

FULL AUTHORITY MEETING
Wednesday June 15, 2016 9:30 am

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

A G E N D A

9:30 am

Public Session

- ◆ **DECLARATION OF CONFLICT OF INTEREST**
 - ◆ **ADOPTION OF AGENDA**
 - ◆ **PRESENTATIONS:**
 - A. RBC (Royal Bank of Canada) Cheque presentation
 - B. OPG (Ontario Power Generation) Cheque presentation
 - C. Comfort Maple - presentation
 - ◆ **BUSINESS**
 - (1) A. Full Authority Meeting----- Draft Minutes May 18, 2016
 - B. Draft Committee Minutes
 - ◆ *Cave Springs Committee Meeting - May 24, 2016*
 - (2) Business Arising from Minutes
 - (3) Correspondence (6 items)
 - (4) Chairman's Remarks
 - (5) Chief Administrative Officer Comments
-

Reports for Information

- (6) Project Status Reports:
 - 1. *Watershed Management*-----Report No. 61-16
 - 2. *Operations*-----Report No. 62-16
 - 3. *Corporate Services*-----Report No. 63-16
- (7) Financial – Monthly update -----Report No. 64-16
- (8) 2017 Budget Timetable -----Report No. 65-16
- (9) Forestry Update -----Report No. 66-16
- (10) Water Quality Annual Report (2016)-----Report No. 67-16
- (11) Niagara Shores – NOTL – Sewage Lagoon Decommissioning -----Report No. 68-16

Reports for Consideration

- (12) Proposed Amendment Section 17 - Regulation #2 -----Report No. 69-16
- (13) Development and Related Recommendations Cave Springs -----Report No. 70-16
 - **Staff Presentation**
- (14) Other Business

Closed Session

- (1) Violations Status update-----Verbal Report
- (2) Cave Springs (Report 70-16) -----Recommendation #14
- (3) Colbeck Drive / Coyle Creek; Welland-----Report No. CR-71-16
- (4) Mining and Lands Commissioner May 31, 2016-----Dismissal Order

Public Session

- ◆ Resolution(s) from closed session
- ◆ **ADJOURNMENT**

CORRESPONDENCE

- ❖ NPCA letter to Lord Mayor NOTL (June 3, 2016)
- ❖ Niagara Corridor RAMSAR Site Steering Committee (letter dated June 2, 2016)
 - ❖ City of St. Catharines – Controlling Invasive Phragmites (June 7)
 - ❖ CA-Act South-Western Engagement Session Agenda
 - ❖ Conserving Our Future – Proposed Priorities for Renewal
 - ❖ Office of Regional Chair-letter to NPCA Board dated June 9, 2016

June 15, 2016 Full Authority Meeting



Office of the Chair

250 Thorold Road West, 3rd Floor, Welland ON L3C 3W2
Telephone (905) 788-3135 x 251 | Facsimile (905) 788-1121
bruce.timms@niagararegion.ca | www.npca.ca

June 3, 2016

Office of the Lord Mayor
Town of Niagara-on-the-Lake,
1593 Four Mile Creek Road
PO Box 100
Virgil, ON L0S 1T0

Dear Mayor Darte;

Re: Report CDS-15-065 – Ramsar Designation of the Niagara River

Following your request regarding the Ramsar Designation of the Niagara River, I forwarded your letter dated April 1, 2016 to the Niagara Corridor Ramsar Site Steering Committee and have herewith, attached their response dated June 2, 2016.

Should you have any further concerns, please do not hesitate to contact me.

Yours truly,

Niagara Peninsula Conservation Authority

A handwritten signature in black ink that reads "D. Bruce Timms".

D. Bruce Timms
Chair, NPCA Board of Directors

/encl.

cc: Carmen D'Angelo, CAO, NPCA
Jim Diodati, Mayor, City of Niagara Falls
Ted Luciani, Mayor, City of Thorold
Wayne Redekop, Mayor, Town of Fort Erie
Walter Sendzik, Mayor, City of St. Catharines
Milena Avramovic, CAO, Town of Niagara-on-the-Lake
Niagara-on-the-Lake Town Council



Brock University, Environmental Sustainability Research Unit
Buffalo Niagara Riverkeeper•Niagara Parks Commission
Niagara Peninsula Conservation Authority•University at Buffalo Regional Institute
Western New York Land Conservancy

June 2, 2016

Attention Chairman Timms
Niagara Peninsula Conservation Authority
250 Thorold Road West, 3rd Floor
Welland, ON (L3C 3W2)

Re: Report CDS- 15 – 065 – Ramsar Designation of the Niagara River

Dear Chairman Timms,

On behalf of the Ramsar Steering Committee, thank you for the opportunity to clarify the purpose and efforts behind the proposed Ramsar designation of the Niagara River.

Major clean-up efforts in the Niagara River over the past 50 years have significantly reduced and in many cases eliminated discharges of pollution to the river. To acknowledge this achievement of a cleaner, healthier river; a Ramsar designation for the Niagara River is being pursued. The Ramsar Convention is a voluntary global Treaty. The purpose of this Treaty is to promote the conservation and wise-use of water-based ecosystems, including lakes and rivers.

Recognizing specific concerns that have recently been raised regarding the Niagara River potentially becoming a Ramsar site of International Importance, we offer the following confirmation:

- On September 1st, 2015, Ramsar Working Group member and Professor, Director of Clinical Legal Education, and Vice Dean for Legal Skills of the University of Buffalo Law School submitted to the Town of Niagara-on-the-Lake a letter verifying “a Ramsar designation is a voluntary, non-regulatory Convention Treaty”.
- On September 10, 2015, Environment Canada submitted to the Town of Niagara-on-the-Lake, a letter verifying “a Ramsar site in and of itself offers no legal protection. Ramsar designation is voluntary and carries no regulatory implications”.
- On September 16, 2015, the Province of Ontario through the Ministry of Natural Resources and Forestry submitted a letter to the Town verifying “a Ramsar designation will not impose any regulatory measures or legally enforceable restrictions on landowners or affect sovereignty rights under the treaty”.
- On November 30th, 2015, the NPCA submitted a letter verifying the NPCA’s wetland definition comes directly from section 28 of the Conservation Authorities Act. The Ramsar Convention uses a much broader definition of wetlands, defined as any substrate that is at least occasionally wet, including lakes and rivers. To be clear, this proposed designation cannot be used as part of the NPCA review or screening process when implementing NPCA’s regulation, or as criteria to protect natural systems within its watershed. The NPCA will continue to only use the existing Land Use Planning

and regulatory framework when providing review of development applications to ensure adherence to existing NPCA and Region of Niagara Core Natural Heritage policies.

Further to the above, the Ramsar Convention and proposed designation cannot impose new or future regulatory requirements, including any irrigation works or network (including the Dee Road irrigation system). The Ramsar designation cannot impose any study requirements on the NOTL irrigation committee including future requirements of permits to take water and the user rights of landowners and/ or farmers who use the Niagara River.

Ramsar Process / Engagement

Each signatory country to the Ramsar Treaty has its own procedure for Ramsar nomination. In Canada, Environment and Climate Change Canada oversees the Ramsar nomination process through the Policy Document: Nomination and Listing of Wetlands of International Importance in Canada. A binational Ramsar Steering Committee, established in 2013 oversees the Ramsar nomination. The following is a brief overview of the process for Ramsar site designation:

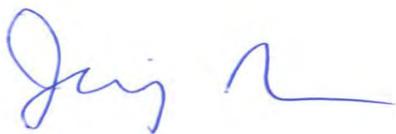
Selection of a site nominator:

- The landowner (administrative body holding title to the proposed Ramsar designated land), can only be the site nominator. There are two landowners of the Ontario portion of the Niagara River, The Niagara Parks Commission and the Province of Ontario. The Niagara Parks Commission Board of Directors has approved the site nominator role in principal pending an acceptable legal review. The Province is required to provide an endorsement and is currently working through the Ministerial briefing process.

Completion of a Canadian nomination package:

- A completed Ramsar Information Sheet (RIS) verifying the site meets the criteria necessary for designation has been deemed complete by Environment and Climate Change Canada.
- The Ramsar Steering Committee developed a stakeholder engagement schedule, initiated in December 2013. Municipal, regional, provincial, and federal government support will advance the nomination. Once government support is achieved, Aboriginal Communities will be engaged, followed by users of the river and other stakeholders including adjacent landowners. Without local municipal and regional support, broad stakeholder consultation is premature. Ontario Power Generation and the New York State Power Authority endorsed Ramsar as part of a feasibility exercise.
- Canadian endorsements have been received from Ontario Power Generation, the NPCA, the City of Niagara Falls (Ontario), and the Town of Fort Erie.

We look forward to continuing to collaborate with our stakeholders on this important initiative. If you require any further clarification, please do not hesitate to contact the undersigned.



Jajeane Rose-Burney
United States Co-Chair, Niagara River Corridor Ramsar Site Steering Committee

cc Jocelyn Baker, Canada Co-Chair, Niagara River Corridor Ramsar Site Steering Committee



OFFICE OF THE LORD MAYOR

Town of Niagara-on-the-Lake
1593 Four Mile Creek Road, PO Box 100, Virgil, ON L0S 1T0
905-468-3266 • pdarte@notl.org

www.notl.org

April 1, 2016

BY E-MAIL ONLY: bruce.timms@niagararegion.ca

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

Attention: Bruce Timms, Chair
NPCA Board of Directors

Dear Bruce:

Re: Report CDS-15-065 – Ramsar Designation of the Niagara River

Please be advised the Council of the Corporation of the Town of Niagara-on-the-Lake approved Community & Development Services Report CDS-15-065, as amended, to seek clarification from the Niagara Peninsula Conservation Authority (NPCA) regarding the Ramsar designation.

More specifically, Council would like to confirm that NPCA contacted private landowners and tenants who use the proposed designated wetland area for business purposes or recreational facilities to request their comments about the designation.

Council would also like to confirm that the NPCA Board, The Niagara Parks Commission Board, Niagara Regional Council, and their staff will not, due to this Ramsar designation, require or support future regulatory requirements or future additional studies of the Niagara-on-the-Lake Irrigation System or individual farmers who use the Niagara River.

We look forward to receiving a written response. Should you have any questions or concerns, please do not hesitate to contact the undersigned.

Sincerely,

Pat Darte
Lord Mayor

cc: Carmen D'Angelo, Chief Administrative Officer & Secretary Treasurer
Jim Diodati, Mayor, City of Niagara Falls
Ted Luciani, Mayor, City of Thorold
Wayne Redekop, Mayor, Town of Fort Erie
Walter Sendzik, Mayor, City of St. Catharines
Sheldon Randall, Interim CAO/Director of Operations, Town of Niagara-on-the-Lake
Niagara-on-the-Lake Town Council



Legal and Clerks Services

Office of the City Clerk
PO Box 3012, 50 Church Street
St. Catharines, ON L2R 7C2

Phone: 905.688.5600
Fax: 905.682.3631
TTY: 905.688.4TTY (4889)

June 7, 2016

Provincial Minister of Transportation
Mr. Steven Del Duca
Ferguson Block, 3rd Floor, 77 Wellesley
Street West, Toronto, ON M7A 1Z8
minister.mto@ontario.ca

Re: Controlling Invasive Phragmites Our File No.: 35.31.91

Please be advised that the Council of the City of St. Catharines, at the meeting of May 2, 2016, unanimously supported the following motion which was Moved by Councillor Phillips and Seconded by Councillor Siscoe:

“WHEREAS, Phragmites Australis is an invasive perennial grass that continues to cause severe damage to coastal wetlands and beaches in areas around the Great Lakes; and

WHEREAS, Phragmites Australis grows and spreads rapidly, allowing the plant to invade new areas and grow into large monoculture stands in a short amount of time, and is an allelopathic plant that secretes toxins from its roots into the soil which impede the growth of neighboring plant species; and

WHEREAS, invasive Phragmites Australis is identified as a priority issue for Great Lakes communities through the Great Lakes St. Lawrence Cities initiative of which the City of St. Catharines is a member; and

WHEREAS, Phragmites Australis results in loss of biodiversity and species richness; loss of habitat, changes in hydrology due to its high metabolic rate, changes in nutrient cycling as it is slow to decompose, an increased fire hazard due to the combustibility of its dead stalks, and can have an adverse impact on agriculture; and

WHEREAS, invasive Phragmites Australis should be distinguished from the native species, Phragmites Americanus, which does not require control as it rarely develops into monoculture stands, does not alter habitat, has limited impact on biodiversity and does not deter wildlife; and

WHEREAS, controlling invasive Phragmites before it becomes well established reduces environmental impacts, time, and costs; and

WHEREAS, the Ministry of Natural Resources and Forestry has Developed Best Management Practices to control invasive Phragmites; and

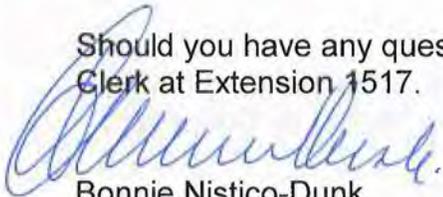
WHEREAS, significant stretches of Provincial Highways are infested with Phragmites which contribute to the continued spread of the plant to ecological areas.

NOW, THEREFORE, BE IT RESOLVED, that the City of St. Catharines call on the Ontario Ministry of Transportation to implement measures to address the increased presence of invasive Phragmites along provincial highways; and

BE IT FURTHER RESOLVED, that a copy of this Motion be sent to the Association of Municipalities of Ontario (AMO), Niagara Peninsula Conservation Authority, Region of Niagara, and all local municipalities in the Niagara Region for their consideration.

Further, that staff be directed to prepare a report outlining what can be done within the city, where the phragmites are located, where the City should be concerned, and what, as a municipality, can be done locally to control this. FORTHWITH

Should you have any questions, please do not hesitate to contact the Office of the City Clerk at Extension 1517.



Bonnie Nistico-Dunk
City Clerk

cc: *(sent electronically via email)*
Association of Municipalities of Ontario (AMO)
Niagara Peninsula Conservation Authority
Regional Council
Niagara area municipalities
Parks, Recreation and Culture Services

**Conservation Authorities Act Review
South-Western Ontario Engagement Session
Double Tree by Hilton, London
300 King Street, London, ON N6B 1S2**

AGENDA

Session objectives:

1. Obtain feedback on identified priorities for updating the *Conservation Authorities Act*:
 - a. Strengthening Oversight & Accountability
 - b. Increasing Clarity and Consistency
 - c. Improving Collaboration and Engagement
 - d. Modernizing Funding Mechanisms
 - e. Enhancing Flexibility for the Province

2. Identify priority actions for the Ministry to take to achieve these priority areas

Time	Agenda Item
9:00	Coffee and Refreshments and Registration
9:30	Welcome, Opening Remarks and Agenda Review
9:45	Overview Presentation
10:15	Questions of Clarification and Plenary Discussion
11:00	World Café Conversations (Topics 1 & 2) <i>Small table facilitated discussions on the five priorities for updating the Conservation Authorities Act</i>
12:00	Lunch (provided)
1:00	World Café Conversations (Topics 3 & 4) <i>Small table facilitated discussions on the five priorities for updating the Conservation Authorities Act</i>
2:00	World Café Conversations (Topics 5 & 6) <i>Small table facilitated discussions on the five priorities for updating the Conservation Authorities Act</i>
3:00	Report Back <i>Facilitators would report back on the highlights of the discussions occurring at their tables.</i>
3:25	Ranking of Actions
3:30	Adjourn



**CONSERVING
OUR FUTURE**

Proposed Priorities for Renewal

May 2016

MINISTER'S MESSAGE

Last summer, my Parliamentary Assistant, MPP Eleanor McMahon, initiated a review of the *Conservation Authorities Act* seeking to identify opportunities to improve the legislative, regulatory and policy framework that currently governs the creation, operation and activities of conservation authorities. I am pleased to share with you the government's priorities for moving forward with the next phase of this review.

I would like to thank indigenous communities, municipalities, stakeholders, members of the public and conservation authorities themselves for taking the time to participate in the review and for providing us with their ideas. Feedback received represents an important contribution to the Ministry's review, and to the overall objective of ensuring the act meets the needs of Ontarians in a modern context.

This feedback confirmed the continued relevance of the *Conservation Authorities Act* model including the importance of managing natural resources at the watershed scale. In response to the feedback provided, the province has identified five priorities for updating the *Conservation Authorities Act's* legislative, regulatory and policy framework:

- 1 Strengthening oversight and accountability in decision-making.
- 2 Increasing clarity and consistency in roles and responsibilities, processes and requirements.
- 3 Improving collaboration and engagement among all parties involved in resource management.

- 4 Modernizing funding mechanisms to support conservation authority operations.
- 5 Enhancing flexibility for the province to update the *Conservation Authorities Act* framework in the future.

The province recognizes and values the achievements of conservation authorities in delivering programs and services that protect and manage water and other natural resources in the province. Our government is committed to continuing to work with Ontarians to build upon the feedback they provided to develop specific actions in support of achieving these priorities.

Your opinions and insights are important to us. I look forward to building on the relationships we've created and moving forward with the development of legislative, regulatory and policy changes designed to address the feedback you have already provided.

Sincerely,

Bill Mauro
Minister of Natural Resources and Forestry

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1

INTRODUCTION

The Parliamentary Assistant to the Minister of Natural Resources and Forestry was given a mandate in November of 2014 to engage with ministries, municipalities, Indigenous Peoples and stakeholders to initiate a review of the *Conservation Authorities Act*.

The objective of the *Conservation Authorities Act* review is to identify opportunities to improve the legislative, regulatory and policy framework that currently governs the creation, operation and activities of conservation authorities, including addressing roles, responsibilities and governance of conservation authorities in resource management and environmental protection.

In July 2015, as a first step in support in the review, the Ministry of Natural Resources and Forestry (MNR) posted a discussion paper to the [Environmental Registry](#) (EBR Registry Number 012-4509) for public consultation and held over twenty stakeholder and indigenous engagement sessions along with targeted meetings across the province to gain feedback on the following three areas:

1. **Governance:** The processes, structures, and accountability frameworks within the act which direct conservation authority decision-making and operations;
2. **Funding Mechanisms:** The mechanisms put in place by the act to fund conservation authorities; and
3. **Roles and Responsibilities:** The roles and associated responsibilities that the act enables conservation authorities to undertake.

The response to the Ministry's discussion paper was substantial. The Ministry received over 270 individual submissions identifying perspectives from ten different sectors, and more than 2,700 individual or distinct comments related to the review. Although comments were provided by a wide range of individuals and groups representing a wide range of perspectives, a number of common areas of agreement were identified.

Comments received in response to the Ministry's discussion paper and during engagement sessions expressed general agreement that the overall conservation authority model and principles upon which it is based remain as relevant today as they were when the act was first established. In addition, most respondents agreed that the watershed continues to serve as an ecologically appropriate scale for many resource management activities, particularly water management, and allows for a balance in developing and implementing locally appropriate solutions and working across larger scales and political boundaries.

All sectors providing input into the review recognized the value and public benefit of conservation authority roles in providing environmental education, landowner and broader stewardship programs, and the provision of access to natural areas and recreational opportunities provided through conservation areas – in addition to the critical role conservation authorities play in protecting people and property from water-related natural hazards.

While the value of conservation authority roles and responsibilities in the conservation, restoration, development and management of natural resources were clearly acknowledged, all sectors – including conservation authorities themselves – identified a number of opportunities for improvement.

Responses to questions concerning the governance of conservation authorities identified a need to update or enhance existing oversight and accountability mechanisms including formalizing the role of other ministries in providing provincial direction and oversight to conservation authorities. In addition, many sectors identified a need to increase coordination in the collection and sharing of information among the province, municipalities and conservation authorities and to provide indigenous communities, stakeholders and other interested parties with greater opportunities to participate in conservation authority decision-making.

Comments regarding the funding mechanisms contained within the act indicated multi-stakeholder support for addressing disparities in conservation authority resources and capabilities. They also highlighted the need for providing additional clarity, consistency and transparency in the development and use of municipal levies and fees.

Discussions concerning the roles and responsibilities of conservation authorities in Ontario identified a need to clarify and confirm conservation authorities' mandate. There is also the desire to see greater consistency in the programs and services offered by conservation authorities, and some degree of standardization in program and policy design and implementation – particularly among neighboring authorities.

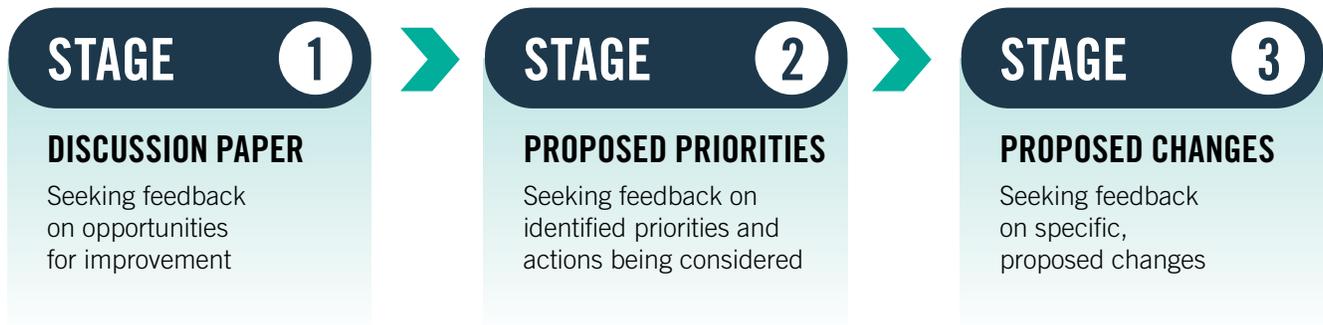
In response to feedback obtained through the initial phase of the Ministry's review, the government has established five priorities for updating the *Conservation Authorities Act* legislative, regulatory and policy framework:

- 1** Strengthening oversight and accountability in decision-making.
- 2** Increasing clarity and consistency in roles and responsibilities, processes and requirements.
- 3** Improving collaboration and engagement among all parties involved in resource management.
- 4** Modernizing funding mechanisms to support conservation authority operations.
- 5** Enhancing flexibility for the province to update the *Conservation Authorities Act* framework in the future.

While support for taking action in these areas was strong, feedback provided in response to the Ministry's discussion paper did not indicate a need for drastic, wholesale changes. Feedback did however indicate a strong desire from all sectors, including from conservation authorities themselves, to update the existing legislative, regulatory and policy framework to match modern expectations for clarity, transparency and accountability in the operation of public sector organizations. In many instances conservation authorities have already taken steps to help meet these expectations by voluntarily incorporating best management practices into their operations and working together to share and coordinate resources and expertise. In fact several of the proposed actions contained within this consultation document are explicitly intended to formally integrate and build upon these best management practices.

This consultation document represents the next stage of the Ministry's review. It provides an overview of the Ministry's priorities for updating the legislative, regulatory and policy framework that currently governs the creation, operation and activities of conservation authorities, and introduces actions currently being considered by the Ministry in support of achieving these priorities.

THE CONSERVATION AUTHORITIES ACT REVIEW PROCESS



The objective of this consultation document is to obtain feedback on the Ministry's priorities for updating the *Conservation Authorities Act* legislative, regulatory and policy framework and the actions being considered by the Ministry in support of these priorities. The feedback received in response to this document will be used to inform the development of proposed legislative, regulatory and policy changes. Any changes to the existing legislative, regulatory or policy framework proposed in the future will be subject to further consultation as appropriate, for example through subsequent Environmental Registry postings.

Your opinions and insights are important to us. This consultation document outlines a number of ways people can engage in the review, and we encourage all to participate.

Additional background on conservation authority roles, responsibilities, governance and funding can be found within the Ministry's [discussion paper](#).

2

PRIORITIES FOR UPDATING THE *CONSERVATION AUTHORITIES ACT*

The subsections below provide an overview of the Ministry's priorities for updating the *Conservation Authorities Act* legislative, regulatory and policy framework and actions currently being considered by the Ministry in support of achieving these priorities.



PRIORITY #1:
Strengthening Oversight and Accountability



PRIORITY #2:
Increasing Clarity and Consistency



PRIORITY #3:
Improving Collaboration and Engagement



PRIORITY #4:
Modernizing Funding Mechanisms



PRIORITY #5:
Enhancing Flexibility for the Province

PRIORITY #1: Strengthening Oversight and Accountability

Conservation authorities are governed by the *Conservation Authorities Act* and by a board of directors appointed by the municipalities that form the local authority. The province, through the act, defines the objectives to be pursued by the authority and the powers granted to the authority to achieve these objectives. The activities undertaken by conservation authorities in the pursuit of these objectives are directed by a municipally appointed board of directors. Municipal representatives to conservation authority boards are directly accountable to the municipalities that appoint them and conservation authorities must abide by provincial legislative, regulatory and policy requirements.

Feedback provided in response to the Ministry's discussion paper indicated strong support for updating or enhancing accountability mechanisms in the act, including

support for increasing the transparency and oversight of conservation authority decision-making, and updating the act to reflect modern best management practices for board operations.

In many cases, conservation authorities themselves have voluntarily taken steps to align their operations with recognized best management practices for board operations including the development of strategic plans, and aligning conflict of interest provisions and meeting procedures with requirements set for municipalities. Strengthening oversight and accountability provisions within the *Conservation Authorities Act* is intended to formalize these practices across all conservation authorities and ensure that conservation authority programs and services are governed in a fair and transparent manner.

Actions taken by the Ministry to strengthen oversight and accountability, could include, but are not limited to:

- Updating the act to reflect modern legislative structures and accountabilities including, adding a purpose statement to the act and regulations and defining the roles and responsibilities of all parties involved in overseeing and ensuring the accountability of conservation authority operations, programs and services.
- Ensuring governance and accountability mechanisms contained within the act align with recognized governance best practices and requirements for public sector organizations including, expectations for establishing and complying with codes of conduct, addressing potential conflicts of interests, ensuring meetings are open to the public, and the proactive disclosure of information.
- Enhancing the authority of the Minister to ensure conservation authority operations, programs and services are consistent with provincial policy direction and legislative requirements, including new powers to require conservation authorities to collect and disclose information related to the efficiency and effectiveness of conservation authorities' operations, programs and services.
- Clarifying the role of municipalities and the conservation authority board in determining, funding, directing, and overseeing programs and services undertaken by conservation authorities to address local concerns and priorities.
- Developing or updating processes and requirements for the establishment, amalgamation, enlargement and dissolution of a conservation authority, including ensuring that decisions to amalgamate or dissolve a conservation authority are based on sound social, economic and environmental considerations, are informed by public consultation, and are consistent with legislative requirements.



PRIORITY #2: Increasing Clarity and Consistency



The *Conservation Authorities Act* provides conservation authorities with the power to develop their own suite of programs and services tailored to the interests, capacity and expertise of each individual authority and the local needs they serve. This flexibility allows conservation authorities, and the municipalities that direct them, to focus their efforts on areas of greatest need to the local population. It also results in considerable variability in the scale and range of programs and services delivered by any individual conservation authority.

Some conservation authorities offer a basic program primarily focused on natural hazards management, stewardship, and conservation land acquisition and management. Other conservation authorities may offer a wider range of programs and services that can include, for example: recreation, education, monitoring, science and research, drinking water source protection planning under the *Clean Water Act*, the development of Remedial Action Plans in Great Lakes Areas of Concern, the conservation of cultural heritage resources, the development of natural heritage strategies, and extensive watershed and water management planning initiatives. Some conservation authorities also invest in resource development initiatives such as hydroelectric power generation, the operation of historical and cultural heritage sites, and income generating projects such as marina operations, facility rentals and product sales.

Feedback provided in response to the Ministry's discussion paper indicated a high-degree of multi-sector support for clarifying and confirming conservation authorities' mandate, and a desire to see greater consistency in programs and services offered by conservation authorities including some degree of standardization in program and policy design and implementation – particularly among neighboring authorities.

While responses to the Ministry's discussion paper indicated a high-degree of support for increasing clarity and consistency, they also acknowledged the importance of maintaining the flexibility given to conservation authorities to tailor programs and services to reflect local needs and priorities.

Increasing clarity and consistency in roles and responsibilities is not intended to remove the flexibility given to conservation authorities to develop local, or regional-scale, programs and services designed to further the conservation, restoration, development and management of natural resources. Increasing clarity and consistency in roles and responsibilities is intended to provide all parties with greater certainty in the roles and responsibilities conservation authorities are expected to carry out on behalf of the province and partner municipalities and, where appropriate, promote greater consistency in the delivery of these programs and services.

Actions taken by the Ministry to increase clarity and consistency in roles and responsibilities and associated processes and requirements could include, but are not limited to:

- Clearly delineating between the provincially mandatory programs and services that all conservation authorities are expected to deliver on behalf of the province and local communities and any optional programs and services which may be carried out by conservation authorities on behalf of the board in consultation with and under the approval of their participating municipalities.
- Establishing a Provincial Policy Directive that provides clear policy direction on the roles and responsibilities conservation authorities are expected to carry out on behalf of the province, defines the roles and responsibilities of provincial ministries in the development, delivery and oversight of these roles and responsibilities, and provides the basis for developing an integrated policy framework across the province.
- Providing clarity and consistency in the application of the *Development, Interference with Wetlands and Alterations to Shorelines and Watercourses* regulations for all parties, by consolidating and codifying regulatory requirements, defining undefined terms, and enhancing the authority of the Minister to establish, monitor and ensure compliance with provincial policy direction and legislative requirements.
- Ensuring sufficient tools are in place to ensure compliance with the *Development, Interference with Wetlands and Alterations to Shorelines and Watercourses* regulations by providing conservation authorities with modern compliance tools and mechanisms and by ensuring penalties for contravention of the act provide sufficient deterrents against contravention and are aligned with penalties in place under similar pieces of legislation.
- Streamlining planning and permitting requirements and associated processes by exploring opportunities to improve application, review and approval processes through the reduction of burdens, improved service standards, enhanced flexibility in approval requirements and the adoption of a risk-based approach to the issuance of approvals.



PRIORITY #3: Improving Collaboration and Engagement



Each conservation authority is an individual local public sector organization that operates under a common provincial legislative, regulatory and policy framework and is governed by a municipally-appointed board of directors. Conservation authority operations also involve a broader set of relationships and interactions with stakeholders and clients, interest groups and members of the public.

Feedback provided in response to the Ministry's discussion paper indicated a high degree of support for improving coordination among all parties involved in establishing, directing and overseeing conservation authority programs and services and strengthening relationships between conservation authorities and local residents and stakeholder groups through increased engagement around conservation authority operations, programs and services.

Greater collaboration and sharing of expertise among conservation authorities was also identified by several sectors as being critical to improving the consistency,

efficiency and effectiveness of conservation authority programs and services, reducing the potential for conflict between conservation authorities and local stakeholder groups, and reducing the perceived duplication of effort between conservation authorities and other agencies.

As the complexity of resource conservation and management decisions increases so does the need to bring a wide range of perspectives and expertise to the table to help inform and implement decisions. In addition, there are many situations where the natural resource management issues being addressed by conservation authorities cross watershed and political boundaries.

By improving collaboration and engagement, the province aims to support conservation authorities in their efforts to coordinate programs and services among themselves and with the province and to, where appropriate, formalize best management practices for engaging with Indigenous Peoples, stakeholders and members of the public.

Actions taken by the Ministry to improve collaboration and engagement could include, but are not limited to:

- Establishing a provincial one-window, led by MNRF, for establishing, coordinating and reviewing programs and services undertaken at the watershed planning scale by conservation authorities and promoting multi-ministry coordination of provincially delegated programs and services and the collection and sharing of science and information among ministries, municipalities, conservation authorities and others.
- Developing an enhanced business relationship with Conservation Ontario and individual conservation authorities to promote greater communication and coordination in the development and implementation of policies, programs and services, the collection and sharing of science and information and the joint development of capacity-building projects and initiatives.
- Enhancing Indigenous Peoples' participation in the development and delivery of stewardship, science and knowledge, and educational initiatives, and by clarifying the process for Indigenous Peoples to join or establish a conservation authority.
- Ensuring board decisions are informed by an appropriate diversity of views and perspectives reflective of local interests, including providing Indigenous Peoples, local residents and stakeholder groups opportunities to participate in the identification of local needs and priorities and conservation authority decision-making processes.
- Supporting efforts currently being made by conservation authorities to promote efficiency and effectiveness in the delivery of programs and services through the development of common policies and procedures, service specializations, and sharing of operational, administrative and technical resources on a regional or landscape basis.



PRIORITY #4: Modernizing Funding Mechanisms



The *Conservation Authorities Act* establishes a number of mechanisms which conservation authorities can use to fund their operations, programs and services. The act enables the Ministry to provide conservation authorities with funding to support Ministry-approved programs such as public safety and natural hazard management programs.

As a corporate body, conservation authorities may also receive or apply for funding from the province to deliver programs on the province's behalf. Local resource management programs and services can be funded through municipal levies or contracts and conservation authorities can self-generate revenue through service and user fees, resource development and fundraising.

Feedback provided in response to the Ministry's discussion paper indicated that some conservation authorities, particularly in rural areas with low population and fewer revenue generating opportunities may not have sufficient revenue to adequately support the programs and services that larger authorities are able to offer.

Respondents generally agreed that mechanisms should be in place to help address disparities in resources and capabilities among conservation authorities with large

and small population bases. In addition, several sectors requested that the province provide clarity on the use of municipal levies including the types of costs that can and cannot be included within the levy in addition to introducing new measures to improve transparency, consistency and accountability around fees.

While several sectors requested increased provincial funding for conservation authority operations, programs and services, others acknowledged that current fiscal realities make this a challenge. This government has made a firm commitment to holding the line on program spending, and is evaluating every program and service it delivers to ensure its sustainability.

Prior to considering any changes to current funding levels the province needs to ensure that existing funding mechanisms are as effective and efficient as possible and that conservation authorities are operating at appropriate economies of scale. As a result, the province is proposing to update funding mechanisms contained within the act with a view to enhancing their efficiency and effectiveness and ensuring that appropriate measures are in place to ensure fiscal accountability.

Actions to be taken by the Ministry to update funding mechanisms contained within the act could include, but are not limited to:

- Enhancing clarity, consistency and accountability in the development and use of municipal levies by defining eligibility criteria, reviewing apportionment, and defining the process by which conservation authorities are to work with participating municipalities to monitor and report on the use of public funds.
- Promoting clarity, consistency and accountability in the development and use of fees and generated revenue with the aim of ensuring fees are established in an open and transparent manner, are consistent with provincial direction on the use of fees, and adequately support the effective delivery of conservation authority operations, programs and services.
- Improving fiscal oversight and transparency by clarifying the role of municipalities in overseeing conservation authority budget development and spending, and where appropriate, standardizing budget development, tracking and reporting processes, and ensuring information on revenue sources and expenditures is made publicly available.
- Improving clarity in the use of provincial funding processes by providing conservation authorities with greater clarity in eligibility criteria, reviewing the efficiency and effectiveness of provincial funding processes, and updating requirements for reporting back on the use of provincial funds.



PRIORITY #5: Enhancing Flexibility for the Province



The framework and conditions for resource conservation and management in Ontario have changed significantly since the establishment of the *Conservation Authorities Act*, and the way conservation authorities operate within that framework has changed along with it. Resource conservation and management has become increasingly complex due to increases in Ontario's population numbers and density. There are also new challenges such as climate change, which further complicate resource management decisions. In addition, conservation authorities have been evolving as organizations. They are growing their funding sources, and accepting and being assigned additional roles that extend their responsibilities into additional areas.

Feedback provided in response to the Ministry's discussion paper recognized the changing nature of resource conservation and management in Ontario and the need for the Ministry to be responsive to both current and future pressures. Several sectors acknowledged that the role of conservation authorities in the delivery of provincial priorities could, and should, change over time in response to emerging issues and changing priorities, and that greater flexibility should be built into the act to periodically update the regulatory and policy framework to enable such changes. Others recognized there are gaps in the delivery of provincial programs in areas

outside of a conservation authority's jurisdiction and that other public sector bodies (including other provincial ministries and municipalities) may be best positioned to help fill these gaps.

The role of conservation authorities in resource conservation and management in Ontario will undoubtedly continue to change over time. Conservation authorities will continue to evolve as organizations, growing their expertise and networks and positioning themselves to take on additional roles in additional areas. At the same time, other public sector bodies, including provincial ministries, municipalities and other groups, will similarly grow in their own expertise and become increasingly attractive partners for the development and delivery of programs and services – particularly in areas outside of the jurisdiction of a conservation authority.

In order to better prepare for these changes in the future, the Ministry is proposing to build greater flexibility within the act to formally delegate the delivery of programs and services to conservation authorities, or other groups, in the future. By enabling greater flexibility for the future, the province will be in a better position to periodically provide additional clarity, consistency and accountability in the delivery of programs and services in the future.

Actions taken by the Ministry to enable flexibility for the future could include, but are not limited to:

- Giving the Minister the authority to use the act to develop additional natural resource conservation and management programs and services in the future, throughout the province.
- Giving the Minister the authority to formally delegate the delivery of current and additional natural resource conservation and management programs and services to conservation authorities in the future.
- Giving the Minister the authority to formally delegate the delivery of current and additional natural resource conservation and management programs and services to other public bodies, not-for-profit organizations, municipalities and other Ministries.
- Giving the Minister the authority to deliver additional natural resource conservation and management programs and services throughout the province.

3

OTHER ACTIONS BEING CONSIDERED

Feedback provided in response to the Ministry's discussion paper also identified a number of areas where general 'housekeeping' amendments could be made, or supporting actions that could be taken, to help improve the efficiency and effectiveness of conservation authority operations, programs and services.

In response to the feedback provided, the province is considering:

- **Reducing administrative burdens** associated with appointing and replacing board members and obtaining approval of board per diems.
- **Aligning board terms** with the municipal elections cycle.
- **Developing an orientation and training program** for board members.
- **Developing a coordinated communications plan** outlining any changes to conservation authority operations, programs and services resulting from the review in partnership with municipalities and conservation authorities.

4

FEEDBACK REQUESTED

The Ministry has established five priorities for updating the *Conservation Authorities Act* and the supporting regulatory and policy framework:

- 1 Strengthening oversight and accountability in decision-making.
- 2 Increasing clarity and consistency in roles and responsibilities, processes and requirements.
- 3 Improving collaboration and engagement among all parties involved in resource management.
- 4 Modernizing funding mechanisms to support conservation authority operations.
- 5 Enhancing flexibility for the province to update the *Conservation Authorities Act* framework in the future.

The following questions are intended to help the Ministry obtain feedback on these five priorities and actions currently being considered by the Ministry in support of achieving these priorities. The questions below are general in nature and are not intended to discourage readers from raising their own questions or providing comments in other areas. Where possible, please provide specific examples and/or links to supporting information:

- **What do you think of these priorities? Which are the most important and/or least important to you? Are there other priorities that should be considered?**
- **What actions would you recommend the province take to help achieve these priorities?**
- **What do you see as some of the key challenges in achieving improvements under any or all of these priority areas?**

5

HOW TO PROVIDE FEEDBACK

We want to hear from you. If you have comments or suggestions that should be considered in updating the *Conservation Authorities Act* to achieve the priorities outlined within this consultation document please take advantage of this opportunity to provide them to us. All comments received in response to this consultation document will be read and considered in moving forward.

Written comments can be provided by:

Responding to the Environmental Registry posting by searching the EBR Registry number 012-7583 on the following website: www.ontario.ca/EBR

Or

Emailing us at:

mnrwaterpolicy@ontario.ca

The deadline for providing comments is September 9, 2016.

Comments collected in response to this consultation document will be used by the Ministry to inform the development of specific changes to the existing legislative, regulatory and policy framework. Any specific changes to the existing legislative, regulatory or policy framework proposed as a result of the review will be subject to further public consultation as appropriate, for example, through subsequent Environmental Registry postings.

The review of individual conservation authorities, the specific programs and services they deliver, and site-specific permit applications and permitting decisions are not within scope of the Ministry's review.



Office of the Regional Chair | Alan Caslin

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Mr. Bruce Timms
Chair, Board of Directors
Niagara Peninsula Conservation Authority
Via Email: Lisa Conte, Administrative Assistant, CAO/Board - lconte@npca.ca

June 9, 2016

Dear Mr. Timms,

During the meeting of Regional Council on Thursday, May 19th a delegation was made by Mr. Ed Smith, Resident, City of St. Catharines with respect to “*Selection of Value for Money Audit Areas (Agenda Item 11.1 - Minutes AC 3-2016, Minute Item 6.1)*”. Unfortunately, I was unable to attend this meeting and it was chaired by Councillor Brian Heit.

Upon review of the deliberations that evening, via video recording and the meeting minutes, I am aware that you raised a point of personal privilege. Your point stated that due to the libelous and defamatory content of the PowerPoint slideshow accompanying Mr. Smith’s presentation, that it should not form part of the official record of the meeting. While Acting Chair Heit ruled against your point of privilege, Councillor Quirk challenged the ruling of the Chair, a challenge which was subsequently supported by a majority of Council.

As a result of this decision by Regional Council in support of your concerns, I extend on behalf of Regional Council our apologies for the offensive content of the delegation in question, and any and all comments by the presenter that supported the allegations outlined in the delegation.

It has also come to my attention that Mr. Smith's original submission of his presentation contained other allegations and defamatory statements that were requested to be removed by the Regional Clerk in consultation with legal counsel. I am concerned that regional staff are now editing content for defamation material and other information outside the jurisdiction of regional government. Thus, I have requested the Regional Clerk to review the process by which PowerPoint slideshows and delegation summaries are reviewed and provided to Regional Council in advance of meetings, and to ensure that all existing policies related to delegations and their content are strictly followed.

Once again, please accept my sincere apologies for the events of May 19th and any harm caused to you or other NPCA Board Members on Regional Council. I request that you circulate this letter to all members of the NPCA Board of Directors.

Respectfully,

Alan Caslin, BSc, MSc
Regional Chair, Niagara Region

REPORTS FOR INFORMATION

- ❖ **REPORT NO. 61-16** – *Project Status - Watershed Management*
- ❖ **REPORT NO. 62-16** – *Project Status - Operations*
- ❖ **REPORT NO. 63-16** – *Project Status - Corporate Services*
- ❖ **REPORT NO. 64-16** – *Finance, Monthly update*
- ❖ **REPORT NO. 65-16** – *2017 Budget Timetable*
- ❖ **REPORT NO. 66-16** – *Forestry update*
- ❖ **REPORT NO. 67-16** – *Water Quality Report 2016*
- ❖ **REPORT NO. 68-16** – *Niagara Shores – Sewage Lagoon Decommissioning*

June 15, 2016 Full Authority Meeting

Report To: Board of Directors
Subject: Watershed Management Status Report
Report No: 61-16
Date: June 15, 2016

RECOMMENDATION:

That Watershed Management Status Report No. 22-16 be received for information.

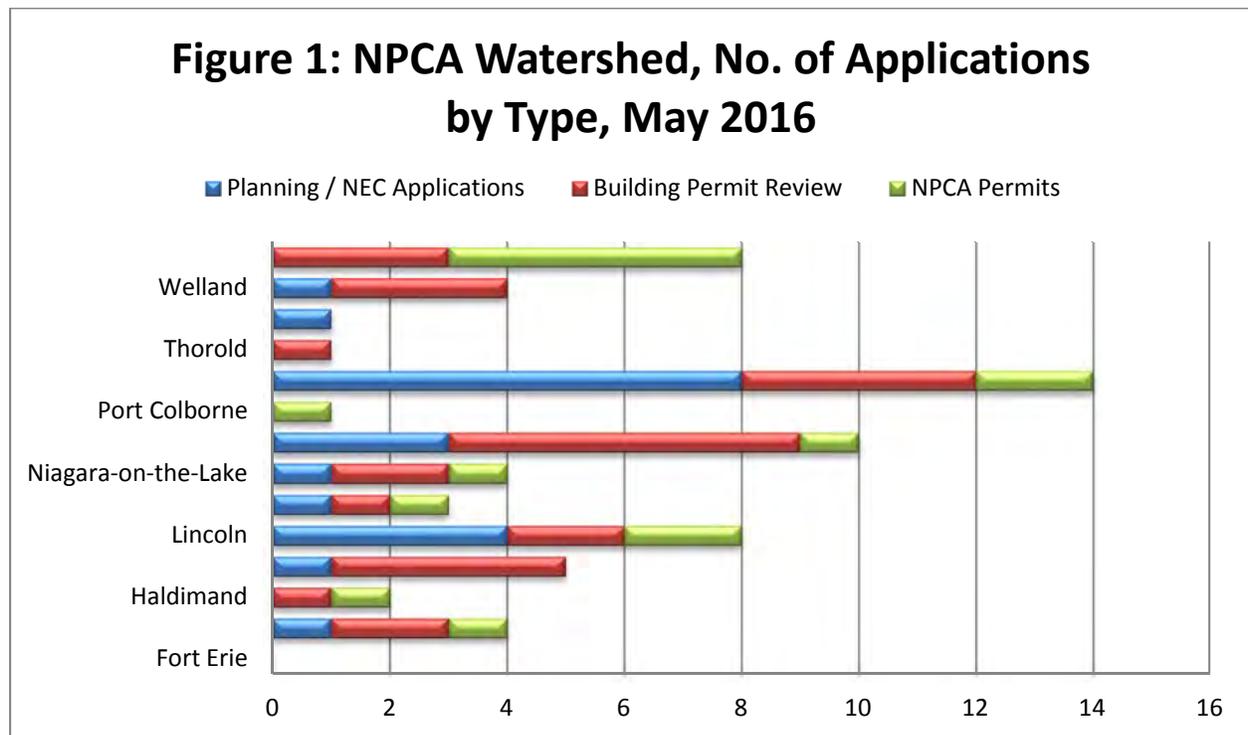
PURPOSE:

To update the Board on the Watershed Management Team’s activities and achievements during the month May 2016

BACKGROUND:

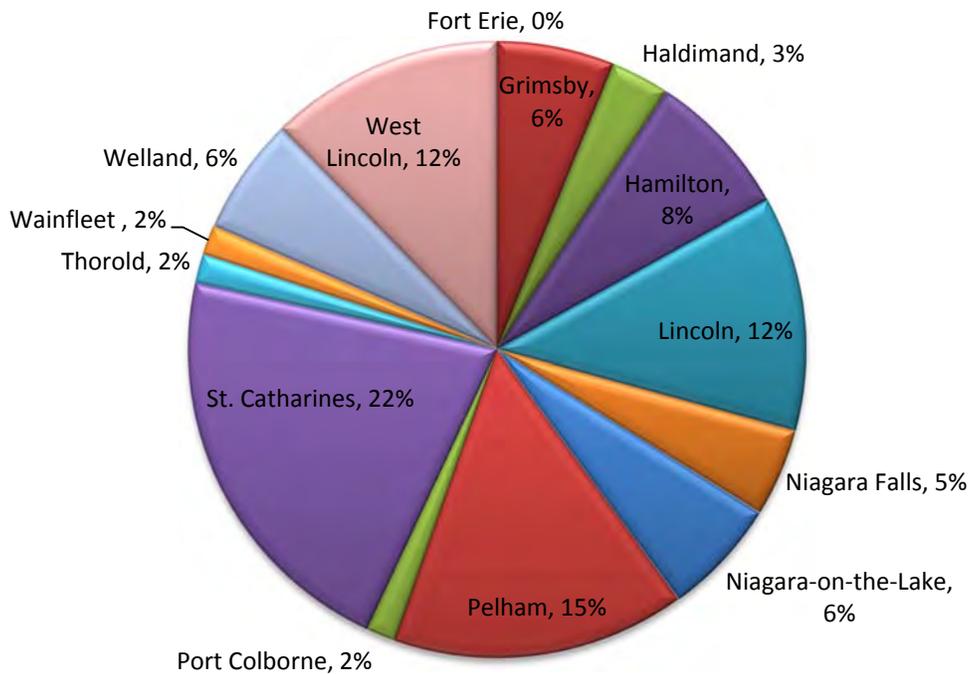
A. Plan Review & Regulations

Figure 1: NPCA Watershed, No. of Applications by Type, May 2016



	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	0	1	0	1	4	1	1	3	0	8	0	1	1	0	21
Building Permit Review	0	2	1	4	2	1	2	6	0	4	1	0	3	3	29
NPCA Permits	0	1	1	0	2	1	1	1	1	2	0	0	0	5	15
Totals	0	4	2	5	8	3	4	10	1	14	1	1	4	8	65

Figure 2: Total No. of Applications (%), May 2016



1) Municipal and Development Plan Input and Review

The Watershed Management Department is responsible for reviewing Planning Act applications and Building Permit applications where there is a feature regulated by the NPCA. Under the Memorandum of Understanding (MOU) with Niagara Region, the NPCA reviews Planning Act applications with respect to the Region's Natural Environment Policies (Chapter 7 of the Regional Official Plan).

During May, 2016, the Watershed Management Department reviewed 21 Planning Act applications (various type and complexity)/Niagara Escarpment Commission Development Permit applications, 29 Building Permit applications, and 10 property information requests. Staff also responded to various inquiries from the public and local municipalities, as well as attended weekly consultation meetings with the local municipalities and conducted various site inspections

2) Construction Approvals (NPCA Permits)

During the month of April, 2016, NPCA Permits and Compliance issued a total of 15 construction permits as per Section 28 of the Conservation Authorities Act (details noted below). These are works that have or are to occur within regulated features, buffers to regulated features or hazard lands.

No.	PERMIT #	MUNICIPALITY	ADDRESS	WORKS PROPOSED/PURPOSE	REGULATED FEATURE	TOTAL DAYS	COMMENTS
1	NRWC-052	West Lincoln	North of Reg Rd 20 on S. Grimsby Road 6 Unopened Road Allowance	Culvert Installation	Watercourse Alteration	0	
2	NRWC-053	West Lincoln	6774 Young Street	Utility Poles, Transmission Lines and HDD	PSW Buffer/Watercourse	0	
3	3756	Lincoln	Red Maple Avenue over 18 Mile Creek	Bridge Replacement	Watercourse Alteration	0	
4	3771	Port Colborne	2153 Fire lane 2	Home Reconstruction and Access	Lake Erie Shoreline	13	
5	3778	Grimsby	480 Winston Road	Retaining Wall	Watercourse Alteration	13	
6	3785	St. Catharines	50 Royal Henley Blvd	In-ground Pool Installation	Slope Stability	5	
7	3789	St. Catharines	1776 Fourth Avenue	New Bakery/Store	Slope Stability	18	
8	3790	NOTL	River Beach Drive	Shoreline Protection Demonstration	Lake Ontario Shoreline	9	
9	3791	West Lincoln	Lot #9 Vaughan Road, Con 2	New Home Construction and Driveway	PSW Buffer/Watercourse	3	
10	3792	Niagara Falls	4875 Lyons Parkway	Demolish existing home and Build new home with garage	Lands adjacent to watercourse	16	
11	3793	Pelham	170 Farr Road	New Home and Channel modification	Lands adjacent to watercourse	13	
12	3795	West Lincoln	Mud Street	New Home Construction	Floodplain	13	
13	3796	West Lincoln	South Side of Bertie Street	Enbridge	Lands adjacent to watercourse	12	
14	3800	Lincoln	2142 South Service Road	Above Ground Fuel Storage	Lands adjacent to watercourse	2	
15	3804	Haldimand	701 Haldimand Road 32	New Home Construction	PSW Buffer	14	

3) Watershed Biology

In the month of May the Watershed Ecological Technicians have provided biology review for a variety of planning and regulations files. The spring season has increased the number of site visit requests related to both planning and permit files, completing at least twenty (20) site visits for planning pre-consultation or permit application review, and providing formal review and comment for fifteen (15) permit application submissions.

The Ecological Technicians were also busy with scoping and reviewing Environmental Impact Studies, providing correspondence to a variety of consultants for information requests on natural heritage features mainly related to Environmental Assessments, and providing comments on multiple municipal projects related to culvert replacement and ditch maintenance.

Both Ecological Technicians also participated for several days in the Niagara Children's Water Festival as lead presenters.

Several days during May were spent assisting the Operations Department in compiling and editing the Cave Springs Management Plan.

The Supervisor of Watershed Biology participated in CityView validation, and has been working on several files including Miller/Bridgeburgh Lands (Fort Erie), Thundering Waters (Niagara Falls), Saffron Meadows (Pelham), and assisting with municipal Environmental Impact Study guidance for the Archery Club (Niagara Falls), ongoing Regulations issues, and in finalizing the Fernwood (Niagara Falls) proposed wetland compensation project under NPCA's existing policies for non-Provincially Significant Wetlands.

4) Tree and Forest Conservation By-law – See Forest By-Law Summary Report

5) NPCA Policy Review

Staff continue to work with Dillon Consulting on a draft Discussion Paper. Dillon will attend the July NPCA Board meeting to present the draft paper. The Discussion Paper outlines the issues and policy gaps that have been identified by stakeholders and the public, and will include some preliminary potential options to address them. Following the Board meeting the Discussion Paper will be available for public review.

6) Welland River Floodplain Mapping Study

The Consultation Summary Report has been posted on the project website (www.wellandriver.ca).

During the month of June, Round #2 Public Information Sessions will be held across the watershed to explain the technical aspects of the floodplain modelling. These meetings will also address any outstanding topics and seek public input on any new issues using the facilitated discussion format. As was the case for the first round, notification of the second round of information sessions was sent by direct mail to all landowners within 500 metres on either side of the Welland River. In addition, notifications were included in a half page newspaper advertisement in Niagara This Week, forwarded to all municipal offices, emailed to those who registered at previous events or added their contact information on the project website, and included in NPCA's website and the project website.

The next Watershed Floodplain Committee meeting is scheduled for **June 22, 2016 @ 5:00pm** at Balls Falls Conservation Centre.

B. Projects / Programs

1) Source Water Protection Plan

- Staff continued to answer enquiries on source water protection, and respond to requests from the Ministry of Environment and Climate Change. Staff participated in the monthly source protection program conference calls and webinars.

2) Water Quality Monitoring Program

- Staff continued routine monitoring at all NPCA 75 water quality monitoring stations for May. This will be performed monthly until November. Samples will be analyzed for general chemistry, nutrients, metals and bacteria.
- Staff continued to analyze data and prepared the 2016 Annual Water Quality Monitoring Report (included as stand-alone staff report).
- The 2015 Hamilton International Airport (HIA) Biological Assessment of Water Quality was submitted to staff of the HIA on May 4 2015. This annual study continues to demonstrate East HIA Creek is more impacted than West HIA Creek. The main stressors are likely stormwater runoff containing road salt and a mixture of contaminants which are adversely impacting the aquatic ecosystems of these creeks.
- Staff completed an assessment of wintertime (2015-2016) dissolved oxygen (DO) concentrations in Lake Niapenco. The results of this assessment found there were sufficient DO concentrations in Lake Niapenco to sustain warm water fish populations during the winter of 2015-2016. **(Attachment #1 - DO assessment)**
- 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, the NPCA has received nine (9) applications and completed 9 projects under the Well Water Decommissioning Program for 2016. At this time 100% of the funding for this program has been allocated.
- A Brock University Sustainability and Science graduate student (Zach Hamer) won the poster competition at the Ontario Climate Change Consortium Symposium using data collected through the NPCA's Water Quality Monitoring Program.
- Staff processed data requests from other governmental agencies, consultants, and academic institutions.

3) Flood Control

a) Flood Forecasting and Warning

- Binbrook Reservoir – The water level in the Reservoir is presently sitting just above (50mm) the normal operational holding level. Due to the dry weather experienced in late May, water discharge from the reservoir has been greatly reduced. Staff continue to monitor reservoir water levels on a daily basis and make adjustments as warranted.
- Staff continue to monitor daily water levels at our 14 stream gauge stations, climatic data at our 15 climate stations, and undertake routine maintenance, calibration, and

inspections at all 29 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.

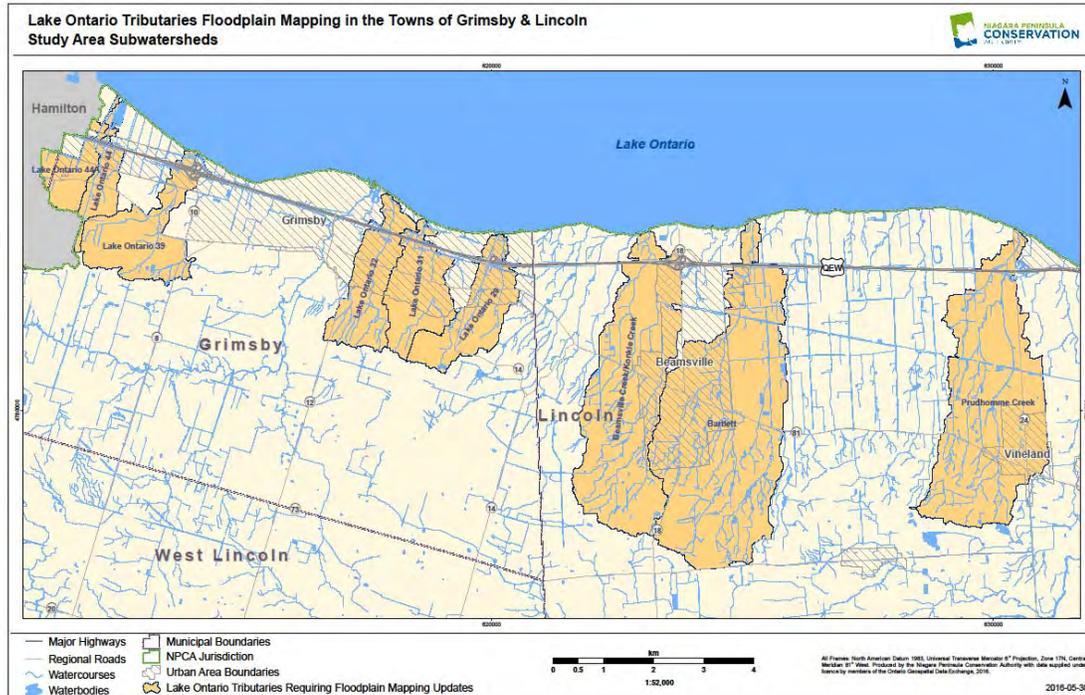
- As part of this program's approved 2016 capital projects, NPCA staff are planning to install a new stream gauge station on 20 Mile Creek in the City of Hamilton in order to provide advanced flood warning for the community of Smithville in West Lincoln. NPCA staff met with City of Hamilton staff to discuss the potential to locate this proposed stream gauge station on the Woodburn Road right-of-way. The gauge equipment would be mounted on a new wood hydro pole. City staff indicated support for the project in principle and will seek to formalize the approval through the appropriate channels.

b) 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 stormwater management engineering designs.
- In mid-May, NPCA staff gave a presentation to a Chinese government delegation from the province of Shanghai. These gentlemen were from the provincial ministry responsible for water quality, treatment, pollution abatement, and flood control. As a result of rapid development in their province, they were in Southern Ontario on a fact finding tour to speak with various Ontario provincial ministries (including the NPCA) to discuss our local regulations, processes, governance, and funding models. The ultimate goal is to improve how they conduct their operations by learning from the experience of other water resource managers.
- In mid-May, NPCA staff attended a presentation at Brock University by Dr. Claudia Baldwin from the University of the Sunshine Coast in Australia. Dr. Baldwin spoke on two of her research projects which focus on flooding and communications in Queensland, Australia. Of interest, Dr. Baldwin (originally from Waterloo, Ontario) contrasted the lack of an organized flood forecasting system in Queensland with the sophisticated system utilized by Ontario's Conservation Authorities in partnership with the Ministry of Natural Resources and Forestry.
- NPCA staff are submitting an application to the federal government's 'National Damage Reduction Program' (NDRP) in an effort to obtain 50% funding to replace outdated 1989 flood plain maps for Prudhommes Creek, Bartlett Creek, and Beamsville Creek in the Town of Lincoln, and for Lake Ontario Tributaries #29, 31, 32, 44, and 44a in the Town of Grimsby (see Exhibit 1).
- Several questions and comments were raised by the public concerning stormwater management facilities and impacts during an information session which was held April 14, 2016 to present the Twelve Mile Creek Stewardship Guide. To follow-up on the concerns expressed by the public, NPCA staff met with the Town of Pelham's Director of Planning and Director of Public Works to tour various locations of interest in the Upper Twelve Mile Creek watershed. The tour locations included the stormwater management facilities in the Fonthill East development (Rice Road and Highway 20), and in the Chestnut Ridge subdivision (off Haist Street north of Highway 20). NPCA staff discussed how the stormwater management facilities function in an effort to reduce downstream flooding, improve the quality of stormwater discharge, and maintain the system's cold water regime. The tour also included Marlene Stewart Street Park, a

location where groundwater bubbles to the surface and provides a water supply for Upper Twelve Mile Creek. Town staff appreciated the NPCA's insight and are in the process of formulating a method to convey this information to interested residents within their municipality.

Exhibit 1 – Proposed Floodplain Mapping Study (2017/18)



4) Restoration

Project Implementation – Watershed Plans

The Watershed Restoration Program is responsible for improving water quality, water quantity and biodiversity within the NPCA Watershed. The Restoration Program advances these areas through the implementation of comprehensive watershed plans. Staff are currently scheduling meetings with implementation committees and key stakeholder groups to plan collaboration opportunities for 2016.

Project Implementation – Voluntary Stewardship

Staff are working with our 2016 project partners, finalizing project designs, stewardship plans, quotations and implementation schedules. To-date there are approximately 65 stewardship projects ready for implementation. Staff have completed the spring tree planting and are hoping for some much needed rain.

City of St. Catharines Partnership

Staff are continuing to work with the City of St. Catharines, the Port Dalhousie Beautification and Works Committee (PDBWC), and the Niagara Restoration Council to develop naturalized pollinator gardens in Port Dalhousie. Two interpretative signs (shown below) will be installed to provide education about pollinators and what they consume.



This pollinator garden was planted here to provide a resting spot for migrating butterflies crossing Lake Ontario.

Over their long migratory journey, butterflies touch down in the Niagara Region looking for refuge like this naturalized garden. With a diversity of native plants, this vital butterfly habitat will attract and feed a host of pollinators. Butterflies, birds, bees and other insects will pollinate the flowers as they move from plant to plant.

Pollinators play a very important role in maintaining our natural environment by aiding plants in

their reproduction. They are also responsible for pollinating over 70 percent of our food crops, including fruits, vegetables and grains.

You can help pollinators by planting native wildflowers at home. Beautiful, and ideal for our local conditions, these plants will provide essential habitat for butterflies and other pollinators with minimal maintenance.

Can you spot any pollinators visiting this naturalized garden?



This naturalized pollinator garden provides a resting spot for migrating butterflies crossing Lake Ontario.

Nectar from flowering plants provides food for adult butterflies; the leafy part provides a home for many species of butterflies to lay their eggs. The flower is the host (house) plant for the eggs and caterpillars. The caterpillars will feed here until adulthood.

Plants found in Niagara before European settlements are "native" to the region. Native plants have adapted over time to changing weather conditions, pests and diseases. Getting all the nutrients they need from the soil, these plants are easy to grow and require

little maintenance. They provide food and breeding areas for many species of our local and migrating butterflies, birds and bees.

Attracting butterflies and other pollinators to your own garden can be done by including native plants. For best results, include nectar producing flowers for adults and host plants for eggs and caterpillars.

The Monarch Butterfly only uses native milkweeds as their host plants. You too, can create habitat for Monarch Butterflies by planting Common Milkweed (*Asclepias syriaca*), Swamp Milkweed (*Asclepias incarnata*) and Butterfly Milkweed (*Asclepias tuberosa*).



Pollinator sign example from Niagara-on-the-Lake



Walker's Creek Pollinator Garden, planted last year

Staff continue to work with City of St. Catharines staff, the Niagara Restoration Council and members of *Friends of Walkers Creek* on the establishment on a pollinator garden in Cindy Park.

Township of West Lincoln Partnership

Staff are working with the Town of West Lincoln, Niagara Restoration Council and the Manor Wood Community Group on the establishment of a pollinator garden adjacent to Twenty Mile Creek in the vicinity of Brookside Estates. Funding for this project is through the Niagara Restoration Council's *Blooms for Bee's*.

Niagara Region Partnership

Staff from the NPCA and Niagara Region have been working collaboratively on a health and wellness garden at the 250 Thorold Road office location. Funding for this program has been secured through the Niagara Region's Wellness Program with in-kind support provided through the NPCA's Restoration Program. The project planted late last summer, includes a pollinator garden, and an education garden to showcase the different species of native wildflowers that can be readily adapted into landscaping projects.



City of Welland Partnership

Staff are working with the City of Welland on an experimental pollinator plot in the traffic calming island in front of the NPCA building. The goal is to maintain the small cluster of milkweed that has established on its own, while monitoring the site to evaluate potential use by Monarchs. Utilizing traffic islands creates more municipal options for establishing pollinator gardens.



Common Milkweed Cluster in Traffic Calming Island at NPCA Head Office

Ducks Unlimited Partnership

Staff are negotiating the terms of the 2016/17 agreement, continuing its partnership that will see \$30,000.00 from Ducks Unlimited be put towards projects of mutual interest.

Haldimand County Water Quality Program

Staff have three (3) project opportunities under this initiative in 2016.

Niagara River Remedial Action Plan (RAP)

- *The Niagara River RAP Website*; A separate stand-alone website (www.ourniagarariver.ca) is nearing completion.
- Staff provided pertinent information for an article published in The Globe and Mail on the Niagara River (Attachment #2 – Globe & Mail article on Niagara River).

Ramsar Designation

- The Niagara Parks Commission staff will be taking a recommendation for full endorsement to their Commission in July. Confirmation of the lead nomination role will assist in facilitating the remaining stakeholder engagement requirements.
- The Ramsar Steering Committee has obtained Congress endorsement for the Ramsar designation in the United States.

5) Special Projects

- Staff provided comments on planning applications for Niagara Region and local municipalities under the Planning Memorandum of Understanding. Staff also provided comments to the Ministry of the Environment and Climate Change on Permits To Take Water.
- Staff assisted Operations with the Ball's Falls Sewage System and the Cave Springs Master Plan.
- Staff continued work on Bedrock Aquifer Study tasks, including: 2016 project planning with the Ontario Geological Survey, landowner siting agreements, external data collection, site restoration activities and MacMaster University Graduate student research.
- Staff responded to information requests from consultants, developers and the public.
- Staff supported Source Water Protection implementation and liaison with external agencies (e.g. emergency response plans).
- Lead presenter at the Niagara Peninsula Children's Water Festival
- Staff liaised with the MOECC on the provincial auditor's 5b Committee. This committee is to deal with notifying the public about naturally occurring groundwater concerns present in Niagara and other areas of the province. The concerns are elements measured to be naturally above provincial drinking water standards. The committee has to address creating a process for the province and local agencies to engage the public on this problem.

FINANCIAL IMPLICATIONS:

None

RELATED REPORTS AND APPENDICES:

1. **Memo: Lake Niapenco Winter 2015-2016 Dissolved Oxygen Concentrations**
2. **Globe & Mail article on Niagara River**
(<http://www.theglobeandmail.com/news/national/the-story-of-the-niagara-river-the-water-wonder-of-the-world/article30117458/>)

Prepared by:



Peter Graham, P.Eng. Director, Watershed Management

Respectfully submitted by:



Carmen D'Angelo, CAO/Secretary-Treasurer

This report was prepared with consultative input from Suzanne McInnes, MCIP, RPP – Manager, Plan Review and Regulations, Brian Wright, P.Eng. – Manager, Watershed Projects, and NPCA staff.

MEMO

DATE: May 20, 2016

FROM: Joshua Diamond, Water Quality Specialist

TO: Steve Miller, Supervisor Water Resources

RE: Lake Niapenco Winter 2015-2016 Dissolved Oxygen Concentrations



Introduction

In the fall of 2015 the Glanbrook Conservation Committee requested that the NPCA monitor wintertime dissolved oxygen (DO) concentrations in Lake Niapenco. The Glanbrook Conservation Committee was concerned that recent declines in crappie fish populations were the result of low wintertime DO concentrations in Lake Niapenco. Both the winters of 2014 and 2015 were cold and caused significant ice cover on Lake Niapenco from January to April. It was hypothesized that ice cover was reducing DO levels within Lake Niapenco and negatively impacting the crappie populations.

Materials and Methods

To assess wintertime DO concentrations NPCA staff installed an YSI 6600 Water Quality Logger (**Figure 1**) in Lake Niapenco (**Figure 2**) on November 19 2015. Before deployment the logger was lab calibrated for use. The logger was deployed to a depth of 7ft from surface or 22ft from the bottom of Lake Niapenco. The logger was suspended with buoys on a steel aircraft cable that was anchored with a concrete slab. The logger was programmed to take DO readings every 15 minutes. The logger was removed on Feb 27 2016 during a significant wind storm that threatened to run the logger aground. The YSI logger was taken to the NPCA main office and the data downloaded to a computer. All data was analyzed with Excel.



Figure 1. Sample location at the beach Lake Niapenco



Figure 2. Logger Location at Lake Niapenco

Results and Conclusion

The winter of 2015-2016 was mild compared to the previous two winters and direct comparison cannot be made. NPCA staff noted that full ice cover was only observed from January 8 2016 to February 16 2016. Full ice cover was not observed after Feb 16 2016. The DO concentrations from November 19 2015 to February 27 2016 are shown in **Figure 3**. The DO concentrations during this study period did not dip below the Ontario Ministry of Environment's Provincial Water Quality Objective of 4.0 mg/L (Ontario Ministry of the Environment. 1994). The mean wintertime DO concentration was 11.01 mg/L with a low value of 4.59 mg/L observed on February 13 2016. Based on these data there were sufficient DO concentrations in Lake Niapenco to sustain warm water fish populations during the 2015-2016 wintertime. It is recommended that the NPCA Monitor DO concentrations for the 2016-2017 winter by redeploying the YSI logger at the same location in order to attempt to capture the wintertime conditions observed in 2014 and 2015.

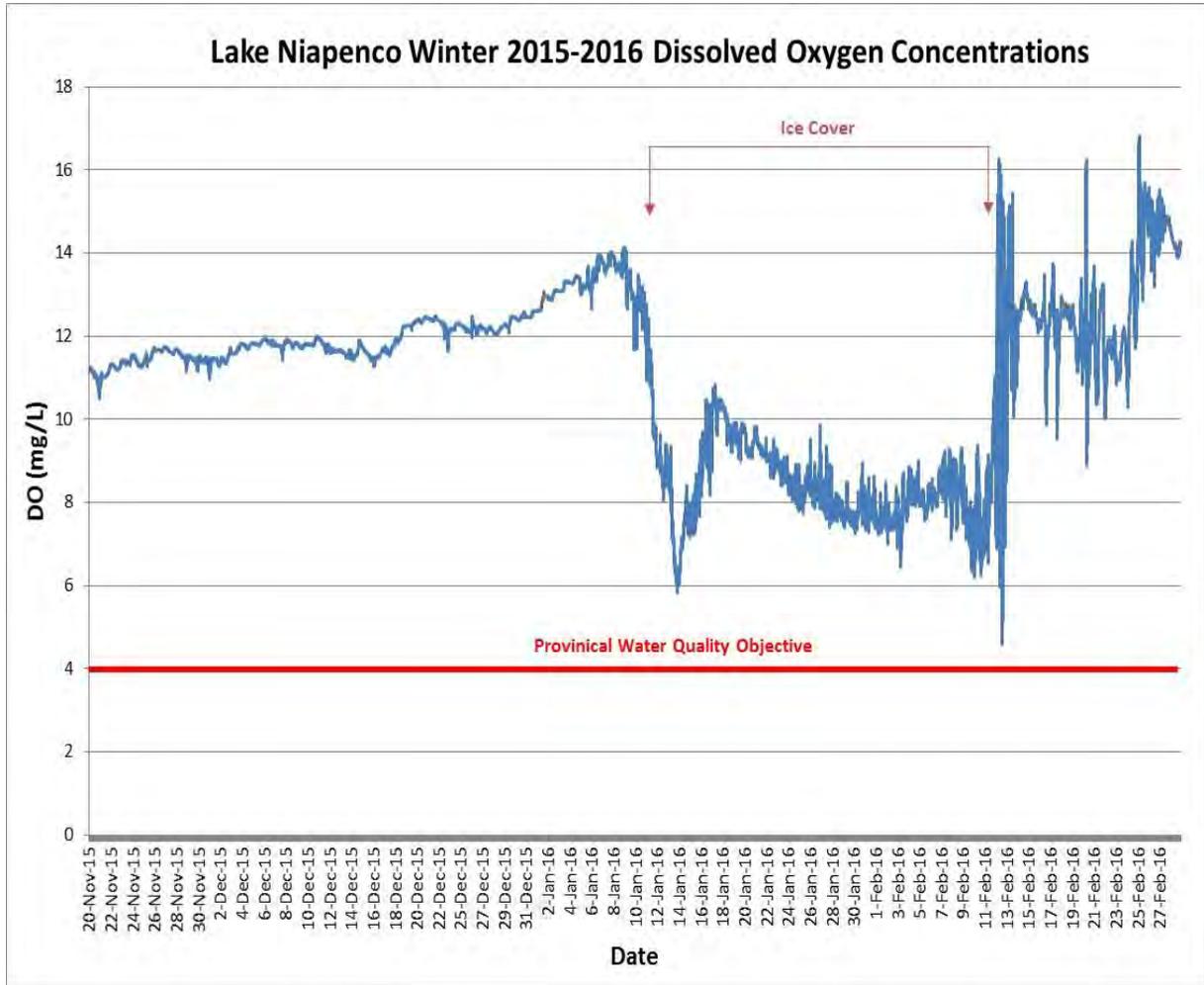


Figure 3. Dissolved Oxygen Concentrations of Lake Niapenco from November 20 2015 to February 27 2016

References

Ontario Ministry of the Environment. 1994. Water Management, Policies, Guidelines and Provincial Water Quality Objectives. Government of Ontario, Toronto.

If you have any questions or require additional information please do not hesitate to contact me.

All of which is respectfully submitted;

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FIFTH IN A SERIES

The story of the Niagara River: The water wonder of the world

ROY MACGREGOR

NIAGARA FALLS, ONT. — The Globe and Mail (includes correction)

Published Sunday, May 22, 2016 10:10PM EDT

Last updated Wednesday, May 25, 2016 5:44PM EDT

13 Comments



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11



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Oscar Wilde, Richard Nixon, Pierre Trudeau, Marilyn Monroe,

Winston Churchill, Shirley Temple, Abraham Lincoln, Mark Twain, Charles Blondin, Wild Bill Hickok, Laura Secord, H.G. Wells, Charles Dickens, Helen Keller, Sir Harry Oakes, Jimmy Stewart, Princess Diana ...

Bit characters all – in a story in which the main character has always been and will always be: the Falls.

Those famous names, with one notable exception, were all as impressed in their day by Niagara Falls as will be the millions of visitors who come this year to stare in awe at one of the Seven Natural Wonders of the World.

Helen Keller, who could not see and could not hear, experienced the falls through her hands. She was so moved by the vibrations she could feel on a hotel windowsill that she told her mother: “One feels helpless and overwhelmed in the presence of such a vast force.”

“Endless water falling the wrong way,” sniffed Oscar Wilde when he visited in late winter of 1882. The legendary Irish wit is also said to have claimed that the legendary honeymoon destination “must be a bride’s second-greatest disappointment.”

There is no disappointment, however, on this recent day, with the sun painting rainbows in the mist over the Canadian-side Horseshoe Falls. Hundreds of viewers line the walkway that runs alongside. Buses discharge tourists who have flown to Canada from China, mostly young couples with selfie sticks to capture themselves in various romantic poses with the falls as backdrop.

Two young friends have driven down from Toronto for the day.

Alejandro Mena, 21, has come from Colombia to see what he calls “one of the five wonders of the world.”

“Seven!” corrects his pal, 23-year-old Bruno Dutey from Spain.

“Okay, seven,” concedes Mr. Mena, who adds that he has found the falls to be a bit of an optical illusion, as they’ve been walking for some time now without seeming to get any closer.

“The closer you get to it,” Mr. Dutey says, “the greater it gets.”

In fact, they have no idea how truly great. The white water that roars over the falls before them may be moving in excess of 100 kilometres an hour. All the mind-boggling numbers that can be placed before cubic feet and gallons might be better illustrated by the writer who calculated there was the equivalent of one million bathtubs full of water going over the falls every single second.

But still, impressive as that sounds, it is still only half of what once was.



Far left, Niagara Falls has impressed visitors since missionary Father Louis Hennepin wrote the first eye-witness description in 1693. (Library of Congress)

In late 1678, Father Louis Hennepin, claimed by some to be the

first European to see the falls – others say Étienne Brûlé had been there a half-century earlier – declared that “the Universe does not hold its parallel.”

Hennepin also found the noise “outrageous ... more terrible than that of thunder.”

There is something about Niagara and hyperbole. According to local historian Sherman Zavitz’s *It Happened At Niagara*, when a young Abraham Lincoln first visited the falls, the future president pronounced: “When Columbus first sought this continent – when Christ suffered on the cross – when Moses led Israel through the Red Sea – nay, even, when Adam first came from the hand of his maker – then, as now, Niagara was roaring here.”

“Then, as now” being 1848 – but not these days.

For one thing, the falls have moved, a remarkable recession chartered by scientists to have shifted 11 km upstream in the past 12,000 years. Every year, more breaks away, sometimes rock chunks the size of a sixteen-wheeler.

“The shape of the falls is always changing,” says Environment Canada’s Aaron Thompson, who also serves as chair of the International Niagara Board of Control. “The rate has slowed down because so much of the flow goes to the power plants.”

And this, it turns out, is what separates the falls the tourists photograph today from the falls that First Nations knew, which so impressed the likes of Hennepin and Lincoln.

The power of Niagara was such that it created the first great industrial centre of North America. By diverting the water into

tunnels leading to turbines, industrialists were able to create electricity, first of all direct-current. Once Nikola Tesla invented alternating-current – a discovery Thomas Edison campaigned against as being too dangerous – it allowed for electricity to travel distances and the great industrialization of the Niagara region spread.

Increasingly, more and more water was diverted into such tunnels. Lord Kelvin, the famous Irish inventor and engineer, said he looked forward to the day when every single drop in the river would be used to create electricity.

Fortunately, wiser heads prevailed. One early suggestion had the power companies ransacking the Niagara as much as they wished six days a week but doing nothing on Sundays so that the tourists could enjoy the falls. That idea, luckily, went nowhere. In 1950, the Niagara Diversion Treaty signed by Canada and the United States specified how much each country could draw for power – roughly half the flow that Hennepin and Lincoln had witnessed.

“They could see that one day there would be no water going over the falls,” Mr. Thompson. says

Today, the flow and diversion gates are all computer-controlled and monitored. More water is diverted during night hours and during winter. Intricate steel booms are placed each year at the Lake Erie mouth so that ice can be relatively controlled.

“We try to keep the ice on at Lake Erie as long as possible so it doesn’t come in and play havoc with the flow,” says Mr. Thompson.

In late January, a public hearing was held to discuss a proposal to “de-water” the American Falls. Two 150-year-old bridges connecting to islands upstream from the falls are in dire need of repair or replacement.

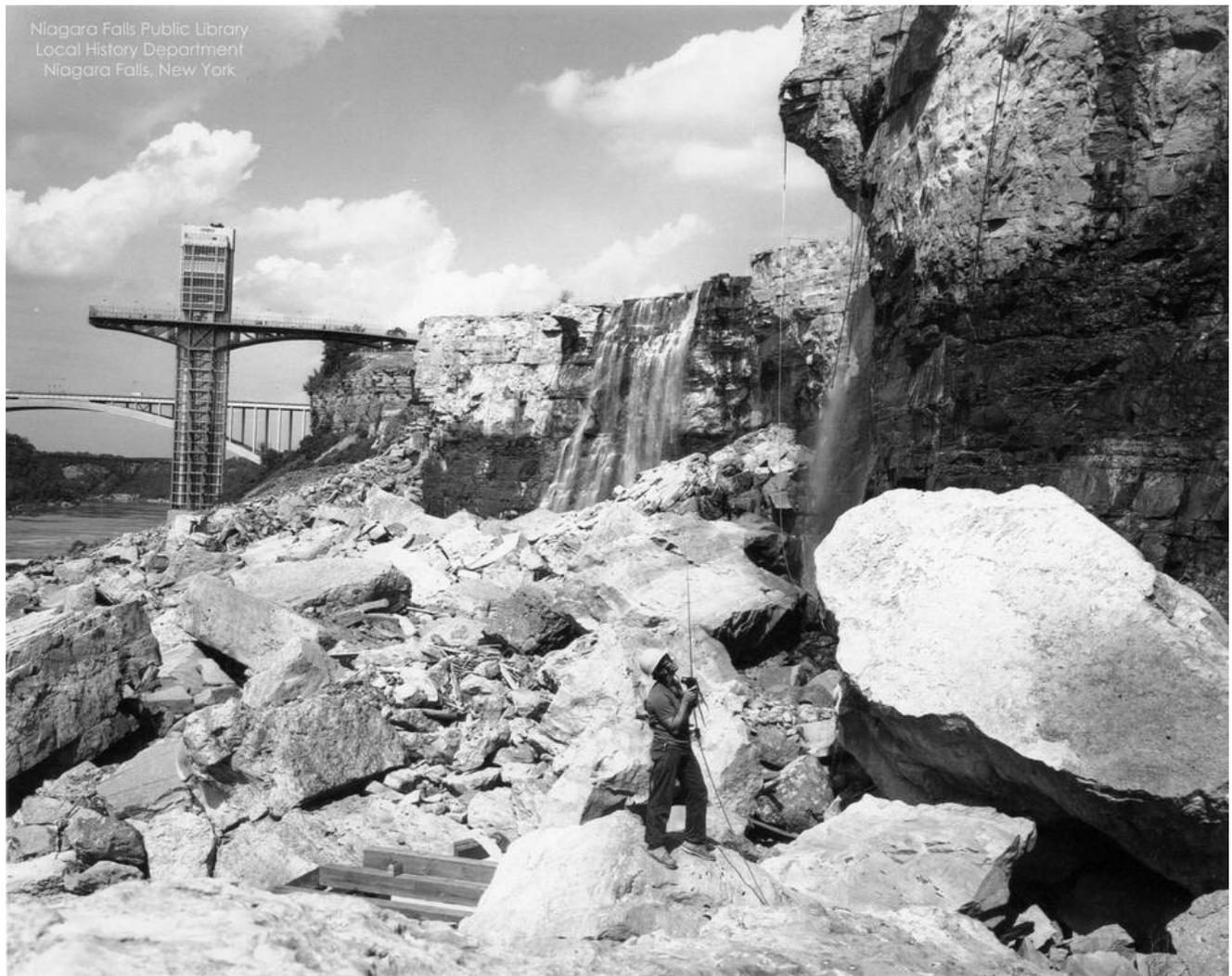
The idea is to divert the water so that it flows only on the Canadian side of Goat Island and over the Horseshoe Falls, theoretically restoring the Canadian falls to the size they were when Hennepin thought the universe held no parallel.

The American side has gone dry, or fairly dry, before, once in 1842 when a massive ice jam briefly plugged the entry point of the river at Lake Erie, and again in 1969 when U.S. army engineers thought they could clean up the American side and perhaps even improve its look.

This new proposal could see the American Falls “de-watered” for as long as it takes to complete the work on the two bridges.

Incredibly, there are those who are hoping the longer the better. They are convinced it would even be great for tourism.

There is already talk of T-shirts and bumper stickers: “I was there when Niagara Falls ran dry.”



An engineer stands at the bottom of the dry falls. The NY State observation tower is seen at left. (Niagara Falls NY Public Library)

The price of progress

The Niagara River could be described as the most important shortest river in the world – except it isn't truly a river. It's a 58-km-long strait, or "connecting channel," that runs north from Lake Erie and empties into Lake Ontario. Political junkies well recall Canadian Alliance Leader Stockwell Day's faux pas during the 2000 federal election campaign when, using the falls as a photo backdrop, he declared that "just as Lake Erie drains from north to south, there is an ongoing drain in terms of our young people" to

the U.S.

Informed by a CBC reporter that he had his geography wrong, Mr. Day announced that he would have his people “check the record” – though all he really had to do was check the falls behind him.

Those who live along its path know its short course intimately – but few as well as Patrick Robson. The first hint of Mr. Robson’s devotion is on his licence plate – “1812” – for it was on both sides of this river that the only war was ever fought between Canada and the United States.

A former commissioner of planning for the Niagara Region who now works in administration at Niagara College, Mr. Robson has lived his entire life in the region. He believes the river, falls and surrounding countryside is endlessly fascinating – a story of war, peace, power, industry, tourism, pollution and, fingers crossed, solution.

“It’s about people and identity,” he says. “Niagara Peninsula is packed with stories – and I have a passion for the stories.”

He is driving along the Niagara Parkway, a relaxing drive along the Canadian side of the river that runs through War of 1812 battlefields, vineyards, farms, small towns and seemingly endless parkland. Winston Churchill called it “the prettiest Sunday afternoon drive in the world.”

Mr. Robson points out Navy Island, a large uninhabited Canadian island that was once home to the brief “Republic of Canada,” a wild idea of Canadian revolutionary William Lyon Mackenzie.

Mackenzie amassed 1,000 armed men here in 1837 and would have invaded Canada had British troops not burned his supply ship and American police not arrested him. He was later sent to Ottawa as a member of Parliament, but that, obviously, is quite another story. Navy Island was once the popular choice for the United Nations headquarters. American and Canadian supporters argued that it stood as the perfect symbol for two countries that had existed peacefully for more than a century. President Harry Truman was all for it until the rich and powerful stepped in and offered free prime land in New York. Today the island is a wildlife reserve.

Mr. Robson is among several area movers and shakers keen to turn the Niagara region on both sides of the river into an International Peace Park. The long-standing peace between the two countries is a main factor, obviously, but there are other arguments, as well. It is estimated as many as 75,000 fugitive slaves made their way to the Canadian colonies before the American Civil War. The “Niagara Movement” was an early civil-rights force founded in Niagara Falls in 1905. Across the river in Lewiston, N.Y., a “Freedom Crossing” monument points over the water to sanctuary.

A few minutes down the Parkway, the crowning mist of Horseshoe Falls is visible in the distance. Even though he lives nearby, a trip to the falls is a rare event for Mr. Robson.

“I don’t go down to the falls often,” he says. “I know what happens there. We tend to forget there are a whole host of other things going on here just off the beaten track.”

He prefers the historical sites such as Lundy's Lane, Laura Secord's homestead, the many battlegrounds of the war – most of the fighting, killing, burning and ransacking took place along the forts and villages of the peninsula.



Tourists walk by a fountain outside the Fallsview Casino and Resort in Niagara Falls, Ont. July 30, 2009.
(Kevin Van Paassen/The Globe and Mail)

The falls of today is more about duelling casinos on both sides of the border, tourism and such curious attractions as the “genuine two-headed lamb” at Ripley’s Believe It or Not! museum.

Mr. Robson is no fan of the casinos – “gamblers aren’t tourists” – but he does have a soft spot for the great daredevils who once made the falls as famous for stunts as they are for size.

Though an estimated half-billion television viewers tuned in on June 15, 2012, to watch Nik Wallenda walk across a cable strung over the Horseshoe Falls, Mr. Robson’s affection is for the great stuntmen of the mid-19th century. In the summer of 1860, Frenchman Charles Blondin and The Great Farini (William Leonard Hunt of Port Hope, Ont.) challenged each other to the point of absurdity – and tragedy.

Farini crossed on a tightrope while wearing peach baskets on his feet. Blondin at one point carried a stove on his back, stopped halfway across, cooked an omelette and lowered it down to The Maid of the Mist, where passengers eagerly ate it. Farini matched by carrying a washtub out, lowering a bucket into the river, then washing handkerchiefs that had been given to him by his many female admirers. Farini also carried a woman across on his back but slipped and dropped her to her death.

No one knows the total of those who died by accident or design at the falls. Many bodies are never found. After a 63-year-old teacher named Annie Edson Taylor survived going over in a barrel in 1901, barrel attempts became popular though rarely successful. The wilder stunts were long ago banned by the authorities, yet some persist, such as the nut who blew over the

falls on a jet ski several years back only to have his parachute fail to open.

There are happy endings, most notably seven-year-old Roger Woodward surviving a plunge over the falls without even a barrel in 1960, but they are few and far between. The tragedies, both foolish and accidental, far outweigh the victories.

Niagara Falls is no longer the setting for serial stunts such as Blondin vs. Farini. Hydro-electric power arrived in the late 19th century, then vast and polluting industry throughout much of the 20th century. Slowly, that heavy industry vanished or moved on, leading to a slow and difficult awareness of the damage “progress” had done to one of the Seven Natural Wonders of the World.

“It’s an economy in transition,” Mr. Robson says. “It’s gone from a heavy industrial economy, one of the first industrial areas of North America, to what it is today – all because of one thing, falling water.”



Passengers admire a rainbow over the American Falls, from the Maid of the Mist on the second-to-last day of Canadian operations of the popular seasonal attraction, Wednesday, Oct. 23, 2013. (AP Photo/The Buffalo News, Charles Lewis)

Celebrating the wetlands

It is early Monday morning for the students of Brock University in St. Catharines, Ont. Geography class began at 8 a.m. and those students not staring at their mobile phones or laptop computers are slowly awakening to the day.

Jocelyn Baker and Deanna Lindblad of the Niagara Peninsula Conservation Authority have come to talk about water. If you could track a single drop, the students are told, it would take 204 years for that water to travel from Thunder Bay to the mouth of the St. Lawrence. Crossing Lake Superior alone would take 174 years, but only 2 1/2 years for Lake Erie and a matter of hours to

run the Niagara River, over the falls and into Lake Ontario.

Increasingly, the students seem to be paying attention. The Great Lakes, they are told, contain 22 per cent of the world's freshwater. One out of every three Canadians relies on this source for drinking water. The British newspaper The Guardian says that now four billion people face severe water shortages for at least one month of the year, with drought a rising concern over vast swaths of the earth. Canadians are among the very lucky.

That water, travelling so easily and quickly through the Niagara River, is what made places like St. Catharines possible. Electricity powered industries, which built economies. Buffalo, often so dismissed these days, was known as "The City of Lights" in the early 1900s. According to Kevin Woyce's illustrated history of Niagara, the Pan American Exposition of 1901 drew eight million visitors, most coming to stare in wonder at Electric Tower, a 100-metre monolith lighted by 44,000 bulbs.

Everything seemed possible back then. President William McKinley came and asked the crowd, "Who can tell the new thoughts that have been awakened, the ambition fired and the high achievement that will be wrought through this exhibition?" The next day he was shot by an anarchist, died eight days later and Theodore Roosevelt was sworn in at the home of a local lawyer.

McKinley, however, was proved right. Buffalo became a major industrial city featuring everything from General Mills to Pierce-Arrow cars. One new cereal factory was so fancy that a 1914 tourism brochure boasted "One might as well see Rome without

seeing St. Peter's as to see Niagara Falls without visiting 'The Home of Shredded Wheat.'"

But at what cost was such massive industrialization along the waters? Science fiction writer H.G. Wells wrote a 1906 magazine article in which he predicted "The End of Niagara." The spectacular natural site, he said, was "long since destroyed beyond recovery by the hotels, the factories, the powerhouses, the bridges and tramways and hoardings [billboards] that rose about it."

"The first sewage treatment plant on the river was built only in 1936," says Lynda Schneekloth, a professor at the University of Buffalo's School of Architecture and Planning. "We used the rivers as sewers for years. And we have tried, together, to take care of these waters once it became clear how badly we had treated them."

By the 1970s, there were more than 700 chemical plants and steel mills dotting the Niagara River waterway. Each day, some 950 million litres of waste water were being washed away by the river.

Some steps were eventually taken to address the growing issue of pollution. In 1972, Canada's Prime Minister Pierre Trudeau and U.S. President Richard Nixon signed the Great Lakes Water Quality Agreement. But it took a singular dramatic story to bring the health concerns to the forefront.

"The Love Canal," Ms. Baker tells the Brock students. "This was a truly important historical event."

An entrepreneur named William T. Love had long ago decided to build a canal that would allow him to divert water from the river through the eastern edge of Niagara Falls, N.Y. When financing dried up, he abandoned the project after digging a trench less than two km long. It filled with water and became a swimming hole for local children.

In the late 1940s, the Hooker Chemical Co. purchased the canal and began filling it with barrels of toxic waste which were then buried. By the 1960s, those chemicals had leached free. Children were burning their hands on what they called “firerocks.” Investigative reporters in the 1970s uncovered staggering tales of cancers and birth defects in the area.

“It was the biggest environmental crisis in U.S. history,” Ms. Baker says.

National outrage demanded action and the various levels of government were forced to act. A school that had been built on the property was closed and some 800 families relocated to new homes.

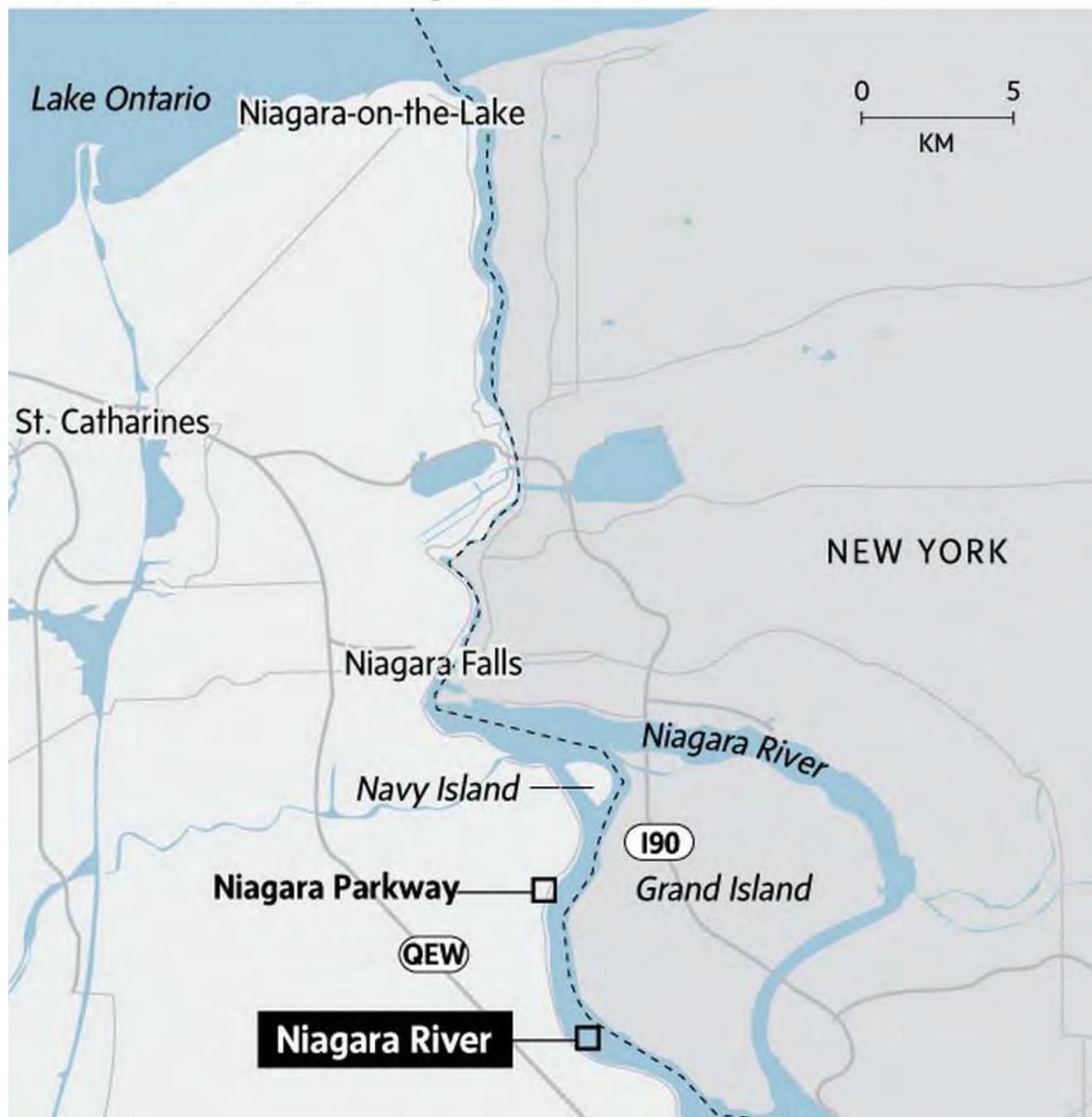
Since that pivotal moment, matters have changed dramatically along the Niagara River. In 1987, this was one of 43 “areas of concern” identified within the Great Lakes Basin. A “Remedial Action Plan” to restore health began and has seen considerable success. Priority was given to 18 toxic pollutants that were targeted for reduction. A recent Brock University study on environmental restoration by engineer Annie Michaud concluded that “the past 25 years have seen a significant improvement in the quality of the Niagara River.”

Those working on the river’s water quality hope to see the Niagara delisted as a “hot spot” by 2020.

The hope, Ms. Lindblad says, is that the Niagara can change from “one of the most polluted, disgusting places on the face of the earth” to a river known for its biodiversity and successes.

NIAGARA RIVER

Flowing north from Lake Erie to Lake Ontario, the Niagara River is about 58 kilometres long.





CARRIE COCKBURN/THE GLOBE AND MAIL) SOURCE: NIAGARA PARKS

“It’s important to celebrate how far we have come,” she says. “And delisting by 2020 doesn’t mean we walk away. There’s always a concern about ‘backsliding.’”

The conservation authority is spearheading a movement to have the Niagara region on both sides of the river declared a Ramsar site of international importance. (“Ramsar” refers to the Iranian city where, in 1971, an international treaty was signed to promote the conservation and wise use of valuable wetlands. Canada alone has 37 such designated sites.)

The river currently meets all criteria for designation and supporters are hopeful to gain it for the sesquicentennial celebrations of 2017 – but there has been some pushback from area politicians and landowners who fear more restrictions could stifle development. One local mayor told an area publication that “the burden of overregulation in Niagara is huge – to me this sounds like another layer.”

The wetlands protection movement has support on the American side, as well. Kerry Mitchell, who spent more than 20 years as a manager and policy expert with the Canadian consulate in

Buffalo, says that “a Ramsar designation of the Niagara River would provide the cross-border region its first, ongoing, non-political, inspirationally oriented framework for collaboration” on the river corridor.

A wide consortium of interested stakeholders on both sides of the river has been “Rethinking Niagara” in recent years. The idea, says Prof. Schneekloth, who is part of the group, grew out of the profound change in cross-river exchange that came about following 9/11. The group mapped out all their shared histories, from First Nations to commerce to tourism to water-quality sustainability.

“We took our relationship for granted,” Prof. Schneekloth says of the situation prior to the terrorist attacks. “But now, with so much attention on division, we had to reimagine ourselves as a single place with a shared border.”

Her group, composed of Canadians and Americans, is trusting that either the establishment of an international peace park or the Ramsar designation, both if possible, would leave “a different kind of mark than 9/11.”

The idea, Prof. Schneekloth says, is to remind those who live there just “how special is our home on the Niagara neck of the Great Lakes.”

Mr. Robson, the former planning commissioner, pulling his car into the picturesque town of Niagara-on-the-Lake, where the Niagara River completes its short-but-fascinating run from Lake Erie to Lake Ontario, has known all his life just how special his home is. He’s all for the peace park but isn’t sure a full

“reimagining” is necessary.

“People keep saying, ‘We’ve got to do some branding.’” He says.

“What for?”

“I’m pretty sure if you were to use the word ‘Niagara’ anywhere in the world, they’d know where you meant.”

Editors’ note: A previous version of this story incorrectly said less water is diverted during night hours and during winter at Niagara Falls. In fact, the opposite is true. This version has been corrected.

Report To: Board of Directors
Subject: Operations Status Report
Report No: 62-16
Date: June 15, 2016

RECOMMENDATION:

That the NPCA Board **RECEIVE** Report No. 62-16 for information.

PURPOSE:

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

DISCUSSION:

◆ **Ball's Falls CA**

This last month we hosted the Children's Water Festival. It was a wonderful display of cooperation between organizations and individuals to teach local children about water conservation, attitude, science, protection, and technology. To go along with this festival, we had our first opportunity to set-up and take down the newly purchased 40ft x 120ft tent, that will also be used for the Thanksgiving Festival.

Capital:

The work to scope the condition of the historical buildings is developing and a building inspection will be taking place in June by the chosen Contractor.

	May
Adults admissions	781
Seniors/students admissions	277
Children admissions	83
Maximum - vehicles admissions	74
Self-pay admissions	0
Regular membership pass	0
Senior membership pass	0
Membership renewals	0

Pavilion Rentals	0
Historical Tours given	0
Barn Wedding Receptions	10
Church Ceremonies	4
Centre for Conservation - wedding receptions	2
Centre for Conservation – non wedding rentals	6

School Education Programs

Bookings (May/June)

A total of 47 programs were booked for the months of May and June, with 947 students anticipated to attend programs at Ball's Falls (exclusively for the months of May and June).

YEAR	PROGRAMS	STUDENTS BOOKED
2015	30	678
2016* AS OF MAY 31ST	47	947

School programs

May was the first month of our busy spring programming for schools. During the month of May, 16 programs took place, and 291 students attending. This generated \$2,149.90. Programs are offered the first week of May, and May 16th to the end of the school year. This year the Children's Water Festival moved from September to May. The Children's Water Festival took place May 10-13th, and our regular education programs were not offered this week.

Children's Water Festival

The Children's Water Festival brought 5,000 students to Ball's Falls. Once again I worked with the Strategic Initiatives team to plan, set up, implement, and clean up this program.

May programming total: \$2,149.90

Summer Camp

Registration

Registration is steady for our summer camp. Currently we have 55 campers booked over 8 weeks. Total projected revenue for these campers is \$6,685.00. At this time there is still space available for each week of camp. We are continuing to receive a steady number of phone calls from parents booking their children for camp.

Camp Themes

The camp themes were established this spring. These themes are:

Our Wet & Wild Water
Back In Time
Outward Bound
Amazing Animals
Best of the Best

Summer students are working on developing detailed plans for each day of camp with these themes. Many exciting plans are in place such as: pond studies, compass orienteering, baking in the bake oven, water pollution experiments, water wheel building, and much more.

Marketing

A Facebook ad has been taken out to advertise the summer camp. This has generated a large amount of interest in new campers. In addition, an e-mail has been sent out to all past campers. Flyers have been distributed to local school children and are hanging in public community boards around town.

Ball's Falls Master Plan

The Strategic Initiatives team was tasked with developing a new Business Plan for Ball's Falls. Part of this Business Plan is aimed at expanding educational programs and offer programs that serve visitors from cradle to grave. Five areas of growth have been identified to increase the age range in which we focus our educational programs. The five areas are:

1. Pre-school programs
2. Day camps
3. School education programs
4. Adult learning
5. Senior tours

Filming

A documentary "Story of Us" was filmed at Ball's Falls on May 4th and 5th. The filming locations were along the river, in the basement of the Mill, and outside the church.

2016 programming total: \$5,311.94

Respectfully Submitted by Nathaniel Devos, Park Superintendent at Ball's Falls Conservation Area and Jill Walters-Klamer, Program Assistant

◆ **Binbrook CA**

Operations

Full staff complement has been hired for the season and training is ongoing.

Revenue Statistics

- Membership Passes Sold to date - 110
- Total Pavilions/Group Picnic Areas Rented - 94
- Occupancy Rates (Weekends and Holidays from May 1st through Labour Day weekend)

Pavilion #1 - 63% occupied
Pavilion #2 - 63% occupied
Pavilion #3 - 56% occupied

Special Events

Annual Spring Crappie Derby - Due to inclement weather on Sunday May 15th, the Annual Spring Crappie Derby was re-scheduled for Sunday May 29th. An abundance of Crappie were caught throughout the day; an indication that numbers may be on the rise.

'Party in the Park' scheduled for Friday July 1st. A number of events are planned for the day, including a catered lunch and supper, bouncy castles, demonstration by a dog performance group, City of Hamilton Fire Department display, movie night, and overnight camping.

Annual Family Movie Night - Scheduled for Saturday July 30th; overnight camping will be available.

Perseides Meteor Shower - 'Public Viewing Night' scheduled for Friday August 12th. This is coordinated by The Hamilton Amateur Astronomers Group.

Capital Project Development

Splash Pad - Initiated. First on site meeting held Thursday May 26th with contractors to discuss project outlay/timelines on permitting process. Next meeting scheduled for June 17th to finalize concept design/colour schemes

Washroom Upgrades - Complete

Water System Scope - Complete

Electrical System Scope - Complete

Pavilion Roof - Complete

Washroom Roof - Complete

Trail Upgrades - Initiated; quotations forthcoming

Fishing Platform - Initiated; concrete slab poured. Awaiting installation.

A detailed summary of Binbrook Capital Projects is attached as an appendix to this report.

This report was respectfully submitted by Mike Boyko, Park Superintendent

◆ Chippawa Creek Conservation Area

Seasonal Camping

We currently have 85 seasonal campers registered for the 2016 season.

Park Maintenance

Park staff has been busy cutting grass, weed eating, pruning trees, and repairing picnic tables. A grass cutting schedule has been implemented to ensure campsites are kept up to a high standard.

Camping

We had 50 camping reservations for the Victoria Long weekend. The park was at 80% capacity. In addition 41 extra vehicle passes were sold.

Gatehouse Store

Retail items were purchased before the Victoria Long weekend for the gatehouse store. The last two weekends in May saw 305 retail sales of various snack items, 77 bags of firewood sold, 150 bags of ice sold, and 13 boat rentals.

Honey Wagon Service

To date we have seven seasonal campers signed up for the honey wagon service with more inquiries and occasional pump outs requested.

Seasonal Campers Recreation Committee

The seasonal campers recreation committee is hosting numerous events throughout the summer such as a pancake breakfast, chili cook-off, corn roast, etc. These events are open to all campers.

Preparations for the May 16th opening at both campgrounds are underway with staff cleaning campsites, Comfort Stations being cleaned and stocked, grass cutting and trimming, and picnic table and fire ring distribution.

Respectfully Submitted by Rob Kuret, Park Superintendent, Chippawa Creek CA.

◆ Long Beach Conservation Area

Beginning of May consisted of training new and returning staff for the upcoming season, getting the park ready by cleaning/ clearing campsites of debris (fallen tree limbs, garbage, etc.) cutting / raking grass, cleaning and restocking comfort stations.

The comfort station showers were retiled, and the 5 'out door' showers have newly upgraded shower controls.

We opened the park Monday May 16th for seasonal campers to come in and setup their trailers for the 2016 season. We officially opened the park on Friday May 20th. Transient sites were 39.43% full for the first long weekend.

Total revenue for May is \$61,254.98 (honey wagon service - \$1,900) which consists of camping, retail sales, day use, membership passes, etc.

There was a great response from campers about the newly created educational programs as well as how good the park looks! (comfort station siding, showers tiled, new lighting, and new pavilion roof)

Long Beach currently has 100 seasonal campers, booked and onsite, and 98 available transient campsites.

Respectfully Submitted by Mike MacIntyre, Park Superintendent, Long Beach CA.

◆ **Central Workshop – Gainsborough CA**

Staff at the Central Workshop continued to help the Revenue parks start up with the aid of grass cutting, brush removal, and general cleanup services. The regular grass cutting routine at the passive parks has started. The docks, signage, and picnic tables have been placed at both E.C. Brown CA and Jordan Harbour CA.

The hydro pole at the Central Workshop rotted away and fell down in mid-May, over the weekend. Power was out at the Central Workshop for a few days. A new transformer was needed.

All Park Attendants have been hired now and have gone through the annual training.

Respectfully Submitted by Mich Germain, Superintendent, Central Workshop

◆ **ECOLOGICAL STATUS REPORT**

Binbrook Conservation Area

- On May 29, 2016, the Glanbrook Conservation Committee held a volunteer fish derby at the Binbrook Conservation Area.

Cave Springs Conservation Area

- a) Bat Monitoring continues at the site by the staff Ecologist. Existing acoustic monitors are helping to assess overwintering areas. The refined hibernacula study was completed June 5 with the data presently being processed. Further study continues on summer maturity areas and roost areas.
- b) Staff are continuing to assist with general details on the Master Plan development for the site.

Smith-Ness Conservation Area

- Tall grass areas will be established this fall at the site, with the remaining area being meadow area. This will provide areas of tall grass, as well as cold season forbs and grasses for a variety of species (birds, insects, etc.) for long term of the property. It assists in providing a variety of ecological communities at our areas and help in providing environmental stability.

St. Johns Conservation Area

- On our annexed property, the ephemeral/ spring plant survey has been completed, while the reptile inventory continues through September at the site. This resource information is being completed by the staff Ecologist with the assistance of a volunteer. When completed will provide baseline information for site management and site use decisions.

Stevensville Conservation Area

- On Saturday June 11, 2016, a butterfly planting will be established at the park. Under the supervision of the NPCA, the public participating in the Bert Miller Nature Clubs Butterfly Festival at the park will plant the native species in a prepared planting area. This area will consist of native flowers and grasses suitable as forage for caterpillar and

butterflies to maintain their life cycles. The generous funding for the native plants and the 'pollinator garden' is the Ontario Community Environment Fund .

Wainfleet Acquisition Conservation Area

- As part of the site resource inventory being completed at the site, spring plants and reptiles are being assessed. To date the spring ephemeral plant inventory is complete, while the reptile survey continues through September. When completed this information will assist in providing baseline information for site management and site use decisions. The work is being completed by the staff Ecologist with the assistance of volunteers.

Other Ecological Activity

NPCA Hunting Program

a) General: Hunting Permits

Staff has issued an additional 9 hunting permits for a total of 154 permits issued for the NPCA Conservation Areas for 2016, with 22 individual residing outside of our administrative area.

b) The Ontario spring Wild Turkey Hunting Season ended May 31.

Bat Workshop

On May 25, 2016 the staff Ecologist participated in a limited provincial workshop regarding inventorying Species at Risk bats. Habitat types, means of search, and appropriate measures for processing were reviewed, with focus on the Eastern Small footed bat (*Myotis leibii*). This information is valuable and will be used by our staff in inventories on our Conservation Areas to ensure the resources are protected and appropriate uses selected.

Resource Monitoring

The staff Ecologist continues to monitor the species at risk at our Conservation Areas throughout November. These include a variety of trees, flowers, grasses, moss as well as animals. Health assessment are completed, restoration needs determined and implemented to help ensure population are maintained or enhanced.

Two summer students positions are posted to assist the staff Ecologist in completing this and other Ecological Projects this summer.

Respectfully Submitted by Kim Frohlich, NPCA Ecologist

◆ EVENTS STATUS REPORT

Niagara Children's Water Festival

The 13th annual Niagara Children's Water Festival took place from May 10th to 13th at Ball's Falls Conservation Area. Beautiful weather, smiling children and wonderful volunteers were the highlight of the event. This year's event saw just over 4,700 children participate and over 100 volunteers per day assist with leading activity centres. New partnerships with Trout Unlimited Canada and Land Care Niagara were forged in relation to activity centre development. In addition to the already great 33 activities--3 new activity centres were developed for the event, Duck Race, Go Fish and Water Recreation. All were greatly enjoyed by the students! This year saw new investments in overall event signage, new

activity centre educational aids, and class size colourable, reusable banners. Great strides were also made to the waste management side of the event—completely compostable forks, knives, spoons and plates were introduced—making lunch time a waste free environment! Much positive feedback was received from teachers and volunteers about the shift in the festival to the month of May.

Media coverage for the day included an article in the St. Catharine's Standard and a video by CogecoTV

<http://www.stcatharinesstandard.ca/2016/05/13/water-fest-makes-splash-with-students>

<http://www.tvcogeco.com/niagara/gallery/the-source/7937-may-2016/108026-npca-water-festival>

Thanksgiving

Thanksgiving Festival Applications for both Artisans, Concessionaires, and Farmer's Market vendors have been curated and applicants have been notified of their application status. 163 applicants were selected to participate in this year's event, while 51 were placed on the waiting list. There were 21 vendors from 2015 that did not return to the event. This means that 85% of our vendors are returning from 2015.

In the coming weeks, work to process vendor deposits, assign spaces, and develop artisan information packages will take place.

In terms of Festival Logistics, Special Occasion Permits, Entertainment Applications, and Staffing still need to be organized and finalized.

Ball's Falls Business Plan-Connecting People to Conservation

Staff have worked extensively to finalize a draft business plan to present to the Board of Directors. This report contains the vision for the Ball's Falls Conservation Area and Centre for conservation for the next 5 years. A full account of potential revenues has been identified as well as programs, services, activities and events that should be pursued. The full draft report is contained in this Agenda package.

Respectfully Submitted by Brianne Wilson, Events Coordinator

RELATED REPORTS AND APPENDICES:

1. *Binbrook Capital Projects Update*
2. *Binbrook Projects Spreadsheet*

Prepared by:



Mark Brickell
Acting Director of Operations

Submitted by:



Carmen D'Angelo
Chief Administrative Officer/
Secretary Treasurer

Binbrook Capital Projects Update – June 2016

Project BB – 2016 – 01 Canada 150 Splashpad: An RFP has been issued and a Project Team from Demikon Construction and Open Spaces has been awarded the bid to take down the existing splashpad at Binbrook Conservation Area and replace it with a much larger system. Half of the funding came from a generous Federal Government Grant for the celebration of Canada's 150th Birthday in 2017. The project will take shape in the fall of 2016 and be open and ready for July 1st, 2017.

Project BB – 2016 – 02 Fishing Pier: A fishing pier was designed to go into Lake Niapenco at the bottom of the hill near Pavilion #1. This is to provide better access to patrons, primarily for fishing.

Project BB – 2016 – 03 Lifeguard Station: An audit has been done by the National Life Saving Society and the results will be submitted by the end of May, 2016. This audit will give us observations and recommendations surrounding our legal needs in relation to allowing the public access to the open water of Lake Niapenco.

Project BB – 2016 – 04 Scoping of Water System Upgrades: ASI Water has been contracted to do an assessment and give recommendations on how to prepare and upgrade the water system in the park to handle the new splashpad as well as other Master Plan Capital Projects.

Project BB – 2016 – 05 Comfort Station Upgrades/ Improvements: The main Comfort Station (Washroom Building) needed a new floor, paint, new partitions, and new fixtures to give it a facelift.

Project BB – 2016 – 06 Splashpad System Building: In addition to the new splashpad, a new splashpad mechanical and chemical building is needed.

Project BB – 2016 – 07 Scoping of Proposed Electrical Upgrades: MPC Engineering was contracted to do an assessment and give recommendations surrounding the existing electrical system and what the needs will be for electricity as the park proceeds through its Master Plan.

Project BB – 2016 – 08 Trail Network Improvements: A trail network through the day-use area of the park is needed to join the parking lot and Comfort Station with the other amenities within the park. This is an AODA requirement.

Project BB – 2016 – 09 Replacement Picnic Table Frames: With the park becoming increasingly busy, there is a need for additional picnic tables to provide to the public.

Project BB – 2016 – 10 POS System: Additional Hardware and Software is needed to include Binbrook Conservation Area to the existing Reservation System and POS system that we have at other NPCA owned and operated parks.

Project BB – 2016 – 11 Comfort Station Roof: A new metal roof was needed to replace the old one at the Comfort Station.

Project BB – 2016 – 12 Scoping of Waste Water System: ASI Water has been contracted to do an assessment on the existing wastewater system and give recommendations on how to upgrade it given the various infrastructure upgrades that are proposed for the Master Plan.

BCA Projects Calendar for 2015 & 2016

Conservation Area	Project Description	Reference No.	B U D G E T	Pr. Lead	Project Schedule												ACTUAL EXPENSES	
					Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec		
Binbrook CA	Canada 150 Splash Pad	BB - 2016 - 01	\$ 500,000.00	R.S.									Initiated					\$ 324.16
	Fishing Pier/ Dock	BB - 2016 - 02	\$ 50,000.00	R.S.									Initiated					
		BB - 2015 - 01	\$ 28,000.00															
	Lifeguard Station	BB - 2016 - 03	\$ 2,500.00	M.B.					Initiated									
	Scoping of Water System Upgrades	BB - 2016 - 04	\$ 5,000.00	M.B.								Completed						Final N/A
	Comfort Station Upgrades/ Improvements	BB - 2016 - 05	\$ 25,000.00	R.S.							Completed							Final N/A
	Splash Pad System Building	BB - 2016 - 06	\$ 25,000.00	R.S.										Initiated				
	Scoping of Proposed Electrical Upgrades	BB - 2016 - 07	\$ 3,000.00	M.B.				Completed										\$ 2,825.00
	Trail Network Improvements	BB - 2016 - 08	\$ 20,000.00	M.B.								Initiated						
	Replacement Picnic Table Frames	BB - 2016 - 09	\$ 10,000.00	M.B.						Completed								\$ 9,915.75
	POS System	BB - 2016 - 10	\$ 5,000.00	M.B.							Initiated							
		BB - 2015 - 04																
	Comfort Station Roof	BB - 2016 - 11	\$ 10,000.00	R.S.						Completed								Final N/A
	Scoping of Wastewater System	BB - 2016 - 12	\$ 20,000.00	M.B.							Initiated							
	Metal Roof - Pavilion 2	BB - 2015 - 02	\$ 15,000.00	R.S.					Completed									\$ 4,350.00
	Splashpad Health and Safety Improvements	BB - 2015 - 03	\$ 30,000.00	M.B.								Completed						\$ 14,235.13
	Water Softening System for Splashpad	BB - 2015 - 05	\$ 7,500.00	M.B.								Completed						\$ 6,633.10
	Kubota Salt Spreader	BB - 2015 - 06	\$ 2,500.00	M.B.						Completed								\$ 2,079.20
	Kubota Cab Enclosure	BB - 2015 - 07	\$ 2,500.00	M.B.						Completed								\$ 2,194.10
	Wind Curtain - Pavilion #2	BB - 2015 - 08	\$ 5,000.00	M.B.											Completed			\$ 6,867.70
	Kayak Condo	BB - 2015 - 09	\$ 25,000.00	M.B.								Completed						\$ 20,897.80
	Gazebo	BB - 2015 - 10	\$ 35,000.00	M.B.								Initiated						\$ 1,130.00
	TOTAL:		\$ 826,000.00															\$ 72,242.94

Initiated
 Not Initiated
 On Hold
 Completed

Report To: Board of Directors
Subject: Corporate Services Project Status Report
Report No: 63-16
Date: June 15, 2016

RECOMMENDATION:

That Corporate Services Project Status Report No. 63-16 be **RECEIVED** for information.

PURPOSE:

To provide the Board a summary of projects important to the Conservation Authority's business objectives.

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.

Information Management & Technology Services:

- ❖ The CityView development tracking system implementation team has been focused on testing the custom configuration. Modified Property Information database set to handle unique ID's for Cityview implementation. Staff anticipates the end of June as the go-live date.
- ❖ Created a web mapping app for Construction Compliance to allow for in-field data collection (Compliance Collector)
- ❖ Wrote precipitation summarization tool for Flood Forecasting (reports monthly precip totals for all stations or selected station for year selected)
- ❖ Performed analysis on NEXRAD data and prepared visualizations to investigate a 2014 heavy rain event for request made to Flood Forecasting by City of St. Catharines
- ❖ Drafted and reviewed cultural heritage sections for Cave Springs Master Plan charter and background reports
- ❖ Updated Provincial and Regional GIS datasets on the development server
- ❖ Multiple database updates: Restoration data, CA lands data, Conservation Areas database

- ❖ Multiple mapping projects for staff: Onondata maps, Water quality maps, Final RAP map edits, additional trail maps
- ❖ Delivered team Corporate Services presentations to Operations and Watershed Management departments

Communications and Foundation:

Communications

- ❖ The 2015 Annual Report was printed and mailed to over 250 stakeholders across the watershed, which included local municipalities, nature/conservation clubs, and NPCA committee members.
- ❖ NPCA received several positive media articles over the past month, including coverage for Welland River Floodplain Mapping, Pollinator Gardens, and the military park in Niagara-on-the-Lake. CogecoTV has committed to attending the June 16th Welland River Floodplain Mapping Information Session as requested at the last Board of Directors meeting.
- ❖ The May 2016 Board of Directors meeting was the first to be broadcast live online from a location, other than Ball's Falls Conservation Area. The live stream was promoted on our social media channels and linked from several pages on our website. PostMedia also embedded the live stream on their news website (St. Catharines Standard, Welland Tribune, Niagara Falls Review, etc.). Although a secondary media channel was included, peak live stream views decreased by 8 vs. April; total views only increased by 7; and, average view duration decreased by over 10min.

May Peak Viewers: 14

Total Viewers: 88

Average View Duration: 12:55

Foundation

- ❖ Planning is under way for the 2016 Rt. Hon. John Turner for Water and Environmental Leadership Award gala dinner. The event will once again take place at the Queen's Landing in Niagara-on-the-Lake on Thursday, Sept. 29. Tickets are \$200 each or tables of ten for \$2,000.
- ❖ The Foundation media release about the Comfort Maple pens for sale was picked up nationally and featured in papers from Winnipeg, Kelowna, Waterloo, national papers and throughout our watershed. Response thus far has been very positive with several pen orders already requested. Net proceeds go to the Foundation and in-turn support conservation projects.
- ❖ The Foundation has begun a strategic planning process with the help of Ms. Liz Palmieri. Liz recently retired as the highly respected Executive Director of the Niagara Community Foundation. Working with the Foundation Board, Liz will focus on a SWOT analysis, fundraising environmental scan, policy and procedure review and identifying skill sets for potential Board members.

Human Resources:

Recruitment

- ❖ Customer Relations Representative role was filled with the successful individual starting on May 31, 2016
- ❖ Student Planning Technician role was posted and closed
- ❖ Administrative Assistant role was posted and closed
- ❖ 2 Summer Student positions hired to assist in Restoration and Water Resources starting on May 30, 2016; positions partially funded through the Student Summer Experience Program
- ❖ Canada Summer Jobs wage subsidies were granted for 14 NPCA summer student positions, totalling available subsidies of \$47,025

Training

- ❖ Confirmation of eligibility for the Ontario-Canada Job Grant for NPCA staff will allow applications to be submitted for 2/3 cost of training (up to \$10,000/employee) to be funded through the program

Community Outreach and Volunteer Report

Community Liaison Advisory Committee (CLAC)

The June 2nd Community Liaison Advisory Committee meeting was re-scheduled and it will take place on Monday June 20th at 5:30 PM at the Ball's Falls Centre for Conservation. Agenda items include the Living Landscape policy document, the Consolidated Provincial Review and the Conservation Authorities Act Review.

Niagara Envirothon

After winning the local event at the Niagara Envirothon on May 4th, five students from Sir Winston Churchill High School in St. Catharines represented Niagara at the Ontario Envirothon Championship from May 29-June 1 2016 at Fleming College. The team had a great experience over the 4 days but has not received their final ranking at this time.

Volunteer Recruitment/Community Outreach

The Niagara Children's Water Festival saw over 100 volunteers per day come to support this event. Area high school students were bused into Ball's Falls to assist with the event. Volunteers assisted with the set-up and tear down of the Water Festival, as lead presenters, lunch tent coordinators, registration desk, and safety.

Volunteers are continuing to monitor the blue bird boxes at Ball's Falls Conservation Area and have confirmed at least one successful nest. Others have been assisting with the delivery of

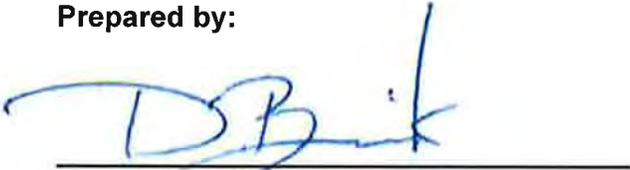
the educational programs at Ball's Falls, tree planting, and participating in the Yellow Fish Road™ program.

Stratus Vineyards partnered with the NPCA to plant trees on one of our restoration properties in Niagara-on-the-Lake. Stratus brought 20 of their staff to assist the restoration team to plant over 500 bare-root trees on a private property on Concession 7. This was the third year that Stratus participated in volunteer events with the NPCA.

A presentation about the NPCA and our volunteer opportunities was given to members of the Lincoln Rotary Club on Tuesday May 31st.

The NPCA is working out the details of the Ontario Community Environment Fund grant received for the implementation of pollinator gardens at three NPCA Conservation Areas. The pollinator gardens will be planted by volunteers in the summer of 2016. One of the plantings will take place during the Butterfly Festival. The NPCA will be partnering with the Bert Miller Nature Club to deliver the Butterfly Festival at the Stevensville Conservation Area. The event will take place June 12th 2016 starting at 11am.

Prepared by:



David Barrick
Director of Corporate Services

Submitted by:



Carmen D'Angelo
Chief Administrative Officer
Secretary Treasurer

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

Report To: Board of Directors

Subject: Financial and Reserve Report – Month Ending May 31, 2016

Report No: 64-16

Date: June 15, 2016

RECOMMENDATION:

That Report No. 64-16 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: month ending May 31, 2016 (consolidated)

Appendix 2 - Statement of Reserves for month ending May 31, 2016

Prepared by:



**David Barrick
Director of Corporate Services**

Submitted by:



**Carmen D'Angelo;
CAO/Secretary Treasurer**

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

NIAGARA PENINSULA CONSERVATION AUTHORITY
CONSOLIDATED NON CAPITAL
JANUARY 1, 2016 - MAY 31, 2016

<u>REVENUES</u>	<u>YTD ACTUAL</u>	<u>ANNUAL BUDGET</u>	<u>% OF BUDGET</u>
MNR TRANSFER PAYMENTS	-	174,500.00	0.0%
PROVINCIAL GRANTS - MOE	110,295	95,000	116.1%
PROVINCIAL GRANTS - OTHER	283,741	235,000	120.7%
FEDERAL GRANTS	175,066	235,000	74.5%
MUNICIPAL LEVY - GENERAL	1,322,876	5,145,765	25.7%
LEVY - SPECIAL - NIAGARA	535,658	2,172,633	24.7%
LEVY - SPECIAL - HAMILTON	4,925	19,700	25.0%
ADMINISTRATION FEES	168,068	355,000	47.3%
USER FEES	722,387	1,379,495	52.4%
RESERVE FUNDS	-	135,000	0.0%
LAND OWNER CONTRIBUTION	11,577	-	100.0%
MISCELLANEOUS	57,862	331,474	17.5%
	<u>3,392,455</u>	<u>10,278,567</u>	<u>33.0%</u>

EXPENDITURES

CAO/BOARD & CORPORATE SERVICES	1,154,715	4,148,598	27.8%
WATERSHED	1,159,135	3,225,585	35.9%
OPERATIONS	908,563	2,904,384	31.3%
	<u>3,222,413</u>	<u>10,278,567</u>	<u>31.4%</u>

NIAGARA PENINSULA CONSERVATION AUTHORITY
CAO/BOARD AND CORPORATE SERVICES
JANUARY 1, 2016 -MAY 31, 2016

<u>REVENUES</u>	<u>YTD ACTUAL</u>	<u>ANNUAL BUDGET</u>	<u>% OF BUDGET</u>
MNR TRANSFER PAYMENTS	-	75,800	0.0%
MUNICIPAL LEVY - GENERAL	589,330	2,324,665	25.4%
LEVY - SPECIAL - NIAGARA	390,783	1,563,133	25.0%
INTEREST INCOME	8,253	60,000	13.8%
MISCELLANEOUS	636	-	100.0%
RESERVE FUNDS		55,000	100.0%
CONSERVATION FOUNDATION	10,241	70,000	14.6%
	999,243	4,148,598	24.1%

EXPENDITURES

CAO & BOARD EXPENSES	138,174	325,073	42.5%
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CORPORATE SERVICES

CORPORATE MANAGEMENT	178,290	1,826,842	9.8%
OFFICE SERVICES	371,301	767,094	48.4%
FINANCIAL SERVICES	124,693	273,937	45.5%
HUMAN RESOURCES	19,754	117,590	16.8%
INFORMATION TECHNOLOGY	213,086	511,324	41.7%
CORPORATE COMMUNICATIONS	109,417	326,738	33.5%
	1,016,541	3,823,525	26.6%

**NIAGARA PENINSULA CONSERVATION AUTHORITY
WATERSHED
JANUARY 1, 2016 - MAY 31, 2016**

<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	110,295	95,000	116.1%
PROVINCIAL GRANTS - OTHER	283,741	235,000	120.7%
FEDERAL GRANTS	175,066	235,000	74.5%
MUNICIPAL LEVY - GENERAL	387,860	1,521,441	25.5%
LEVY - SPECIAL - NIAGARA	138,625	584,500	23.7%
LEVY - SPECIAL - HAMILTON	4,925	19,700	25.0%
ADMINISTRATION FEES	168,068	355,000	47.3%
RESERVE FUNDS	-	-	0.0%
LAND OWNER CONTRIBUTION	11,577	-	100.0%
MISCELLANEOUS	16,484	81,244	20.3%
	<u>1,296,641</u>	<u>3,225,585</u>	<u>40.2%</u>
 <u>EXPENDITURES</u>			
WATERSHED MANAGEMENT	112,097	326,785	34.3%
PLAN REVIEW AND REGULATIONS	471,243	1,119,381	42.1%
WATERSHED PROJECTS	575,795	1,779,419	32.4%
	<u>1,159,135</u>	<u>3,225,585</u>	<u>35.9%</u>

**NIAGARA PENINSULA CONSERVATION AUTHORITY
OPERATIONS
JANUARY 1, 2016 -MAYL 31, 2016**

<u>REVENUES</u>	<u>YTD ACTUAL</u>	<u>ANNUAL BUDGET</u>	<u>% OF BUDGET</u>
MUNICIPAL LEVY - GENERAL	345,686	1,299,659	26.6%
LEVY - SPECIAL - NIAGARA	6,250	25,000	25.0%
USER FEES	722,387	1,379,495	52.4%
RESERVE FUNDS	-	80,000	0.0%
MISCELLANEOUS	22,248	120,230	18.5%
	<u>1,096,571</u>	<u>2,904,384</u>	<u>37.8%</u>
 <u>EXPENDITURES</u>			
OPERATIONS MANAGEMENT	175,294	457,673	38.3%
STRATEGIC INITIATIVES	187,994	600,348	31.3%
LAND PROGRAMMING	503,866	1,645,863	30.6%
VEHICLES AND EQUIPMENT	41,410	200,500	20.7%
	<u>908,563</u>	<u>2,904,384</u>	<u>31.3%</u>

NIAGARA PENINSULA CONSERVATION AUTHORITY
CONSOLIDATED CAPITAL
JANUARY 1, 2016 - MAY 31, 2016

<u>REVENUES</u>	<u>YTD ACTUAL</u>	<u>YTD BUDGET</u>	<u>% OF BUDGET</u>
FEDERAL GRANTS	-	245,000	100.0%
MUNICIPAL LEVY - GENERAL	216,212	977,345	22.1%
LEVY - SPECIAL - NIAGARA	125,000	500,000	25.0%
LEVY - SPECIAL - HAMILTON	25,000	100,000	25.0%
RESERVE FUNDS	-	582,000	0.0%
MISCELLANEOUS	-	29,000	100.0%
	366,212	2,433,345	15.0%

EXPENDITURES

CORPORATE SERVICES	56,979	182,500	31.2%
WATERSHED	12,786	112,500	11.4%
OPERATIONS	213,530	1,110,876	19.2%
LAND ACQUISITION (RESERVE)	-	600,000	0.0%
NIAGARA DIFFERENTIAL (RESERVE)	-	427,469	0.0%
	283,295	2,433,345	11.6%

**NIAGARA PENINSULA CONSERVATION AUTHORITY
CORPORATE SERVICES - CAPITAL
JANUARY 1, 2016 - MAY 31, 2016**

<u>REVENUES</u>	<u>YTD ACTUAL</u>	<u>YTD BUDGET</u>	<u>% OF BUDGET</u>
MUNICIPAL LEVY - GENERAL	45,625	182,500	25.0%
	45,625	182,500	25.0%
 <u>EXPENDITURES</u>			
CORPORATE SERVICES	19,538	97,500	20.0%
GIS	37,441	85,000	44.0%
	56,979	182,500	31.2%

NIAGARA PENINSULA CONSERVATION AUTHORITY
WATERSHED CAPITAL
JANUARY 1, 2016 - MAY 31, 2016

<u>REVENUES</u>	<u>YTD ACTUAL</u>	<u>YTD BUDGET</u>	<u>% OF BUDGET</u>
RESERVE FUNDS	-	112,500	0.0%
	<u>-</u>	<u>112,500</u>	<u>0.0%</u>
 <u>EXPENDITURES</u>			
BINBROOK DAM	-	10,000	0.0%
STREAM GUAGE & MONITORING NETWORK	12,786	92,500	13.8%
GENERAL OFFICE ENHANCEMENT/MISC.	-	10,000	0.0%
	<u>12,786</u>	<u>112,500</u>	<u>11.4%</u>

**NIAGARA PENINSULA CONSERVATION AUTHORITY
CONSERVATION LAND DEVELOPMENT - CAPITAL
JANUARY 1, 2016 - MAY 31, 2016**

<u>REVENUES</u>	<u>YTD ACTUAL</u>	<u>YTD BUDGET</u>	<u>% OF BUDGET</u>
FEDERAL GRANTS	-	245,000	100.0%
MUNICIPAL LEVY - GENERAL	62,651	254,876	24.6%
RESERVE FUNDS	-	582,000	0.0%
MISCELLANEOUS	-	29,000	100.0%
	62,651	1,110,876	5.6%
 <u>EXPENDITURES</u>			
BALL'S FALLS	57,731	65,000	88.8%
BINBROOK	30,025	645,499	4.7%
CHIPPAWA CREEK	52,520	130,000	40.4%
LONG BEACH	20,379	132,000	15.4%
ECOLOGICAL PROJECTS	-	29,000	100.0%
GAINSBOROUGH CENTRAL WORKSHOP	52,875	109,377	48.3%
	213,530	1,110,876	19.2%

NIAGARA PENINSULA CONSERVATION AUTHORITY
STATEMENT OF CONTINUITY OF RESERVES AND RESERVE FUND
PROJECTION FOR THE YEAR ENDED DECEMBER 31, 2016

	Balance 31-Dec <u>2015</u>	Approved Budgeted <u>Inflows</u>	*Approved Budgeted <u>Outflows</u>	Projected 31-Dec <u>2016</u>
	\$	\$	\$	\$
Unexpended capital reserves				
Capital Assets				
Vehicle	210,731	0	60,000	150,731
Equipment	59,582	0	20,000	39,582
Computers & office equipment	79,522	0	0	79,522
	<u>349,835</u>	<u>0</u>	<u>80,000</u>	<u>269,835</u>
Conservation area capital reserve				
Niagara Region	1,209,346	0	804,569	404,777
City of Hamilton	136,682	0	292,250	(155,568)
Haldimand County	11,594	0	0	11,594
Niagara Levy Differential	347,000	427,469	0	774,469
Land acquisition-Hamilton	800,000	100,000	0	900,000
Land acquisition-Niagara	298,174	500,000	0	798,174
	<u>2,802,796</u>	<u>1,027,469</u>	<u>1,096,819</u>	<u>2,733,446</u>
Water management capital projects				
Welland River restoration - Niagara	242,210	0	0	242,210
Welland River restoration - Hamilton	10,676	0	0	10,676
Water Management	46,167	0	51,200	(5,033)
Watershed Studies-Niagara	3,162	0	0	3,162
Watershed Studies-Hamilton	20,260	0	0	20,260
Watershed Studies-Haldimand	22,032	0	0	22,032
Flood Protection Services	483,978	0	10,000	473,978
Resource Inventory & Monitoring	52,443	0	51,300	1,143
	<u>880,928</u>	<u>0</u>	<u>112,500</u>	<u>768,428</u>
	<u>4,033,559</u>	<u>1,027,469</u>	<u>1,289,319</u>	<u>3,771,709</u>
Operating reserves				
Conservation Areas				
Niagara Region	90,274	0	0	90,274
City of Hamilton	191,372	0	0	191,372
Haldimand County	14,931	0	0	14,931
	<u>296,577</u>	<u>0</u>	<u>0</u>	<u>296,577</u>
Conservation Land Management				
Tree Bylaw	61,765	0	0	61,765
Agreement forest	20,606	0	0	20,606
Regulations & planning services	181,647	0	0	181,647
General operating contingency	45,808	0	40,000	5,808
	<u>606,403</u>	<u>0</u>	<u>40,000</u>	<u>566,403</u>
Reserve Fund				
Accumulated sick leave	16,103	0	15,000	1,103
	<u>1,906,616</u>	<u>0</u>	<u>110,244</u>	<u>1,796,372</u>
Ontario Power Generation Funding	<u>1,906,616</u>	<u>0</u>	<u>110,244</u>	<u>1,796,372</u>

* Approved outflows include: \$359,801 from 2015 carryover capital projects

Report To: Board of Directors
Subject: NPCA 2017 Budget Timetable
Report No: 65-16
Date: June 15, 2016

RECOMMENDATION:

That Report No. 65-16 be **RECEIVED** for information.

PURPOSE:

For the NPCA Board to be operationally aware of the proposed 2017 budget planning process and timelines. This report aligns with the NPCA's 2014-2017 Strategic Plan under, 'Transparent Governance & Enhanced Accountability,' specifically, 'develop improved transparency.'

DISCUSSION:

The following 2017 budget timetable acts as a guide for staff and provides clarity on certain check-points of accountability throughout the process:

Check-point	Date
NPCA Budget Committee Meeting (Direction & Guidance)	June 29
Budget Preparation by Division Managers	July 4 - 22
Deadline for Submission to Directors	July 25
Deadline for Electronic Submission to Finance	Aug. 5
Consolidation and Preparation of 1 st Draft	Aug. 8 – 12
Distribution of 2017 Budget Binder to SMT	Aug. 15
Review by SMT, Budget Revisions & Prep. of Budget Package	Aug. 16- Sept. 7
Budget Package delivered to NPCA Budget Committee Members	Sept. 8
NPCA Budget Committee Meeting (Operating)	Sept. 14
NPCA Budget Committee Meeting (Capital)	Oct. 12
NPCA Budget Committee Meeting (Review of Final Draft)	Nov. 3
Present DRAFT 2017 Budget to NPCA Board for Approval	Nov. 16

**Additional Budget Committee meetings may also occur at the call of the Committee Chair*

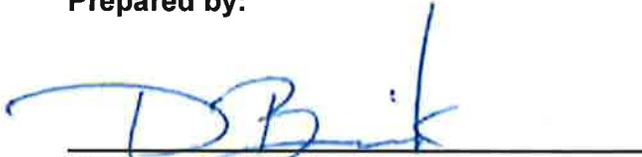
FINANCIAL IMPLICATIONS:

None

RELATED REPORTS AND APPENDICES:

None

Prepared by:



David Barrick
Director of Corporate Services

Submitted by:



Carmen D'Angelo
Chief Administrative Officer
Secretary Treasurer

Report To: Board of Directors

Subject: NPCA Forestry and Tree and Forest Conservation By-law Status

Report No: 66-16

Date: June 15, 2016

RECOMMENDATION:

THAT Report No. 66-16 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.

BACKGROUND:

By-law issues/main activities since May 6, 2016 include:

- Harvest operations approved under Good Forestry Practices (GFP) permits in woodlots located in Niagara Falls and Fort Erie will be commencing in mid-June. Operations will be routinely monitored by the NPCA Forester to ensure conformance with permit conditions and operating conditions are suitable.
- Approved a GFP permit application for a woodlot in Fort Erie. Operations are planned for summer 2016.
- Conducted site visits with a woodlot owner in Pelham interested in managing/harvesting their 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 three (3) tree cutting complaints associated with woodlands in Fort Erie and Niagara on the Lake. All situations did not warrant additional investigation as there was no non-compliance observed.
- Completing work on Managed Forest Plans (MFP) for five Conservation Authority properties (Chippawa Creek, Balls Falls, Stevensville, Willoughby Marsh and Long Beach). The plans must be submitted to the MNRF by June 30, 2016. The purpose of a MFP is to guide the land owner in the management of their forest and values found within it. The intent of the Managed Forest Program is to foster ecologically sound forest management on private lands while providing a reduction in property taxes to landowners of forested land who prepare a plan and agree to be good stewards of their property.

- Participated in the Niagara Envirothon as a judge in the Forestry module and the Children's Water Festival as a presenter.
- Responded to complaints from property owners adjacent to the Virgil and Two Mile Creek CAs in Niagara on the lake. The complaints involve potential hazard tree damage from declining ash trees located on authority property. These trees pose a risk as individual ash trees decline from EAB infestation. Hazardous trees are being marked by the NPCA Forester and then assigned to operations staff to manage.
- Conducted a site visit and provided comments on a planning issue related to a property with proposed development in south Niagara Falls. The assessment determined the woodland on the property would be covered by the Bylaw. Comments were provided to the land owner and NPCA planning staff. The owner was informed he would require a building permit from the city before clearing commenced.

FINANCIAL IMPLICATIONS:

None

RELATED REPORTS AND APPENDICES:

None

Prepared by:

Dan Drennan

Dan Drennan,
R.P.F; Forester

Reviewed by:

Peter Graham

Peter Graham
Director, Watershed Management

Submitted by:

Carmen D'Angelo

Carmen D'Angelo
Chief Administrative Officer
Secretary Treasurer

Report To: Board of Directors

Subject: 2016 NPCA Water Quality Report

Report No: 67-16

Date: June 15, 2016

RECOMMENDATION:

- 1) That Report No. **67-16** regarding the 2016 NPCA Water Quality Report be received for information and approved for placement on the NPCA website.
- 2) That the NPCA Water Quality Report be distributed to all municipalities and Public Health Departments within its watershed, and the local Ontario Ministry of Environment and Climate Change office.

PURPOSE:

The purpose of this report is to provide a summary of the 2016 NPCA Water Quality Report and request approval to place it on the NPCA website. This report aligns with NPCA's Strategic Plan (2014-2017) in relation to the need to develop an "Effective Model to Set Policies and Priorities".

BACKGROUND:

The NPCA Water Quality Monitoring Program was implemented in 2001 and is operated in partnership with the Ministry of the Environment (MOE), the Regional Municipality of Niagara and the City of Hamilton. This is the most comprehensive water quality sampling and analysis program within the NPCA jurisdiction. The management of our natural resources is a key component to the NPCA Strategic Plan. The condition of our water is a reflection of the activities undertaken on our land. This monitoring program provides an assessment of the overall health of our watershed.

The NPCA collects and analyzes hundreds of water samples each year from the streams, rivers and groundwater resources within the watershed. From this information, the NPCA is able to identify sources of pollution, track water quality trends, and help to assess and direct NPCA stewardship programs. The monitoring and reporting of watershed conditions is a critical component of the NPCA as the delivery of this program improves corporate transparency and accountability. As well, the long term data collected serves as a baseline by which to compare the success of all the various water quality improvement initiatives being undertaken within the watershed.

DISCUSSION:

The 2016 NPCA Water Quality Report summarizes the results of surface water and groundwater monitoring in the NPCA watershed. The NPCA collects monthly surface water quality samples (from April to November) at 74 monitoring stations and analyses them using several indicator parameters including chloride, nitrate, total phosphorus, total suspended solids, copper, lead,

zinc, and *E. coli*. These indicator parameters were used to calculate the Canadian Water Quality Index (WQI) which provides a descriptive water quality rating for each station. Since 2003 the NPCA has also been collecting water quality data and water level data from 15 Provincial Groundwater Monitoring Network (PGMN) monitoring wells in partnership with the MOE. This data is important to assess the ambient conditions of several bedrock and overburden aquifers found in NPCA watershed.

In general, water quality monitoring data collected between 2001 and 2015 is summarized as follows:

- Based on the results (see map) of the 2011 to 2015 WQI, 61% of the NPCA surface water monitoring stations are rated as poor, 31% are rated as marginal, 5% are rated as fair and 3% are rated as good. None of the stations were able to achieve a WQI rating of excellent.
- Generally, the WQI ratings at water quality stations were relatively stable when compared to historic NPCA data. However, water quality improvements were observed in Drapers Creek and the lower Welland River when comparing to previous water quality assessments. The Effingham tributary of upper Twelve Mile Creek, the lower section of Twelve Mile Creek in Port Dalhousie, the Welland Canal, Frenchman Creek, Lyons Creek and the Welland River downstream of Binbrook Conservation Area continue to achieve the highest water quality ratings in the NPCA watershed. WQI ratings decreased in sections of Twelve Mile Creek, Lowbanks Drain, Kraft Drain, and Eight Mile Creek, because of increased exceedances of water quality parameters.
- The NPCA watershed has total phosphorous and *E. coli* exceedances of the Provincial Water Quality Objectives at virtually all monitoring stations owing to higher population densities, and larger concentration of agriculture and industry. Based on the data collected to date, elevated concentrations of total phosphorus and *E. coli* are the most frequent and widespread cause of water quality impairment in the NPCA watershed. The relative high frequency and magnitude of these exceedances are the driving factors in lowering the WQI at all stations.
- The water quality at most PGMN wells meets the Ontario Drinking Water Standards and therefore can be characterized as good water quality. Some of the wells were found to have exceedances in boron, fluoride and sodium that were attributed to natural conditions of the groundwater. Nitrate exceedances found in two PGMN wells were attributed to agricultural land use in the vicinity of the monitoring well. Follow-up monitoring by the NPCA and Niagara Public Health determined that these nitrate exceedances were site specific to the PGMN monitoring well only.

ACTIONS:

Actions from the NPCA Water Quality Monitoring Program 2016 Annual Report are summarized as follows:

1. Implement Best Management Practices through the NPCA Restoration programs. Examples include nutrient management initiatives, riparian buffers, and increased forest cover. These practices will help reduce the levels of total phosphorus and *E. coli* which have been identified to be major contributors to water quality impairment in the NPCA watersheds. Ultimately, these practices will help improve overall watershed health.
2. Maximize the effectiveness of stewardship initiatives by tapping into additional funding sources and prioritizing initiatives that target NPCA watersheds with high nutrient, *E. coli*, and sediment loadings.

3. Continue to the partner with watershed municipalities and the Ministry of the Environment and Climate Change to identify and mitigate sources of water pollution.
4. Continue to incorporate the use of data logging technology into ongoing monitoring initiatives. This type of technology will allow the NPCA to automatically collect data on a 24-hour basis for a wide range of water quality parameters. It also allows for a comprehensive and accurate picture of the environmental conditions being monitored.
5. Continue to participate with the Provincial Working Group that was formed to improve the public notification process when naturally occurring chemical or biological contaminants are identified in the groundwater.

FINANCIAL IMPLICATIONS:

Although there is no direct financial implication for the water quality monitoring program (i.e. it is funded as part of normal NPCA operations), it is worth noting that there is no direct funding available at NPCA to meaningfully address the significant water quality problems. The NPCA's Restoration program does help to correct some of the water quality programs, but much more is required to make a meaningful impact.

RECOMMENDED DISTRIBUTION OF WATER QUALITY REPORT

The 2016 NPCA Water Quality Report should be distributed to the following agencies and government bodies:

- All municipalities located within NPCA's watershed area
- Niagara Public Health Department
- Hamilton Public Health Department
- Haldimand Public Health Department
- Local Health Integrated Network
- Ontario Ministry of Environment and Climate Change (Niagara office).

RELATED REPORTS AND APPENDICES:

1. Attachment 1: Map showing Water Quality Ratings in NPCA
2. 2016 NPCA Water Quality Report (not appended)

Prepared by:



Joshua Diamond, M.Sc.
Water Quality Specialist

Reviewed by:



Peter Graham, P.Eng.
Director, Watershed Management

Submitted by:

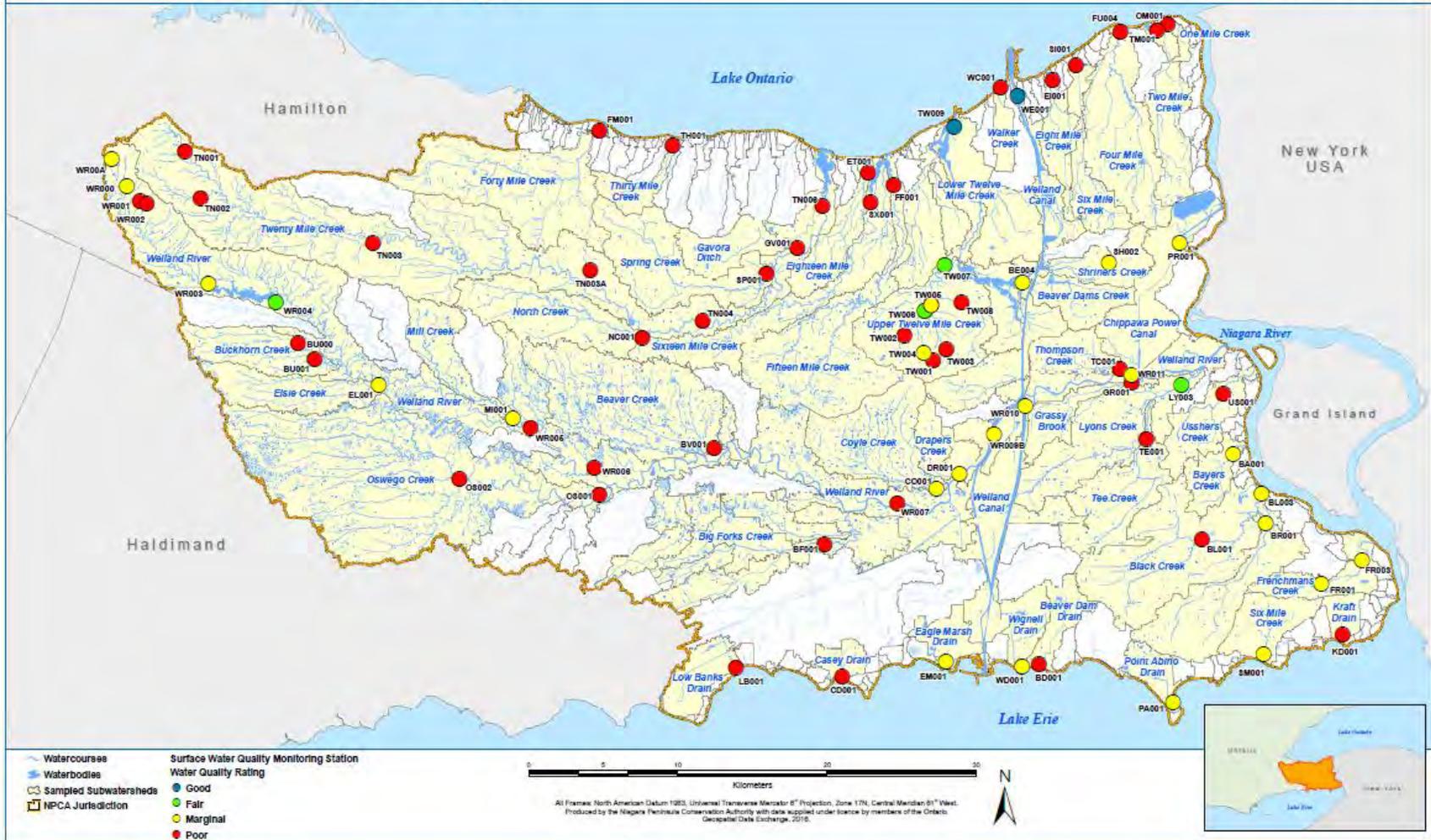


Carmen D'Angelo
Chief Administrative Officer / Secretary Treasurer



Niagara Peninsula Conservation Authority 2016 Water Quality Report

Water Quality Ratings



Report To: Board of Directors

Subject: Niagara Shores - NOTL Sewage Lagoon Decommissioning

Report No: 68-16

Date: June 15, 2016

RECOMMENDATION:
That Report No. 68-16 be received for information

PURPOSE:

To respond to the Board's direction from its May 18, 2016 Full Authority Board meeting (i.e. Resolution No. FA-82-16) to have "staff engage in discussions and report back to the board at the next Authority meeting with a strategy on how to support this initiative".

BACKGROUND:

Direction from the Board to staff was in response to a presentation at the May 2016 Board meeting by a local stakeholder group ("Harmony Residents") who are proposing a *Natural Heritage Park* be established on the Parks Canada Lakeshore Road site. The subject lands ("Niagara Shores") are located off Lakeshore Road in Niagara-on-the Lake (NOTL) near Garrison Village Drive. Attachment #1 contains an aerial map outlining the subject lands, indicating ownership and highlighting two (2) sewage lagoons utilized by the NOTL Wastewater Treatment Plant. The Harmony Residents are specifically looking for NPCA to provide their expertise on the decommissioning of these lagoons.

In the fall of 2015, the NPCA received a Notice of Study Commencement for the NOTL Wastewater Treatment Plant Lagoons Decommissioning Coordinated Federal/Provincial Environmental Assessment (the EA). The study was to explore alternatives for decommissioning the existing lagoons.

The following provides a brief summary of the Environmental Assessment (EA) process for the NOTL Wastewater Treatment Plant (WWTP) and Lagoon decommissioning and NPCA's staff involvement in this process to date:

The decommissioning of the WWTP and Lagoon is considered a Schedule B project under the Municipal Class EA process. This allows for the omission of Phases 3 and 4 of the Municipal Class EA process. The EA is currently in Phase 2 of the process and the study is being managed by a 3rd party consultant (Hatch Mott MacDonald).

In September 2015, NPCA staff were invited to participate on the Technical Advisory Committee (TAC) for the EA. The TAC is comprised of representatives from Hatch Mott MacDonald, Parks Canada, Niagara Region, Town of NOTL, and the NPCA. The first TAC meeting was held on September 30, 2015 which served as the project initiation meeting. NPCA staff provided

general comments identifying the features within the EA study area on September 24, 2015 (Attachment #2). Since that time the EA consultants have been collecting additional background information and conducting field work.

Another TAC meeting was held on May 31, 2016, which NPCA staff attended. The purpose of this meeting was to review the three (3) alternative solutions and the preliminary preferred alternative, which will be presented to the public at a public information centre (PIC) on June 8, 2016. The three (3) alternative solutions are:

1. Do nothing;
2. Decommission the lagoons and create a wetland; and
3. Decommission the lagoons and create a naturalized meadow.

The preliminary preferred alternative is to decommission the WWTP and create a wetland. NPCA staff advised the TAC that it supports the preliminary preferred alternative. The EA is expected to be completed in the Fall of 2016. NPCA staff will continue to provide input where requested as the EA process continues.

At the May 31, 2016 TAC meeting, Parks Canada advised all parties that the EA study area and surrounding lands will be part of a Parks Canada Management Planning Process (PCMPP). This process will develop a management strategy for the lands that implements Parks Canada's Mandate (protecting heritage resources). The PCMPP will commence near the completion of the EA study. As noted in attachment #1, the lands within the EA study area are currently owned by the Region of Niagara. Following the completion of the required works authorized under the EA, the lands will be transferred to Parks Canada.

Based on the above, it is recommended that staff continue to be involved in the TAC and provide expertise and comments on the decommissioning of these lagoons as part of the EA process.

FINANCIAL IMPLICATIONS:

None

RELATED REPORTS AND APPENDICES:

1. Niagara Shores Ownership Map (June 2016)
2. NPCA Comments: NOTL Wastewater Treatment Plant Lagoons Decommissioning Environmental Assessment

Prepared by:



David Deluce; MCIP, RPP
Supervisor, Development Reviews

Reviewed by:



Peter Graham; MBA, P.Eng.
Director, Watershed Management

Submitted by:



Carmen D'Angelo;
Chief Administrative Officer / Secretary Treasurer



- ~ Watercourses
- Waterbodies
- NPCA Watershed
- Property Boundaries
- EA Study Area

All Frames: North American Datum 1983, Universal Transverse Mercator 6° Projection, Zone 17N, Central Meridian 81° West

Niagara Shores Park Property Ownership

Produced by The Niagara Peninsula Conservation Authority, 2016. Portions of this map produced under license with Niagara Region, Members of the Ontario Geospatial Data Exchange, and the Ontario Ministry of Natural Resources, Queen's Printer for Ontario, 2016. Reproduced with

September 24, 2015

Via Email Only

Ms. Melissa Torchia
Environmental Planner
Hatch Mott MacDonald
5035 South Service Road, 6th Floor
Burlington, ON, L7L 6M9

Our File No.: LUP 7.1.87

Dear Ms. Torchia

**Re: Niagara Peninsula Conservation Authority (NPCA) Comments
Niagara-on-the-Lake (NOTL) Wastewater Treatment Plant Lagoons
Decommissioning Environmental Assessment**

The NPCA has received a Notice of Study Commencement for NOTL Wastewater Treatment Plant Lagoons Decommissioning Coordinated Federal/Provincial Environmental Assessment (the EA). The study will explore alternatives for decommissioning the existing lagoons. To assist in completion of the study, the NPCA offers the following initial comments regarding the types of NPCA-regulated features present within the study area.

NPCA-Regulated Features

The NPCA regulates flood plains (up to the 100 year flood level), Great Lakes shorelines, hazardous land, valleylands and wetlands (Provincially Significant Wetlands and other wetlands over 2 hectares in size) under *Ontario Regulation 155/06* of the *Conservation Authorities Act*. The study area contains features which are subject to regulation by the NPCA.

The study area is traversed by Two Mile Creek and its associated 100 year flood plain (flood plain). Development and site alteration within the flood plain is generally restrictive, although some minor activities may be permitted as per the NPCA's policies (*Policies, Procedures and Guidelines for the Administration of Ontario Regulation 155/06 and Land Use Planning Policy Document*). As the EA process evolves and the various alternatives are put forth, the NPCA will provide more detailed comments as to the implications of NPCA policy on the proposed alternatives. Typically, development and site alteration within the flood plain, or alteration to Two Mile Creek, will require an NPCA Work Permit.

There are also valleylands associated with Two Mile Creek. The NPCA regulates development and site alteration within 15 metres of the stable top of bank of a valley

with a minimum setback of 7.5 metres from the stable top of bank. The approximate location of the physical top of bank is attached for reference. Any alternatives that propose development and/or site alteration within 15 metres of the physical top of bank will require a geotechnical analysis to determine the location of the stable top of bank and would be subject to an NPCA Work Permit.

The study area is impacted by the regulated shoreline of Lake Ontario. The extent of the area associated with the instantaneous 100 year flood elevation is generally confined to valley of Two Mile Creek. There is a very small portion in the northeast corner of the study area that is affected by the erosion limit of Lake Ontario shoreline. As the EA process evolves and the various alternatives are put forth, the NPCA will provide more detailed comments as to the implications of NPCA policy associated with the Lake Ontario shoreline on the various options. Development and/or site alteration within the regulated shoreline may require an NPCA Work Permit.

The Study area contains a Provincially Significant Wetland (PSW) associated with the Two and One Mile Creek Wetland Complex. The NPCA regulates lands within 120 metres of a PSW and has a minimum buffer area of 30 metres. While normally development and site alteration is not permitted within a PSW, public infrastructure may be entertained (excluding stormwater management ponds) where an EA has been completed and subject to an NPCA Work Permit. More detailed comments will be provided once we are presented with the proposed alternatives.

I hope this information is helpful. If you have any questions, please let me know.

Regards,

David Deluce, MCIP, RPP
Supervisor, Development Reviews (ext. 224)

Attachments (4)

cc: Mr. Sunil Sharma, P.Eng, Niagara Region (email only)
Mr. Steve Miller, P. Eng., NPCA (email only)
Ms. Lee Ann Hamilton, NPCA (email only)
Mr. Darren MacKenzie, C.Tech., rcsi, NPCA (email only)

m:_7 watershed mgmt -planning & regulations\dave d\environmental assessments\notl sewage lagoon decommissioning ea\notl sewage lagoon ea - lup 7 1 87 (sep 24 2015).docx

REPORTS FOR CONSIDERATION

❖ **REPORT NO. 69-16** – *Proposed amendment Section 17 – Regulation No. 2*

❖ **REPORT NO. 70-16** – *Approval of Cave Springs - Development & Recommendations*

○ **STAFF PRESENTATION** (same as Appendix 3 of report)

June 15, 2016 Full Authority Meeting

Report To: Board of Directors

Subject: Proposed Amendment- Section 17, Regulation #2, Meeting Procedures

Report No: 69-16

Date: June 15, 2016

RECOMMENDATION:

That Report No. 69-16 be **RECEIVED** for information.

That the NPCA Board **AMEND** Section 17 within the Board of Directors Policy Handbook – Regulation #2, Meeting Procedures as outlined in this report.

PURPOSE:

For the Board to consider amending its live stream/recording policy within its current Meeting Procedures. This report aligns with the 2014-2017 Strategic Plan under, ‘Transparent Governance & Enhanced Accountability,’ specifically, ‘develop improved transparency.’

BACKGROUND:

At its May 18, 2016 meeting, the Board approved that the following section be inserted into the current Policy Handbook – Regulation #2

Section 17.0 Live Streamed / Recorded Full Authority Meetings

In the event the NPCA live streams and/or records its Full Authority meeting(s) the following shall apply:

- 17.1** The recorded video of a full authority meeting is not an official record until the minutes of that meeting are approved by the Full Authority Board.
 - 17.2** At the start of the full authority meeting, the Chair shall advise all in attendance that the meeting is being recorded and/or live-streamed.
 - 17.3** The NPCA will advise all delegates in advance that their presentation will be live-streamed and archived for viewing by the public in the future.
 - 17.4** Opinions of delegates are their own and the NPCA is not responsible for delegate’s comments or any material delegates choose to provide.
 - 17.5** The goal of the NPCA will be to post, within two business days of meeting, the archived live stream video.
-

Staff was further asked to seek a legal opinion on what constitutes an 'official record,' and further, upon receiving a legal opinion, to determine if any amendments to Section 17 would be advisable.

DISCUSSION:

Staff followed up on Board direction and obtained a legal opinion (please see Appendix 1-CONFIDENTIAL Letter from Gowling WLG). Further, Section 17 is recommended to be amended as follows:

Section 17.0 Live Streamed/Recorded Full Authority Meetings

The NPCA may live stream and/or make video recordings of all or part of its Full Authority meeting(s) available to the public, but is not obliged to do so. Where in the discretion of the NPCA a full authority meeting is live-streamed and/or recorded by video, the following principles shall apply:

- 17.1 At the start of the full authority meeting, the Chair shall advise all in attendance that the meeting is being recorded and/or live-streamed.
- 17.2 The Chair shall further advise those in attendance that delegates are solely responsible for all statements of fact, opinion, or of mixed fact and opinion, which they express at the full authority meeting. This applies whether the delegate's statements are made orally or included in written materials provided by the delegate. No endorsement by the NPCA of a delegate's statements may be implied or inferred from the communication of the statements during the course of the full authority meeting, or on account of the NPCA having granted permission to the delegate to make a presentation at the full authority meeting.
- 17.3 Wherever possible, the NPCA will advise all delegates in advance of the full authority meeting that their presentation may be live-streamed and the recording archived for public viewing.
- 17.4 Subject to the discretion of the Chair, the goal of the NPCA will be to post, within two business days of meeting, the archived live stream video.
- 17.5 A recorded video of a full authority meeting is not an official record of that meeting. The official record of the full authority meeting shall consist solely of the Minutes approved by the Full Authority Board.

The Board has the option to further amend the Section 17 or do nothing.

FINANCIAL IMPLICATIONS:

None

RELATED REPORTS AND APPENDICES:

1. Appendix 1- CONFIDENTIAL Letter from Gowling WLG
2. Policy Handbook - Regulation #2 Meeting Procedures is accessible on One Drive.

Prepared by:



David Barrick
Director of Corporate Services

Submitted by:



Carmen D'Angelo
Chief Administrative Officer
Secretary Treasurer

Report To: Board of Directors

Subject: Approval of Cave Springs Development and Related Recommendations

Report No: 70-16

Date: June 15, 2016

RECOMMENDATION:

1. That Report No. 70-16 be received;
2. That the recommendations of the Cave Springs Management Plan Steering Committee identified in this report be approved for inclusion in the Draft Management Plan.

PURPOSE:

At its March 29th meeting the Cave Springs Management Plan Steering Committee supported 15 development and related recommendations to be included in the Draft Management Plan. Staff is now in final stages of writing the draft management plan and is seeking Board approval of these recommendations.

BACKGROUND:

In September 2014, the Cave Springs Management Plan process was initiated to develop a long-term vision and plan for the Cave Springs property, in Lincoln. As Cave Springs is nestled into the escarpment, it is subject to the Niagara Escarpment Plan and the Niagara Escarpment Parks and Open Space Systems planning guidelines.

The planning guidelines require a very thorough study of the property and the engagement of all key stakeholders. The planning team has embraced these requirements and has now completed a 12-month ecological study, a comprehensive water/geology study and a cultural heritage study. The public engagement process has been robust and has included open house information sessions, planning workshops and one-on-one interviews with more than 20 key stakeholder groups.

Based on all the input received, in November 2015, the planning team hosted an open house at which they shared conceptual drawings, representing the various options that had been put forward. The drawings allowed stakeholders to provide more detailed and specific feedback about the proposed plans for Cave Springs. Generally speaking, the stakeholder feedback confirmed that we were on the right path. The same presentation was brought before the NPCA Board at its January meeting.

Throughout the process, it was made clear that all recommendations were subject to the findings of the ecological, water and cultural heritage studies. The stakeholder feedback from the open house, combined with the technical steering team analysis helped inform, shape and finalize the final recommendations which were taken to the Steering Committee, in March.

DISCUSSION:

The recommendations adopted by the committee for the consideration of the NPCA Board of Directors are as per below:

Recommendation # 1

That the Cave Springs property officially be designated as a Conservation Area.

Recommendation # 2

That for NEPOSS purposes, Cave Springs be classified as a Natural Environment.

Recommendation # 3

That the Entrance Concept shown in the adjacent drawing be approved.

Recommendation # 4

That a permeable “green” parking lot for 16-20 cars be established on the property, as represented on the adjacent map.

Recommendation # 5

That the existing barn and surrounding area be restored to be used for special events and meetings.

Recommendation # 6

That the gravel laneway from the main entrance to the former Reed house be reestablished.

Recommendation # 7

That the former Reed house be deconstructed / demolished.

Recommendation # 8

That a new building of similar size be built on the site of the former Reed house and that a design competition will be held to determine the look of the new structure, including that the distinctive gable end of the house be a part of the design competition.

Recommendation # 9

That a Constructed Wetland and Septic System be established on the Cave Springs property to serve both the house and barn structures.

Recommendation # 10

That the Escarpment Trail, at Cave Springs be made AODA compliant.

Recommendation # 11

That two small viewing platforms be built on top of the escarpment, along the Bruce Trail.

Recommendation # 12

That a new entrance and parking area be established along Campden Road.

Recommendation # 13

That NPCA acquire the 15 to 20 acres of adjacent land identified through the management plan process, should they become available at fair market value.

Recommendation # 14

Confidential – Recommendation involves a matter related to a proposed or pending acquisition or disposition of land.

Recommendation # 15

That the Draft Cave Springs Development Budget be approved.

FINANCIAL IMPLICATIONS:

There are no immediate financial implications as the Draft Management Plan is subject to final Board approval, as well as NEC and MNRF approval. However, once the plan is approved, the NPCA financial contribution is estimated at \$1.4 million and will be incorporated into the annual capital budget process.

RELATED REPORTS AND APPENDICES:

- 1. Cave Springs Management Plan Steering Committee Minutes Dated March 29, 2016
- 2. Draft Management Plan Budget
- 3. Cave Springs Development and Related Recommendations PowerPoint Presentation

Prepared by:



Mark Brickell
Acting Director – Operations

Submitted by:



Carmen D'Angelo
Chief Administrative Officer
Secretary Treasurer

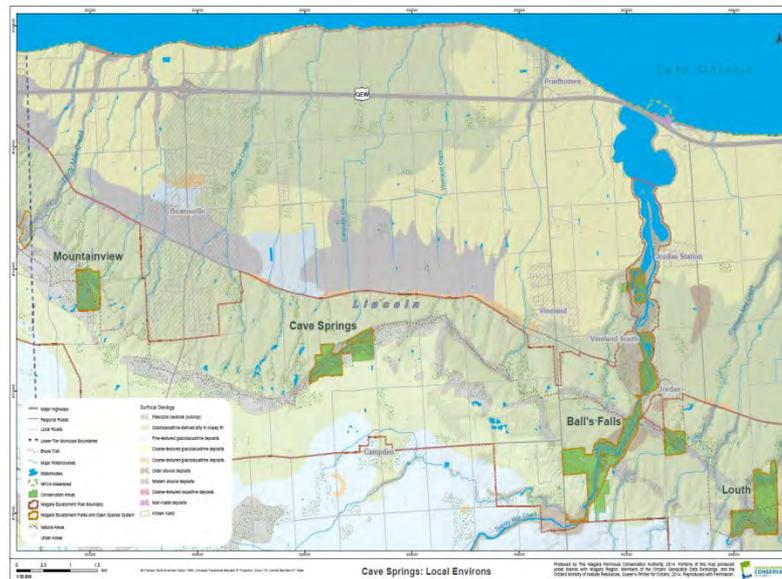
Cave Springs Management Plan



Development and Related Recommendations March 29, 2016

Recommendation #1

That the Cave Springs property officially be designated as a Conservation Area.



Parks and Open Space Classifications

Nature Reserve

Nature Reserves represent the most significant and distinctive natural areas and landforms found along the Niagara Escarpment. These areas serve to protect selected life science and earth science ANSI's. Access to Nature Reserve class parks will not be widely promoted due to the sensitivity of the features in them.

Natural Environment

Natural Environment lands are characterized by the variety and combination of outstanding natural heritage features, cultural heritage features and outstanding landscape. Activities may range from back-country-hiking to...day use activities in the more developed or accessible areas.

Recommendation #2

**That for NEPOSS purposes, Cave Springs
be classified as a Natural Environment.**

Recommendation #3

That the Entrance Concept shown in the adjacent drawing be approved.

Key Features:

- Cave Springs Conservation Area Sign
- Rock Wall
- Native Plantings
- Gates and fencing

Cost: \$45,000



Cave Springs Masterplan
Entrance Concept November 2015

Prepared By
Sun Harbour Studio

Recommendation #4



That a permeable “green” parking lot for 16-20 cars be established on the property, as represented on the adjacent map.

Key Features:

- Permeable surface, allowing grass to grow
- Handicapped spaces
- 16-20 cars
- Native Plantings

Cost: \$105,000



Recommendation #5



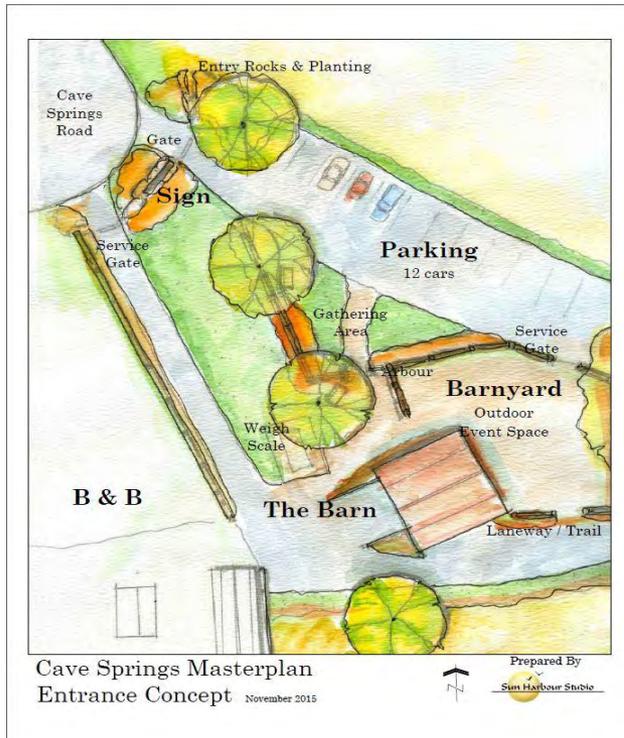
That the existing barn and surrounding area be restored to be used for special events and meetings.

Key Features:

- Reinforce the foundation
- Meet Special Event Standards and Regulations
- AODA Compliant
- New washrooms
- Improved north-south views
- Fencing

Cost: \$500,000

Recommendation #6



That the gravel laneway from the main entrance to the former Reed house be re-established

Key Features:

- **Allows for emergency and service vehicle access**

Cost: \$100,000

Recommendation #7



**That the former Reed house be
deconstructed/demolished**

Cost: \$20,000

Recommendation #8

That a new building of similar size be built on the site of the former Reed house and that a design competition be held to determine the look of the new structure.



Cave Springs Masterplan
House Concept November 2015



Prepared By
Sun Harbour Studio

Key Features:

- **Gathering space for 30-40 people**
- **Office space on upper floor**
- **Wrap around viewing platform with interpretive signage and benches**
- **Washrooms**

Cost: \$800,000

Recommendation #9



That a Constructed Wetland and Septic System be established on the Cave Springs property to serve both the house and barn structures.

Cost: \$150,000

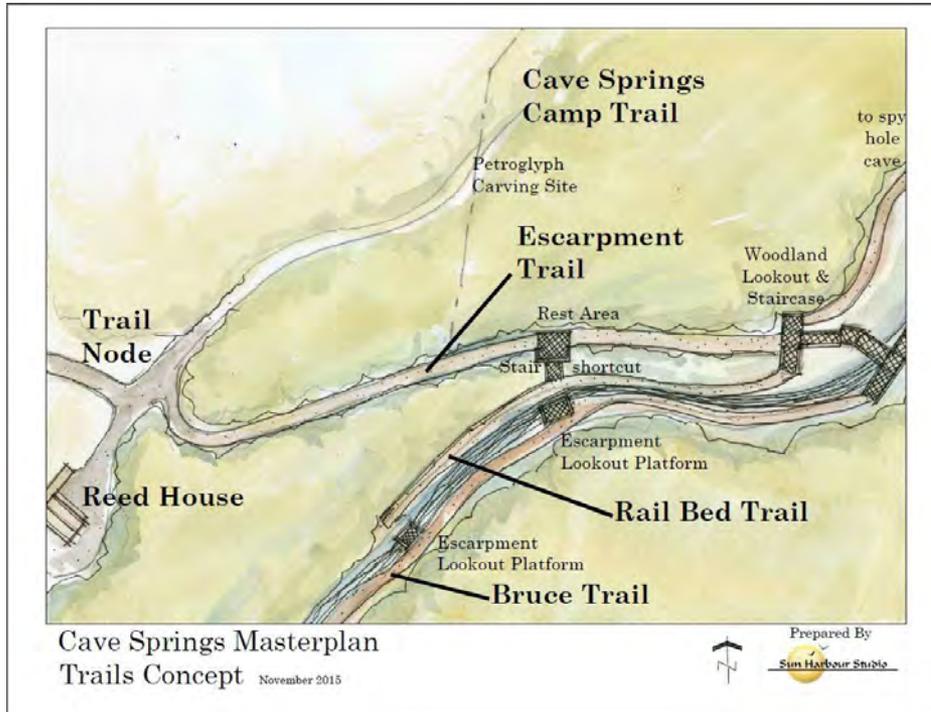
Recommendation #10

That the Escarpment Trail, at Cave Springs, be made AODA compliant.

Key Features:

- Stairs and/or alternative trail improvements
- AODA compliant, as per local AODA Committee
- 2-3 platform/rest areas with benches, interpretive signage, garbage bins
- Improved safety
- Ecological protection

Cost: \$400,000



Recommendation #11



That 2 small viewing platforms be built on top of the escarpment, along the Bruce Trail.

Key Features:

- **Safe viewing of spectacular vistas**
- **Interpretative Signage**

Cost: \$120,000

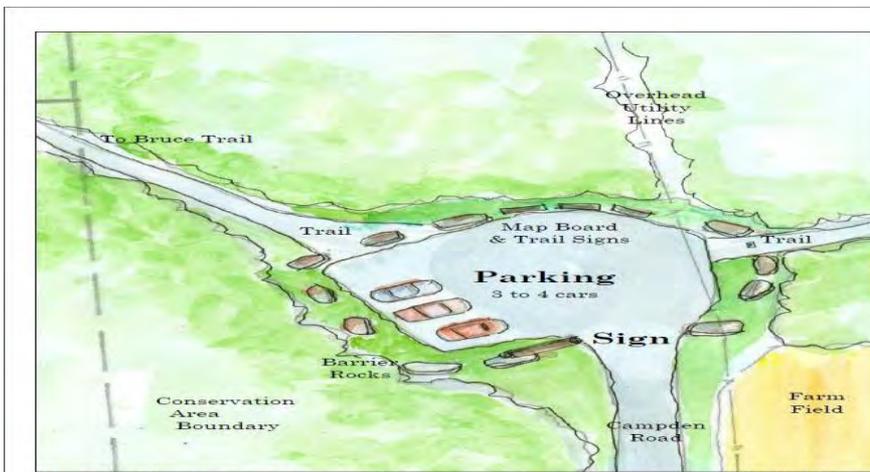
Recommendation #12

That a new entrance and parking area be established along Campden Road.

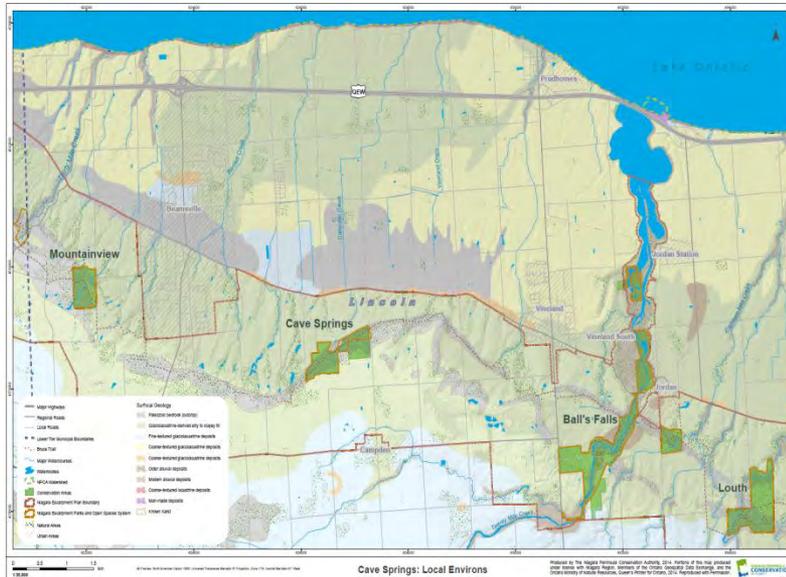
Key Features:

- Room for 5-6 cars
- Rock Wall
- Native Plantings
- Signage
- Access to Bruce Trail
- Reduction of illegal dumping at this site

Cost: \$40,000



Recommendation #13



That NPCA acquire the 15-20 acres of adjacent land identified through the management plan process, should they become available at fair market value.

Key Features:

- **Ecological Enhancement**

Cost: Unknown

Recommendation #15

Cave Springs Development Budget	
Project Description	Budget
Demolition/Deconstruction of Existing House (Confirm stability of culvert)	20,000
Construction of Main Parking Area/Staging Area	105,000
Installation of Services (water, waste-water, electrical)	50,000
Constructed Wetland	150,000
Construction of New Building on Former House Site	800,000
Barn Improvements (Foundation, AODA, Fire Code, Structure)	450,000
Barn Yard Outdoor Event Space	50,000
Re-establish laneway	100,000
Main Entrance Enhancements	45,000
Campden Road Entrance Enhancements	40,000
Signs and Benches	30,000
Escarpment Stairs and Rest Areas	400,000
2 Viewing Platforms along Bruce Trail	120,000
Burying of Hydro Lines	50,000
Archaeological Consulting Services	30,000
Contingency	244,000
TOTAL	2,684,000
Potential Cave Springs Sources of Revenue	
Source	Amount
NPCA Funding Sources	1,401,000
Friends of Cave Springs (Community Fundraising)	500,000
Senior Government Programs	433,000
In-kind Contributions	200,000
	150,000
TOTAL	2,684,000

That the Draft Cave Springs Development Budget be approved.