions (sand and ice), experienced at Long Beach.

Although there are four (4) sets of stairs to be redone, only three (3) are necessary for public access to the beach. The fourth set is next to the water treatment plant/ pump-house and around the access areas to the Potable Water Holding Tanks/ Cisterns and pumps. Staff had already anticipated restricting access, to the public, to that area due to Public Health and Safety concerns. The additional savings, by not completing the fourth set of stairs, would be more than sufficient to complete the Accessible Ramp to the beach and to decommission the set of stairs next to the Water Treatment System compound. Staff is confident that the project will come in under budget.

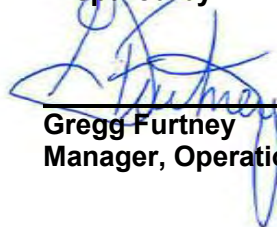
FINANCIAL IMPLICATIONS:

At the March 29th Board meeting, the Board approved the release of up to \$89,902.71 from the General Capital reserve Budget for this project, thereby allowing NPCA to maximize the matching dollars received through the Niagara Region's Lakefront Enhancement Strategy Fund.

RELATED REPORTS AND APPENDICES:

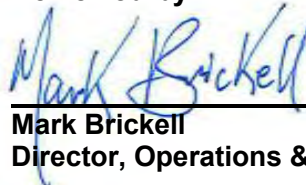
1. Report No. 34-17 Request to Release Funds for Long Beach

Prepared by:



Gregg Furtney
Manager, Operations

Reviewed by:



Mark Brickell
Director, Operations & Strategic Initiatives

Submitted by:



Peter Graham
Acting CAO / Secretary/Treasurer



NIAGARA PENINSULA
CONSERVATION
AUTHORITY

Report To: Board of Directors

Subject: Request to Release Funds for Long Beach CA Stairs

Report No: 34-17

Date: March 29, 2017

RECOMMENDATION:

1. That Report No. 34-17 be **RECEIVED** for information.
2. That the Board approve the release of up to \$89,902.71 from the General Capital Reserve Budget, and earmarked for the completion of the Long Beach stairs and accessible ramp project, thereby, allowing NPCA to maximize the matching dollars received through the Niagara Region's Lakefront Enhancement Strategy Fund.

PURPOSE:

To seek Board approval to release up to \$89,902.71 from the General Capital Reserve Budget to be used for the completion of the Long Beach Stairs and Accessible Ramp Project, already approved through the Niagara Region's Lakefront Enhancement Strategy incentive program.

BACKGROUND:

In 2015, NPCA successfully applied for matching funds from the Niagara Region's Lakefront Enhancement Strategy Incentive Program. The Region approved matching funds for two NPCA projects, the Master Plan Study for NPCA's Waterfront properties, in Wainfleet, and the Long Beach Conservation Area Improvement Plan.

The Long Beach C.A. Improvement Plan included capital projects valued at \$389,500, with the Region and NPCA each contributing \$194,750 towards the identified projects. To date, approximately \$210,000 worth of work has been completed. The only project still remaining is the installation of 4 replacement staircases to the beach along with the addition of a new beach accessibility ramp. Based on previous request for quotes, the value of this work is estimated to be between \$165,000 and \$180,000. As such, Board approval for the actual work will be required.

DISCUSSION:

This project is important for safety reasons and the improvement of beach accessibility. The staircases currently in place are very uneven and sloped. Additionally, beach access is difficult for people who require assistance, or need a wheelchair or scooter.

The Region has indicated that this work must be completed by October 20th of this year and that there will be no extensions beyond this date.

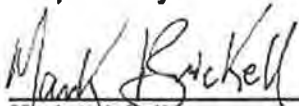
FINANCIAL IMPLICATIONS:

If the work is not undertaken now, NPCA will lose the matching dollars already approved through the Niagara Region's Lakefront Enhancement Strategy Incentive Program.

RELATED REPORTS AND APPENDICES:

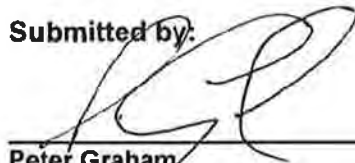
1. N/A

Prepared by:



Mark Brickell
Director, Operations and Strategic Initiatives

Submitted by:



Peter Graham
Acting Chief Administrative Officer
Secretary Treasurer

This report was prepared with the consultative input from: Gregg Furtney and John Wallace