

**FULL AUTHORITY MEETING
ON-LINE VIDEO CONFERENCE**

**Thursday, February 18, 2021
9:30 A.M.
A G E N D A**

CALL TO ORDER – ROLL CALL

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

1. APPROVAL OF AGENDA

2. DECLARATIONS OF CONFLICT OF INTEREST

3. APPROVAL OF MINUTES

- a) Minutes of the Full Authority meeting dated January 21, 2020 (For Approval)
- b) Minutes of the Full Authority closed session meeting dated January 21, 2020 (enclosed separately to remain private and confidential) (For Approval)

Page #1

4. CORRESPONDENCE

- a) Correspondence from Ann-Marie Norio, Regional Clerk, Niagara dated January 25, 2021 to the NPCA RE: Niagara Official Plan - Steps and Directions Moving Forward (For Receipt)
- b) “Drainage Act Regulatory Proposal” (ERO #019- 2814)
 - i) Correspondence from Leslie Rich, Policy and Planning Liaison, Conservation Ontario dated February 4, 2021 to Sara Peckford, Food Safety and Environmental Policy Branch RE: Conservation Ontario’s Comments on the “Drainage Act Regulatory Proposal” (ERO #019- 2814) (For Receipt)
 - ii) Memorandum from Jason Culp, NPCA Supervisor, Permits and Compliance dated February 2, 2021 to Environmental Registry of Ontario RE: Drainage Act Regulatory Proposal Comments (For Receipt)
- c) Correspondence from Len Aarts, President, Welland River Floodplain Association dated February 10, 2021 RE: Floodplain Mapping (For Receipt)

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5. PRESENTATIONS

6. DELEGATIONS

7. CONSENT ITEMS

- a) Report No. FA-11-21 RE: Niagara Region Tree and Forest Bylaw Annual Report (For Receipt)

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8. DISCUSSION ITEMS

- a) Report No. FA-06-21 RE: Board of Directors' 2021 Meeting Schedule (For Approval)

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- b) Report No. FA-07-21 RE: 'Grimsby and Lincoln Floodplain Mapping Update and Formal Adoption' (For Approval)

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- c) Report No. FA-08-21 RE: Richardson Creek Floodplain Mapping and Priority Study Formal Adoption (For Approval)

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- d) Report No. FA-09-21 RE: Progress Update - 2018 Special Audit of the Niagara Peninsula Conservation Authority (For Approval)

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- e) Report No. FA-10-21 RE: NPCA Public Advisory Committee – Member Appointment (confidential appendix to be provided under separate cover) (For Approval)

Page # 87

- f) Report No. FA-12-21 RE: Bill 229 - Implications of (February 2021) Proclamation of Various Provisions (to be provided under separate cover) (For Approval)

9. COMMITTEE REPORTS

9.1 STRATEGIC PLANNING COMMITTEE

- 9.1.1 Minutes of the Strategic Planning Committee Meeting dated January 21, 2020 (For Receipt)

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9.2 WATERSHED FLOODPLAIN SUB-COMMITTEE

- 9.2.1 Minutes of the Watershed Floodplain Sub-Committee Meeting dated January 26, 2020 (For Receipt)

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10. NOTICES OF MOTION

11. NEW BUSINESS

- a) Verbal Update from the C.A.O.

12. CLOSED SESSION

- a) Personal matters about an identifiable individual including NPCA employees

13. ADJOURNMENT



**FULL AUTHORITY
ONLINE VIDEO CONFERENCE
MEETING MINUTES
Thursday, January 21, 2021
9:30 a.m.**

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

MEMBERS PRESENT: B. Johnson (Chair)
S. Beattie
R. Brady
D. Bylsma
D. Coon-Petersen (joined at 9:41 a.m.)
D. Cridland
L. Feor
R. Foster
J. Hellinga
D. Huson (joined at 10:42 a.m.)
J. Ingrao
K. Kawall
B. Mackenzie
W. Rapley
R. Shirton
E. Smith
B. Steele
M. Woodhouse
B. Wright

MEMBERS ABSENT: B. Clark
J. Metcalfe

STAFF PRESENT: C. Sharma, C.A.O. / Secretary – Treasurer
G. Bivol, Executive Co-ordinator to the C.A.O. / Board
R. Bisson, Manager, Communications and Public Relations
A. Christie, Director, Operations and Strategic Initiatives
J. Culp, Supervisor, Permits and Compliance
D. Deluce, Senior Manager, Planning and Regulations
M. Ferrusi, Manager, Human Resources
L. Gagnon, Director, Corporate Services
D. MacKenzie, Director, Watershed Management
S. MacPherson, Restoration Project Lead
S. Mastroianni, Manager, Planning and Development
S. Miller, Senior Manager, Water Resources
G. Shaule, Administrative Assistant
G. Verkade, Integrated Watershed Planning/Information Management

The Chair called the meeting to order at 9:32 a.m.

1. APPROVAL OF AGENDA

Resolution No. FA-01-2021
Moved by Member Beattie
Seconded by Member Brady

THAT the Full Authority Agenda dated January 21, 2021 **BE APPROVED**.

CARRIED

2. DECLARATIONS OF CONFLICT OF INTEREST

None declared.

3. APPROVAL OF MINUTES

- a) Minutes of the Full Authority meeting dated December 17, 2020

Resolution No. FA-02-2021
Moved by Member Bylsma
Seconded by Member Cridland

THAT the minutes of the Full Authority meeting dated December 17, 2020 **BE ADOPTED** as presented.

CARRIED

4. CORRESPONDENCE

- a) Correspondence dated December 18, 2020 from Wayne Emmerson, Chair, Conservation Ontario to the Honourable Jeff Yurek, Minister of the Environment, Conservation and Parks RE: Indemnification Clause Requested in the Conservation Authorities Act or Regulations
- b) Correspondence dated December 18, 2020 from Brenda Johnson, NPCA Chair to the Honourable Jeff Yurek, Minister of the Environment, Conservation and Parks RE: Environmental Registry of Ontario Posting 019-2636 "A proposal under the Endangered Species Act to enable use of the Species at Risk Conservation Fund and to streamline authorizations for certain activities that impact species at risk, while maintaining protections for species at risk"
- c) Correspondence dated December 21, 2020 from Regional Clerk Ann-Marie Norio, Regional Municipality of Niagara RE: Niagara Official Plan – Consultation Update

Resolution No. FA-03-2021
Moved by Member Feor
Seconded by Member Foster

THAT the following items of correspondence be received into the record:

- Correspondence dated December 18, 2020 from Wayne Emmerson, Chair, Conservation Ontario to the Honourable Jeff Yurek, Minister of the Environment, Conservation and Parks RE: Indemnification Clause Requested in the Conservation Authorities Act or Regulations;

- Correspondence dated December 18, 2020 from Brenda Johnson, NPCA Chair to the Honourable Jeff Yurek, Minister of the Environment, Conservation and Parks RE: Environmental Registry of Ontario Posting 019-2636 “A proposal under the Endangered Species Act to enable use of the Species at Risk Conservation Fund and to streamline authorizations for certain activities that impact species at risk, while maintaining protections for species at risk”;
- Correspondence dated December 21, 2020 from Regional Clerk Ann-Marie Norio, Regional Municipality of Niagara RE: Niagara Official Plan – Consultation Update.

CARRIED

- d) i) Email dated January 11, 2021 from the Honourable Jeff Yurek, Minister of the Environment, Conservation and Parks RE: Ontario Moves Forward with Conservation Authorities Working Group
- ii) Correspondence dated January 14, 2021 from Regional Municipality of Niagara, Regional Chair Jim Bradley to the Honourable Jeff Yurek Minister of Environment, Conservation and Parks RE: Membership of the Conservation Authorities Working Group

Resolution No. FA-04-2021

Moved by Member Brady
Seconded by Member Woodhouse

THAT the Chair **BE DIRECTED** to prepare correspondence to the province requesting appointment of an NPCA representative on the Province’s newly-formed Conservation Authorities Working Group.

CARRIED

Resolution No. FA-05-2021

Moved by Member Coon-Petersen
Seconded by Member Feor

THAT the following items of correspondence be received into the record:

- Email dated January 11, 2021 from the Honourable Jeff Yurek, Minister of the Environment, Conservation and Parks RE: Ontario Moves Forward with Conservation Authorities Working Group;
- Correspondence dated January 14, 2021 from Regional Municipality of Niagara, Regional Chair Jim Bradley to the Honourable Jeff Yurek Minister of Environment, Conservation and Parks RE: Membership of the Conservation Authorities Working Group.

CARRIED

5. PRESENTATIONS

- a) Board Training and PowerPoint presentation by David Deluce, MCIP, RPP, Senior Manager, Planning and Regulations, Steve Miller, P.Eng. Senior Manager, Water Resources and Sarah Mastroianni, Manager, Planning and Development RE: Understanding Floodplain Mapping

Resolution No. FA-06-2021

Moved by Member Foster
Seconded by Member Hellinga

THAT the PowerPoint presentation by David Deluce, MCIP, RPP, Senior Manager, Planning and Regulations, Steve Miller, P.Eng. Senior Manager, Water Resources and Sarah Mastroianni, Manager, Planning and Development RE: Understanding Floodplain Mapping **BE RECEIVED**.

6. DELEGATIONS

None.

7. CONSENT ITEMS

- a) Report No. FA-01-21 RE: Human Resources - 2020 Q3 & Q4 Update

Resolution No. FA-07-2021

Moved by Member Ingrao

Seconded by Member Kwall

THAT Report No. FA-01-21 RE: Human Resources - 2020 Q3 & Q4 Update **BE RECEIVED** for information.

CARRIED

- b) Report No. FA-02-21 RE: Watershed 2020 Year End Report

Resolution No. FA-08-2021

Moved by Member Mackenzie

Seconded by Member Rapley

THAT Report No. FA-02-21 RE: Watershed 2020 Year End Report **BE RECEIVED.**

CARRIED

- c) Report No. FA-03-21 RE: Compliance and Enforcement 2020 Year End Summary

Resolution No. FA-09-2021

Moved by Member Mackenzie

Seconded by Member Rapley

THAT Report No. FA-03-21 RE: Compliance and Enforcement 2020 Year End Summary **BE RECEIVED.**

CARRIED

8. DISCUSSION ITEMS

- a) Report No. FA-04-21 RE: 2021 Restoration Project Approvals - November 2020 Application Intake

Resolution No. FA-10-2021

Moved by Member Shirton

Seconded by Member Smith

1. **THAT** Report No. FA-04-21 RE: 2021 Restoration Project Approvals- First 2021 Application Intake **BE RECEIVED.**

2. **AND THAT** restoration projects selected from the First 2021 Application intake (as per Appendix 1) **BE APPROVED.**

CARRIED

- b) Report No. FA-05-21 RE: Postponement of the February 2021 Annual General Meeting to

June 2021 – G. Bivol presented. Member Foster indicated that he had provided staff with suggestions of voting software to investigate. Discussion ensued.

Resolution No. FA-11-2021

Moved by Member Steele

Seconded by Member Woodhouse

1. **THAT** Report No. FA-05-21 RE: Postponement of the February 2021 Annual General Meeting to June 2021 **BE RECEIVED**.
2. **THAT** the provisions of the Administrative By-law with respect to convening the Annual General Meeting **BE WAIVED**.
3. **THAT** the NPCA Annual General Meeting **BE RESCHEDULED** for June of 2021.
4. **THAT** elections for the position of Board Chair and Vice Chair of the Board normally conducted at the Annual General Meeting **BE DEFERRED** until said Annual General Meeting of the Board to be held in June of 2021 with the current Board Chair and Vice Chair remaining in place until that time.
5. **THAT** the current term of Board Members appointed to Committees, along with the term of each respective NPCA Committee Chair and Vice Chair **BE EXTENDED** until the end of 2021 and formally reconfirmed at the June 2021 AGM.
6. **THAT** the appointments to Niagara Peninsula Conservation Foundation and Conservation Ontario Council **BE EXTENDED** until the end of 2021 and formally reconfirmed at the June 2021 Annual General Meeting.

CARRIED

9. COMMITTEE ITEMS

9.1 STRATEGIC PLANNING COMMITTEE

9.1.1 Minutes of the Strategic Planning Committee Meeting dated December 17, 2020

Resolution No. FA-12-2021

Moved by Member Kawall

Seconded by Member Huson

THAT the minutes of the Strategic Planning Committee meeting dated December 17, 2020 **BE RECEIVED**.

CARRIED

10. MOTIONS

- a) Motion from Vice Chair Mackenzie RE: Improvements to NPCA Passive Conservation Areas - Vice Chair Mackenzie spoke to his motion noting that any plan could also be undertaken with consideration for revenue generating opportunities. Discussion ensued.

Resolution No. FA-13-2021

Moved by Member Mackenzie

Seconded by Member Cridland

WHEREAS the NPCA has passive, non-revenue generating, conservation areas located across the entire watershed;

WHEREAS the increase in attendance at all conservation areas has been significant in 2020;

WHEREAS the visiting public has shown a strong need to visit our areas for recreational use for their mental and physical health;

WHEREAS the passive conservation areas are in need of visitor services improvements,

including signage, trails, visitor facilities and parking;

NOW THEREFORE, BE IT RESOLVED:

THAT staff **BE DIRECTED** to bring forward a report with a 5-year plan illustrating the needs, on a priority basis, for proposed improvements to the passive conservation areas in the NPCA watershed.

CARRIED

11. NOTICES OF MOTION

None.

12. NEW BUSINESS

- a) Chief Administrative Officer, Chandra Sharma provided a verbal update to the Board on the office closure resulting from the provincial lockdown and addressed the matter of insurance and liability coverage for Board Members stemming from a prior inquiry from Member Kawall.

Resolution No. FA-14-2021

Moved by Member Beattie Woodhouse

Seconded by Member Brady Wright

THAT the verbal update from C.A.O. Sharma **BE RECEIVED**.

CARRIED

13. CLOSED SESSION

- a) Personal matters about an identifiable individual including NPCA employees – Member Feor was appointed as a recording secretary to record proceedings should any portion of the closed session be convened in the absence of staff.

Resolution No. FA-15-2021

Moved by Member Beattie

Seconded by Member Brady

THAT the meeting of the Board of Directors of the Niagara Peninsula Conservation Authority **CONVENE** in closed session at 11:03 a.m. in accordance with Section 10.1 of the NPCA Administrative By-law for the discussion on personal matters about identifiable individual(s), including NPCA employees.

CARRIED

Resolution No. FA-16-2021

Moved by Member Beattie

Seconded by Member Brady

THAT the meeting **RECONVENE** in open session at 11:52 a.m..

CARRIED

14. ADJOURNMENT

Resolution No. FA-17-2021

Moved by Member Beatty

Seconded by Member Brady

THAT the Full Authority Meeting **BE ADJOURNED** at 11:53 a.m..

CARRIED

Brenda Johnson, Chair
Niagara Peninsula Conservation Authority

Chandra Sharma, MCIP, RPP
Chief Administrative Officer / Secretary-
Treasurer,
Niagara Peninsula Conservation Authority

Administration

Office of the Regional Clerk

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January 25, 2021

CL 1-2021, January 21, 2021
PEDC 1-2021, January 13, 2021
PDS 4-2021, January 13, 2021

Local Area Municipalities
Niagara Peninsula Conservation Authority

SENT ELECTRONICALLY

RE: Niagara Official Plan - Steps and Directions Moving Forward

Regional Council, at its meeting of January 21, 2021, approved the following recommendation of its Planning & Economic Development Committee:

That Report PDS 4-2021, dated January 13, 2021, respecting Niagara Official Plan – Steps and Directions Moving Forward, **BE RECEIVED** and **BE CIRCULATED** to the Local Area Municipalities and Niagara Peninsula Conservation Authority.

A copy of Report PDS 4-2021 is enclosed for your information.

Yours truly,



Ann-Marie Norio
Regional Clerk
:me

CLK-C 2021-019

Distribution List: D. Heyworth, Official Plan Policy Consultant
D. Giles, Acting Commissioner, Planning & Development Services
N. Oakes, Executive Assistant to the Commissioner, Planning & Development Services

Subject: Niagara Official Plan – Steps and Directions Moving Forward

Report to: Planning and Economic Development Committee

Report date: Wednesday, January 13, 2021

Recommendations

1. That Report PDS-4-2021 **BE RECEIVED** for information; and
2. That Report PDS-4-2021 **BE CIRCULATED** to the Local Area Municipalities and Niagara Peninsula Conservation Authority.

Key Facts

- The purpose of this report is to provide information on the Niagara Official Plan consultation, work program and reports over Q1 and Q2 of 2021.
- This is the first comprehensive review of the Niagara Official Plan since approval in the early 1970's, this review is referred to as a Municipal Comprehensive Review (MCR). The objective of this MCR is to replace the outdated current Regional Official Plan and to provide a Niagara Official Plan that manages growth in Niagara over the next 30 years and balances the requirements of competing land uses.
- To date, as background reports and other information has become available, reports have been presented by subject matter. However, policies in the Official Plan are interconnected and over the coming months subject matter will be presented as integrated policy sets.
- The next phase of consultation, focusing on draft policy and implementation, will continue in early 2021 and will include consultation with Regional Council, local Councils, Area Planners and stakeholders.
- In Q2 of 2021 (April) a Regional Official Plan Policy Report will be prepared for PEDC/Council that will reflect the recent round of consultation and provide the status of the following policy sets Growing Region – regional structure, housing, land needs assessment (growth allocations), settlement area boundary expansions; Connected Region – transportation, infrastructure; Vibrant Region – district and secondary plans, urban design, archeology; Competitive Region – employment, agriculture,

aggregates; and Sustainable Region – natural heritage system & water resource system options, Niagara watershed plan project, climate change.

Financial Considerations

Council approved the resources to complete the Niagara Official Plan over a 5 year period as part of the 2017 Budget Process.

Analysis

Conformity & Role of an Official Plan

Certain parts of Niagara's Official Plan are mandated by provincial policy. For example, we must plan for employment areas and allocate assigned growth to them. Other policies in an Official Plan are more permissive, such as policies around climate change.

The *Planning Act, 1990* requires Council to make planning decisions that are consistent with, conform to, or not conflict with, Provincial Policy. Regional staff must make recommendations to Council under the same rules.

Part of the Official Plan process is identifying the roles of Regional and local planning departments. Local municipalities will need to bring their Official Plans in to conformity with the Niagara Official Plan once it is approved by the Province.

There are statutory limits on how much can be done in an Official Plan. Official Plans regulate the use of land and, to an extent, they can assist in addressing social issues such as youth and business retention. However, these matters are primarily not land use related, and therefore require strategies and programs outside the Official Plan.

Emerging Themes

- **Managing Growth**

Future population and employment numbers are given to the Region by the Province. Over the past 3 to 4 years Niagara has experienced a level of population growth that if continued would achieve the previous 2041 population projections. A significant level of growth is coming to Niagara and the Niagara Official Plan is required to plan for this level of growth to 2051. Data from CANCEA indicates that increasing the supply of all forms of housing, low, medium and higher density

housing, will improve affordability, and support the long term future of Niagara socially and economically. Additionally, proactively planning through exercises like district and secondary plans, will allow for the allocation of growth and intensification in strategically identified areas.

- **Policies are Interconnected**

In the preparation of the Niagara Official Plan it is mandatory to consider all applicable Provincial policies. The interconnection between policy sets will allow the Niagara Official Plan to provide a framework that accommodates growth, ecological health and addresses climate. Changing direction in one area will impact other plan components.

- **Competing Interests**

Not everyone will agree on a planning outcome; in many cases, there can be more than one good outcome. Consultation carried out thus far identifies a variety of competing interests. A balanced policy approach often means fewer people or groups being highly satisfied.

- **Planning for the Long Term.**

The Niagara Official Plan will include policies that have not been addressed or required in the current Regional Official Plan. With this comes challenges in policy direction and decision making in an environment where communities do not stay static. Both the current and projected levels of growth will result in development patterns that represent significant changes compared to what has historically occurred.

- **Regular Updating.**

The Niagara Official Plan is a 30 year plan. To effectively monitor and adapt to changes that will occur it is important to ensure land use policies are review at regular intervals, that policies at the Regional and Local levels are aligned and that the monitoring of growth is consistent across Niagara.

- **Assist with Local Conformity**

Once the Niagara Official Plan is approved, local municipalities will need to bring their Official Plans in to conformity. It is important that Niagara Official Plan policies are clear in identifying local roles and responsibilities.

Consultation with Regional & Local Councils

Niagara Official Plan consultation with Regional and Local Councils will be held in February, March and April with both Regional Councillors and Local Councils.

In February, Overlap Consultants will conduct an online survey of Regional Councillors relating to the direction and themes of the Regional Official Plan.

Consultation with Regional Council in April will focus on growth management and environmental policy. The purpose is to inform Councillors of the draft policy direction and provide for discussion. Staff are not seeking any decisions from Councillors at that time, this consultation is to provide information and answer questions.

Consultation with individual Local Councils including the Mayor, designated Local Councillors (i.e. Chair and Vice Chair of Planning and Economic Development Committee), CAO and Planning Director, will occur during March and April. The purpose is to provide an overview of policy contained in the Niagara Official Plan and to discuss policy sets that are of interest to the Local Councils.

Other consultation is planned in early 2021, but for the purpose of this report, only Council related consultation is outlined.

Upcoming Reporting To PEDC

In the lead up to the Regional Official Plan Policy Report in Q2, the following reports will be coming to PEDC/Council in February and March:

- A Consultation Report on Natural Heritage and Water Systems options which summarizes feedback obtained through the virtual Public Information Centres (PICs), virtual stakeholder workshops, discussions with Area Planners, presentations to provincial agencies and Niagara Peninsula Conservation Authority.
- A Climate Change Report to outline consultation and feedback received to date from the Climate Change Discussion Paper.
- Overlap Associates will report on its directions survey with Regional Councillors. The Overlap survey will be informed by public survey results of Pillar Statements and Directives previously developed.

Regional Official Plan Policy Report

The Regional Official Plan Policy Report (the Report) will cover 5 policy sets and 15 topics as presented below. The status of policy will be provided and draft policies will be included. There will be areas that are less developed and may not include draft policies.

Importantly, the purpose of the Report is to provide information. Council will not be asked to make decisions (with limited exceptions, noted below). The Report is an opportunity for Council and the public to view the direction of the Regional Official Plan. Subsequently, significant consultation on draft policy will be undertaken before returning to Council for decision-making.

The exception to the above is in relation to the Natural Heritage System and Water Resource System Options. In April, Committee and Council will be asked to make a decision on an environmental policy option, a decision will be necessary to ensure the next phase of work (preparation of detailed methodology, policy and mapping) can be initiated.

The following is a breakdown of the topics to be covered in the Report, which has been organised by the Official Plan Sections.

Growing Region

Regional Structure

The Regional Structure sets out a strategic distribution of population and employment growth to the planning horizon of 2051.

A Regional Structure Policy Paper will be provided with the Joint Report.

That Paper will include draft policies and a discussion of critical factors needed to allocate population and housing forecasts for the local municipalities, including the identification of Strategic Growth Areas, minimum intensification rates for Built-Up Areas, and density targets for Designated Greenfield Areas. The Regional Structure directs growth to these areas based on the area's function, with the goal of achieving complete communities, protecting natural heritage resources, and maximizing investments in infrastructure, public transit, and community services.

Housing

Niagara needs a diverse housing supply in order to improve affordability and offer a range of housing options. The Housing Strategy identifies the form of housing needed to accommodate Niagara's current and future residents. This Strategy is based on extensive analysis of housing-related data, which is currently being updated to conform to the Growth Plan's 2051 population and employment forecasts.

Housing Strategy policies will support a range and mix of housing options and will establish targets to facilitate the development of affordable ownership and rental housing. These policies will also align with the Housing and Homelessness Action Plan, and coordinate with the Incentive Review to identify land use planning and financial planning tools that facilitate the provision of affordable housing.

Draft policies will be included in the Joint Report.

Land Needs Assessment (Growth Allocations)

The Land Needs Assessment ("LNA") is a technical, Region-led process that determines the amount of land needed for each local municipality. Specifically, the Region must quantify the amount of designated land each municipality requires to accommodate population, housing and employment forecasts provided to it in the Growth Plan. The Province released a new Land Needs Assessment Methodology in August 2020, which the Region must use.

Staff are working expeditiously to provide a draft LNA. The LNA will be based on inputs from other background strategies noted here, including the Regional Structure (for intensification rates and densities), Housing Strategy (for housing mix and targets), and the Employment Policy Paper (for employment forecasts and densities).

A summary of the draft LNA will be provided in the Joint Report.

Settlement Area Boundary Expansions

Settlement area (i.e. urban and hamlet) boundaries cannot be changed except where specific policies are satisfied. The Region has exclusive authority to adjust boundaries. However, the Region is working closely with local municipalities to set processes for boundary adjustment reviews.

The Region's program is called the Settlement Area Boundary Expansion Review ("SABR"). A threshold component of the SABR is the outcome of the LNA. The LNA will set out the amount of population and employment growth and whether expansions are warranted; the SABR process is that which determines where that expansion will go.

The SABR program has and will continue to be carefully coordinated with local municipalities. It balances the interests of Provincial, Regional, and local municipalities and their ability to accommodate growth. The process is done in collaboration with local municipalities and in consultation with stakeholders and the public.

Regional staff are in the process of establishing evaluation criteria for the SABR program. This will allow for the assessment of SABR requests received to date. The evaluation criteria will prioritize the availability of existing infrastructure and public service facility investments, and consider impacts on watersheds, the natural environment, the agricultural system, and the protection of resource areas, as required.

Evaluation criteria for the SABR program will be provided in the Joint Report. Additionally, staff will provide policies to guide any expansion applications submitted *after* approval of the Niagara Official Plan.

Following consultation on the draft LNA and SABR evaluation criteria, at a later time Regional staff will bring forward a final LNA for Council endorsement. Based on the final LNA, staff will make recommendations for boundary changes and that will be provided to the public and Council for consideration.

Connected Region

Transportation

Transportation policies and mapping approved through Regional Official Plan Amendment No. 13 will be carried forward to the new Niagara Official Plan.

A Complete Streets Design Manual is being developed by the Public Works Department, which will include the identification and application of Complete Streets typologies to the Regional Road system. The results of this analysis will result in updates to right-of-ways for all Regional Road segments listed in Table 9-1 of the existing Official Plan. The above-noted Table may not be ready for the Joint Report. If not, it will be provided in draft a later time.

Infrastructure

Draft infrastructure policies will address promoting the efficient use and optimization of existing infrastructure; planning, designing and constructing systems to prepare for the impacts of a changing climate; integrating servicing and land-use considerations during all stages of the planning process; and developing water and wastewater master plans that identify options for servicing growth and development.

Additionally, draft storm water policies will address promoting storm water management best practices, such as low impact development, water conservation and efficiency; ensuring storm water management is informed by watershed planning and prepared for the impacts of changing climate; and ensuring large-scale development will have storm water management plans that incorporate best practices, such as no negative impacts on the quality and quantity of surface or groundwater.

Draft infrastructure policies will be provided in the Joint Report.

Vibrant Region

District & Secondary Plans

District Plans and Secondary Plans are proactive planning tools that focus on managing growth and the development of complete communities to support economic prosperity. Although they vary in scale, both District Plans and Secondary Plans require a collaborative effort between the Region and the local municipalities, creates a strategic vision to inform where and how much growth can occur, and allow for the strategic identification of intensification areas within communities. These Plans rely on extensive public engagement and consultation.

Secondary Plans will be used to implement the Regional Structure. Through the Niagara Official Plan, these plans will be required for Strategic Growth Areas and new Designated Greenfield Areas. They may also be considered for existing Designated Greenfield Areas and Built-Up Areas that are facing development pressure.

Draft District and Secondary Plan policies will be included in the Joint Report.

Urban Design

Urban design is the practice of making places attractive, memorable, and functional for the people who use them. It involves the arrangement, appearance and relationship between buildings, public spaces, transportation systems, services, and amenities. Policies will support a better understanding of urban design and commitment to excellence, enhancement of the public realm and promotion of active transportation, tools for urban design implementation, and providing a clear direction to local municipalities.

Draft urban design policies will be provided in the Joint Report.

Archaeology

The review of proposed development sites for archaeological potential is a requirement of the Ministry of Heritage, Sport, Tourism and Culture. An Archaeological Management Plan (“AMP”), has been undertaken to streamline this Provincial review process at the local level. The AMP will create a clear process for the identification and conservation of archaeological resources.

The Joint Report will provide information on the proposed archaeological review process and function, draft modelling and draft archaeological resource potential mapping.

Competitive Region

Employment

An Official Plan Employment Policy Paper (“Employment Paper”) will be included with the Joint Report. The Employment Paper will contain draft employment policy and employment area mapping to be considered for the Official Plan. Recommendations are based on current legislation, detailed analysis, and other municipal practices. The Employment Paper will improve the degree of certainty and predictability to which employers can plan for and sustain viable employment operations for short- and long-term horizons, while protecting Provincial and municipal interests.

The Employment Policy Paper, which includes draft policies, will be provided in the Joint Report.

Agriculture

The Region has a strong history of proactive agricultural planning. Regional agricultural policies are being refined to capture the updated policy regime implemented by the Province. The Agricultural System includes policies to protect the agricultural land base and the agri-food network. This includes elements important to the sector such as farm diversification and irrigation systems that contribute to a thriving agricultural industry.

Regional staff, in collaboration with local area municipalities, have made refinements to the agricultural land base, including a review of provincially-proposed candidate areas for consideration as prime agricultural areas.

The Joint Report will contain Agricultural draft policy and draft mapping.

Aggregates

The Region is expecting increased demand for aggregates to support forecasted growth. Background reports related to aggregate resources are complete and have been previously presented to Committee and Council. A first draft of the policies were prepared and circulated to the local municipalities, stakeholders, and industry representatives for comment.

The Joint Report will contain an updated draft of the Official Plan policies for mineral aggregate resources and mineral aggregate operations. Mapping of mineral aggregate resources is undertaken by technical experts at the Province (Ontario Geological Survey). Planning staff have been in touch with our colleagues at the Province and hope to have new mapping for Niagara included with the Official Plan.

Sustainable Region

Natural Heritage System (NHS) & Water Resource System (WRS) Options

In the Joint Report, the results of the additional analysis being completed on the NHS and WRS options will be presented. This includes statistics on the estimated extent of the natural heritage system and water resource system for each of the options, and commentary on the implications for developable land.

The information will be presented for the urban areas in each local municipality. To accompany these detailed statistics, preliminary information on the policy intent of each option will be prepared.

Unlike other topics set out in this Report, Committee and Council will be asked to make a decision on the preferred option for the NHS and WRS. It is critical that a decision is made at that time, to allow Staff to proceed with detailed mapping and policy development. Otherwise, the timing of the Official Plan will be in jeopardy.

After a decision from Council in April, detailed draft mapping and policy for the NHS and WRS can be prepared for review and comment by Committee and Council, the public, and other stakeholders.

Niagara Watershed Plan (NWP) Project

The NWP is the next step in implementing a watershed planning program. It will ensure the Niagara Official Plan is appropriately informed by watershed planning.

The NWP is being undertaken at the 'tertiary-level' and will be an important tool to guide more detailed watershed and sub watershed planning studies in the Region. The NWP will include a range of best practices and recommendations to inform land use planning decisions in the region.

The NWP is being prepared in accordance with Provincial requirements, including direction that decisions on growth allocations and the identification of a water resource system be informed by watershed planning.

The Joint Report will provide an update on the NWP, including how watershed planning has helped inform growth allocations and the development of the water resource system.

Climate Change

The Climate Change Work Program has been updated as set out in Report PDS 6-2021.

The program now includes climate modeling for Niagara as well as a tree planting and greening strategy. Policy development for this subject has been ongoing to inform other Official Plan work programs.

The Joint Report will update Council on the climate modeling exercise, provide a preliminary overview of a tree planting and greening strategy, as well as highlight the integration of climate policies in other sections of the Official Plan.

Alternatives Reviewed

The background report and review stage of the Official Plan program is nearly complete. Staff are developing policy, most of which will be ready for April 2021. It is important to provide the policy comprehensively and openly at that time. There are no reasonable alternatives to proceeding as set out. This is an important step in informing and allowing discussion of policy directions and content with Regional and local Councils, to ensure we represents the best approach to enable informed decision making.

Relationship to Council Strategic Priorities

The Niagara Official Plan is important to address Council's priorities, being: Supporting Businesses and Economic Growth; Healthy and Vibrant Community; and Responsible Growth and Infrastructure Planning.

Other Pertinent Reports

PDS 35-2020	Niagara Official Plan - Consultation Update
PDS 1-2020	New Niagara Official Plan - Public Consultation Summary
PDS 33-2019	Growth Management Program Update for New Official Plan
PDS 9-2019	New Official Plan Consultation Timeline Framework
CWCD 421-2019	New Niagara Official Plan Updates

Prepared by:

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Recommended by:

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Acting Commissioner
Planning and Development services

Submitted by:

Ron Tripp, P.Eng.
Acting Chief Administrative Officer

This report was prepared in consultation with Isaiah Banach, Acting Director of Long Range Planning, and reviewed by Erik Acs, Manager of Community Planning and Lyndsey Ferrell, Program Financial Specialist, Corporate Services.



February 4, 2021

Sara Peckford
Food Safety and Environmental Policy Branch
1 Stone Road West
Ontario Government Building, 2nd Floor, Southwest
Guelph, On N1G 4Y2

Re: Conservation Ontario's Comments on the "Drainage Act Regulatory Proposal" (ERO #019-2814)

Dear Ms. Peckford:

Thank you for the opportunity to provide comments on the "Drainage Act Regulatory Proposal" and to participate in the drainage stakeholder webinars. Conservation Ontario is the network of Ontario's 36 conservation authorities (CAs). Comments submitted by Conservation Ontario are not intended to limit comments submitted by individual CAs as part of the consultation process.

In general, conservation authorities are quite supportive of the proposal. In addition, we appreciate the proposed inclusion of CAs as "prescribed persons" through the regulation made under the *Drainage Act*. Conservation Ontario offers the following comments in relation to the discussion questions with an aim of improving the overall proposal.

1. Do you agree with the proposed minor improvement criteria?

The majority of the criteria is administrative in nature and does not address technical matters or project scope. Having clearly defined technical and project scope criteria would assist in determining whether or not a project is truly minor in nature and whether the intent of the proposed regulation is being achieved. Having these criteria more clearly defined will serve to limit differences of opinion regarding what is considered to be a "minor improvement". Failure to do so could ultimately undermine the intent of efficiency and timeliness.

Proposed Criteria	Conservation Ontario's Comments
The improvement would be initiated by the property owner	<ul style="list-style-type: none">• None
The improvement would take place on an individual property	<ul style="list-style-type: none">• For clarity, we recommend including, "owned by the initiating property owner".• The requirement for the landowner to have to apply for and pay for the work and have the work solely on their property may limit the amount of works that can be done under this option – especially if the intention of the works are to improve a municipal road but the work or part of the work

	<p>would need to expand onto private property.</p> <ul style="list-style-type: none"> • A drainage area can extend beyond an individual property. Clarification is needed that to be eligible for the proposed minor improvement process any changes will not impact the drainage area beyond the individual property boundary
The property owner would pay the full cost of construction for the minor improvement	<ul style="list-style-type: none"> • None
There would be no need for construction access on neighbouring properties or the property owner has already obtained consent from applicable neighbouring properties	<ul style="list-style-type: none"> • Recommend a formal process/form for demonstrating a landowner has obtained consent from applicable neighbouring property owners
The proposed minor improvement would not lead to changes as to how future repair and maintenance costs are allocated to other property owners in the watershed	<ul style="list-style-type: none"> • Further clarity is required on this point. For example, if a farm crossing is installed and in the future needed to be remediated, would that be assessed as a special assessment to that property owner or would it be included in the overall assessment for maintenance and repair?
The minor improvement project would maintain the existing drainage capacity	<ul style="list-style-type: none"> • In some cases the objective of a proposal may be to retain and/or slowly release drainage from a feature on the property. For example, rural stormwater management may benefit from restrictions on flow rates. Similarly, in some cases enhancements to drainage capacity should be considered, e.g. floodplain enhancements or engineered wetlands • As per the comments related to technical criteria and scope, it is recommended that drain enclosures should not be considered to be minor • Additional criteria should include not having an impact on upstream or downstream erosion rates

General Comments - Minor Improvement Process

Conservation authorities would appreciate the opportunity to participate as part of the initial site visit to identify any technical or regulatory constraints up front, which could then be included as part of the work of the appointed engineer. This will help to expedite the approval process when permission under Section 28 of the *Conservation Authorities Act* is being sought.

The proposal identifies that the regulation may permit a municipality to rely on a municipal staff engineer who has P.Eng credentials. It is recommended that the regulation instead reference that the municipality rely on a P.Eng. who has experience in this field. The engineer should be familiar with the *Drainage Act*, the DART protocol and any other protocol that may be provided for in the regulation.

Given the reduced timeframe proposed for appeals (10 days) the regulation should specify that the reports/notices should be sent to regulatory agencies and landowners via electronic means. As a result of the COVID-19 pandemic, many letters are not making it to their destination within 10 days. Conservation Ontario is concerned that the reduced timeframes may not give landowners (including CAs) and regulatory agencies adequate time to review a proposal. It is recommended that the proposal be increased to 20 **business** days (or approximately one month).

This proposal would allow for an appellant to sidestep the Drainage Tribunal and go directly to the Drainage Referee. The advantage of this proposal is unclear given the Drainage Tribunal's expertise in handling appeals.

Examples of minor projects were provided but were limited to examples related to agricultural farmlands. The *Drainage Act*, however, is also used to provide legal outlet for drainage associated with urban development. It is unclear whether some drainage associated with urban development may be considered minor projects. Given the heightened risk to people and property, it is recommended that drainage associated with urban development should not be considered a minor project.

Finally, the relative age of the Engineer's Reports should be considered when defining "minor improvements". Conservation authorities identify that many of the Engineer's Reports in their watersheds are more than 20 years old and therefore not reflecting current engineering best practices and regulatory approval standards. In some cases, these reports do not contain cross-section data. The lack of information in some of these reports will make it difficult for CAs to assess potential impacts upstream and downstream of a "minor improvement".

2. What types of improvements do you foresee fitting under the minor improvement process?

Conservation Ontario would be very supportive of the use of the minor improvement process to help incentivize stewardship activities for individual landowners. Improvements that could fit under the minor improvement process include: green infrastructure projects that maintain or improves the drainage capacity of the system; environmentally friendly bank stabilization/erosion protection works; replacement of existing gabion baskets or hardened retaining walls; and installation of vegetated buffers. In addition, replacement or repair of existing infrastructure, such as culverts and crossings on a like-for-like basis or upsizing where the risk of increasing flooding or erosion is low could be considered under the minor improvement process. Finally, localized bank stabilization and erosion control at outlets and bends should also be considered as a type of improvement fitting under the minor improvement process.

In general, Conservation Ontario does not support the use of the minor improvement process in wetland areas, associated with urban development or for drain enclosures.

3. What potential pre-approved designs do you foresee for being possible under a protocol for minor improvements?

Conservation Ontario is supportive of the proposal to develop pre-approved practices and respectfully requests an opportunity to participate in their development. It is recommended that the term "practice"

be used in place of “design”; this change in terminology would serve as a reminder to the Engineers and the regulators to ensure that the proposal fits the situation.

In general, Conservation Ontario supports the recommendation to consider straightforward farm crossings and erosion protection as potentially eligible projects for pre-approved designs.

4. Are there other opportunities to further reduce burden for minor improvements?

In order to further reduce burden for minor improvements, it is recommended that the province consider allowing a qualified conservation authority staff engineer who has P.Eng credentials to be appointed by a municipality to prepare a report. Many smaller municipalities do not have P.Eng on staff and this could be a way to support those municipalities on a watershed basis. Moreover, having the ability to appoint a conservation authority staff member may further serve to incentivize landowners to undertake stewardship programs.

It is recommended that the province form a working group with CAs and other regulatory agencies to create criteria for determining what should be considered a minor improvement as compared one that should follow the typical process. This will help to streamline the overall drain approval process. Moreover, the regulation should be designed to require that the Drainage Engineer engage as early as possible with conservation authorities and other regulatory bodies. In addition to undertaking regulatory approvals, CAs have considerable knowledge about the form and function of watercourses, which could assist with the design and approval of a project.

5. Are the proposed criteria for updating an Engineer’s Report appropriate?

It is understood that the proposed new Minister’s regulation would establish a new process for reflecting changes to a drain design in an Engineer’s Report. In the discussion paper, a variety of draft eligibility criteria are proposed. The first criterion is that “current agency approvals would support the required changes to the drain design”. The criterion does not identify who would be responsible for making that determination. Therefore, it is recommended that the criterion be amended to require consultation and clearance from approval agencies to reflect the changes to a drain design. This should be undertaken prior to granting the municipality authority to maintain the drain “as built”.

As a final step, the council-approved Engineer’s Report should be electronically distributed to approval agencies, including conservation authorities.

6. What new protocols would you prioritize?

Conservation authorities have experience administering streamlined Section 28 approvals for municipal drain maintenance and repair in accordance with the Drainage Act and Conservation Authorities Act (DART) Protocol since 2012. Our experience has confirmed that it provides consistency and efficiency for the approvals process. Adoption of the DART protocol by reference will formalize its status and will further the objectives of consistency and efficiency.

A second installment of the DART protocol to address these minor improvements on drains would be a welcomed addition and provide a standard throughout the province where conservation authorities

exist. There is also a need and opportunity for DART to refine what constitutes drain improvement under Section 78 of the *Drainage Act*.

Finally, as discussed, CAs are supportive of a protocol for pre-approved engineered designs for minor improvements. CAs should be consulted on these pre-approved designs to ensure that they are compliant with CA Act Section 28 requirements. Consideration should be given to including designs which prioritize green infrastructure as a way to further incentivize landowners to employ best management practices.

Once again, thank you for the opportunity to provide comments on the “Drainage Act Regulatory Proposal”. We are appreciative of the ongoing efforts to consult directly with conservation authorities throughout the process and we look forward to working with you as you further refine these proposals. Should you have any questions about this letter, please contact me at extension 226.

Sincerely,

A handwritten signature in black ink, appearing to read 'Leslie Rich', written in a cursive style.

Leslie Rich
Policy and Planning Liaison

c.c. All CA CAOs/GMs

Conservation Ontario
120 Bayview Parkway, Newmarket ON L3Y 3W3
Tel: 905.895.0716 Email: info@conservationontario.ca
www.conservationontario.ca

MEMORANDUM

To: Environmental Registry of Ontario

From: Jason Culp – Niagara Peninsula Conservation Authority

Date: February 2, 2021

Re: Drainage Act Regulatory Proposal Comments

The Niagara Peninsula Conservation Authority (NPCA) has completed a review of the proposed changes to the Drainage Act and associated regulations, specifically in relation to the completion of engineering reports and provisions for streamlining the process of approvals required for minor improvements of existing municipal drains in Ontario.

At this time, no detailed criteria defining what would constitute a minor improvement or a requirement for a new engineering report has been provided. Similar to recent changes to the Conservation Authorities Act, the proposed changes address process, with a subsequent Minister's Regulation(s) to be developed specific to defining additional details. Input into the development of the new regulation with regards to process and specific activities to be included in the new Minister's Regulation was requested by Conservation Ontario for submission to the Province. Due to the large number of municipal drains in the NPCA watershed, the NPCA also felt it appropriate to post their own comments.

Within the NPCA area of jurisdiction, every municipality with the exception of the City of St. Catharines has and is responsible for municipal drains. Each of these municipalities has a qualified professional, trained, and designated as a Drainage Superintendent by the Ontario Ministry of Agriculture, Food and Rural Affairs, and appointed by a municipal bylaw, whose responsibility is to maintain existing drains as well as coordinate the process for the construction of new municipal drains should they be requested or required by residents or in some cases the municipality itself. Under the Drainage Act, and through the Drainage Act and Conservation Authorities Act Protocol, the NPCA works with the local Drainage Superintendents and their municipalities to review and approve the maintenance and repair of municipal drains.

A significant number of municipal drains in Ontario are also considered regulated watercourses under the Conservation Authorities Act, and may include other regulated features such as flood plain, wetlands, terrestrial and aquatic species at risk occurrences and habitat and in-water works which require additional approvals not only from the local Conservation Authority but also the Department of Fisheries and Oceans (DFO), the Ministry of Environment, Conservation and Parks and the Ministry of Natural Resources and Forestry. Improved coordination in addition to enhanced agency and municipal awareness of all legislative requirements which may impact these processes is the general intent of the Province's review of the Drainage Act and associated reviews and approvals.

Additional Discussion Questions and Answers

The NPCA has provided below a table of additional questions and responses in relation to the regulatory proposal.

Drainage Act Regulatory Proposal Discussion Paper Discussion Questions	
Discussion Questions	CA Comments
1. Do you agree with the proposed minor improvement criteria?	Yes
2. What types of improvements do you foresee fitting under the minor improvement process?	1. New access crossings 2. Localized bank stabilization 3. Construction and implementation of permanent offsetting measure e.g., Low flow channels, sediment traps, as per current DART protocol
3. What potential pre-approved designs do you foresee for being possible under a protocol for minor improvements?	Given the nature of what would be considered a minor improvement and the engineering requirement for implementing them, each type of improvement could be supported by a pre-approved design standard similar to the existing Ontario Provincial Standards Specifications and Drawings for Roads and Public Works.
4. Are there other opportunities to further reduce burden for minor improvements?	It would be very helpful if the MNRF would provide additional clarification to OMAFRA, municipalities and Conservation Authorities as to their guidelines/expectations in relation to municipal drain projects and Provincially Significant Wetlands.
5. Are the proposed criteria for updating an Engineer's Report appropriate?	Yes
6. What new protocols would you prioritize?	1. Adoption of existing DART protocol by all Cas 2. Standardized approval submission guidelines for applications submitted through DART protocol 3. Pre-approved Design Protocol and associated specifications/drawings

General Comments	
	CA Comments
Drainage Act Regulatory Proposal (ERO#019-2814)	NPCA staff experienced in Municipal Drains (former Drainage Superintendents) appreciate that these changes are long overdue and will, if properly implemented, continue to protect, and enhance the environmental integrity of



	Ontario's Municipal Drain network while assisting in clarifying approval roles and processes and reducing financial burden to the municipalities and affected landowners.
--	--

Overall, the proposed changes and revisions appear positive. Many Conservation Authorities and the other regulatory agencies such as DFO have already been working with partner municipalities on the development of review and approval processes which aim to streamline and compliment existing legislative requirements for municipal drain maintenance and improvement projects.

Regards,

A handwritten signature in red ink that reads "Jason Culp".

Jason Culp, C. Tech., EP
Supervisor, Compliance & Enforcement
Niagara Peninsula Conservation Authority

Welland River Floodplain Association

Representing Property Owners in the Welland River Watershed

Ms. Brenda Johnson,

February 10, 2021

Chair, Board of Directors

Niagara Peninsula Conservation Authority

Dear Ms. Johnson,

The Welland River Floodplain Association was formed in January 2012 in response to public concerns over the proposed expansion of the floodplain along the Welland River by the NPCA. Although the floodplain mapping project on the Welland River was completed in December 2019, we continue to monitor the progress of floodplain mapping initiatives on other watercourses in the area.

At the January 2021 NPCA Board of Directors meeting, staff made a presentation to familiarize Board Members with the floodplain mapping process. In response to the presentation, certain comments were made by Board Members regarding the floodplain mapping process in general and the Welland River project in particular that we find quite concerning. We wanted to respond to those comments.

Floodplain mapping on the Welland River has a long and controversial history. The original mapping exercise raised significant public concern and opposition and was completed in 1985. In 2010, the NPCA re-mapped the central section of the Welland River. This study was completed in private, without public consultation or collaboration. It resulted in a significant raising of the floodplain (over 1 m vertically in places) and a dramatic expansion of the floodplain zone.

In November 2011, when members of the public became aware of the new, expanded floodplain proposal and expressed concern to NPCA staff, they were told that floodplain mapping was strictly a technical exercise and was much too complex for property owners to understand. They were told that there was no need to make the study public and that there were no requirements to hold public meetings when updating flood lines.

In response to significant public concerns, the Board of the day delayed adoption of the 2010 study, made the study public and initiated a technical review. Additionally the Watershed Floodplain Committee consisting of Board members, staff and crucially, members of the public was formed.

The original draft of this study was authored by a University PhD Candidate student, using an unproven self-designed hydraulic model, an inappropriate hydrological model, and an inadequate calibration procedure among other shortcomings. It generated widespread public concern regarding the reliability and accuracy of the results. By 2015, the Board finally recognized that the 2010 study lacked public confidence. A new RFP was issued, the project was expanded to include all of the main channel, a new engineering group was selected, and the project was re-started

In stark contrast to the 2010 effort, this study, (adopted in 2019) was completed by experienced engineers, using proven modelling techniques, sound engineering principles and much more complete and accurate data. Critically, staff went to significant lengths to engage the public through media,

targeted mailing and through a series of public information meetings. In contrast to the public outcry, confrontation and ill-will of the first effort, the public was engaged and informed, were confident in the results, and the 2019 study was widely accepted.

Recent comments by Board Members seemed to question why members of the public should be engaged in the floodplain mapping process at all and why the NPCA should care about the opinions of the public. There was also a suggestion that the results of the two options (presumably the 2010 study vs the 2019 study) were of equal merit and that the Board took the path of least resistance when approving the 2019 study, simply because of public preferences.

We feel strongly that members of the public should always be engaged, especially on a public facing initiative such as a floodplain mapping project that will impact those same members of the public. Has the NPCA learned nothing from the 2010 Welland River study debacle? Consultation and collaboration is always preferable to the confrontational, autocratic and authoritarian NPCA of the (not so distant) past. Several hundred people attended the public information meetings that staff arranged. The public should always be engaged, not because you will be criticized if you don't engage, but because you genuinely value those opinions.

With regard to the Welland River floodplain mapping study, those who would suggest that the 2010 study and the 2019 study were of equal merit are misinformed. To suggest that the Board was pressured to accept the 2019 study is also highly questionable. This effort was the result of over four years of hard work by staff, engineering professionals and the Watershed Floodplain Committee (comprised of Board Members and members of the public from the affected communities.) **The NPCA should not only accept the results from this study, but should adopt the technical and especially the public engagement process that was used, as a template for all floodplain mapping projects in the future.**

Additional comments questioning dumping of material in the floodplain also need clarification. The "dumping" is not intended to be debris, garbage or any other substance that might be detrimental. The guidelines are not meant to circumvent general floodplain policies. Board Members must realize that floodplains are not simply vast, open spaces. There are many properties, farms, businesses and residences in floodplain zones that predate floodplain mapping. Those residents must be allowed to live and enjoy their properties like all others. Placing quantities of soil, gravel or other acceptable material is consistent with landscaping, driveway maintenance, septic system upkeep and other building or maintenance activities that are necessary from time to time on all properties. We strongly believe that the impact of placing these small quantities of material, even if on all floodplain properties (however unlikely) would be negligible.

The Welland River Floodplain Association has worked collaboratively in the past with NPCA Board Members, staff, technical and engineering professionals, politicians from all levels of government and members of the public. We look forward to continuing this work in the future, as the NPCA proceeds with floodplain mapping projects on tributaries of the Welland River.

Yours truly,

Welland River Floodplain Association

Len Aarts, President

Report To: Board of Directors

Subject: Niagara Region Tree and Forest Bylaw Annual Report

Report No: FA-11-21

Date: February 18, 2021

Recommendation:

THAT Report No. FA-11-21 RE: Niagara Region Tree and Forest Bylaw Annual Report **BE RECEIVED.**

Purpose:

The purpose of this report is to present to the Board of Directors, the final NPCA Annual Report on activities undertaken by the NPCA in relation to administration of the Niagara Region's Tree and Forest Conservation Bylaw in 2020.

Background:

The NPCA has been successfully administering the Niagara Region's Tree and Forest Conservation Bylaw on behalf of the Region since 2008. On January 31, 2021, the Niagara Region's new Woodland Bylaw was enacted, replacing the existing Tree and Forest Conservation Bylaw. As the Board is aware, as part of this process, the Niagara Region has assumed responsibility for administration of their new bylaw. As such, the NPCA is no longer involved in the administration of the new Woodland Bylaw.

Discussion:

A full review of the details and information related to the transfer of the bylaw's administration from the NPCA to the Niagara Region was presented to the Board of Directors at the Full Authority meeting on October 22, 2020 in Report No. FA-56-20. As per the direction provided in that report, NPCA staff including the Watershed Forester are and will continue to offer assistance to the Region in support of this transition to ensure the highest level of environmental protection and landowner outreach. NPCA staff are currently in the process of working with Niagara Region staff to develop details around the level of support required in 2021.

Appendix 1: 2020 Annual Report – Niagara Region Tree and Forest Conservation Bylaw (2008-30) is attached for information and will be the last NPCA staff report to the Board of Directors with regards to the NPCA's administration of the bylaw.

Financial Implications:

None.

Related Reports and Appendices:

Appendix 1: 2020 Annual Report – Niagara Region Tree and Forest Conservation Bylaw (2008-30)

Authored by:

Original Signed by:

Jason Culp, C. Tech., EP
Supervisor, Compliance & Enforcement

Reviewed by:

Original Signed by:

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

Submitted by:

Original Signed by:

Chandra Sharma, MCIP, RPP
Chief Administrative Officer/Secretary-Treasurer

2020 ANNUAL REPORT
NIAGARA REGION
TREE AND FOREST CONSERVATION BYLAW (2008-30)



Niagara Region Tree and Forest Conservation Bylaw
2020 Annual Summary Report
Niagara Peninsula Conservation Authority

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Introduction

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

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

The 2020 year marked the twelfth year and final year in which the NPCA administered the By-law on behalf of the Region. This report will summarize the activities undertaken throughout the year by the NPCA to promote Good Forestry Practices, educate the public and enforce the provisions of the By-law.

Permits

Good Forestry Practices (GFP) Permits are issued after an application is received and satisfies the necessary criteria. In 2020, 15 new GFP Permits were issued by the NPCA, 6 permits were carried over from the 2019 year. 73% of these permits were completed by the end of 2020. Poor weather conditions were a contributing factor for permits not being completed by year's end.

Commenced in 2012 and continued in 2020, strategies for managing woodlots for emerald ash borer (EAB) are required in prescriptions and tree marking for woodlots that have a significant component of ash. This strategy will continue into 2021 as the impact of EAB continues to be an issue.

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

All permits are subject to conditions which are specified and tailored to the characteristics of the individual site. For example, harvesting in woodlands with sensitive ground conditions will be conditional to the work being done while the ground is frozen in the winter, or during a dry period during the summer, to minimize soil disturbance. Failure to follow the conditions of a permit is considered a violation of the By-law. There were no incidents in 2020 where permit conditions were not complied with. Forest Bylaw staff maintained regular communication with logging contractors to ensure operations were suspended when ground conditions were not favourable.

Selection Silvicultural System

The forest management plan or silvicultural prescription required for a permit is prepared and reviewed by forest professionals with expert knowledge in silvicultural practices. Silviculture practices are treatments applied at the stand (woodlot) scale to achieve specific forest management objectives. Treatments are broadly categorized as either harvest, renewal, or tending. Ideally these practices are applied in a coordinated fashion with a long-term view of what is possible, practical, and desirable at both a stand and landscape scale. The coordination and long-term view are achieved through application of a silvicultural system.

A silvicultural system is a planned program of silviculture treatments that extends throughout the life of a stand for the purposes of controlling stand establishment, composition, and growth. While this view implies a certain intensity of effort and manipulation, on suitable sites the simplest application may include only a single harvest with natural regeneration (assuming a seed source, seedlings are present in sufficient quantity to restore the forest to a desired composition and structure).

There are three silvicultural systems used in Ontario; Clear-cut, Shelterwood and Selection. **Selection is the system most used in the Niagara Region.** The following table describes the three silvicultural systems.

Silvicultural System	Description	General characteristics
Clear-cut	Most of the overstory trees are removed over a short period of time to create a fully exposed microenvironment for the establishment of a new even-aged stand.	<ul style="list-style-type: none">• even-aged future stand• regeneration established in >70% full sunlight.
Shelterwood	Most of the overstory trees are removed in a series of two or more harvests for the purpose of establishing and sheltering regeneration under a residual canopy.	<ul style="list-style-type: none">• even-aged future stand• regeneration established in 30-70% full sunlight• regeneration period <20% of the intended rotation• final removal creates >70% full sunlight.
Selection	Periodic partial harvests timed based on basal area recruitment using vigour, risk, and species preference, to select trees for harvest and retention.	<ul style="list-style-type: none">• all-aged future forest• regeneration established in ≥70% residual cover (approx. ≤30% full sunlight)• dense mature forest cover maintained in perpetuity.

The selection system provides an environment ranging from partial to full-shade and a forest floor protected from temperature extremes and desiccation. Regeneration under single tree selection favours shade tolerant species while some mid-tolerant species are well suited to group selection openings. Both single tree and group harvest methods are used in Niagara

Single Tree: Individual trees are removed at regular intervals with no clear patches or edges created.

Group: The removal of a small group of trees, in an area normally less than 2 tree heights in diameter, in a single entry or progressive fashion, within a matrix of mature forest canopy.

The following illustrations show the implementation of the Single Tree Selection Silvicultural System.

(a) Pre-harvest



(b) Post-harvest

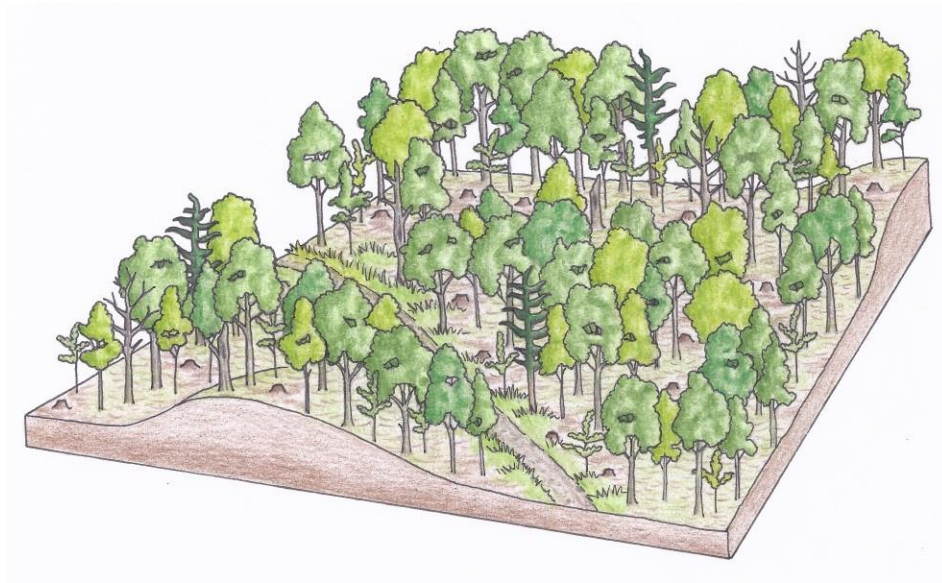


(c) Ten years later

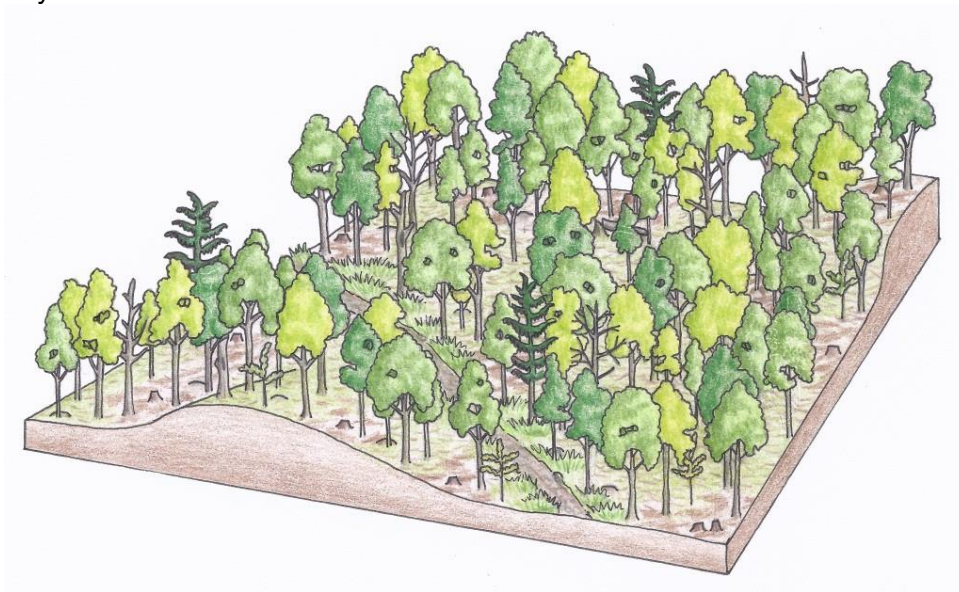


A profile of an individual selection silviculture system depicting a pre-harvest tolerant hardwood stand (a), stand conditions after a partial selection cut (b), and 10 years later with the natural regeneration of shade tolerant species under the canopy (c) (illustrations by Jodi Hall).

(a) Post-harvest



(b) Ten years later



An aerial view of an individual tree selection harvest in a tolerant hardwood stand resulting in >70% residual cover and perpetual all-aged stand. Image (a) depicts the initial harvest entry, while image (b) depicts regrowth after approximately 10 years and the harvest associated with the next cutting cycle (illustrations by Jodi Hall).

Tree Marking

The selection system requires the practice of tree marking. Tree marking involves the selection of individual trees to be harvested, while leaving trees to grow for future harvests and to provide wildlife habitat. The actual process of tree marking is recognized as being both an art and a science. Historically, many of our forests were subjected to various types of uncontrolled harvest. This included “high-grading,” a term that refers to woodlots that have had only the largest and best quality timber harvested. These unregulated disturbances, in combination with other factors, such as disease and insects, can lead to a forest with irregular stand structure and unpredictable growth. In the absence of sound forest management these forests often display a lack of regeneration of favorable species and poor spacing of smaller diameter stems.

When properly applied, tree marking can reverse many of the historical, negative impacts that unregulated cutting has created in our forests. This often requires two or more cutting cycles and adhering to the guidelines of selection and shelterwood system management.

Trees to be cut through tree marking are physically identified through the application of paint on the tree. Depending on the management system being used, trees are marked in a colour that indicates the tree is to be cut or in some cases a colour that indicates the tree should not be cut. The objective of marking is to optimize growth for all trees being retained rather than attempting to maximize growth on a few individual trees. Marking also allows the forest manager to make changes, if necessary, to selected trees before the harvest takes place.

Tree marking alone will not prevent 'high-grading'. Virtually anyone with a can of spray paint can sell their services as a tree marker. It is only when tree marking is applied in conjunction with good forestry practices that the opportunity for high grading can be minimized. Regular monitoring (site visits) by the NPCA Forester during harvest operations ensures tree marking is being followed.

To ensure the practice of tree marking is being done professionally, the Bylaw requires those marking woodlots be ‘Certified Tree Markers’. Since 1995, the MNRF has provided tree marking certification training. The training involves a one-week course covering silvicultural systems, silviculture, silvics, wildlife habitat, tree defects and tree vigour characteristics. Participants are field tested, and successful trainees are issued a certificate endorsing their skills as a certified tree marker (of conifer forests, hardwood forests or both). To maintain MNRF's certification, a tree marker must attend and successfully complete a two-day refresher course every three years.

Certified tree markers must be knowledgeable in silviculture, tree and wildlife biology, and forest economics to choose the right trees to mark for cutting. Knowledge required for proficiency as a tree marker:

- ability to identify species
- understanding of silvical characteristics of species
- familiarity with site and land features
- recognition of tree defect characteristics and indicators
- appreciation of tree quality and vigour, including use of an acceptable tree classification system
- comprehension of stocking levels and structural types
- appreciation of commercial values of species, products, and grades, and
- appreciation of wildlife habitat, biodiversity, and other ecosystem values

Forest Harvest Summary

The following table breaks down the distribution and harvest area of the 2020 GFP permits by municipality.

Municipality	Number of permits	Harvest Area		Harvest Volume	
		Hectares	Acres	FBM	Cubic Meters
Fort Erie					
Grimsby					
Lincoln					
Niagara Falls					
Niagara on the Lake					
Pelham	1	14.0	34.6	45,871	108.2
Port Colborne					
St Catharines					
Thorold	1	3.2	7.9	17,593	41.5
Wainfleet	6	33.9	83.8	186,733	440.6
Welland					
West Lincoln	7	46.0	113.7	129,199	304.9
Totals	15	97.1	240	379,396	894.7

The table excludes permit renewals. Permit renewal statistics will always be included in the year in which the original permit was issued.

Inspections

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

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

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

The result is that NPCA staff made approximately 61 site inspections on permits during 2020.

Education

In 2020 the NPCA continued to educate the public as well as groups and public agencies regarding the Bylaw.

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

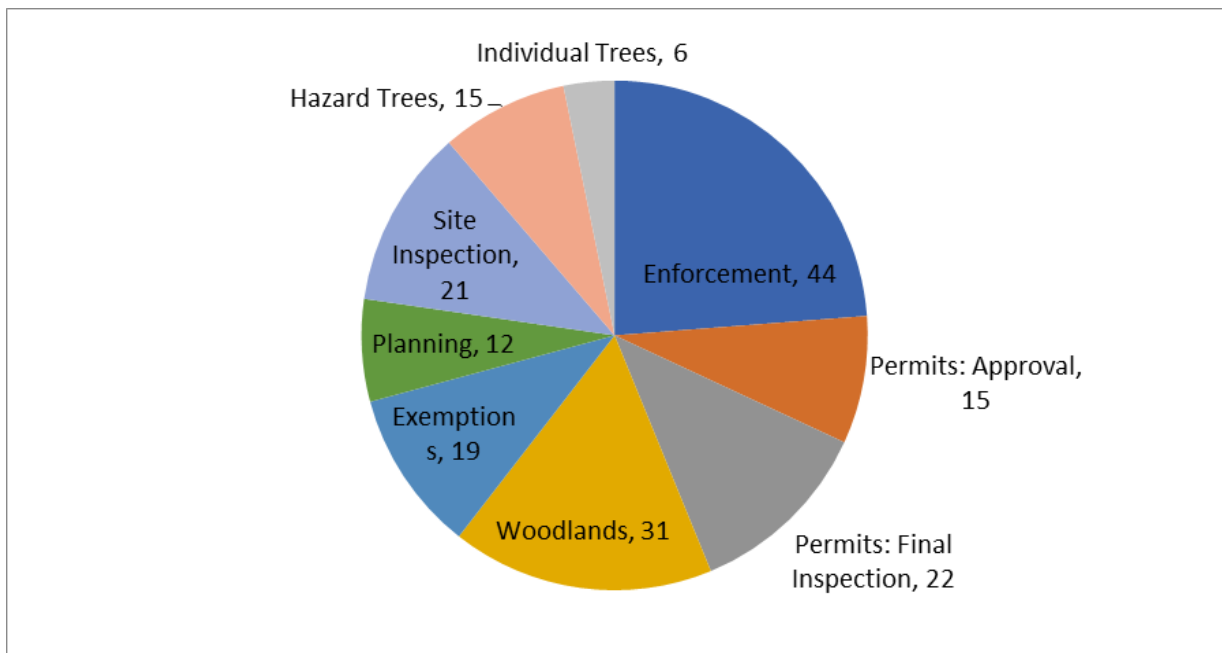
The NPCA website has a section dedicated to the Forest Bylaw with an emphasis placed on Good Forestry Practices and the latest strategies for managing woodlots for Emerald Ash Borer.

Bylaw Inquiries

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

In 2020, Bylaw staff responded to 200 bylaw inquiries. Chart 1 indicates the number of inquiries by program area. Most of the inquiries were about enforcement followed by permits and woodlands. Most of the inquiries about individual trees were related to dead and dying ash trees from local citizens. Many inquired if a permit was required for their removal. A brief explanation of program area's follows.

Chart 1: Number of Inquiries by Program Area



Program Area Descriptions

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

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

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

Permits Approval: The review and issuing of a Good Forestry Practices permit.

Permits Final Inspection: A formal documented inspection of a completed harvest operation.

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

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

Site Inspections: An informal site inspection of a permit during a harvest operation.

Planning: Land use planning inquiries

Chart 2: Number of Inquiries by Interest Group

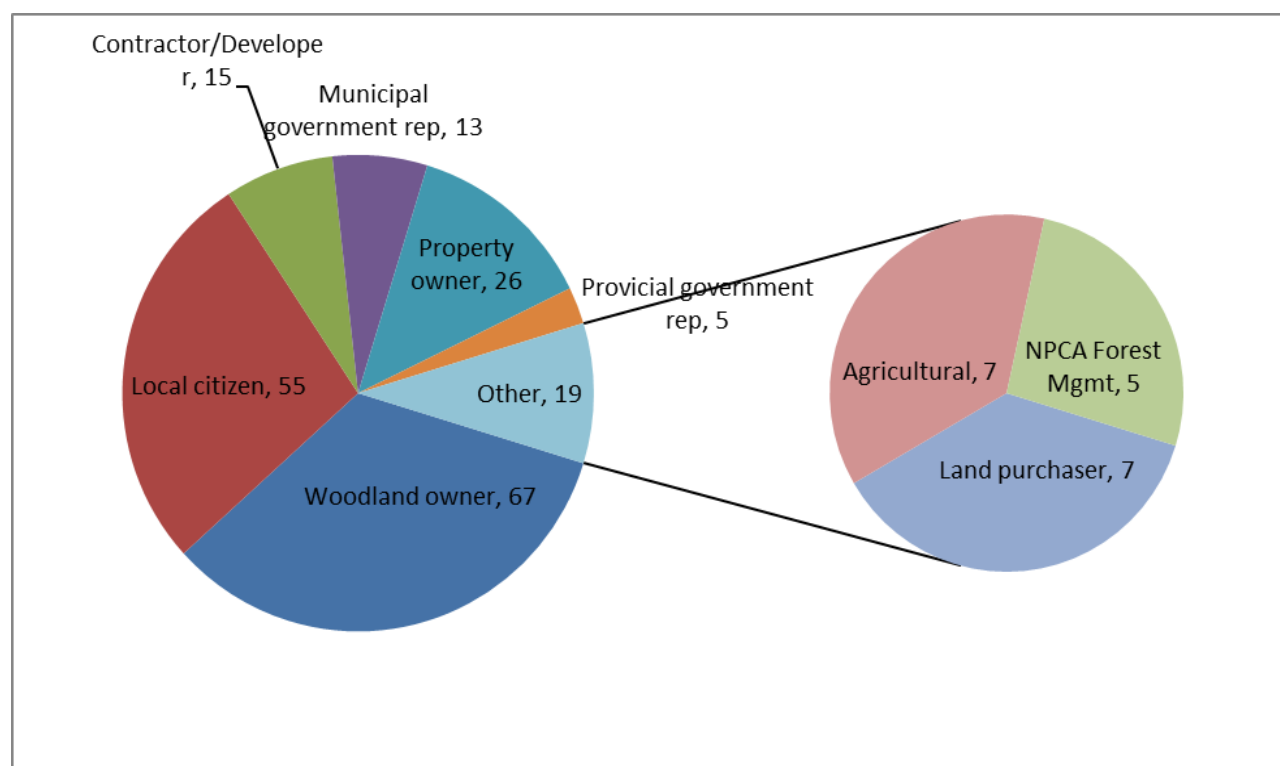


Chart 2 is a break down of the types of people that make the inquiries to the NPCA office. Most of the inquiries are from woodlot owners, followed by local citizens and contractors/developers.

Enforcement and Charges

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

There were no Bylaw violations that required charges to be laid in 2020.

In 2018, there were two Bylaw infractions in which Part III Informations were filed for properties located in Thorold and St. Catharines, and in 2019 one charge was filed for another property in Thorold. The cases for the Thorold properties are still being processed in court as of the date this report was prepared. The COVID-19 pandemic has impacted the court process leading to delays in getting cases resolved. Tree planting associated with a reforestation order for the infraction in St. Catharines was completed in June 2020.

It is the intention that the outcomes will be presented in future annual reports once the matters are finalized.

Training and Development

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

Advisory Committee

The Tree and Forest Conservation By-law Advisory Committee did not meet during 2020, as there were no issues brought up by NPCA that required additional meetings. The role of the committee is to review and provide advice or recommendations on matters of forest conservation as requested by the NPCA.

Conclusion

2020 is the twelfth and final full year in which the Bylaw was being administered by the NPCA. There were no issues with the NPCA's ability to carry out the role of administering the Bylaw for the Region. All aspects of the Bylaw, from managing Good Forestry Practice permits, enforcement and public education were conducted in a professional manner.

Woodlot management strategies to deal with Emerald Ash Borer will continue to be a main concern in 2021 especially in the southern part of the region. Current strategies will be used in woodlots that have a significant component of ash.

The Bylaw was amended in November 2020. The administration of the Bylaw returns to the Niagara Region on January 31, 2021.

Literature Cited:

OMNRF. 2015. Forest Management Guide to Silviculture in the Great Lakes-St. Lawrence and Boreal Forests of Ontario. Toronto: Queens Printer for Ontario. 394 pp.

Report To: Board of Directors

Subject: Board of Directors' 2021 Meeting Schedule

Report No: FA-06-21

Date: February 18, 2021

Recommendation:

1. **THAT** Report No. FA-06-21 RE: Board of Directors' 2021 Meeting Schedule **BE RECEIVED**.
2. **THAT** Appendices 1 and 2 to Report No. FA-06-21 RE: Board of Directors' 2021 Meeting Schedule **BE APPROVED**.
3. **THAT** the meeting schedule **BE MADE** available on the NPCA website and **PROVIDED** to the participating and local area municipalities.

Purpose:

The purpose of this report is to establish the NPCA Board of Directors' 2021 meeting schedule for internal business planning purposes and public awareness, accessibility and transparency.

Background:

Although the calendar of regular Board meetings for the year is typically approved at the Annual General Meeting (AGM), postponement of the AGM does not invalidate the need to establish an annual schedule early in the calendar year. The schedule attached as Appendix 1 maintains the practice of convening meetings at 9:30 a.m. but instead moves the meetings to the third Friday of the month. As per past practice, the December timeslot is scheduled tentatively with the option to forego a meeting and an August meeting is not planned. The proposed calendar now before the Board does however schedule a May Board meeting that abuts the Victoria Day long weekend. With the pandemic ongoing, the calendar also provides for a meeting during March Break which allows for adequate spacing around a strategic planning session to be scheduled later in March.

Discussion:

In establishing the calendar, to the extent possible, staff considered the individual calendars of Members, the meeting schedules of the local municipalities and the member municipalities with the intent to minimize any known scheduling conflicts. With twenty Directors and the schedules of municipal councillors evolving during the ongoing pandemic, finding consistent and available meeting dates has proven a challenge. The only known recurring conflict in scheduling occurs with the Niagara Regional

Housing Board of Directors meetings, however there are no NPCA Board Members on their Board. There are also occasional conflicts with individual Members' various other meeting commitments but these are limited overall.

Financial Implications:

There are no new or additional financial implications posed by adoption of the Board of Directors' 2021 Meeting Schedule as presented.

Links to Policy/Strategic Plan:

Approving and publicizing the Board of Directors' 2021 Meeting Schedule promotes the awareness of public meetings and enhances accessibility to the NPCA while aligning with the Strategic Plan Mission Statement to remain a responsive and accountable organization.

Related Reports and Appendices:

Appendix 1: NPCA Board of Directors' 2021 Meeting Schedule

Appendix 2: NPCA Board of Directors' 2021 Meeting Calendar

Authored by:

Original Signed by:

Grant Bivol,
Executive Coordinator to the C.A.O. and Board

Submitted by:

Original Signed by:

Chandra Sharma, MCIP, RPP
Chief Administrative Officer/Secretary-Treasurer

NPCA Board of Directors' 2021 Meeting Schedule

Full Authority Board Meetings (9:30 a.m.): Friday, March 19
Friday, April 16 (includes Source Protection Authority)
Friday, May 21
Friday, June 18
Friday, July 16
Friday, September 17
Friday, October 15
Friday, November 19
Friday, December 17 (optional)

There will be an additional Source Protection Authority Board meeting scheduled for the Fall, 2021 to co-incide with a regular Full Authority Board meeting.

Committee Meetings:



Finance Committee (9:30 a.m.): Wednesday, February 24
Wednesday, April 28
Wednesday, July 28
Wednesday, October 27



Governance Committee (9:30 a.m.): Thursday, March 11
Thursday, June 24
Thursday, September 23
Thursday, December 16

Public Advisory Committee (5:00 p.m.): Thursday, February 25
Thursday, April 29
Thursday, June 17
Thursday, September 30
Thursday, November 25

Strategic Planning Committee: Strategic Planning Committee meetings will be slated to occur immediately after Full Authority Board Meetings as may be required unless otherwise specified.

NPCA BOARD OF DIRECTORS' 2021 MEETING CALENDAR

 Governance Meeting (9:30 a.m.)
 Public Advisory Meeting (5:00 p.m.)

 Board Meeting/Strat Plan (9:30 a.m.)
 Finance Committee Meeting (9:30 a.m.)

	February							March							April												
	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S						
		1	2	3	4	5	6		1	2	3	4	5	6					1	2	3						
	7	8	9	10	11	12	13	7	8	9	10	11	12	13	4	5	6	7	8	9	10						
	14	15	16	17	18	19	20	14	15	16	17	18	19	20	11	12	13	14	15	16	17						
	21	22	23	24	25	26	27	21	22	23	24	25	26	27	18	19	20	21	22	23	24						
28							28	29	30	31				25	26	27	28	29	30								
May							June							July							August						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
						1			1	2	3	4	5					1	2	3	1	2	3	4	5	6	7
2	3	4	5	6	7	8	6	7	8	9	10	11	12	4	5	6	7	8	9	10	8	9	10	11	12	13	14
9	10	11	12	13	14	15	13	14	15	16	17	18	19	11	12	13	14	15	16	17	15	16	17	18	19	20	21
16	17	18	19	20	21	22	20	21	22	23	24	25	26	18	19	20	21	22	23	24	22	23	24	25	26	27	28
23	24	25	26	27	28	29	27	28	29	30				25	26	27	28	29	30	31	29	30	31				
30	31																										
September							October							November							December						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
S	M					S						1	2		1	2	3	4	5	6				1	2	3	4
			1	2	3	4	3	4	5	6	7	8	9								5	6	7	8	9	10	11
5	6	7	8	9	10	11	10	11	12	13	14	15	16	14	15	16	17	18	19	20	12	13	14	15	16	17	18
12	13	14	15	16	17	18	17	18	19	20	21	22	23	21	22	23	24	25	26	27	19	20	21	22	23	24	25
19	20	21	22	23	24	25	24	25	26	27	28	29	30	28	29	30					26	27	28	29	30	31	
26	27	28	29	30			31																				

Report To: Board of Directors

Subject: Grimsby and Lincoln Floodplain Mapping Update and Formal Adoption

Report No: FA-07-21

Date: February 18, 2021

Recommendation:

WHEREAS the Grimsby and Lincoln Floodplain Mapping Update Report:

- a. Provides an updated and more accurate delineation of the floodplain than the floodplain mapping studies undertaken more than 25 years ago; and
- b. Identifies broad and shallow floodplain 'Spill Areas' that allow landowners within these zones far greater opportunity to expand their residential, commercial, and industrial structures and operations than they were afforded by the previous floodplain mapping; and
- c. Provides floodproofing recommendations that can be undertaken to reduce the risk of flooding; and
- d. Has undergone public consultation; and
- e. The NPCA Watershed Floodplain Sub-Committee (WFSC) has reviewed the study's methodology, results, and Public Engagement campaign and has recommended that the NPCA Board of Directors approve the Grimsby and Lincoln Floodplain Mapping Update report and associated flood maps, as such;

NOW THEREFORE, BE IT RESOLVED:

- 1. **THAT** Report No. FA-07-21 RE: 'Grimsby and Lincoln Floodplain Mapping Update and Formal Adoption the NPCA Board of Directors **BE RECEIVED**.
- 2. **THAT** Grimsby and Lincoln Floodplain Mapping Update report and the associated flood maps as presented **BE APPROVED** for use in the administration of the NPCA's Ontario Regulation 155/06, a Regulation intended to reduce the negative impacts of natural hazards including flooding.

3. **AND THAT** the Board **DIRECTS** staff to circulate the approved finalized report to the Towns of Grimsby and Lincoln, the Region of Niagara and the Ministry of Natural Resources and Forestry (MNR) for their information and use.

Purpose:

The purpose of this report is to seek the NPCA Board of Directors' approval to use the Grimsby and Lincoln Floodplain Mapping Update Report and associated flood maps to administer the NPCA's Ontario Regulation 155/06.

It is noted that the requirement for the Board to approve all new major changes to hazard maps was reiterated at the May 21, 2020 Board Meeting when the Board adopted the 'Final Draft Client Service Standards for Plan and Permit Review' (Report No. FA-17-20 and Resolution No. FA-64-20).

The report also provides a summary of the final round of this project's Public Engagement Sessions.

Background:

The objective of the Niagara Peninsula Conservation Authority (NPCA) is to "establish and undertake, in the area over which it has jurisdiction, programs designed to further the conservation, restoration, development and management of its natural resources". In order to fulfill this mandate, one of the responsibilities of the NPCA is to advocate and implement programs that contribute to keeping the public safe from flooding, erosion, and other natural hazards.

In 1989, floodplain mapping was generated for Prudhomme's Creek, Bartlett Creek, and Beamsville/Konkle Creek in the Town of Lincoln, and for portions of Lake Ontario Tributaries #31, 32, 44 and 44a in the Town of Grimsby. Approximately 139 buildings were identified as being located within the 100-year flood hazard zone.

In the ensuing 28 years, the Towns of Grimsby and Lincoln have experienced significant growth. In addition to updating this existing floodplain mapping, the NPCA proposed to generate new floodplain mapping on two additional watercourses in the Town of Grimsby which face development pressures: Lake Ontario Tributaries #29 and #39.

The NPCA was successful in obtaining \$60,000 in funding from the federal National Disaster Mitigation Program in order to undertake this project. Through a competitive procurement process, NPCA retained the engineering firm Aquafor Beech Limited to complete this work. Aquafor Beech has extensive experience in undertaking floodplain mapping projects all through the Greater Golden Horseshoe Area including Niagara.

In January 2020, Aquafor Beech completed the final Draft of the Grimsby and Lincoln Floodplain Mapping Update Report. The following sections summarize the study results, the final engagement process with the public, and provide a summary of the public comments received. The mapping is provided in Figures 1 to 4 at the end of the Appendices.

Discussion:

1.0 Study Results

Of the 9 watercourses analyzed, the calculated peak flow rates in 7 of the systems show general conformance between this study and previous floodplain mapping and master drainage studies. Only 2 watercourses show a disparity in peak flows between the different reports.

The NPCA notes that despite the variances in the peak flow rates of all 9 watercourses, the NPCA's updated 100-year floodplain mapping typically conforms with floodplain mapping undertaken previously. In addition, the NPCA's updated floodplain mapping has been able to more precisely understand that in some areas the Regulatory floodplain transitions into a very shallow and wide Spill Zone. As Spill Zones policies are administered differently than floodplains, landowners within these Spill Zones now have a far greater opportunity to expand their residential, commercial, and industrial structures and operations than they were afforded by the previous floodplain mapping.

The Grimsby and Lincoln Floodplain Mapping Update Report also contains practical floodproofing recommendations (and associated costs for budgeting purposes) for the municipalities and private landowners to undertake in to reduce the extent and frequency of roadway and structural flooding.

2.0 About the Final Round of Public Consultation

The engagement program was designed to ensure that property owners know about any potential impact to their property. In addition, it is important that input from property owners and the public is incorporated into the technical process before draft floodplain maps are finalized.

2.1 *Public Information Sessions*

The original Public Information Sessions scheduled for March 31, 2020 at the Peach King Center in Grimsby and April 2, 2020 at the Fleming Center in Lincoln were cancelled due to Covid-19. At their September 24, 2020 meeting, the NPCA's Watershed Floodplain Sub-Committee approved the format of the virtual public information sessions and the associated media campaign.

Two virtual public information sessions were held. The first took place on December 15, 2020 and focused on the watercourses in Lincoln. The second information session was held on December 16, 2020 and dealt with the floodplain in Grimsby.

The intent of the meetings was to present the draft floodplain maps to the public and provide a chance for the public to ask questions of the project team. The meetings were held from 6:00 p.m. to 8:00 p.m. and were professionally facilitated by Mr. Glenn Pothier of the firm GLPi.

The format of the Public Information Sessions was as follows:

- Introductions, Meeting Format, Meeting Goals – GLPi
- Floodplain Mapping presentation (a brief description of floodplain mapping, this study's methodology and results) – Aquafor Beech Engineering
- Differences between old and new floodplain mapping – NPCA
- NPCA floodplain policy presentation – NPCA
- Open Question & Answer – GLPi

A total of **57 people** attended these live events. Both Public Information Sessions were entirely recorded and posted on the NPCA project webpage for the public to view.

3.0 Media Campaign

The NPCA Communications staff created a robust social, digital, and print marketing campaign to achieve the following goals:

- a) Increase awareness of the NPCA's Grimsby and Lincoln Floodplain Mapping Update project;
- b) Increase attendance at both Public Information Sessions;
- c) Obtain public feedback on the Grimsby and Lincoln Floodplain Mapping Update project.

3.1 *Print Advertising*

Print advertisements were scheduled and launched in three different media outlets to reach residents who may not be present on-line. Each advertisement included information about the Public Information Sessions. Please refer to Appendix A for a copy of the advertisement. The advertisements were scheduled as follows:

- Niagara This Week – December 3 and December 10, 2020
- Niagara Now – December 2 and December 9, 2020
- St. Catharines Standard – December 3, 2020

3.2 *Direct Mail via Canada Post*

On December 1, 2020, **7,038 homes and businesses** within 300 metres of the 9 creeks being studied were mailed a postcard describing the project, the virtual location and times of the Public Information Session, and how to provide feedback. Please see Appendix B and C for a copy of the postcards.

3.3 *NPCA Corporate Website*

The NPCA website contained a link to the Grimsby and Lincoln Floodplain Mapping Update Project webpage. The project webpage contained the draft floodplain mapping report and associated flood maps. The project webpage also contained an area for the public to provide comments which would be directed to a central repository for the NPCA staff to review and provide response. Comments were accepted from the public up until January 15, 2021.

The analytics from the project webpage indicate that:

- There was a total of **1,200 visits** to the project web page;
- The 'Floodplain Mapping Update – Draft Report' and maps were downloaded **261 times**;
- **916 people** viewed either one of the recorded Public Information Sessions or used the 'Is My House in the Floodplain?' mapping tool.

3.4 *Social Media Posts*

NPCA Communications staff utilized regularly scheduled social media posts, event listings, and targeted ‘boosting’ of posts to inform the public of the project, the associated project web page and the Public Information Sessions.

3.5 *Grimsby and Lincoln Municipal Resources*

The time and dates of the virtual Public Information Sessions (including a link to the project web page) were posted on both the Town of Grimsby and the Town of Lincoln’s municipal websites on December 4, 2020. In addition, through the municipal Clerks, a copy of the project postcards was sent to senior municipal staff and all municipal Councillors on December 4, 2020.

4.0 What We Heard

A total of **57 questions** were asked at either the Public Information Sessions by email to the Project Manager or posted to the Project Webpage. People generally understood the need to update floodplain mapping that is more than 25 years old. The questions contained several common themes. These can be summarized as follows:

- 1) What are the differences between the old and the new flood lines?
 - a. Answer – See Section 1.0, Study Results (above).
- 2) If I am in the floodplain, how will this affect my property values and insurance rates?
 - a. Answer – The value of a property is influenced by many factors. Recently the housing market has experienced a rapid rise in value across all sectors. It appears that the fact that a house is located in a floodplain has had little impact on the sale price.
 - b. Answer – With respect to insurance rates, as there are many contributing factors regarding the premiums paid on each policy, the NPCA can only advise that an insurance agent be consulted.
- 3) Who is responsible for maintaining the creeks and cleaning them out?
 - a. Answer – The property owner is responsible for maintaining a watercourse. In some cases, the municipality owns the property that the creeks flow through, in other cases the lands are privately owned. It is always advisable that the NPCA be contacted prior to undertaking any maintenance works to determine if approval is required.
 - b. Answer – It should be noted that the NPCA cannot compel a landowner to undertake maintenance works on a watercourse.
- 4) When will the Town upgrade the culverts as recommended in the study?
 - a. Answer – The culvert upgrades recommended in the study are intended to provide guidance to municipal and Regional staff with respect to preliminary culvert sizing (and associated budget costs) for use when the existing culvert is anticipated to be replaced. The timing and reason to replace a culvert is the sole responsibility of the road owner (be it the municipality or the Region).
- 5) Is my house or yard in the new floodplain?
 - a. Answer – On the NPCA’s project webpage is an interactive map that a landowner can navigate to see if any portion of their property is in the new floodplain.

5.0 Presentation to the NPCA's Watershed Floodplain Sub-Committee

At the Watershed Floodplain Sub-Committee (WFSC) meeting on January 28, 2021, NPCA staff presented a summary of the study results, the Public Engagement Sessions, the associated media campaign and the nature of the public comments. Members of the WFSC used this opportunity to discuss the project and ask questions.

It is noted that this study's methodology, results, and a description of the differences between the updated study and previous studies had already been presented to the Watershed Floodplain Sub-Committee at their November 26, 2020 meeting.

After the question period, the WFSC passed a motion recommending that the NPCA Board adopt the Grimsby and Lincoln Floodplain Mapping Update Study for use in administering the NPCA's regulations and policies.

Financial Implications:

The NPCA was successful in obtaining \$60,000 in funding for the Grimsby and Lincoln Floodplain Mapping Update project through the federal National Disaster Mitigation Program. The balance of the funding (\$60,000) was authorized by the NPCA Board to be taken from the General Capital Reserve Funds on November 15, 2017 (Report No. FA-108-17 and Resolution No. FA-210-17).

Staff note that should the Grimsby and Lincoln Floodplain Mapping Project not be approved for use by the NPCA Board of Directors, the NPCA would then be required to return the \$60,000 funding back to the National Disaster Mitigation Program.

Related Reports and Appendices:

- 1) Appendix A – Newspaper Advertisement
- 2) Appendix B – Lincoln Project Postcard
- 3) Appendix C – Grimsby Project Postcard
- 4) Figure 1 – Proposed Floodplain Mapping - Prudhomme's Creek
- 5) Figure 2 – Proposed Floodplain Mapping - Beamsville/Konkle Creek and Bartlett Creek
- 6) Figure 3 – Proposed Floodplain Mapping - Lake Ontario 29, 31, and 32
- 7) Figure 4 – Proposed Floodplain Mapping - Lake Ontario 39, 44, and 44A

Authored by:

Original Signed by:

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Senior Manager, Water Resources

Reviewed by:

Original Signed by:

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

Submitted by:

Original Signed by:

Chandra Sharma, MCIP, RPP
Chief Administrative Officer/Secretary-Treasurer

Appendix A – Newspaper Advertisement

Grimsby & Lincoln Creeks UPDATED FLOODPLAIN MAPPING INFO SESSION

The NPCA is in the process of updating floodplain mapping along six creeks in the Town of Grimsby, and three creeks in the Town of Lincoln. The floodplain was last mapped more than 25 years ago.

HOW TO PROVIDE FEEDBACK:


1. Visit getinvolved.npca.ca to view the draft report, floodplain maps and to submit feedback online
2. Written comment can be sent to 250 Thorold Road West, Welland, L3C 3W2
3. Comments can be emailed to smiller@npca.ca
4. Attend the virtual information session

VIRTUAL SESSIONS


LINCOLN
Tuesday
December 15

GRIMSBY
Wednesday
December 16

Please visit getinvolved.npca.ca for instructions on how to join the meeting. The virtual meeting will run from 6p.m. to 8p.m.



For further discussion:
Steve Miller, P.Eng.,
Senior Manager of Water Resources
smiller@npca.ca
905-788-3135 x 231



250 Thorold Road West; 3rd Floor, Welland, ON L3C 3W2


www.npca.ca
Phone: 905.788.3135 | Fax: 905.788.1121

Appendix B – Project Postcard - Lincoln

Beamsville Creek, Bartlett Creek & Prudhommes Creek UPDATED FLOODPLAIN MAPPING INFO SESSION

You are receiving this notice because you are a property owner
in the vicinity of these creeks.

We are looking for your feedback! More information and details on the back.




The NPCA is in the process of updating floodplain mapping along Beamsville Creek, Bartlett Creek and Prudhommes Creek, as the floodplain was last mapped more than 25 years ago.

Your feedback is appreciated.

- Draft Report and associated maps can be found at GetInvolved.NPCA.ca
- Attend the virtual information session to learn about the process and what it means for your property
- Provide feedback as per details on the back of this postcard

As per Ontario Regulation 155/04, the updated mapped flood lines may or may not impact what you can do on your property.

 www.npca.ca | 905.788.3135

rd.pdf - Adobe Acrobat Pro DC

Lincoln - Floodplain... x

2 / 2 130%

PLEASE SHARE WITH FRIENDS AND NEIGHBOURS.

WHY FLOODPLAIN MAPPING?

Living near a creek has many advantages, but it also exposes people to certain risks. One of the more serious risks is flooding. The impact of floods varies widely, from a minor inconvenience of a wet yard to the potential loss of life.

Managing flood risk starts by identifying the areas of land next to creeks and rivers that are prone to flooding.

The NPCA looks forward to receiving your feedback and working with you as we move through this important project.

HOW TO PROVIDE FEEDBACK:

1. Visit getinvolved.npca.ca to view the draft report, floodplain maps and to submit feedback online
2. Written comment can be sent to 250 Thorold Road West, Welland, L3C 3W2
3. Comments can be emailed to smiller@npca.ca
4. Attend the virtual information session

VIRTUAL INFORMATION SESSION:

Tuesday, December 15, 2020
Please visit getinvolved.npca.ca for instructions on how to join the meeting.

This meeting will provide information about the project and allow property owners and interested residents a chance to speak with the project team. The meeting will run from 6 p.m. to 8 p.m.

For further discussion:

Steve Miller, P.Eng.,
Senior Manager of Water Resources
smiller@npca.ca
905-788-3135 x 231

 www.npca.ca
Phone: 905.788.3135 | Fax: 905.788.1121
250 Thorold Road West; 3rd Floor, Welland, ON L3C 3W2


Appendix C – Project Postcard – Grimsby

Town of Grimsby Creeks

FLOODPLAIN MAPPING INFO SESSION

You are receiving this notice because you are a property owner in the vicinity of a creek.

We are looking for your feedback! More information and details on the back.




The NPCA is in the process of updating floodplain mapping along six creeks in the town of Grimsby, as the floodplain was last mapped more than 25 years ago.

Your feedback is appreciated.

- Draft Report and associated maps can be found at GetInvolved.NPCA.ca
- Attend the virtual information session to learn about the process and what it means for your property
- Provide feedback as per details on the back of this postcard

As per Ontario Regulation 155/06, the updated mapped flood lines may or may not impact what you can do on your property.

 **NIAGARA PENINSULA CONSERVATION AUTHORITY**

www.npca.ca | 905.788.3135

PLEASE SHARE WITH FRIENDS AND NEIGHBOURS.

WHY FLOODPLAIN MAPPING?

Living near a creek has many advantages, but it also exposes people to certain risks. One of the more serious risks is flooding. The impact of floods varies widely, from a minor inconvenience of a wet yard to the potential loss of life.

Managing flood risk starts by identifying the areas of land next to creeks and rivers that are prone to flooding.

The NPCA looks forward to receiving your feedback and working with you as we move through this important project.

HOW TO PROVIDE FEEDBACK:

1. Visit getinvolved.npca.ca to view the draft report, floodplain maps and to submit feedback online
2. Written comment can be sent to 250 Thorold Road West, Welland, L3C 3W2
3. Comments can be emailed to smiller@npca.ca
4. Attend the virtual information session


VIRTUAL INFORMATION SESSION:

Wednesday, December 16, 2020
Please visit getinvolved.npca.ca for instructions on how to join the meeting.

This meeting will provide information about the project and allow property owners and interested residents a chance to speak with the project team. The meeting will run from 6 p.m. to 8 p.m.

For further discussion:

Steve Miller, P.Eng.,
Senior Manager of Water Resources
smiller@npca.ca
905-788-3135 x 231

 **NIAGARA PENINSULA CONSERVATION AUTHORITY**

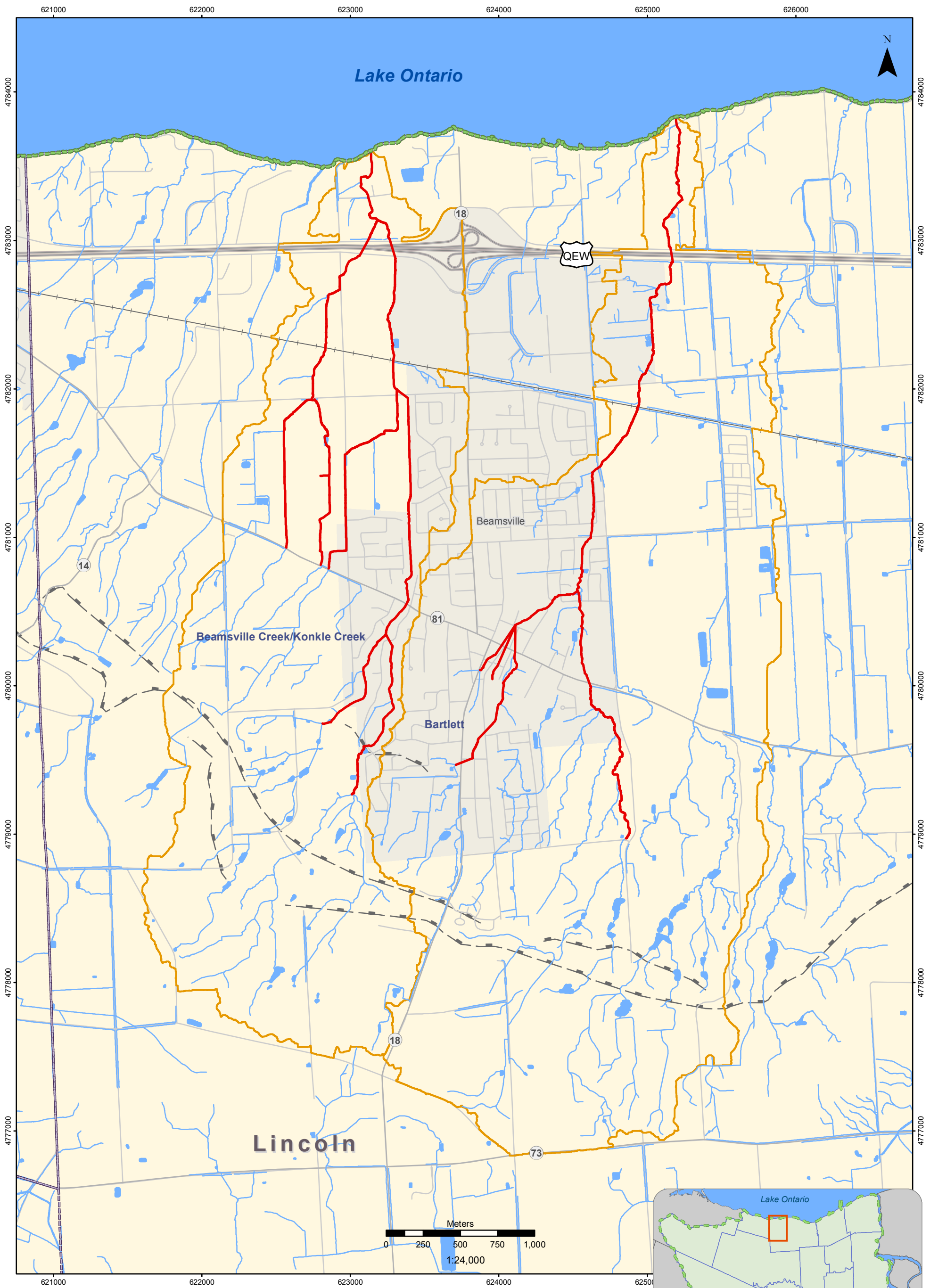
www.npca.ca
Phone: 905.788.3135 | Fax: 905.788.1121
250 Thorold Road West; 3rd Floor, Welland, ON L3C 3W2

Figure 1 - Proposed Floodplain Mapping - Prudhommes Creek

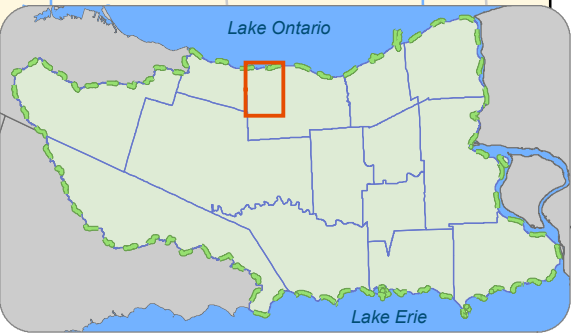


Figure 2 - Proposed Floodplain Mapping - Beamsville-Konkle Creek and Bartlett Creek

Lake Ontario Tributaries Floodplain Mapping Update in the Towns of Grimsby & Lincoln
Proposed Floodplain Mapping - Beamsville/Konkle & Bartlett Creeks



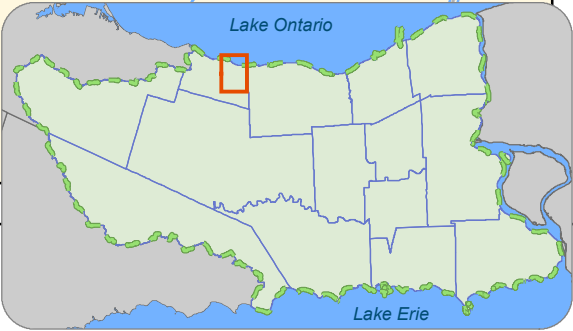
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|------------------|---------------------|-------------------------------|
| — Major Highways | — Escarpment | ▭ Municipal Boundaries |
| — Regional Roads | — Watercourses | ▭ Urban Area |
| — Local Roads | — Waterbodies | ▭ Subwatersheds |
| — Rail Line | ▭ NPCA Jurisdiction | — Proposed Floodplain Mapping |



All Frames: North American Datum 1983, Universal Transverse Mercator 6° Projection, Zone 17N, Central Meridian 81° West. Produced by the Niagara Peninsula Conservation Authority with data supplied under licence by members of the Ontario Geospatial Data Exchange, 2016.

Figure 3 - Proposed Floodplain Mapping - Lake Ontario 29, 31, and 32

Lake Ontario Tributaries Floodplain Mapping Update in the Towns of Grimsby & Lincoln
Proposed Floodplain Mapping - Lake Ontario 29, 31 & 32



- | | | |
|----------------|-------------------|-----------------------------|
| Major Highways | Escarpment | Urban Area |
| Regional Roads | Watercourses | Subwatersheds |
| Local Roads | Waterbodies | Proposed Floodplain Mapping |
| Rail Line | NPCA Jurisdiction | |

All Frames: North American Datum 1983, Universal Transverse Mercator 6° Projection, Zone 17N, Central Meridian 81° West. Produced by the Niagara Peninsula Conservation Authority with data supplied under licence by members of the Ontario Geospatial Data Exchange, 2016.

Figure 4 - Proposed Floodplain Mapping - Lake Ontario 39, 44, and 44A



Report To: Board of Directors

Subject: Richardson Creek Floodplain Mapping and Priority Study Formal Adoption

Report No: FA-08-21

Date: February 18, 2021

Recommendation:

WHEREAS the Richardson Creek Floodplain Mapping and Priority Study, undertaken by the City of St. Catharines:

- a. Provides an updated delineation of the floodplain against the previous study undertaken 15 years prior; and
- b. Provides floodproofing recommendations that can be undertaken to reduce the risk of flooding; and
- c. Has been presented to the public at 3 Public Information Centres; and
- d. The City of St. Catharines has already adopted the study and is utilizing it to direct road operations and maintenance and to plan for future Capital projects; and
- e. The City of St. Catharines has approved the use of the report, models, and associated flood maps by the NPCA; and
- f. The NPCA Watershed Floodplain Sub-Committee has reviewed the study's methodology, results, and Public Information campaign and has recommended that the NPCA Board of Directors approve the Richardson Creek Floodplain Mapping Update and Priority Study' report and associated flood maps as such;

NOW THEREFORE, BE IT RESOLVED:

1. **THAT** Report No. FA-08-21 RE: Richardson Creek Floodplain Mapping and Priority Study Formal Adoption **BE RECEIVED**.
2. **THAT** the Richardson Creek Floodplain Mapping and Priority Study and the associated flood maps presented within said report **BE APPROVED** the Richardson Creek Floodplain Mapping and Priority Study report and associated flood maps to be used in the administration of the

NPCA's Ontario Regulation 155/06, and to ensure consistency between the City of St. Catharines and NPCA's floodplain mapping.

3. **THAT** the Board **DIRECTS** staff to circulate the approved finalized report to the City of St. Catharines, the Region of Niagara and the Ministry of Natural Resources and Forestry (MNRF) for their information and use.

Purpose:

The purpose of this report is to provide a summary of the Richardson Creek Floodplain Mapping and Priority Study report (undertaken by the City of St. Catharines) and to seek the NPCA Board of Director's approval to use the Richardson Creek Floodplain Mapping and Priority Study report and associated flood maps to administer the NPCA's Ontario Regulation 155/06, and to ensure consistency between the City of St. Catharines and the NPCA's floodplain mapping.

It is noted that the requirement for the Board to approve all new major changes to hazard maps was reiterated at the May 21, 2020 Board Meeting when the Board adopted the 'Final Draft Client Service Standards for Plan and Permit Review' (Report No. FA-17-20 and Resolution No. FA-64-20).

Background:

In 2004, the NPCA mapped the Richardson Creek 100-year floodplain in the City of St. Catharines. The modelling results identified undersized road culverts in the Richardson Creek watershed and recommended that the municipality further examine the hydraulic capacity of these culverts when these culverts were planned to be replaced. The 2004 Richardson Creek floodplain maps were also used to regulate development within the 100-year floodplain, pursuant to the NPCA's Ontario Regulation 155/06 and the Conservation Authority's Act.

On July 28, 2014, a severe thunderstorm occurred resulting in significant flooding within the Richardson Creek watershed. This storm was very localized and intense. Thirteen properties reported damage from flooding.

The rain gauge at the St. Catharines Pelham Road Fire Hall recorded 70mm of rainfall and the Niagara Region rain gauge in Vineland recorded 96mm of rainfall over a period of 16 hours. During the most intense period of the storm, approximately 50mm of rain fell within a 2-hour period. Analysis of weather radar indicates that these rain gauges did not record the most intense portions of the storm. Lands in west St. Catharines, the eastern portion of Lincoln, and the northern portion of Pelham were hardest hit.

Due to the lack of rain gauges in the area that experienced the most intense portion of the storm, it is difficult to accurately predict the magnitude of the storm event. However, based on analysis of the weather radar it appears that some areas within the thunderstorm cell experienced a storm greater than the 100-year storm event.

As a result of this 2014 storm, the City undertook to study the flooding, erosion, and drainage issues within the Richardson Creek watershed. The City was successful in obtaining a grant through the federal National Disaster Mitigation Program to help fund this project. The City retained the engineering firm Aquafor Beech Limited to complete this work. Aquafor Beech has extensive experience in undertaking floodplain mapping projects all through the Greater Golden Horseshoe

Area including Niagara. A Technical Steering Committee was also formed on which NPCA staff participated.

The goals of this study were to:

- 1) Confirm the accuracy of the existing floodplain mapping;
- 2) Identify culverts that are undersized or structurally deficient and prioritize maintenance works;
- 3) Identify erosion issues within Richardson Creek and recommend mitigation measures;
- 4) Identify drainage issues within Richardson Creek and recommend mitigation measures; and
- 5) Identify means to mitigate flooding and prioritize these flood remediation projects.

The City introduced this study in 2018 and consulted with the public at three separate Public Information Centers. The Technical Steering Committee (including NPCA staff) reviewed and approved the study which was then completed in November 2019. The City of St. Catharines has since adopted the study and is utilizing it to direct road operations and maintenance and to plan for future Capital projects.

In addition, the City has since shared the finalized floodplain maps, report and associated computer models with the NPCA. The City has no objection to allowing the NPCA to adopt the updated floodplain maps to administer the NPCA's policies and regulations.

Discussion:

1.0 Study Results

The Richardson Creek peak flows calculated in the NPCA 2004 study and the 2019 Aquafor Beech study were very consistent based on a 100-year design storm (of a 12-hour duration) which produces 95mm of rain.

There are many design storms that can be used for the purposes of floodplain mapping. The differences are primarily based on size of the watershed, land use (rural vs. urban) and how the rainfall is distributed over the duration of the storm event.

Based on the damage experienced in the July 2014 storm, the City preferred to utilize a design storm that was a little more conservative than the one utilized in the NPCA's 2004 floodplain mapping study. As such, the City chose to carry out this floodplain mapping study using a 100-year design storm of a 24-hour duration which produced 114mm of rain over the life of the storm event.

Despite the utilization of a different design storm, the updated 2019 flood lines generally conformed with the NPCA's 2004 floodplain mapping study. In those areas that differed, the updated floodplain was calculated to increase by average 0.4m (15 inches). However, these increases were generally confined to the watercourse branches that flowed through defined river valleys that did not contain houses or structures.

2.0 Public Consultation

2.1 *Public Information Center 1*

The first Public Information Center was held on Feb. 22, 2018. A total of **51 people attended** and the following information was presented:

- a) Study background and objectives;
- b) Explanation of floodplain mapping;
- c) Study outline;
- d) Next steps.

2.2 *Public Information Center 2*

The second Public Information Center was held on July 23, 2019. A total of **22 people attended** and the following information was presented:

- a) Preliminary floodplain mapping;
- b) Culvert assessments;
- c) Next steps.

2.3 *Public Information Center 3*

The third Public Information Center was held on November 12, 2019. A total of **17 people attended** and the following information was presented:

- a) Draft floodplain mapping;
- b) Culvert assessments;
- c) Watercourse erosion assessment;
- d) Flood hazard assessment;
- e) Proposed remedial works for identified flood hazards, erosion hazards, and culvert deficiencies.

After considering the comments received from the public, the Richardson Creek Floodplain Mapping Study was finalized. The Technical Steering Committee (including NPCA staff) reviewed and approved the study which was then completed in November 2019.

The City of St. Catharines has since adopted the study and is utilizing it to direct road operations, maintenance and to plan for future Capital projects.

In addition, the City has since shared the finalized floodplain maps, report and associated computer models with the NPCA. The City has no objection to allowing the NPCA to adopt the updated floodplain maps to administer the NPCA's policies and regulations.

3.0 Presentation to the NPCA's Watershed Floodplain Sub-Committee

At the Watershed Floodplain Sub-Committee (WFSC) meeting on January 28, 2021, representatives from Aquafor Beech engineering presented the methodology, study results, and a summary of the Public Information Centers (please see Appendix 1 for a copy of the presentation). Members of the WFSC used this opportunity to ask questions about the technical aspects of the study, the study results, and the proposed flood mitigation measures. After the question period, the WFSC passed a motion recommending that the NPCA Board adopt the Richardson Creek Floodplain Mapping Study for use in administering the NPCA's regulations and policies.

Based on the information provided and the endorsement of the WFSC, NPCA staff agree with the recommendation to approve the Richardson Creek Floodplain Mapping and Priority Study Formal Adoption report and subsequent usage of that information to update NPCA flood lines in this area.

Financial Implications:

There are no additional financial implications assigned to the NPCA.

Related Reports and Appendices:

Appendix 1 – Richardson Creek Floodplain Mapping and Priority Study presentation to the Watershed Floodplain Sub-Committee

Authored by:

Original Signed by:

Steve Miller, P.Eng.
Senior Manager, Water Resources

Reviewed by:

Original Signed by:

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

Submitted by:

Original Signed By:

Chandra Sharma, MCIP, RPP
Chief Administrative Officer/Secretary-Treasurer

RICHARDSON CREEK FLOODPLAIN MAPPING AND PRIORITY STUDY CITY OF ST. CATHARINES

JANUARY 28, 2021



Background

Richardson Creek Watershed Floodplain Mapping

- ▶ Existing floodplain for Richardson Creek was defined by the Niagara Peninsula Conservation Authority (NPCA) in 2004. At this time, NPCA developed hydrologic and hydraulic models to determine expected flows from the 100-year storm and extents of the floodplain respectively.
- ▶ The modelling results were used to identify 9 undersized culverts in the Richardson Creek subwatershed. The results have also been used to regulate development within the 100-year floodplain, as mandated by the Conservation Authority's Act.



Background

July 28, 2014 Storm

- ▶ Heavy rainfall between the evening of July 27, 2014 and morning of July 28, 2014 caused significant flooding. Lands in west St. Catharines, east Lincoln, and north Pelham were hardest hit.
- ▶ Summary of Storm
 - ▶ 70 mm of rain
 - ▶ Road flooding and closures
 - ▶ Train traffic closures
 - ▶ Damage to roads and shoulders
 - ▶ 13 properties reported flooding within Richardson Creek subwatershed

Updates to the Richardson Creek Floodlines

- ▶ In light of the 2014 storm, the City undertook an update to the Richardson Creek floodplain study. Study objectives included:
 - ▶ Identify culverts that are undersized or structurally deficient
 - ▶ Prioritize flood remediation projects
 - ▶ Protect public safety and infrastructure



Study Outline

Floodplain Mapping

- Update land use
- Update culverts and bridges
- Rerun hydrologic and hydraulic models
- Use model results to define floodplain



Watercourse Crossing Inspections

- Summarize findings of structural assessments of culverts
- Inspect culverts that have not yet been documented
- Identify culvert works required



Capacity of Culvert

- Compare modeled culvert capacity to Ontario Ministry of Transportation (MTO) design standards
- Identify undersized culverts



Flood Sites

- Complete benefit-cost analysis for flood remediation works
- Prioritize flood remediation works



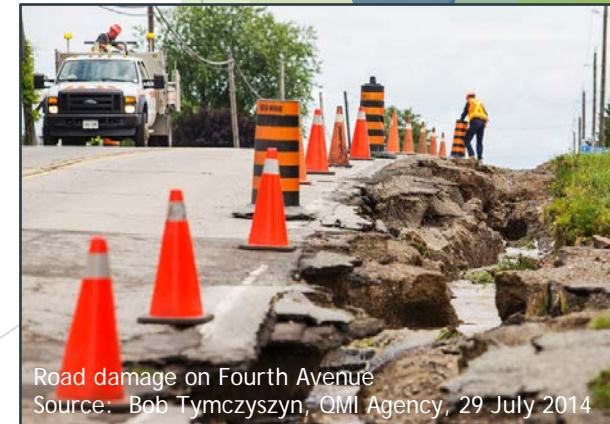
Municipal Drainage

- Review recommendations from previous reports
- Provide recommendations to alleviate flooding



Field Assessments

- Walk extents of Richardson Creek
- Identify erosion issues



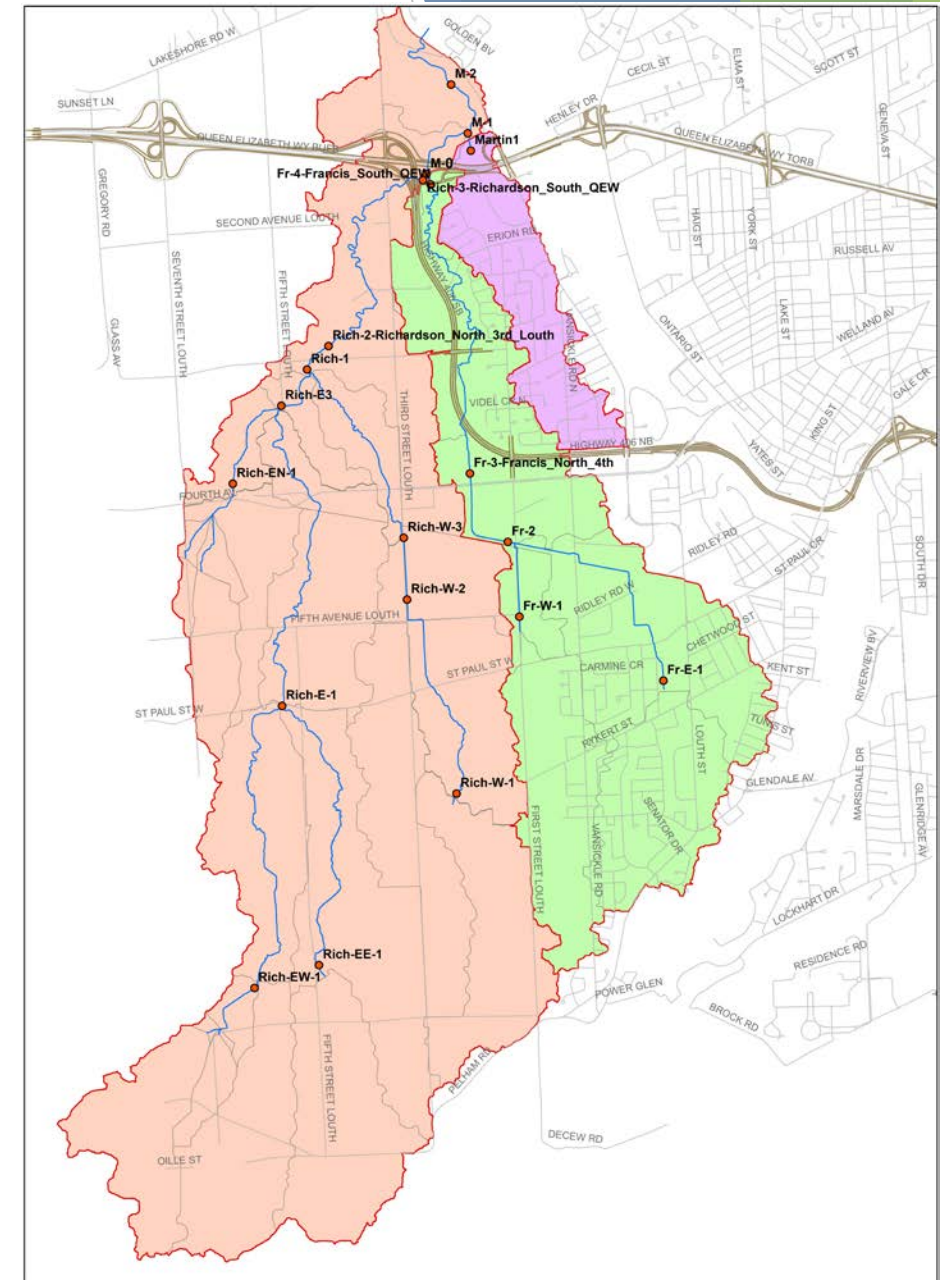
Hydrology & Hydraulics

► Objectives:

- Define flows through Richardson Creek and Francis Creek subwatersheds
- Quantify flood hazard throughout Richardson Creek subwatershed

► Key Findings:

- Flow rates were determined at key locations along the creek
- 100 Year floodlines were plotted for the Richardson Creek subwatershed



Subcatchment Map

Culvert and Bridge Conveyance Capacity Assessment

► Objectives:

- Determine whether culverts are appropriately sized based on hydraulic capacity.

► Key Findings:

- 4 culverts were identified as undersized
 1. Fourth Ave east of Seventh St Louth
 2. Fourth Ave west of Third St Louth
 3. Eighth Ave Louth east of Seventh St Louth
 4. Seventh St Louth right of way

	Road Classification	Return Period Design Flow	
		Total Span \leq 6.0 m	Total Span $>$ 6.0 m
—	Regional Arterial (rural)	25 Year	50 Year
—	Arterial (rural)	25 Year	50 Year
—	Collector	25 Year	50 Year
—	Local	10 Year	25 Year

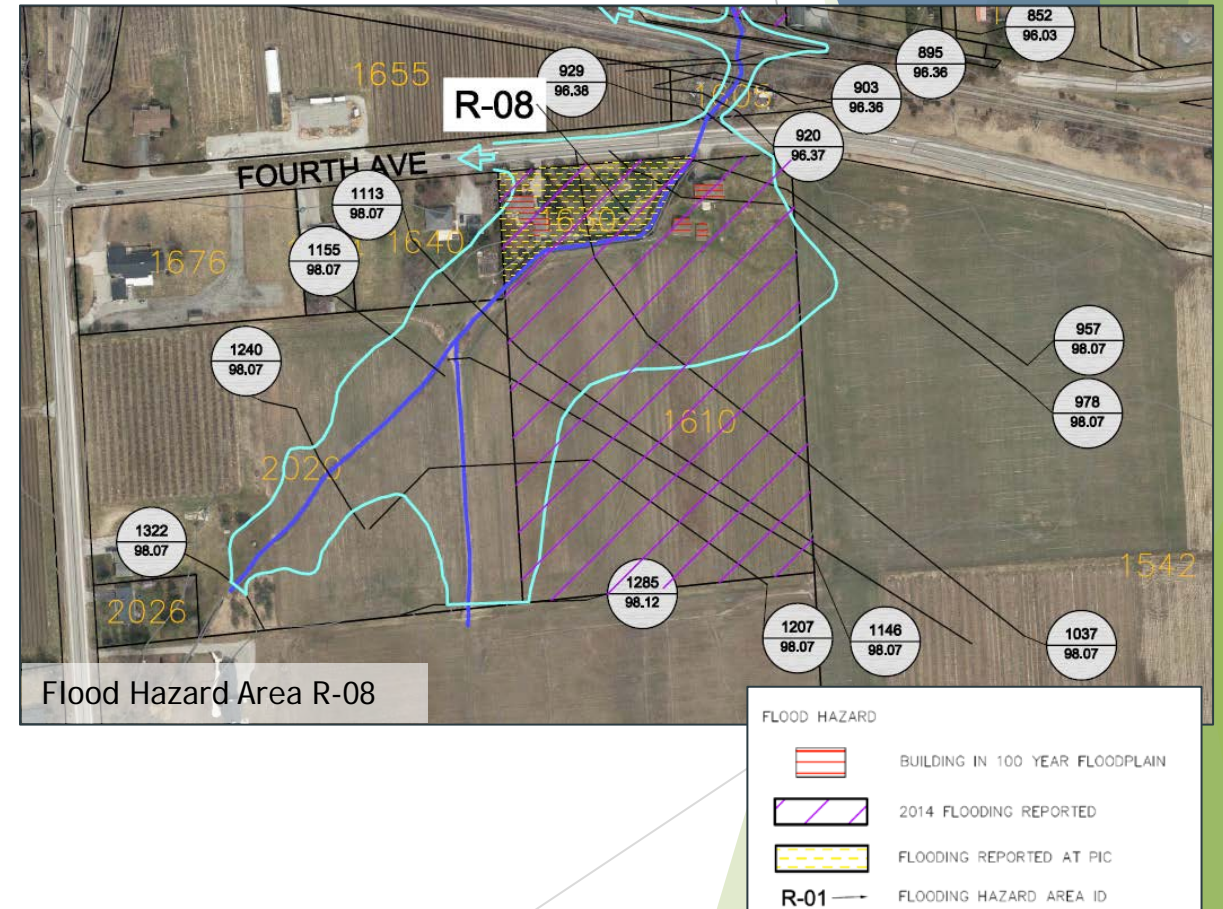
* MTO Design Standards, 2008



Flood Hazard Assessment

► Flood Hazard Areas:

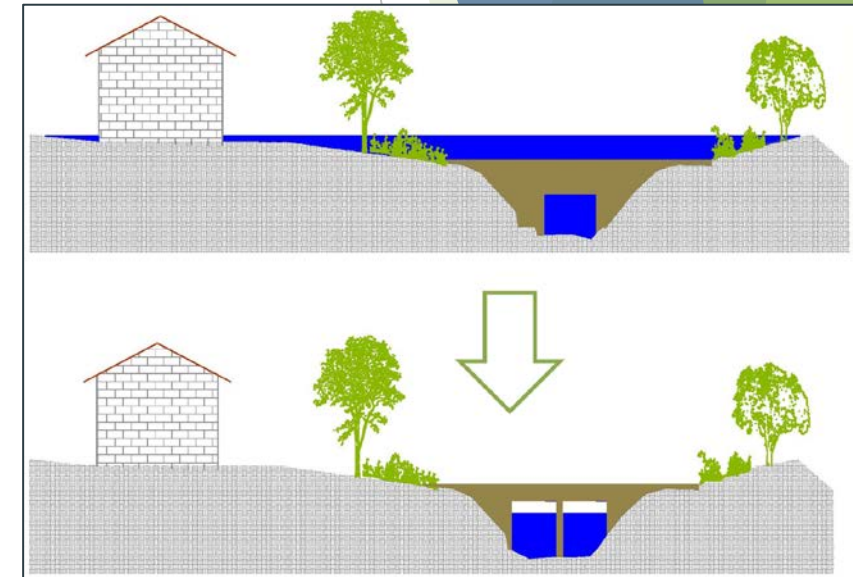
- 19 Flood Hazard Areas were identified
- Flood Hazard Areas are clusters of Flood Susceptible Properties including:
 - Buildings intersected by the 100 Year floodplain
 - Properties for which flooding was reported following the 2014 storm event
 - Properties for which flooding was reported at a Public Information Centre



Flood Hazard Assessment

► Flood Remediation Alternatives:

- Alternative flood relief options were reviewed at identified flood hazard locations and the most feasible alternative was selected
- Flood Remediation Alternatives included:
 - Outside of Municipal Authority
 - Structural Floodproofing
 - Culvert Capacity Upgrade
 - Dykes / Berms
 - Resolution of Private Flooding Issues Using the Drainage Act
 - Watercourse Capacity Enlargement
 - Ditch Operations and Maintenance
- 7 Flood Remediations Projects within Municipal or Regional Authority were proposed
- 13 Flood Hazard Areas were found to be outside of Municipal Authority



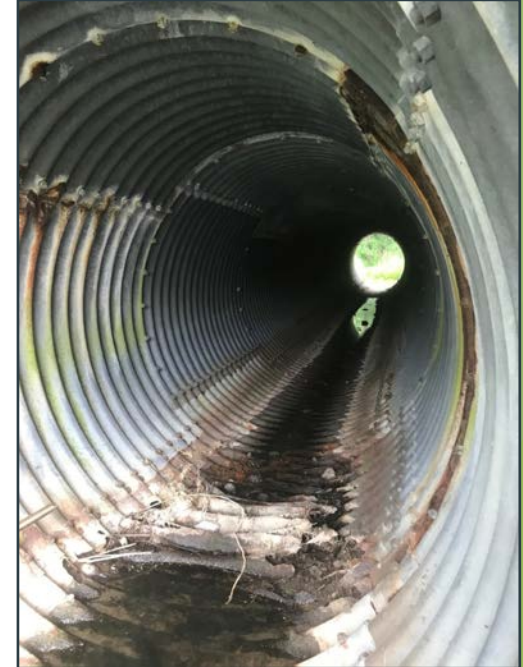
Structural Assessment of Crossings

► Objectives:

- Assess condition of crossing structures across watershed
- Prioritize maintenance works

► Key Findings:

- 13 public structures in Good Condition
- 2 public structures in Fair Condition
- 4 public structures in Poor Condition
- Maintenance works recommended for 10 public structures



Erosion Assessment

► Objectives:

- Assess risk that channel erosion issues pose to public infrastructure and identify erosion mitigation opportunities

► Key Findings:

- Erosion remediation projects recommended for 6 sites
- Monitoring recommended for 3 sites
- Proposed solutions include culvert replacement, bank protection, bed protection, slope protection/repair, scour protection, and replacement of failing bank treatments

► Additional Erosion Remediation Opportunities:

- Riparian vegetation buffers
- Yard waste disposal



Public Consultation

- ▶ **Public Information Centre #1 (February 22, 2018):**
 - ▶ Study background and objectives
 - ▶ Explanation of floodplain mapping
 - ▶ Study outline
- ▶ **Public Information Centre #2 (July 23, 2019):**
 - ▶ Preliminary floodplain maps
 - ▶ Hydraulic culvert capacity assessment
 - ▶ Structural culvert assessment
- ▶ **Public Information Centre #3 (November 12, 2019):**
 - ▶ Erosion assessment
 - ▶ Flood hazard assessment
 - ▶ Proposed remedial works for identified flood hazards, erosion hazards, and culvert structural deficiencies

Implementation

- ▶ City has adopted study for following uses:
 - ▶ Undertaking road operations
 - ▶ Planning future Capital Budgets

The background features a series of overlapping triangles in various shades of blue and green, creating a dynamic, geometric pattern on the right side of the slide.

Thank you!

Report To: Board of Directors

**Subject: Progress Update - 2018 Special Audit of the Niagara Peninsula
Conservation Authority**

Report No: FA-09-21

Date: February 18, 2021

Recommendation:

1. **THAT** Report No. FA-09-21 RE: Progress Update - 2018 Special Audit of the Niagara Peninsula Conservation Authority **BE RECEIVED**.

Purpose:

The purpose of this report is to provide an update on the status of the Special Audit of the Niagara Peninsula Conservation Authority as conducted by the Auditor General in 2018.

Background:

Throughout 2019, the Niagara Peninsula Conservation Authority (NPCA) largely of its own volition provided the Office of the Auditor General of Ontario (AG) with regular updates on efforts being undertaken to address the recommendations and issues identified in the 2018 Special Audit of the Niagara Peninsula Conservation Authority. In March of 2020, the AG began its formal progress review engaging NPCA staff to provide her office with additional supporting documentation to be included in the 2020 Auditor General Annual Report. On December 7, 2020 the Auditor General published her Annual Report which included her findings to date. At the link below is Chapter 2, Section 2.01 entitled "Follow-Up on 2018 Special Audit of the Niagara Peninsula Conservation Authority":

https://auditor.on.ca/en/content/annualreports/arreports/en20/FU_201en20.pdf

In this section, the AG summarized and assessed the progress made by the NPCA to date.

Discussion:

The Auditor General provided a total of 75 recommendations, with 61 being directed to the NPCA. As part of the follow up, the AG reports on 5 completion stages (Fully Implemented, In Process of Being Implemented, Little or No Progress, Will Not Be Implemented, No Longer Applicable). The recommendations to the NPCA fell into 1 of 3 categories:

Fully Implemented – 56% (34 recommendations)

The NPCA has fully implemented recommendations in the areas of:

Board Governance: clarification of per diem payments and conflict of interest, development of board training plans and evaluation of the CAO;

Watershed: identifying flood-prone areas, finalizing policies for reviewing development proposals and updates to the enforcement and compliance procedures;

Human Resources: key policy updates including recruitment and workplace harassment and development of a short-term HR action plan;

Finance: revision and adherence to the procurement policy and updates to the asset management system.

In the Process of Being Implemented – 31 % (19 recommendations)

Since the time of the AG follow-up, an additional 4 recommendations have been completed in the areas the capital assets plan and staff performance reviews. The NPCA is continuing work on recommendations in the areas of:

Board Governance: determination and evaluation of board skill sets and performance, (scheduled for early 2021);

Watershed: updates to permit compliance follow ups and reporting mechanisms, (which will be aligned to broader Conservation Ontario Standard Operating Procedures);

Human Resources: development of a long-term HR plan, (which will coincide and be in alignment with the NPCA strategic plan);

Land Acquisition: improvements to the land acquisition goals, strategy and plan (set for completion in Spring 2021).

Little or No Progress – 13% (8 recommendations)

In her annual report, the AG outlined recommendations summarized in the following chart with NPCA comments presented thereafter.

Rec #	Recommendation	NPCA Update – Feb 2021
2	<p>To ensure that the Niagara Peninsula Conservation Authority (NPCA) Board of Directors has the necessary independence and objectivity to oversee the NPCA's activities effectively, we recommend that the NPCA Board:</p> <ul style="list-style-type: none"> adhere to its Code of Conduct, which states that Board members are to refrain from unduly influencing staff, being respectful of staff's responsibility to use their professional expertise and corporate perspective to perform their duties. 	<p>An updated code of conduct was approved by the Board of directors on Oct 22nd.</p> <p>The Board further addressed this issue with Code of Conduct training that occurred on November 19th, 2020. Integrity Commissioner Suzanne Craig delivered the Training which included a section on interaction and influence on staff.</p> <p>Additionally, the CAO of the NPCA has communicated with the AG office about the nature of positive Board-staff interactions and progress made so far.</p>
3	<p>To ensure that members of the Niagara Peninsula Conservation Authority (NPCA) Board of Directors collectively have the skills, experience and training necessary to oversee the NPCA's activities effectively, we recommend that the NPCA Board:</p> <ul style="list-style-type: none"> assess the current role of its advisory committee to determine whether it is sufficient in fulfilling any gaps in Board skills and competencies and revise as necessary. 	<p>The Public Advisory Committee(PAC) has assessed gaps as stakeholder representatives within the watershed.</p> <p>Once the Board skill set has been identified, profiling of the PAC members will occur to allow the Board to identify and address gaps. As PAC appointments occur every 2 years, this will have the opportunity for implementation in 2022.</p> <p>It is our understanding that further direction on Conservation Authority Public Advisory Committees may result from Bill 229 Regulations.</p>
11	<p>To ensure that reports of possible and known violations are appropriately addressed in a timely manner, we recommend that the Niagara Peninsula Conservation Authority:</p> <ul style="list-style-type: none"> revise its enforcement policy to provide guidance on the progressive actions enforcement staff should take to address violations taking into consideration the significance of the violations; 	<p>Through the Conservation Authority Act update in 2020 and previous to that, conservation authorities have requested better tools and powers in regards to their enforcement functions.</p> <p>The NPCA is an active participant on the Regulations and Compliance Committee of Conservation Ontario. This committee has been working on the collective development of Standard Operating Procedures (SOP) with due regard for pending regulations (Bill 229). The SOP's will be reviewed by a third-party consultant and presented to the Conservation Ontario Council, with an expected completion date of early 2021.</p> <p>In the meantime, NPCA is using Best Management Practices to augment the 2011 Enforcement Manual.</p>

Rec #	Recommendation	NPCA Update – Feb 2021
	<ul style="list-style-type: none"> revise its enforcement policy to require that enforcement activities be sufficiently documented and ensure that staff adhere to the policy. 	<p>Due to confidentiality issues related to information regarding violations, until December 2020, staff tracked and documented violations through a secure shared file system.</p> <p>The NPCA purchased a compliance module within City View in December 2020 and is in the process of installing the module and training staff on use to allow for detailed confidential documentation of enforcement and compliance activities. Procedures will be updated accordingly.</p>
15	<p>To ensure that lands are acquired to help the Niagara Peninsula Conservation Authority (NPCA) fulfill its mandate, we recommend that the NPCA:</p> <ul style="list-style-type: none"> monitor and report to the NPCA Board of Directors on land acquisition progress. 	While the NPCA is currently in the process of finalizing the land acquisition strategy, the Board has been updated on land purchases that were recommended in line with the draft land acquisition strategy that is anticipated to be completed in the Spring of 2021.
16	<p>To enable the Niagara Peninsula Conservation Authority (NPCA) to assess its performance in fulfilling its mandate, we recommend that the NPCA:</p> <ul style="list-style-type: none"> develop performance indicators that are tied to its mandate and overall program goals; 	The 2021-2031 strategic plan currently underway will include Key Performance Indicators, which once finalized, will allow staff to collect, analyze and report on performance metrics.
	<ul style="list-style-type: none"> establish targets against which each indicator will be assessed; 	Please see above.
	<ul style="list-style-type: none"> regularly collect and analyze information about the impact of its programs and services on the Niagara Peninsula watershed to help adjust programs on an ongoing basis. 	Please see above.

Staff will continue to deliver on the unfinished actions in 2021 under the direction of the NPCA Governance Committee. Updates will be provided to the Board on a regular basis.

Financial Implications:

This is an update report and there are no financial implications.

Links to Policy/Strategic Plan

The information presented in this report demonstrates dedication to advancing the NPCA's mission statement "to implement our Conservation Authorities Act mandate by remaining a responsive, innovative, accountable and financially sustainable organization".

Related Reports and Appendices:

Auditor General 2020 Annual Report Chapter 2, Section 2.01 entitled "Follow-Up on 2018 Special Audit of the Niagara Peninsula Conservation Authority" (link provided above)

Submitted by:

Original Signed by:

Chandra Sharma, MCIP, RPP
Chief Administrative Officer/Secretary-Treasurer

Report To: Board of Directors

Subject: NPCA Public Advisory Committee - Member Appointment

Report No: FA-10-21

Date: February 18, 2021

Recommendation:

1. **THAT** Report No. FA-10-21 RE: NPCA Public Advisory Committee - Member Appointment **BE RECEIVED** for information.
2. **THAT** the NPCA Board of Directors **APPOINT** the individual identified in Confidential Appendix 1 to Report No. FA-10-21 as the member representing First Nations on the NPCA Public Advisory Committee.
3. **THAT** Confidential Appendix 1 to Report No. FA-10-21 **BE DEEMED** a public document and received into the record.

Purpose:

The NPCA Public Advisory Committee has a vacancy in the First Nations seat due to an unexpected circumstance resulting in a leave of absence for the remaining year of a two-year term. The individual identified in Confidential Appendix 1 is presented to the NPCA Board of Directors for consideration and appointment.

Background:

The NPCA Public Advisory Committee (PAC) was created based on recommendations from the NPCA's Strategic Plan 2014-2017. The purpose of the Public Advisory Committee is to provide collaborative local perspective, guidance, and expert advice in the implementation of the NPCA programs, policies, plans and/or other public engagement activities as the Board may request. Members serve in a non-governance capacity with a focus on providing advice and recommendations for consideration by the NPCA Board.

The NPCA Public Advisory Committee is comprised of 12 members as well as the NPCA Board Chair and Vice-Chair. The members represent various sectors described as public-at-large, Métis Niagara, Chamber of Commerce/Tourism, Agriculture, development, environment, planning, and users/volunteers. Committee members are officially appointed by the NPCA Board of Directors, and the NPCA Board Chair and Vice-Chair serve as ex-officio members to provide a direct conduit for communication to the NPCA Board of Directors.

Discussion:

The NPCA was informed of the leave of absence in January 2021. Given the unexpected nature of the vacancy, the short length of the term and a desire to move forward with a full Committee composition to begin work in 2021, the NPCA consulted with the PAC Chair and members of the Selection Sub-Committee, and presented them with the following three options for proceeding with the filling of the vacancy:

- Option 1: A new recruitment process.
- Option 2: A review of the 2019 applications for the First Nations seat.
- Option 3: To request if the previous member had a recommended candidate to fill the vacancy in their place.

The Selection Sub-Committee agreed that Option 2 was most desirable if a suitable candidate could be found from the pool of 2019 applications, and that the candidate was willing and able to fill the vacancy. The NPCA contacted five previous applicants to determine if they were still interested in participating on the NPCA Public Advisory Committee. The Selection Sub-Committee reviewed three applications of individuals that had expressed an interest, including previous correspondence from five members of the Indigenous community for reference and recommendations, as well as an additional Indigenous community partner for guidance and insight. The Selection Sub-Committee has considered all of this information and have recommended the individual in Confidential Appendix 1 for appointment to the NPCA Public Advisory Committee as the First Nations representative.

Financial Implications:

There are no financial implications to this report.

Links to Policy/Strategic Plan

Appointing a new member to the PAC ties into the Strategic Plan's Mission Statement "to implement our Conservation Authorities Act mandate by remaining a responsive, innovative, accountable and financially sustainable organization" by "working in collaboration with our partners in conservation".

Related Reports and Appendices:

Confidential Appendix 1 to Report No. FA 10-21 (provided under separate cover)

Authored by:

Original Signed by:

Kerry Royer, B. Sc.
Coordinator, Community Outreach

Reviewed by:

Original Signed by:

Geneviève-Renée Bisson
Manager, Communications and Public Relations

Submitted by:

Original Signed by:

Chandra Sharma, MCIP, RPP
Chief Administrative Officer/Secretary-Treasurer



**STRATEGIC PLANNING COMMITTEE MEETING
ON-LINE VIDEO CONFERENCE
MEETING MINUTES
Thursday, January 21, 2021
12:01 p.m.**

MEMBERS PRESENT: K. Kawall (Chair)
S. Beattie
R. Brady
D. Bylsma
J. Hellinga
D. Huson
W. Rapley
E. Smith
M. Woodhouse
B. Wright

OTHERS PRESENT: D. Cridland
K. Baker, StrategyCorp
J. Matheson, StrategyCorp

STAFF PRESENT: C. Sharma, C.A.O. / Secretary – Treasurer
G. Bivol, Executive Co-ordinator to the C.A.O. / Board
R. Bisson, Manager Communications and Public Relations
N. Green, Project Manager

The Chair called the meeting to order at 12:01 p.m..

1. APPROVAL OF AGENDA

Recommendation No. SPC-1-2021

Moved by Member Brady

Seconded by Member Hellinga

THAT the Strategic Planning Committee Meeting agenda dated Thursday, January 21, 2021 **BE APPROVED** as presented.

CARRIED

2. DECLARATIONS OF CONFLICT OF INTEREST

None declared.

3. APPROVAL OF MINUTES

- a) Minutes of the NPCA Strategic Planning Committee meeting dated December 17, 2020

Recommendation No. SPC-2-2021

Moved by Member Wright

Seconded by Member Woodhouse

THAT the minutes of the NPCA Strategic Planning Committee meeting dated December 17, 2020 **BE APPROVED**.

CARRIED

4. CORRESPONDENCE

None.

5. DELEGATIONS

None.

6. PRESENTATIONS

- a) SWOT Analysis and Gaps - John Matheson, StrategyCorp presented his analysis via PowerPoint. Lengthy discussion ensued.

Recommendation No. SPC-3-2021

Moved by Member

Seconded by Member

THAT the SWOT Analysis and Gaps PowerPoint presentation by John Matheson, StrategyCorp **BE RECEIVED**.

CARRIED

7. CONSENT ITEMS

None.

8. DISCUSSION ITEMS

- a) Report No. SPC-01-21 RE: Strategic Planning Update & SWOT Analysis Summary

Recommendation No. SPC-4-2021

Moved by Member Huson

Seconded by Member Hellinga

THAT Report No. SPC-01-21 RE: Strategic Planning Update & SWOT Analysis Summary **BE RECEIVED**.

CARRIED

9. NEW BUSINESS

C.A.O. Sharma sought feedback and suggestions from the Committee on next steps in advancing the strategic plan and engaging the Board in the analysis. Discussion ensued. Ms. Sharma indicated that she would review the options with the project manager and consultant and structure an approach for the Board based on the discussions.

10. ADJOURNMENT

By consensus of the membership, the Strategic Planning Committee meeting of January 21, 2021
ADJOURNED at 1:15 p.m..

CARRIED

K. Kwall
Committee Chair

C. Sharma, MCIP, RPP
Chief Administrative Officer / Secretary
- Treasurer



**WATERSHED FLOODPLAIN SUB-COMMITTEE
ONLINE VIDEO CONFERENCE
MEETING MINUTES**

**Thursday, January 28, 2021
4:00 p.m.**

MEMBERS PRESENT:	J. Oblak (Sub-Committee Chair) E. Furney B. Johnson, NPCA Board H. Korosis B. MacKenzie, NPCA Board J. Schonberger
MEMBERS ABSENT:	D. Speranzini
STAFF PRESENT:	C. Sharma, Chief Administrative Officer / Secretary – Treasurer D. MacKenzie, Director, Watershed Management S. Miller, Senior Manager, Water Resources K. Royer, Coordinator, Community Outreach
OTHERS PRESENT:	E. Buckrell, Aquafor Beech Ltd. J. Hellinga, NPCA Board K. Kawall, NPCA Board D. Kelly, Public Advisory Committee D. Maunder, Aquafor Beech Ltd. J. Musso, Public Advisory Committee N. Seniuk, Public Advisory Committee M. Woodhouse, NPCA Board

The Committee Chair called the meeting to order at 4:05 p.m. welcoming everyone in attendance.

1. APPROVAL OF AGENDA

Recommendation No. WFSC-01-2021

Moved by Member Furney

Seconded by Member Korosis

THAT the agenda for the January 28, 2021 Watershed Floodplain Sub-Committee meeting
BE ADOPTED as presented.

CARRIED

2. DECLARATIONS OF CONFLICT OF INTEREST

None

3. BUSINESS FOR CONSIDERATION

- a) Presentation by Steve Miller, NPCA Senior Manager Water Resources RE: Summary of the Lincoln and Grimsby Floodplain Mapping Update Public Consultation

S. Miller presented the results of the public information sessions in Grimsby and Lincoln in December 2020 about the Floodplain Mapping updates. A discussion ensued about the presentation, and corresponding Report No. WFC-01-21. Questions were raised about the difference between floodplains and spill areas, and who receives copies of the report.

Recommendation WFSC-02-2021:

Moved by Member Schonberger

Seconded by Member Korosis

THAT the Report No. WFC-01-21 RE: Grimsby and Lincoln Floodplain Mapping Update Public Engagement Summary **BE RECEIVED.**

CARRIED

Recommendation WFSC-03-2021

Moved by Member Furney

Seconded by Member Korosis

WHEREAS the Grimsby and Lincoln Floodplain Mapping Update Report:

- i. Provides an updated and more detailed and accurate delineation of the floodplain than the floodplain mapping studies undertaken more than 25 years ago, and
- ii. Identifies broad and wide floodplain 'Spill Areas' that allow landowners within these zones far greater opportunity to expand their residential, commercial, and industrial structures and operations than they were afforded by the previous floodplain mapping, and
- iii. Provides floodproofing recommendations that can be undertaken to reduce the risk of flooding; and
- iv. Has received favourable feedback from the public;

NOW THEREFORE, BE IT RESOLVED:

THAT the NPCA Watershed Floodplain Sub-Committee **RECOMMENDS** to the NPCA Board of Directors that the Grimsby and Lincoln Floodplain Mapping Update report and associated flood maps be approved for use in the implementation of the NPCA's Ontario Regulation 155/06, a Regulation intended to reduce the negative impacts of natural hazards including flooding.

CARRIED

- b) Presentation by Dave Maunder and Emma Buckrell, Aquafor Beech Limited RE: Richardson Creek Floodplain Mapping Update – City of St. Catharines

D. Maunder and E. Buckrell presented the results of a study undertaken by the City of St. Catharines concerning flooding and drainage issues in Richardson Creek. The study was initiated after a large storm event in 2014. The NPCA was involved in the project as part of a technical advisory committee. A discussion ensued regarding the connection of the project with the Niagara Region Official Plan, the role of the NPCA, property values and the cost of the project.

Recommendation WFSC-04-2021

Moved by Member Furney

Seconded by Member Schonberger

THAT Report No. WFC-02-21 RE: Richardson Creek Floodplain Mapping Update Report
BE RECEIVED.

CARRIED

Recommendation WFSC-05-2021

Moved by Member Korosis

Seconded by Member Schonberger

WHEREAS the Richardson Creek Floodplain Mapping Update Report:

- i. Provides an updated delineation of the floodplain against the previous study undertaken 15 years prior, and
- ii. Provides floodproofing recommendations that can be undertaken to reduce the risk of flooding; and
- iii. Has been presented to the public at 3 Public Information Centres; and
- iv. The City of St. Catharines has already adopted the study and is utilizing it to direct road operations and maintenance and to plan for future Capital projects;

NOW THEREFORE, BE IT RESOLVED:

THAT The NPCA Watershed Floodplain Sub-Committee **RECOMMEND** to the NPCA Board of Directors that the Richardson Creek Floodplain Mapping Update report and associated flood maps be approved for use in the administration of the NPCA's Ontario Regulation 155/06, and to ensure consistency between the City of St. Catharines and NPCA floodplain mapping.

CARRIED

4. ADJOURNMENT

The meeting was adjourned at 5:39 p.m. due to on-going technical difficulties from various members resulting in the uncertainty of quorum. All agenda items were not able to be

covered and the meeting was recessed by NPCA Board Chair Brenda Johnson in the absence of Chair Oblak.

Jackie Oblak
Public Advisory Committee Chair

Chandra Sharma, MCIP, RPP
Chief Administrative Officer / Secretary –
Treasurer