

PUBLIC ADVISORY COMMITTEE Thursday, June 17th 2021 5:00PM ONLINE VIDEO CONFERENCE

Anyone interested in joining the meeting as a guest may do so using the link below: <u>https://npca.webex.com/npca/j.php?MTID=m47e9c3e6a68ceb586fef659f095b994c</u>

AGENDA

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. PRESENTATIONS

a) <u>Andrea Crosby (Niagara Peninsula Conservation Foundation) RE: Annual Report,</u> <u>Donation Challenge and Gallery at Ball's Falls</u>

4. DELEGATIONS

5. APPROVAL OF MINUTES

a) Minutes of the Public Advisory Committee – April 29 2021

6. CORRESPONDENCE

7. CONSENT ITEMS

8. DISCUSSION ITEMS

- a) Floodplain Mapping Projects: Big Forks Creek and Beaver Creek, Steve Miller
 - a. Project Team Introduction
 - b. Presentation Floodplain Mapping Public Engagement Media Campaign
 - c. Resolution requesting Watershed Floodplain Sub-Committee endorse the Public Engagement Media Campaign
- b) <u>Strategic Planning Progress Update: survey results summary and input on public</u> <u>engagement, Presentation by Natalie Green</u>
- c) <u>Niagara River Beach Closings Beneficial Use Impairment Assessment Report –</u> <u>Verbal Update , Natalie Green</u>

9. COMMITTEE REPORTS

- a) <u>Report No. PAC 01-21 RE: NPCA Public Advisory Committee Membership Update</u>
- b) Report No. PAC-02-21 RE: NPCA Public Advisory Committee Discussion Paper

10. NEW BUSINESS

- a) <u>Verbal update RE: Growing Canada's Forests Request for Information.</u> <u>Geoff Verkade</u>
- b) <u>Verbal update RE: Conservation Authorities Act Regulatory Proposal Consultation</u> <u>Guide, Chandra Sharma</u>

11. ADJOURNMENT



Presentation to NPCA Public Advisory Committee June 17, 2021

Purpose of Presentation

Today's presentation will include:

- Brief history of NPCF
- Our plans for 2021 2022
 - Initiatives and Programs
 - Capital Campaign
 - Great Canadian Giving | Director's Donation Challenge

Niagara Peninsula Conservation Foundation -Overview

Founded May 5,1969 at request of NPCA
 Created under *The Corporations Act* Letters Patent (Articles of Incorporation)
 Registered Charity
 CRA Filing Requirements

Foundation Board of Directors and Staff

- Regional Councillor Tom Insinna, Chair
- Gayle Wood Vice Chair
- Regional Councillor Rob Foster, Treasurer and NPCA appointee
- Mickey DiFruscio, Board Member
- Donna Cridland, Board Member and NPCA appointee
- Mary Sergenese, *Board Member*
- Andrea Crosby-DiCenso, Executive Coordinator
- * with additional members to be considered *

Foundation - Strategic Plan -Vision and Mission

Vision:

A leader in providing resources to support conservation work throughout the Niagara Peninsula *watershed*.

Mission:

To raise funds toward environmental endeavors that include increasing green space, improving water quality, habitat restoration and environmental research and education.

Foundation Values

Transparent

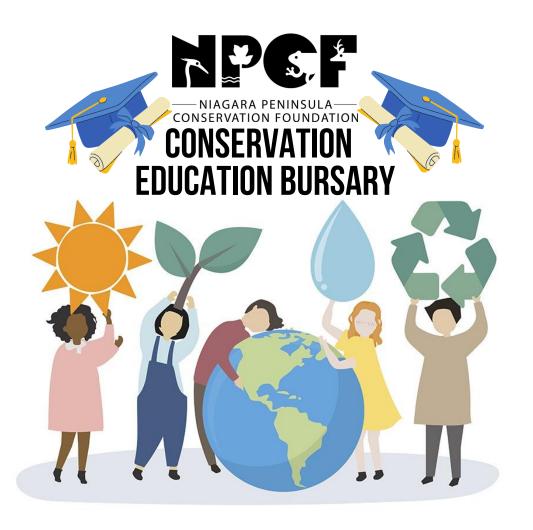
- Accessible
- Professional
- Accountable

Delivered through an organization operating with honesty, integrity, respect.

2021 Programs and Projects

- ► NPCF Education Bursary Program
- NPCF Speakers Series
- Great Canadian Giving Challenge | Directors' Donation Challenge
- Memorial Program
- The Gallery at Ball's Falls Centre for Conservation
- Comfort Maple Pens
- Outdoor Education Fund | Educational Programming Support
- Niagara College Bursary / Brock University Scholarship
- Conservation Areas Projects via Nevada Funding
- Chair's Celebration Event
- NPCF Giving Weekend as part of the Holiday Trail

NPCF Education Bursary



The NPCF launched its Education Bursary in March which supports the educational endevours of secondary school students entering post secondary education in the environment or related field.

6 school boards (public and catholic) within our jurisdictional watershed were contacted about the bursary and information was spread to the secondary schools.

Applications closed May 31st, and 16 total were received from the municipalities of Niagara Falls, St. Catharines, Welland, Hamilton, Haldimand, Thorold, Fort Erie and Pelham.

The Education Bursary Committee will meet June 16th to review and approve applications.

NPCF Speaker Series

Speaker Series with Mark Zelinski APRIL 14, 2021 | 11AM Sponsored by NPCF Chair, Tom Insinn Hosted by gistered Charity No.: 11905 7511

Speaker Series with David Newland

Sponsored by D. Gayle Wood

MAY 26, 2021 | 1PM



camera to make a donatio

Hosted by

Registered Charity No.: 11905 7511 Photo: Michelle Valberg



STATE WINE AND NPCF TOTE



CONSERVATION FOUNDATION

CAN THE QR CODE OR REGISTER ONLINE AT: NIAGARACON SERVATION FOUNDAITON.COM/SPEAKERSERIES

Great Canadian Giving Challenge | Director's Donation Challenge 2021

In 2020, we launched our first Director's Donation Challenge, where the Boards of the Foundation, Authority and the NPCA's Public Advisory Committee, in addition to Staff Directors, contributed and far exceeded our expectations, raising almost \$8,000. We thank you all for your participation and as we launch during the Great Canadian Giving Challenge, we need your support more than ever. Every \$2 donated through our Canada Helps page will give us a chance to win \$20,000 for our cause!



Memorial Bench Program

- 5 Benches were installed in 2020
- Total revenue: \$13,500
- 2 Benches on the go for 2021 with three inquiries addressed
- NPCF and NPCA staff met to discuss additional and more affordable options to offer as part of this program and for general donor recognition. These options include, 5 existing benches at the CFC, and plaques along the flagstone rocks at line the accessible pathway at Ball's Falls.



Gallery Capital Campaign

Ball's Falls Centre for Conservation opened May 2008. This state-of-the-art building achieved a Certified Gold LEED (Leadership in Energy and Environmental Design) designation. The building cost over \$2 million, including *The Gallery* – an educational exhibit for students, community groups and tourists, linked to the conservation area. Set within the breathtaking Twenty Valley on the Niagara Escarpment, Ball's Falls offers spectacular scenery as well as natural, cultural and historical value.

Since 2008, no updates to *The Gallery* have been completed. To satisfy educational and tourism needs, we need a more effective, engaging exhibit area with the following:

- enhanced information and languages;
- improved exhibit flow;
- integrated interactivity into various educational programmes;
- Integrated programmes into regional tourism partnerships;
- contextualized and self-guided learning of site features and significance; and
- introduced Indigenous history.

At the Centre for Conservation at Ball's Falls Conservation Area an exciting journey is occurring to enhance "The Gallery" - an educational experience which will provide engaged, tactile, and experiential learning for people of all ages. Linked to this experience is the ability to address our "nature-deficit" by linking *The Gallery* to the exquisite Ball's Falls Conservation Area. The Gallery Capital Project will address a need for the current Niagara community, the growing Niagara population and tourists visiting this area annually. The Niagara Region, which currently has a population of around 450,000, is growing by as much as 30% in the next 20 years. According to Province of Ontario statistics a population of 610,000 people is projected by 2041. With this growth will come a community craving for a greater connection to nature and outdoor space.

According to Niagara Region's *Niagara Tourism Profile* around 13 million people visit the Peninsula annually and bring a \$2 billion economy to the area. Many of the tourists are drawn to the magnificent Niagara Falls – one of the natural wonders of the world. Countless tourists extend their Niagara Falls experience by exploring other significant natural sites in the Peninsula – including Ball's Falls Conservation Area.

Updating the Gallery at Ball's Falls Centre for Conservation is important in order to provide the community and tourists with an educational facility linked to a spectacular natural area.

Phase I – Design: May 2020 to May 2021 Budget \$39,500 Fully Funded

Phase II – Build: May 2021 to December 2021 Budget \$60,000 Funded to date - \$25,000 To be raised - \$35,000

Phase III – Waterscape:

January 2022 to December 2022 Budget \$250,000 To be raised \$250,000.

The Launch



Quiet Phase

Our Foundation needs to raise 60% (\$35,000) of our overall campaign goal for Phase II during the Quiet Phase. To date, the Foundation has raised \$25,000 of the \$60,000 required, so an additional \$10,000 is required to move to the public phase.

Public Phase

This includes the public announcement of our campaign, public relations and other general marketing and solicitation efforts, campaign mailings, public events, and online fundraising efforts. Generally, gifts raised during the public phase are low-dollar and mid-level gifts.

The final portion of our capital campaign plan for Phase II will lay out a "celebration" event and a strategy for what we will do in Phase III next year. This includes thanking and recognizing our donors (including fulfilling any benefits or public recognition opportunities that we offered to donors). We will also have a plan in place to transition campaign donors back into our general / annual fundraising efforts.

Comfort Maple Pens and Promos

The Comfort Maple Conservation Area conserves what is widely believed to be the oldest and finest sugar maple tree in Canada, estimated to be over 540 years old, and was designated a heritage tree in June 2000 under the Ontario Heritage Act.

Originally in an area of hardwood forest, the tree's size and shape suggest the forest was cleared when the tree was still young, likely for agricultural purposes. The 0.2-hectare area was land owned by the Crown and granted to Major Robert Secord in 1808. It was then sold by the Secord family to the Comfort family in 1816, and later entrusted to the NPCA on April 30, 1961 by Miss Edna Eleanor Comfort (Lease for 999 years), to conserve the 'old growth' tree for its historical and biological significance.

Over the years, NPCA arborists have collected the wood pruned annually for repair and health, and in 2015, the NPCF launched a fundraiser selling pens by turner Marv Ens of Fenwick, ON. Mr. Ens continues to make these hand-crafted pens to preserve and highlight the beauty and character of this magnificent tree. It is truly a "one of a kind" writing instrument.





CELEBRATE THE GREAT OUTDOORSMEN THIS JUNE

WITH A MEMORABLE GIFT FROM THE NPCF!

\$125 | ORDER BY JUNE 17

INCLUDES A HAND-TURNED PEN MADE FROM 100% PRUNED COMFORT MAPLE TREE WOOD (WITH YOUR CHOICE OF FINISH), AN NPCA PARK DAY PASS, AND A SIX PACK OF BALL'S FALLS SESSION IPA CRAFTED BY BENCH BREWING COMPANY.



- A total of 19 pens were sold in 2020
- Total revenue: \$1,900
- So far, 9 pens have been sold in 2021
- We continue to discuss additional or alternative options outside the pens to meet current demands and trends

\$67,970 Nevada Funds Foundation \$91,826 Endowment Funds Financials -\$56,672 Unrestricted Funds Q4 2020 \$216,368 ► TOTAL

Thank You!

Thank you for giving us your time.

Questions? Comments?



PUBLIC ADVISORY COMMITTEE ONLINE VIDEO CONFERENCE MEETING MINUTES

Thursday April 29th 2021 5:00 p.m.

MEMBERS PRESENT:	 B. Johnson, NPCA Board (Acting Committee Chair) J. Ariens C. Ecker-Flagg M. Kauzlaric D. Kelly H. Korosis B. Mackenzie, NPCA Board J. Musso J. Schonberger D. Speranzini
MEMBERS ABSENT:	J. Oblak (Committee Chair) D. Pont
STAFF PRESENT:	C. Sharma, Chief Administrative Officer / Secretary – Treasurer N. Green, Project Manager, Niagara River Remedial Action Plan

K. Royer, Coordinator, Community Outreach

By consensus, in the absence Committee Chair Oblak, NPCA Board Chair Johnson agreed to Chair the PAC meeting on her behalf. Chair Johnson called the meeting to order at 5:06 p.m.. Chair Johnson welcomed the Members and sent regrets on behalf of Committee Chair Oblak.

1. APPROVAL OF AGENDA

Recommendation No. PAC-07-2021 Moved by Member Kauzlaric Seconded by Member Schonberger

THAT the agenda for the April 29, 2021 NPCA Public Advisory Committee meeting **BE ADOPTED** with item 8 b) Verbal Discussion RE: Recording of Video Conference Public Advisory Committee meetings during the Pandemic be moved to be directly following the Declarations of Conflict of Interest.

CARRIED

2. DECLARATIONS OF CONFLICT OF INTEREST

D. Speranzini declared that her opinions are her own and not that of her employer Agriculture and AgriFood Canada.

8. DISCUSSION ITEMS (As per Recommendation No. PAC-07-2021)

8. b) <u>Verbal Discussion RE: Recording of Video Conference Public Advisory Committee</u> <u>meetings during this Pandemic</u> – This item of business was moved up to be addressed immediately following Declarations of Conflict of Interest as per Recommendation No. PAC-07-2021.

Recommendation No. PAC-08-2021 Moved by Member Korosis Seconded by Member Musso

- 1. **THAT** the NPCA Public Advisory Committee meetings **BE RECORDED** for the remainder of the pandemic video conference meetings.
- 2. **AND THAT** recordings **BE POSTED** to the NPCA website within one (1) week of each meeting.

CARRIED

3. PRESENTATIONS

None.

4. **DELEGATIONS**

None.

5. APPROVAL OF MINUTES

5 a) Minutes of the NPCA Public Advisory Committee dated February 25, 2021

Recommendation No. PAC-09-2021 Moved by Member Ecker-Flagg Seconded by Member Furney

THAT the minutes of the NPCA Public Advisory Committee meeting dated February 25, 2021 **BE APPROVED**.

CARRIED

6. CORRESPONDENCE

None.

7. CONSENT ITEMS

None.

8. **DISCUSSION ITEMS (Continued)**

8 a) <u>Strategic Planning Progress Update and Input on Draft Strategic Priorities, Natalie Green</u> <u>– Presentation and Discussion</u> - Natalie Green presented the status of the NPCA Strategic Plan, Draft priorities and gave a reminder about the public survey currently open until May 6th. She outlined next steps and noted that the Draft Strategic Plan will likely be coming back to the PAC for input in spring 2021 NPCA is aiming for end of June 2021 for next round of public outreach and engagement on the draft Strategic Plan. A roundtable discussion ensued with each member providing input on the draft strategic priorities and direction of the strategic plan to date.

Recommendation No. PAC-10-2021 Moved by Member Ecker-Flagg Seconded by Member Furney

THAT the Strategic Planning Progress Update and Input on Draft Strategic Priorities presentation by Natalie Green **BE RECEIVED**.

8. b) <u>Verbal Discussion RE: Recording of Video Conference Public Advisory Committee</u> <u>meetings during this Pandemic</u> – This item of business was moved up to be addressed immediately following Declarations of Conflict of Interest as per Recommendation No. PAC-07-2021.

9. COMMITTEE REPORTS

None.

10. NEW BUSINESS

None.

11. ADJOURNMENT

Resolution No. PAC-11-2021 Moved by Member Speranzini Seconded by Member Ariens

THAT this meeting of the NPCA Public Advisory Committee **BE** herby **ADJOURNED** at 6:01 p.m..

CARRIED

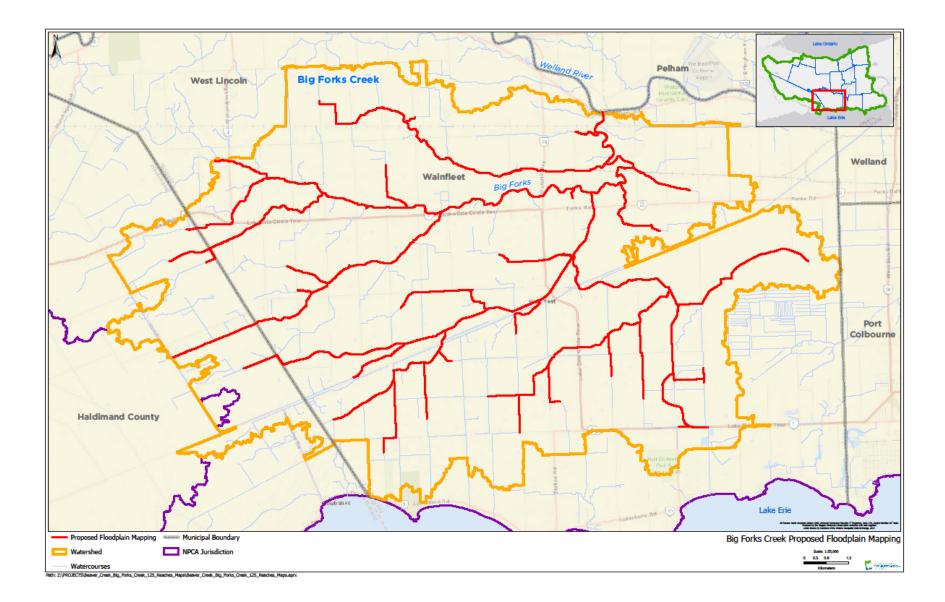
Brenda Johnson Public Advisory Committee Acting Chair Chandra Sharma Chief Administrative Officer / Secretary – Treasurer

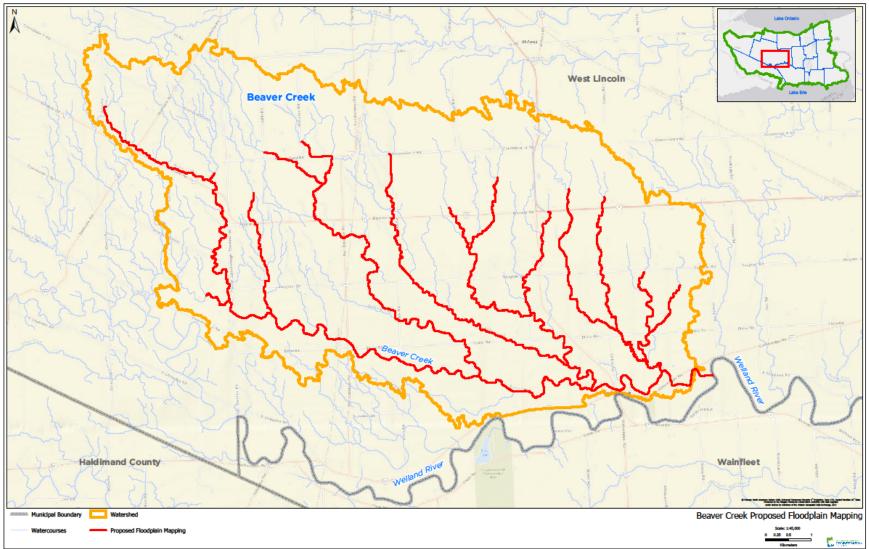


Big Forks Creek and Beaver Creek Floodplain Mapping Public Engagement Media Campaign

June 17, 2020

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





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The Plan...

- The NPCA plans on hosting a virtual Public Engagement Session which will inform the public of the beginning of this project and give people a chance to ask questions and provide local knowledge and experiences with respect to floods.
- The tentative schedule for the first Public Engagement Session is late July or early August 2021 in the evening (6-8pm).
- For the project team, this is a meeting to collect local information and knowledge. No technical work will begin prior to the Public Engagement Session.
- This will be the first of 3 rounds of engaging the public.
 - The second round will be around the 60% project milestone to inform the public of the work to date and allow for folks to ask questions.
 - The third round will be to present the draft flood lines, talk about the NPCA's floodplain policies, and again allow the public to ask questions.



Proposed Media Campaign

- Print Advertising ads placed 1 2 weeks prior to meetings.
 - Niagara This Week
 - Farmer's Monthly
- Direct Mail via Canada Post
 - All homes and businesses within 200m of the creeks being studied will be sent project postcard.

Walker's Creek & Beamer Creek UPDATED FLOODPLAIN MAPPING INFO SESSION

You are receiving this notice because you are a property owner in the vicinity of Walker's Creek and Beamer 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 Walker's Creek and Beamer Creek, as the floodplain was last mapped in 1989. Come and find out why the floodplain has not generally changed, and has even decreased in many areas!

Your feedback is appreciated.

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

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:

 Visit getimvolved.npca.ca to view the draft report, floodplain maps and to submit feedback online.
 Attend the information session (no registration required).
 Written comment can be dropped off at our main office at 250 Throid Road West in Welland.

INFORMATION SESSION:

Wednesday, March 4, 2020

Grantham Lions Club 732 Niagara Street St. Catharines

This meeting will provide information about the project and allow for property owners and interested residents a chance to speak with the project team. The meeting will run from 6:00pm to 8:00pm with a presentation beginning at 6:15pm.

For further discussion:

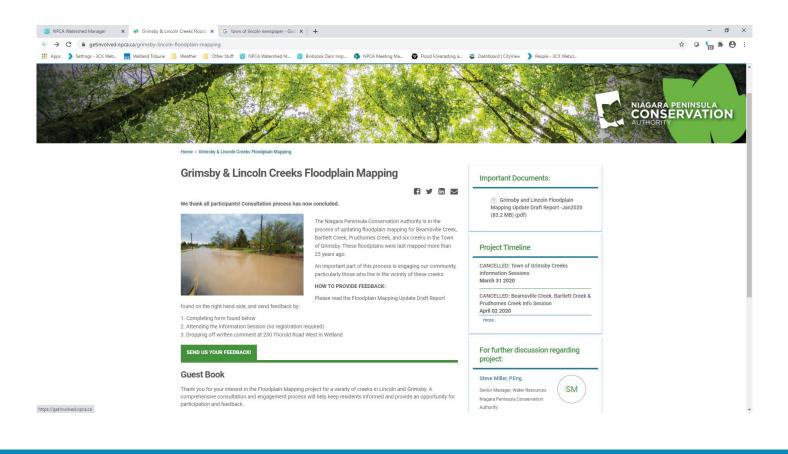
Steve Miller, P.Eng., Senior Manager of Water Resources smiller@npca.ca 905-788-3135 x 231

NIAGARA PENINSULA CONSERVATION AUTHORITY www.npca.ca | info@npca.ca Phone: 905.788.3135 | Fax: 905.788.1121 250 Thorold Road West; 3rd Floor, Welland, ON L3C 3W2



NIAGARA PENINSULA CONSERVATION

- NPCA Corporate Website
 - Project page to be created which will allow people to provide feedback and track the project.
 - Project page to contain an invitation and a link to the virtual public meetings.





- NPCA Social Media Posts
 - The virtual public meetings and the project web page will be promoted through the NPCA's Facebook, Twitter, and Instagram accounts.
- Wainfleet and West Lincoln Websites
 - The virtual public meeting dates will be posted on both municipality's Community Calendars.

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After the first Public Engagement Session...

- After the first virtual Public Engagement Session, WSP Canada will start on the technical work.
- Prior to holding the second Public Engagement Session, WSP will present their work directly to the Watershed Floodplain Subcommittee and will be available to answer any questions.
- NPCA staff will also present a summary of the first virtual Public Engagement Meeting to the Subcommittee at this time.



Subject to any amendments, NPCA staff are looking to the Watershed Floodplain Subcommittee to endorse this Public Engagement Strategy.



Thank you!

Questions?





Summary of public survey results & input on <u>draft</u> strategic goals

Public Advisory Committee Meeting June 17, 2021

> Natalie Green, M.Sc., PMP Project Manager







- Inform and collect feedback on draft strategic priorities
- Get Involved portal (information, video, tools)
- Outreach/Marketing campaign (digital ads, newspaper ads, earned media, social media channels)
 - Public survey launched on March 30 until May 6
 - Total of 501 surveys completed; comments being synthesized



Public

Engagement

Analytics indicate <u>many</u> people aware and engaged in the NPCA Strategic Planning process

Campaigns had 917,000 impressions

(# time combined ads were seen/heard)

Social media ads reached **90,923** unique users

1,541 engagements

(clicks, reactions, comments, shares)

Top digital ad clicks: Kijiji (65k), The Weather Network (69k)

All media outlets covered story







231 video views

2,777 sent 1,149 opens

204 sent

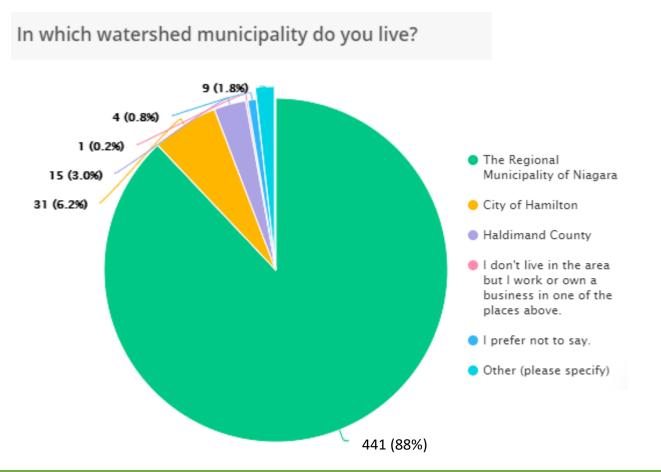
Get Involved Portal

- Over **4,300 visits** to the project page
- 500 visitors engaged (participated in survey and/or ideas)
- 757 visitors informed (contributed to a tool or viewed multiple pages)
- **3,609 visitors aware** (visited at least one page)



Survey Participation Demographics

• Total 501 surveys received (paper & online)



Sector/Group	%	
Academic Institutions	3.1	
Agricultural Sector	3.4	
Business Sector	1.2	
Conservation Area User	30.3	
Development Sector	1.0	
First Nations Member	1.0	
General Public	43.5	
Government Agency (staff/rep)	4.6	
Metis	0	
Non-Government Organization	5.4	
Tourism Sector	1.6	
Prefer not to say	1.6	
Other	3.1	



Key Takeaways from Public Survey

- Strategic priorities all received strong support except *Destination of Choice*; revisions made.
- Feedback was generally positive and supportive.
- Misunderstanding of NPCA's role and responsibilities.
- Need for us to be aware of language/terminology used.



Healthy and Climate Resilient Watersheds

Avg. rating: 4.6



Sample of feedback received

"Focus on protection of people and land from flooding"

"The suggested goals are critical for human health and protection of wildlife and their habitat.

"Aggressive targets on forest cover."

"It is unclear what is meant by preparing for the impacts of climate change."

"[...] must include, with equal weight, consideration for normal agricultural practices."



Sustainable Growth

Avg. rating: 4.1



Sample of feedback received

"Proper planning to ensure smart growth principles that preserve sensitive ecosystems."

"The explanation is extremely vague and confusing."

"Green infrastructure and low impact development are imperative for new and existing development."

"Although growth is inevitable, the NPCA needs to advocate for the natural lands and for the environment, particularly its own holdings."

"Limit growth in undeveloped areas, or emphasize densification, building on brownfields."



Connecting People to Nature



Sample of feedback received

"Maintaining public access is integral to fostering a public stewardship ethic [...]"

"More environmental education and learning activities for the public."

"More public lands for public use."

"The NPCA function is not a park and recreation" department or operator."

"[...] connecting with nature is good for our physical and mental health and more innercity greenspaces are needed for those who can't access conservation areas."

Frequent confusion about active transportation.



Organizational Excellence



Sample of feedback received

"Providing staff with the support and tools they need to achieve a healthy work-life balance"

"Supports other priorities."

Should be the goal of any organization"

"NPCA staff need to have a customer focus across all areas of work.

"NPCA policies should be transparent to every resident."



Financial Sustainability and Innovative Business Models

Avg. rating: 3.9



Sample of feedback received

"Heavy reliance on municipal levy to fund the organization. User pay systems work. Cost share farm conservation programs."

"Consider a fee for service arrangement."

"Unclear what is meant by Innovative Business Models; service offerings; building capacity."

"It depends on how you diversify your funding sources."

"Align the NPCA with private, public, and political entities that are a good fit to build public trust and political support."



Partner of Choice



Sample of feedback received

"Engage municipalities."

"Improving relations with governments and other stakeholders can only help to benefit our conservation efforts.

"It depends on who you chose as a partner."

"Actively liaise with local outdoor clubs, nature clubs, birding groups, etc. [...] will likely form the core of volunteer and help with fundraising"

"Strengthening partnerships with local educational educations might help to bring more public attention to (and support for) NPCA work."



Marketing as a Destination of Choice



Sample of feedback received

"Not unless you create more conservation areas."

"Properties cannot support high volumes.

"Could take away from local users."

"We're already a destination of choice. Don't need more marketing."

"Conservation and contributing to the local economy" are often at odds. Please be about conservation first."

"Niagara's position as a tourist destination could be enhanced by making more areas for walking or biking only (special parking and shuttle bus)."

"Other agencies who concern themselves with such things."



Gathering Input

• Provide feedback/input on the draft goals:

- Are there goals missing?
- Actions to be considered?
- Is anything there that shouldn't be?



Healthy & Climate Resilient Watersheds

This strategic priority is aimed at understanding, conserving, and improving the natural heritage features of the landscape using an integrated watershed management approach to achieve healthy and climate resilient watersheds.





Support Sustainable Growth

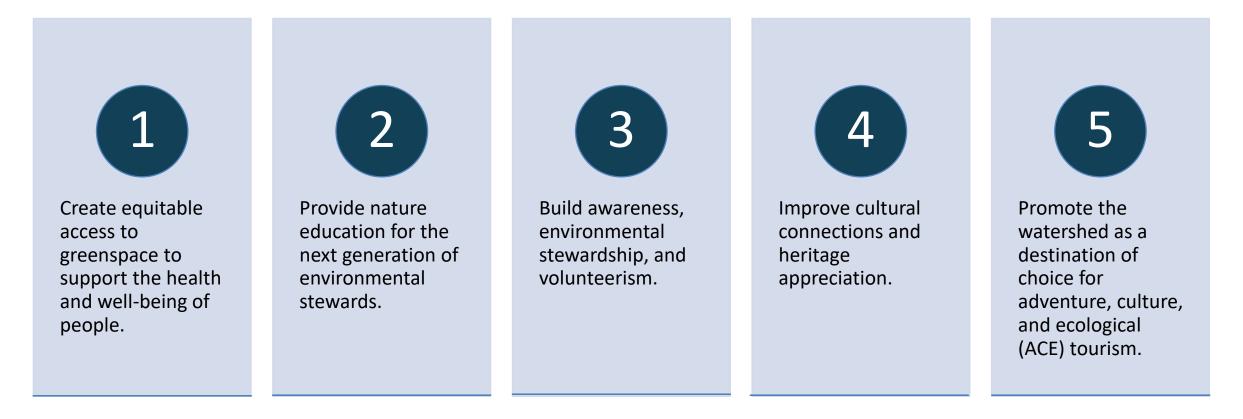
This strategic priority is aimed at using a coordinated approach and emerging practices to support building resilient communities in the watershed.





Connecting People to Nature

This strategic priority is about strengthening conservation through creating opportunities for people to learn, appreciate, and enjoy nature.





Organizational Excellence

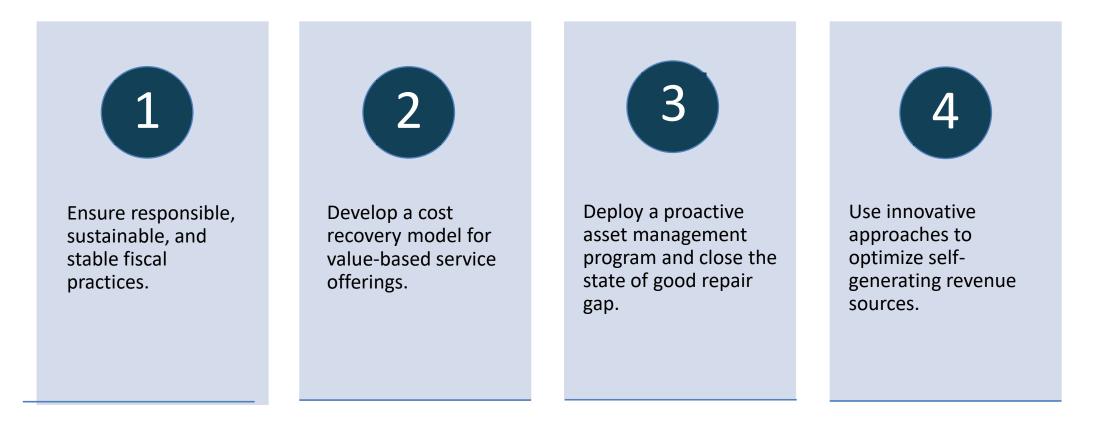
This strategic priority is aimed at providing a high quality of service, accountability and transparency by adopting high standards of service delivery and state of the art digital technology to support internal operations and processes.





Financial Sustainability

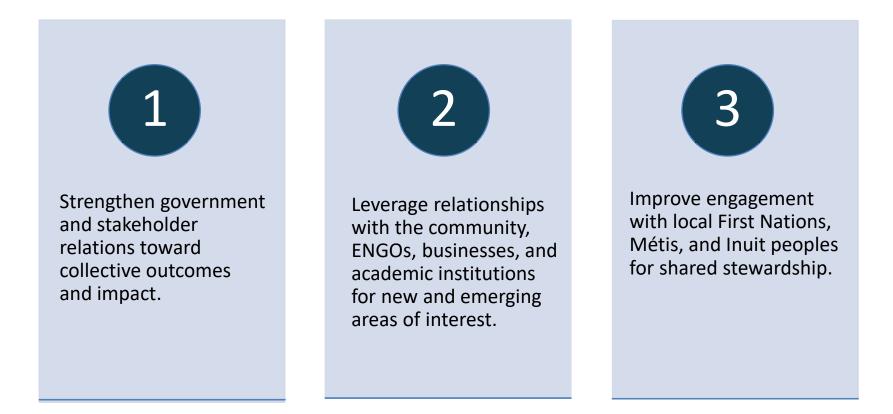
This strategic priority is aimed at ensuring we are a financially responsible, stable and sustainable organization.





Partner of Choice

This strategic priority recognizes that we will best achieve our collective goals by working together with partners and stakeholders.



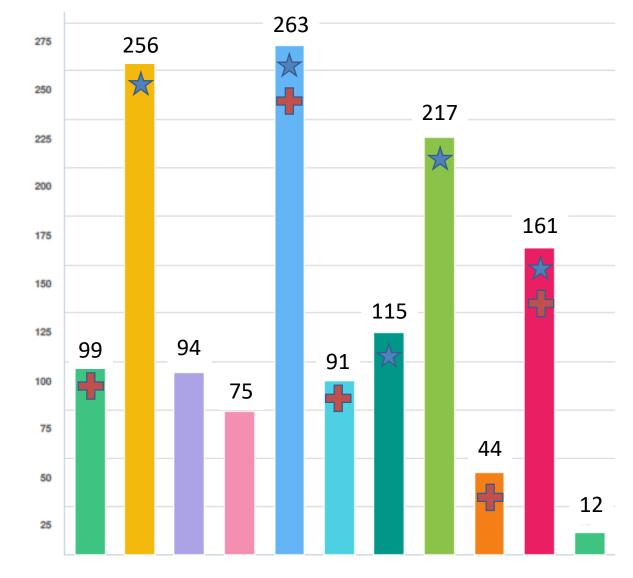


Toward a Shared Vision

- We asked community to vote on top 3 phrases (from staff session).
- Input from Board of Directors (star) and Public Advisory Committee members (+)
- Top statement shared by all: A healthy landscape now and for future generations.
- Followed by:

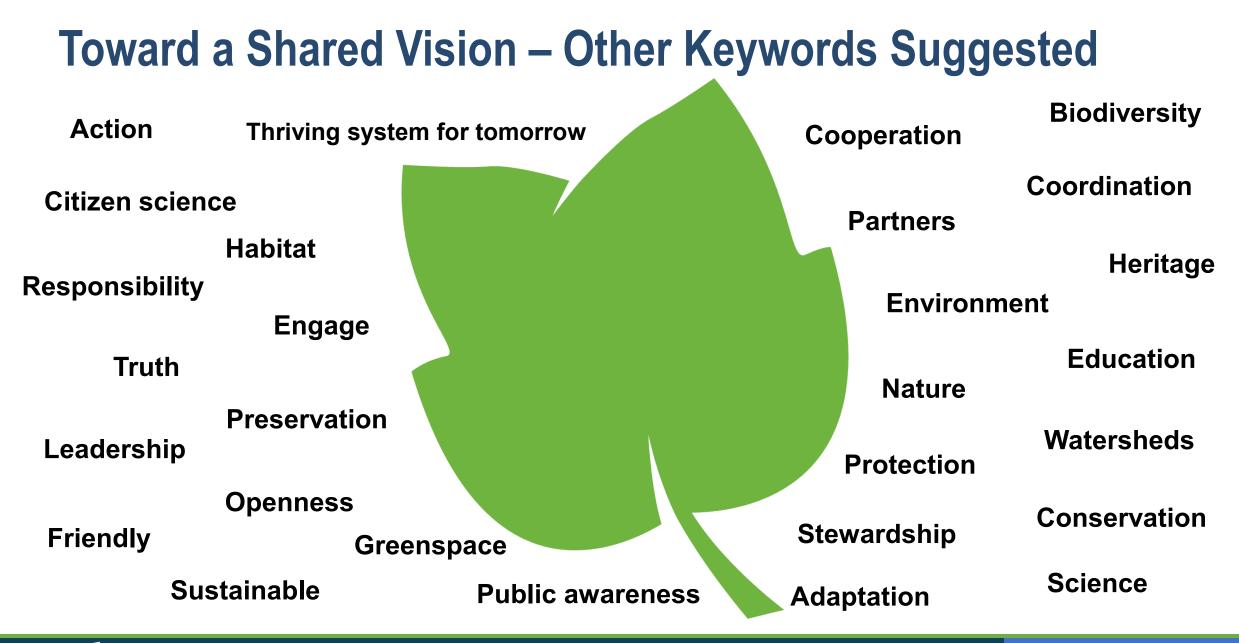
NIAGARA PENINSULA

Healthy and resilient watersheds



Question options

- Champions of environmental leadership
 Healthy and resilient watersheds
 Connected and climate resilient landscape
 A thriving and vibrant landscape for all
 A healthy landscape now and for future generations
 Watersheds for everyone to work, live and play
 Stewardship toward a healthy environment
 Conservation of natural features
 Watersheds to live and grow
 Sustainable management of natural resources
- None of the above



NIAGARA PENINSULA CONSERVATION AUTHORITY



Next Steps

- Reviewing input and refine strategic priorities, goals, and actions
- Develop key performance indicators / measures
- Draft strategic plan
 - Strategic Planning Committee and Public Advisory Committee for input
- Public outreach / Engagement #2
 - Virtual public meetings
 - Input & ideas from PAC for consideration?





Report To: Board of Directors

Subject: Niagara River 'Beach Closings' Beneficial Use Impairment (BUI) Status Assessment and Re-designation

Report No: FA-36-21

Date: June 18, 2021

Recommendation:

- 1. **THAT** Report No. FA-36-21 RE: Niagara River 'Beach Closings' Beneficial Use Impairment (BUI) Status Assessment and Re-designation **BE RECEIVED**.
- 2. **THAT** Report No. FA-36-21 **BE CIRCULATED** to the Regional Municipality of Niagara and the Town of Niagara-on-the-Lake.
- 3. **AND THAT** a letter **BE WRITTEN** to the Town of Niagara-on-the-Lake thanking them for their leadership and ongoing collaboration with the NPCA to improve the Niagara River's water quality and ecosystem health as part of the Niagara River Remedial Action Plan initiative.

Purpose:

The purpose of this report is to inform the NPCA Board of Directors about the recent Niagara River Beneficial Use Impairment Status Assessment Report which recommends changing the status of the 'Beach Closings' BUI to Not Impaired.

Background:

The Niagara River was identified as one of 43 Great Lakes' Area of Concern (AOC) in the late 1980s due to water quality and habitat problems. Several partners (including the NPCA) have been working together to improve the Niagara River's water quality and ecosystem health as part of a local Remedial Action Plan (RAP). Each AOC must restore fourteen potential impaired beneficial uses that represent the ways in which humans and wildlife benefit from water. The beneficial use impairments (BUIs) are used by the local RAP team to focus restoration needs, track progress, and report on success. There are only 5 BUIs remaining in the Niagara River (Ontario) AOC related to restrictions on fish consumption, degradation of fish and wildlife populations, degradation of benthos (bugs that live in sediments in waterbodies), beach closings, and loss of fish and wildlife habitat. The goal of the RAP is to complete actions that improve individual BUIs to remove the Niagara River from the list of Great Lakes' AOCs.

The 'Beach Closings' BUI is meant to indicate water quality issues due to bacterial pollution from fecal sources (e.g., sewage waste). Historically, the 'Beach Closings' BUI has been designated as

impaired due to high levels of *E. coli* bacteria at Queen's Royal Beach (QRB) in the Town of Niagaraon-the-Lake (NOTL). QRB is the only public swimming beach on the Canadian side of the Niagara River. Studies indicated that the contamination was likely from the nearby storm sewer outfall that discharges near the beach. From 2010-2018, thorough investigations into the bacterial pollution sources that could be linked to water quality issues were identified and remedial and monitoring actions were completed by the Town of NOTL and other relevant partners to address the challenges impacting QRB.

Discussion:

Recent extensive water quality monitoring, microbial source tracking studies, storm sewer investigations, and implementation of remedial actions have resulted in significant water quality improvements at the Niagara River beach. Additional risk management actions will continue to ensure people are aware of potential risks and help them make decisions to protect their health.

The 'Beach Closings' BUI Status Assessment Report indicates all the Niagara River RAP criteria have been met and recommends that the status of the 'Beach Closings' BUI for the Canadian side of the Niagara River be officially changed to Not Impaired. The BUI is not considered impaired on the U.S. side of the Niagara River.

Table 1. Niagara River BUI delisting criteria and assessment result.

For the Niagara River (ON) AOC, the Beach Closings BUI will no longer be considered impaired when:	Assessment Result
 Prominent sources of fecal pollution that could contaminate the beach or recreational waters are known <u>and</u> remedial actions to address known sources are identified and completed; 	Achieved
 At least 80% of the geometric mean results of recreational water samples (when sampled at least once per week) meet the Ontario Ministry of Health Recreational Water Quality Guideline (≤200 CFU/100 mL) each swimming season for a minimum of three years; 	Achieved
 Risk management actions (e.g., postings, signage, education, rain rule) are in place to protect human health. 	Achieved

In a joint outreach and engagement effort with the Town of NOTL, RAP partners are proceeding with the re-designation process by seeking input from the public, local First Nations, Métis Nation of Ontario, and U.S. RAP counterparts before submitting an official status change request to the Government of Canada and Ontario for review and approval. If approved, the Niagara River RAP Team will have reached another tremendous milestone on the journey to remove the Niagara River from the list of Great Lakes' Areas of Concern and will have four remaining BUIs. More information is available at www.ourniagarariver.ca/beach.

Financial Implications:

There are no financial implications. The Niagara River Remedial Action Plan project is funded through agreements with Environment and Climate Change Canada and the Ontario Ministry of the Environment, Conservation and Parks.

Links to Policy/Strategic Plan:

The Niagara River (Ontario) Remedial Action Plan is currently hosted and coordinated by the NPCA through agreements with the federal and provincial governments.

Related Reports and Appendices:

None.

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ASSESSMENT REPORT

BEACH CLOSINGS BENEFICIAL USE IMPAIRMENT #10

2021



BEACH CLOSINGS BENEFICIAL USE IMPAIRMENT STATUS ASSESSMENT REPORT for the Niagara River (Ontario) Area of Concern

DRAFT FOR REVIEW

2021

<u>Suggested citation</u>: Green, N. 2021. Beach Closings Beneficial Use Impairment Assessment Report for the Niagara River (Ontario) Area of Concern. Welland, ON. pp. 11.

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EXECUTIVE SUMMARY

This document serves to present an updated assessment on the *Beach Closings* Beneficial Use Impairment against the established delisting criteria and outlines the recommendation to change the status to not impaired for the Canadian side of the Niagara River Area of Concern.

The *Beach Closings* Beneficial Use Impairment (BUI) is meant to indicate water quality issues due to bacterial pollution from fecal pollution sources (e.g., sewage waste). Historically, the *Beach Closings* BUI has been designated as impaired in the Niagara River Area of Concern (AOC) since the inception of the Remedial Action Plan (RAP) program and was first listed in the RAP Stage 1 Report (1993). It remained impaired due to high levels of *E. coli* bacteria at Queen's Royal Beach in the Town of Niagara-on-the-Lake—the only public swimming beach on the Niagara River.

Recent extensive water quality monitoring, microbial source tracking studies, storm sewer investigations, and implementation of remedial actions have resulted in significant water quality improvements at the Niagara River beach. Additional risk management actions will continue to ensure people are aware of potential risks and help them make decisions to protect their health.

This assessment report reviews recent information to examine whether the BUI delisting criteria have been met. Below is a summary of the BUI delisting criteria and the result of this assessment.

For the Niagara River (ON) AOC, the Beach Closings BUI will no longer be considered impaired when:

- Prominent sources of fecal pollution that could contaminate the beach or recreational waters are known <u>and</u> remedial actions to address known sources are identified and completed;
- At least 80% of the geometric mean results of recreational water samples (when sampled at least once per week) meet the Ontario Ministry of Health Recreational Water Quality Guideline (≤200 CFU/100 mL) each swimming season for a minimum of three years;
- 3) Risk management actions (e.g., postings, signage, education, rain rule) are in place to protect human health.

This assessment report indicates all the criteria have been met. Thus, it is recommended that the status of the *Beach Closings* BUI for the Canadian side of the Niagara River be officially changed to 'NOT IMPAIRED'. The Remedial Action Plan (RAP) Committee will proceed with the re-designation process by seeking input from the community, including its U.S. RAP counterparts before submitting an official status change request to the government of Canada and Ontario for review and approval.

Assessment

Result

BACKGROUND

Swimming is a fun and healthy way for people to enjoy the waters of the Great Lakes and is considered a beneficial use under the Canada-U.S. Great Lakes Water Quality Agreement (GLWQA). When something interferes with the ability to enjoy water (like poor water quality leading to a beach posting), it is considered a Beneficial Use Impairment, or BUI. The BUIs are used by the local Remedial Action Plan (RAP) team to focus restoration needs, track progress and report on success. When taken together, the status of all the BUIs inform the RAP team about the overall condition of the Niagara River—which was listed as a Great Lakes Area of Concern (AOC) in 1987. When the required actions for each BUI identified by the RAP are complete and locally defined goals (called delisting criteria) are met, then the Niagara River can be removed from the list of AOCs.

The *Beach Closings* BUI is meant to indicate water quality issues due to bacterial pollution from fecal pollution sources (e.g., sewage waste). This was one of the main environmental concerns when the Niagara River was first listed as an AOC. Swimming in waters with bacterial pollution increases the risk of infections of the ear, eye, nose, throat, and skin and may cause diarrhea if that water is ingested (Niagara Region 2021). Escherichia coli (*E. coli*) is used as an indicator of fecal pollution for the purpose of beach monitoring across Ontario. Each AOC has its own set of goals and actions to guide remediation and tackle the key issues impacting the water quality impairment.

For the Niagara River (ON) AOC, the *Beach Closings* BUI will no longer be considered impaired when:

- Prominent sources of fecal pollution that could contaminate the beach or recreational waters are known <u>and</u> remedial actions to address known sources are identified and completed;
- At least 80% of the geometric mean results of recreational water samples (when sampled at least once per week) meet the Ontario Ministry of Health Recreational Water Quality Guideline (≤200 CFU/100 mL) each swimming season for a minimum of three years;
- 3) Risk management actions (e.g., postings, signage, education, rain rule) are in place to protect human health.

The *Beach Closings* BUI has been noted as impaired on the Canadian side of the Niagara River AOC since the RAP Stage 1 Report (NRRAP 1993), which provided a description of environmental conditions and identified problems in the AOC. The 1993 Report indicated that beach closings on the Canadian side, "had occurred fairly routinely over a decade and that issues were related to combined sewer overflows, slow moving waters in nearshore swimming areas, and plentiful waterfowl". At that time, there were other public swimming beaches on the Canadian side of the Niagara River, but they have since been removed from the list of public beaches by the Niagara Parks Commission due to public safety concerns rather than water quality issues. Today, Queen's Royal Beach (QRB), located in the Town of Niagara-on-the-Lake (NOTL) at the mouth of the Niagara River, is the only public swimming beach within the Ontario waters of the Niagara River.

The *Beach Closings* BUI status remained 'Impaired' in the RAP Stage 2 Report (NRRAP 1995) and in the subsequent 2009 RAP Stage 2 Update Report due to bacterial water quality not meeting the water quality goals at QRB, particularly in 2009. The RAP Stage 2 Update Report (NRRAP 2009) indicated that the source of contamination at QRB was likely from the nearby storm sewer outfall and recommended further studies to determine whether the contamination was anthropogenic (from human sources) and if the source could be remediated. From 2010-2018, thorough investigations into the bacterial pollution

source(s) that could be linked to water quality issues were completed and 18 priority actions were identified by a Technical Expert Working Group in 2019 (Appendix 1). Since 2018, the Town of NOTL and other relevant partners have implemented remedial and monitoring actions to address the challenges impacting QRB.

The purpose of this report is to assess the *Beach Closings* BUI delisting criteria and determine whether the BUI status should be changed to 'Not Impaired' for the Niagara River (ON) AOC.

ASSESSMENT OF BUI DELISTING CRITERIA

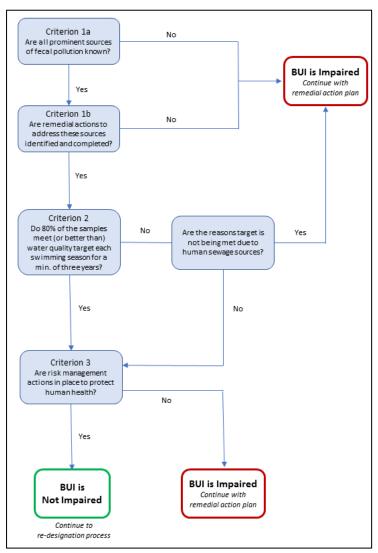


Figure 1. Beach Closings BUI assessment framework for determining BUI status.

This section examines and summarizes the information related to each of the three delisting criteria identified for the *Beach Closings* BUI and assesses whether each criterion has been met. The Assessment Framework (Fig. 1) assists in determining the BUI's status.

Assessment of Criterion 1

This criterion first examines if all prominent sources of fecal pollution are known and whether remedial actions have been identified and completed as necessary. It is meant to ensure a course of action is identified and completed if significant sources of fecal pollution are found. Remedial actions noted in this criterion target locally-controllable human sources (e.g., human sewage rather than waterfowl fecal waste) as these are tied to the legacy concerns of the AOC and RAP program.

In response to recommendations in the Stage 2 Update Report (NRRAP 2009), scientists from Environment and Climate Change Canada (ECCC) conducted microbial source tracking studies (using DNA markers) from 2010-2015 to identify the source (human or animal) of bacterial pollution at beaches in the Niagara Region, including QRB. The studies found that:

- a microbial DNA marker indicating human sewage contamination was detected more often at QRB than any other Niagara Region beach;
- low levels of *E. coli* bacteria (usually from human sources) at the beach come from upstream sources in the Niagara River;
- high levels of *E. coli* at QRB were strongly linked to the stormwater outfall near the beach;
- subsequent studies also identified low levels of fecal pollution from gulls at QRB and at the storm outfall typically associated with rain events.

Overall, the microbial source tracking results 2010-2015 identified that the King Street Stormwater Outlet (KSSO), which discharges stormwater immediately east of QRB, was the prominent source of contamination that required further investigation and remediation (Fig. 2). The Town of NOTL subsequently received funding from Environment and Climate Change Canada between mid-2017 to early 2019 to investigate the KSSO catchment area (Fig. 3) to identify the potential sources of *E. coli* that were impacting QRB.



Figure 2. View of the Niagara River from the King Street Storm Outlet located near the Queen's Royal Beach (located to the left of the image; not shown).

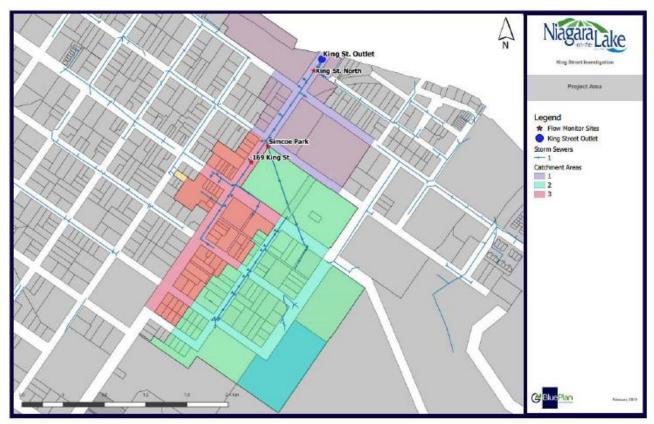


Figure 3. Map of the King Street Storm Sewer catchment area (Coveart 2021).

The engineering firm retained to conduct the storm sewer investigations found that the KSSO catchment area had several issues with bacterial contamination linked to improper sewer connections, abandoned sewer infrastructure, low flow cross-connections (between storm and sanitary sewers), and stormwater infrastructure in poor/failing condition. A detailed report (GMBP 2019) outlined findings of the investigations and provided recommendations to address the most prominent sources of bacterial

contamination in the KSSO catchment area. The Niagara River RAP technical expert working group reviewed and prioritized these recommendations into a list of remaining actions that guided remediation efforts (refer to Appendix 1). 2018-2020, a water quality From monitoring program, extensive field investigation program, and rehabilitation of identified infrastructure deficiencies were undertaken within the KSSO drainage area with a focus on reducing levels of E. coli at QRB. With the most prominent issues identified, the Town of NOTL began completing remedial actions in 2018 to resolve problems with the storm sewer system potentially impacting water quality at QRB. For example, raccoon grates were installed



Figure 4. The biofiltration facility installed in Simcoe Park in the Town of NOTL (October 2020).

in 2019, sewer infrastructure improvements (fixing cracks, joint offset, connection problems) were completed in 2019/20, several best practices were implemented (e.g., regular maintenance of catch basins), and a bioswale (low-impact development feature) was constructed in Simcoe Park in 2020 (Fig. 4). The bioswale uses one meter of engineered filter media comprised of sand, soil and organic matter to provide quality control treatment for two stormwater outfalls with a 4.2 ha catchment area, which ultimately discharge to the KSSO. This reduces the amount of bacterial loading at QRB. A report by GMBluePlan Engineering (Coveart, 2021) indicates that the efficacy of these remedial actions in the KSSO catchment area have been successful in improving water quality (Table 1). Specifically, post-remediation sampling (2020) at the KSSO outfall indicated minimal levels of human sources of *E. coli* and confirms that the outfall is no longer a prominent source of human sewage. Further, the construction of the bioswale at Simcoe Park has significantly improved water quality. Monitoring indicates it is 89-95% effective at reducing bacteria.

Area of Focus	Summary of Results
KSSO Outlet discharging to the beach	 Only 20% of samples collected from KSSO in 2020 showed presence of human source of <i>E. coli</i> compared to 2018 (where all samples collected had the presence of human source of <i>E. coli</i>). The maximum amount of human DNA marker in dry weather samples was reduced by 68%. The maximum amount of human DNA marker in wet weather samples was reduced by 77% (compared to 2020) and 85% (compared to 2019). 82% reduction of other animal source <i>E. coli</i> DNA markers (non-human and non-gull) in wet weather. 99% reduction in human DNA marker compared to highest recorded value in 2014.
Simcoe Park bioswale	 Human DNA marker (max amount) during wet weather reduced by 93%. 95% reduction of maximum values for Other Animal source (non-human and non-gull) <i>E. coli</i> during wet weather 89% reduction of average values for Human DNA marker (wet weather) Average values for Other Animal source (non-human and non-gull) E. coli during wet weather – 94% reduction.

Table 1. Summary of water quality monitoring results (2018-2020) in specific areas of focus in the KSSO.

While the Town of NOTL has completed all priority actions as part of the RAP requirements, it will be initiating additional infrastructure upgrades to the King Street drainage area during the 2021 season, including the installation of trenchless structural lining in the mainline sewer pipes within the KSSO catchment area.

In summary, all prominent sources of fecal pollution are known and remedial actions to address these known sources are identified and completed. The assessment shows that criterion 1 has been met.

Assessment of Criterion 2

The second BUI criterion specifically relates to the water quality condition at the beach due to bacteria from anthropogenic sources (i.e., human sewage rather than waterfowl or other animal fecal waste). It is meant to ensure that remedial actions (identified and addressed through criterion 1) are having a positive impact on water quality at the beach.

Prior to 2017, the Niagara Region Public Health Unit (NRPHU) monitored Queen's Royal Beach water quality weekly as part of its regional beach monitoring program from May (Victoria Day) to September (Labour Day). In 2017, the NRPHU determined that several beaches (including QRB) would be removed from their sampling schedule to allow for increased sampling and data accuracy at the most popular beaches (A. Habjan, personal communication, May 2019). To fulfill the RAP goals and the Town of NOTL's desire to maintain the QRB as a public swimming beach, partner organizations involved in the

Niagara River RAP worked together to ensure the beach would be monitored. The Town of NOTL monitored water quality at the beach three times per week during the swimming season 2018-2020 with funding support from ECCC, Ontario Ministry of Environment, Conservation and Parks (MECP) and technical support from NRPHU and the Niagara Peninsula Conservation Authority (NPCA) (Fig. 4). During that time, the NRPHU provided training for Town of NOTL water quality staff and conducted sample analysis to ensure adherence to the sample collection and analysis protocols for quality assurance and for comparison to previous sampling.



Figure 3. Staff at the Town of NOTL collect a sample at QRB (June 2019).

In Ontario, the water quality guidelines are set by the Ontario Ministry of Health and Long-Term Care (OMHLTC) (OMHLTC, 2018). People are advised to avoid using recreational waters when the geometric mean of *E. coli* is higher than 200 colony forming units (CFU) per 100 mL and the beach is 'Posted' (i.e., swimming/recreational water contact should be avoided due to unsafe conditions). A beach is closed when there is a high risk of impacting human health due to poor water quality or immediate health hazards that make it unsafe for recreational body contact (e.g., blue-green algae, chemical spill, oil). To date, no Niagara Region beaches have ever been 'closed' due to water quality and/or severe health hazards (A. Habjan, personal communication, May 2019).

The BUI delisting criterion #2 is based on the geometric mean *E. coli* levels from the beach meeting the provincial water quality guideline at least 80% of sampling events during the swimming season, and it is to be assessed over a three year period. Results of the water quality sampling in 2018, 2019, and 2020 indicate that the beach consistently met the RAP water quality targets in each swimming season. Details on sampling and results are outlined in two separate reports (Laufman & Moura, 2020; Laufman & Patel, 2021). Below is a summary of the key findings from the water quality monitoring studies:

Year	Year % samples met water quality target	
2018	83	
2019	80.6	
2020	90.5	

Given the dynamic nature of beach environments and natural influences (e.g., wildlife, rainfall), it is unlikely for a beach to be entirely free of E. coli bacteria above thresholds 100% of the time (ECCC/USEPA 2018). Past microbial source tracking studies completed in the Niagara River by ECCC (2010-2015) indicate that the Niagara River itself delivers low concentrations of E. coli to the beach, usually associated with low level human sewage impacts linked to wastewater treatment bypasses or heavy rainfall events farther upstream (NRRAP 2019). However, the three years of beach monitoring still shows E. coli levels are within the provincial guideline based delisting criteria. Other persistent, low level sources of E. coli are likely to come from wildlife at the beach, because field observations during beach monitoring (2018-2020) noted the frequent presence of gulls and geese at QRB. Microbial source tracking analysis also confirmed the presence of gull DNA as well as 'Other Animals' (there is no marker to identify other animals such as horses and racoons). The presence of racoons in the storm sewers was confirmed in 2017 and actions were taken to prevent their entry into the KSSO area (e.g., installation of racoon prevention grates and a one-way check valve on the storm outlet at the beach). Results show that remedial actions have reduced the maximum amount of 'Other Animal' microbial DNA in samples from the KSSO from 2018-2020 by 99% in dry weather and 89% in wet weather (Coveart 2021). There is a horse carriage route in the area that may continue to contribute some E. coli to the storm system. The Town of NOTL installed additional measures (i.e., smart sponges) in targeted locations to capture potential fecal contamination from other runoff sources to protect water quality at QRB. Furthermore, the Town of NOTL may re-route the horse carriages away from the KSSO catchment area and may consider adding other management options to reduce droppings on the roads. The Town of NOTL will continue to monitor the beach by collecting samples 3 times per week with analysis support by the Niagara Region Public Health Unit (NRPHU). This long-term collaborative sampling will be reviewed and confirmed annually.

In summary, over 80% samples collected during each swimming season met the provincial water quality target of ≤200 E. coli CFU/100 mL each year for the last 3 years (i.e., 2018, 2019, 2020). **Results of the assessment shows that criterion 2 has been met.**

Assessment of Criterion 3

The third and final criterion is meant to mitigate health risks associated with swimming in contaminated waters. Given that it is unlikely for beach water to be 100% free of *E. coli*, there is a risk of getting sick if someone swims in more contaminated water. The protection of human health can be achieved through numerous risk management methods such as appropriate signage indicating best practices (e.g., wash hands after swimming and before eating, do not swim when water is wavy or if it has rained within the past 24 hours, check the website for beach monitoring results).

In line with the risk management actions required to meet criterion #3, the Niagara River RAP partners have implemented several risk management actions:

- A webpage was added to the Town of NOTL website to communicate best practices for swimming at QRB and to share beach monitoring results;
- The NRRAP website contains a webpage to communicate similar best management practices and has a link to the NOTL beach webpage;
- The NRPHU will continue to post data on its Open Data Portal website where it can be downloaded.
- A sign is in development and will be installed at the beach to further protect beachgoers from potential bacteria in the water.

• Although not required, a sign may be also installed at the storm outlet advising people not to let pets drink the water.

Given all these risk management actions are completed or in progress, criterion 3 has been met.

RECOMMENDATION

Recent water quality monitoring, microbial source tracking studies, storm sewer investigations, and implementation of remediation and risk management actions, the Niagara River (ON) *Beach Closings* BUI delisting criteria have all been met.

It is recommended that the status of the *Beach Closings* BUI for the Canadian side of the Niagara River be officially changed to 'NOT IMPAIRED'.

REFERENCES

- Coveart, C. 2019. Town of Niagara-on-the-Lake King Street Storm Sewer Investigation. GMBluePlan Engineering File #618025. [Download]
- Coveart, C. 2021. King Street Investigation & Rehabilitation: Water Quality Monitoring Report for Data Collected from 2018 to 2020. GMBluePlan Engineering File #618025. [Download]
- Environment and Climate Change Canada and the U.S. Environmental Protection Agency (ECCC/USEPA). 2018. Lake Ontario Lakewide Action and Management Plan, 2018-2022. Cat. No. En164-58/2019E-PDF ISBN 978-0-660-32586-6
- Laufman K. and P. Moura. 2020. Queen's Royal Beach Water Quality 2019 Monitoring and Data Analysis Report. Town of Niagara-on-the-Lake, Ontario, Canada. [Download]
- Laufman K. and I. Patel. 2021. Queen's Royal Beach Water Quality 2020 Monitoring and Data Analysis Report. Town of Niagara-on-the-Lake, Ontario, Canada. [Download]
- Niagara River Remedial Action Plan (NRRAP). 1993. Niagara River Area of Concern Environmental Conditions and Problem Definitions: Remedial Action Plan Stage 1. Prepared jointly by Ontario Ministry of Environment and Energy, Environment Canada, Ontario Ministry of Natural Resources, and Fisheries and Oceans Canada.
- Niagara River Remedial Action Plan (NRRAP). 1995. The Cleanup Connection: Remedial Action Plan Stage 2 Report (Recommended Plan). ISBN 0-7778-3897-4.
- Niagara River Remedial Action Plan (NRRAP) 2009. Niagara River Remedial Action Plan Stage 2 Update
- Ontario Ministry of Health and Long-Term Care (OMHLTC). 2018. Operational Approaches for Water Quality Guideline.

Appendix 1. The list of recommended actions identified by the RAP's Technical Expert Working Group members in 2019. All actions with a check mark are complete. Those with a dot are in progress or will be implemented beyond the RAP.

#	Recommended Action	2019	2020	2021	2022	2023	Beyond	Lead(s)	
REMED	REMEDIAL ACTION(S)								
10.1	Disconnect the wading pool in Simcoe Park from the lateral storm sewer connection and connect to the sanitary sewer system.	$\overline{}$						NOTL	
10.2	Implement grate improvements to the Wellington Street storm sewer inlet to prevent racoon entry.	$\overline{}$						NOTL	
10.3	Implement storm grate outlet improvement and structural lining of storm sewer on Davy Street.		\searrow					NOTL	
10.4	Repair the laterals with large and medium joint offsets at property line.		\searrow					NOTL	
10.5	Remediate the sanitary manhole with the Region of Niagara sewage forcemain connection.		\searrow					NOTL, Niagara Region	
10.6	Rehabilitate the storm manhole and outlet in poor condition located on King Street and Front Street.	\checkmark	\searrow					NOTL	
10.7	Abandonment of poor condition mainline sanitary sewer on King street.		\searrow					NOTL	
10.8	Implement low-impact development (LID) stormwater management techniques in Simcoe Park to reduce bacterial loadings to the storm sewer system.		\checkmark					NOTL, ECCC, MECP	
	 If <i>E. coli</i> results do not improve after LID construction in Simcoe Park, then LID techniques at the storm outfall near QRB (King Street Storm Outlet) could be considered. 			N/A					
	Implement regular maintenance of catchbasins and storm drains in the King Street Storm Outlet (KSSO) catchment area, including (but not limited to):								
10.9	 Perform sump maintenance (annually) to remove sediment and debris in catchbasins. 	\checkmark	\checkmark				•		
	 Flush the King Street Storm Outlet catchment area once grates installed on Wellington Street storm inlet (min. once per year thereafter). After flushing, conduct a visual inspection of storm sewer sumps to ensure they are free of debris. If not, they must be cleaned. 		\checkmark				•	NOTL	
	 Manual labour required where difficult truck access is noted (e.g. Simcoe Park) for catchbasin sump cleaning in spring and fall annually. 		\searrow				●		

#	Recommended Action	2019	2020	2021	2022	2023	Beyond	Lead(s)	
WATER	WATER QUALITY MONITORING								
10.10	Collect water samples from QRB three times per week during the swimming season and analyze for levels of <i>E. coli</i> (note: this sampling began in 2018).	\checkmark	\checkmark					NOTL (collection) NRPHU (analysis)	
10.11	Confirm that the QRB will continue to be monitored at least once per week during the swimming season and analyze for levels of <i>E. coli</i> beyond the RAP.		\checkmark				•	NOTL (collection) NRPHU (analysis)	
10.12	Collect monthly (May-Oct) water samples from the stormwater outfall near QRB for <i>E. coli</i> testing.	\checkmark	\checkmark					NPCA, NOTL	
10.13	Collect water samples from the storm sewer catchment area to validate the efficacy of the LID stormwater management techniques.		\checkmark					NOTL	
10.14	Collect water samples from QRB and stormwater outfall to be tested for presence/absence of human DNA markers.	\checkmark	\checkmark					NOTL	
OUTRE	OUTREACH & EDUCATION								
10.15	Notify the public of beach postings at QRB due to elevated levels of <i>E. coli</i> using existing methods such as NRPHU website and signage at the beach (NOTL Parks & Recreation Dept.).							NRPHU, NOTL	
10.16	Continue to communicate information to public about making safe swimming choices (e.g., avoid swimming 24-48h after rainfall, check NRPHU website before entering water, wash hands after swimming, etc.).						•	NRPHU (2019) NOTL (2020 - beyond)	
10.17	Design and install improved signage at the QRB to communicate beach postings, swimming safety, and risk management practices (e.g., rain rule, washing hands, etc.).		In progress					NOTL, NRRAP, NRPHU	
10.18	Design/install interpretive signage to highlight the LID project at Simcoe Park.		\checkmark					NOTL, NRRAP	
REPOR	TING		•						
10.19	Gather all relevant water quality information for the past three years at QRB and conduct an assessment of the BUI.		\checkmark	\checkmark					
	If not impaired, proceed with re-designation process							NRRAP	
	• If still impaired, further discussions will be required.			N/A					



Report To: NPCA Public Advisory Committee

Subject: NPCA Public Advisory Committee Membership Update

Report No: PAC-01-21

Date: June 17, 2021

Recommendation:

That Report No. PAC-01-21 Public Advisory Committee Membership Update Membership **BE RECEIVED**.

Purpose:

The purpose of this report is to inform the NPCA Public Advisory Committee (PAC) of a change in membership for the Niagara Region Métis Council representation on the PAC effective June 2021.

Background:

On May 20, 2021 the NPCA was informed that the current Niagara Region Métis Council representative on the PAC, Mr. Derrick Pont, would be stepping down. He noted that he had consulted with the Métis Nation Ontario Region 9 Presidents and they wished to see a Métis citizen from the Niagara-area fill the remainder of his term. The Niagara Region Métis Council discussed the membership and put forward a candidate by the name of Kelsey Huxley, a Métis Nation of Ontario citizen who is a resident of Welland and interested in serving on the NPCA Public Advisory Committee.

The PAC Chair and the Member Selection Sub-Committee are fully supportive of Kelsey Huxley fulfilling the remainder of Derrick Ponts' term effective June 2021.

Related Reports and Appendices:

None.

Authored by:

Kerry Royer Coordinator, Community Outreach

Reviewed by:

Renee Bisson Manager, Communications and Public Relations

Submitted by:

Chandra Sharma CAO/Secretary-Treasurer



Report To: NPCA Public Advisory Committee

Subject: NPCA Public Advisory Committee Discussion Paper

Report No: PAC-02-21

Date: June 17, 2021

Recommendation:

- 1. That Report No. PAC-02-21 regarding the NPCA Public Advisory Committee Discussion Paper found in Appendix 1 **BE APPROVED**.
- 2. **THAT** the NPCA Public Advisory Committee **DIRECT** Chair Oblak to bring the approved Discussion Paper to the Full Board Authority at an upcoming meeting.

Purpose:

The purpose of this report is to present the attached Discussion Paper that outlines issues and opportunities within the Niagara Peninsula watershed identified by members of the NPCA Public Advisory Committee (PAC). Once approved, the Discussion Paper will be presented to the NPCA Full Board Authority for their consideration and discussion.

Background:

On February 25, 2021 as part of the meeting agenda, the PAC discussed issues and opportunities specific to their sectors in relation to the natural systems found within the watershed jurisdiction of the NPCA. The following questions were put forward to help frame the discussion:

- 1. From the perspective of your interest in environmental conservation and sustainable land use in Niagara what two issues do you feel are the most important?
- **2.** How do these issues relate to the NPCA and how would you like to see the organization address them?
- 3. Other important issues?
- **4.** Further comments?

Members were asked to provide a written response to these questions after the meeting. The Discussion Paper was authored by PAC Chair Jackie Oblak with input from the PAC members and includes key points captured at the meeting as well as the written responses from six (6) members. A total of twelve (12) members, including the NPCA Board Chair and Vice Chair, participated in the discussion,

Related Reports and Appendices:

1. Appendix 1: NPCA Public Advisory Committee Discussion Paper

Authored by:

Kerry Royer, Coordinator, Community Outreach

Reviewed by:

Renee Bisson, Manager Communications and Public Relations

Submitted by:

Chandra Sharma, CAO/Secretary-Treasurer

Niagara Peninsula Conservation Authority Public Advisory Committee Discussion Paper

Identification of Key Issues and Opportunities within the Niagara Peninsula Conservation Authority (NPCA) Area

June 17, 2021

Introduction

The Niagara Peninsula Conservation Authority (NPCA) Public Advisory Committee (PAC) is comprised of twelve (12) voting members representing a broad cross-section of interests across NPCA jurisdictional area and two non-voting Board members. Members represent the following sectors;

- First Nations
- Métis
- Urban/rural planning
- Agricultural North
- Agricultural South
- Development
- Chamber of Commerce/Tourism
- Property owners/Public-at-large
- Public-at-large
- Public-at-large
- User/volunteer
- Environment
- NPCA Board Chair
- NPCA Board Vice Chair

Members are recommended by a selection sub-committee based on their experience and expertise and appointed to the PAC by the NPCA Board of Directors.

On February 25th, 2021 the Public Advisory Committee met to discuss, in part, issues and opportunities specific to their sector in relation to natural systems and the NPCA. The following questions were put forward to frame the discussion;

- 1. From the perspective of your interest in environmental conservation and sustainable land use in Niagara what two issues do you feel are the most important?
- 2. How do these issues relate to NPCA and how would you like to see the organization address them?
- 3. Other important issues?
- 4. Further comments?

Members were also asked to provide a written response to these questions after the meeting. This paper captures key points made both in the discussion and in the written responses. Twelve (12) members, including the Board Chair and Vice Chair, participated in the discussion and six (6) written submissions were received following the meeting.

The following is a summary of comments and observations from PAC members. Further detail is available on request. It should be noted that four (4) of the PAC members were attending their very first meeting when this discussion took place, while other members have been members of the PAC for a full term or more.

Issue Identification by Sector

First Nations

The member representative stressed the importance of the land and using it sustainably.

- 1. **Natural systems protection** We must ensure that we are preserving the natural flora and fauna. As important is ensuring the ones that aren't supposed to be here, the invasive species, aren't here.
- 2. Education Education around historical aspects of the land in Niagara is important and should be approached in positive ways.

Métis

The member representative was very interested in protecting our water and watershed. They_are concerned about what is being put on the land, with the understanding that water and land are connected, so what is put onto our lands may eventually find its way into the water, including sources of drinking water.

- 1. **Drainage** the province is allowing for increases to the length of culverts for road crossings. It is important to not create "entombments" of the waterways by increasing the area of waterway in culverts. It should also be remembered that what many see as a drain is the main source of water for other animals.
- 2. **Nutrients** what is allowed to be put on the land, especially close to waterways. The provincial government is allowing an increase to the amount of farm manure which may be put into the digesters and the waste from this will be put on the land. This will be an increase to what they currently put on the land, often close to waterways, and there is a high risk that increased

Appendix 1: NPCA Public Advisory Committee Discussion Paper Report No. PAC 02-21 nutrients and other contaminants will enter our waterways during spring runoff and rainfall events. The safe transport of these nutrients is also a concern as new regulations are making it easier to transport material from one farm to another.

Urban/Rural Planning

The member representative noted that climate change is something that is going to impact all of us. We will need to prepare/mitigate, to maintain water supplies, and the health of our ecosystems. The Niagara region is poised for substantial growth so there is a need to balance environmental responsibility and reasonable pricing levels.

- Provide Balance There is a desire to strike a balance between environmental protection and sustainable development. The NPCA could become a leader in sustainable development while at the same time facilitating land development projects that comply and implement appropriate environmental initiatives. Sometimes proposed innovative low impact development (LID) solutions are declined by the municipalities for perceived maintenance and upkeep issues. A very proactive educational program would help make LID options more accepted/recognized.
- Realistic environmental standards These need to be implemented. A blanket prohibition of development closer than 30 m to a provincially significant wetland (PSW) is a prime example. There are a myriad of environmental policies and permits to deal with for development projects.
 - Proposing environmental or LID standards or guidelines is a great initiative in order to implement these_municipal staff and developers need to "buy in" and see direct benefits
 - b. Tree preservation initiatives are also important. Adopting a watershed wide replacement policy and having land available to facilitate replacement when it is not possible to save every tree should be a consideration/option
 - c. Having replacement habitat readily available outside the urban boundary–paid for by developers who are forced to find replacement habitat protects the threatened or endangered species while also allowing the development to proceed.

"The diversity on PAC is great and we should be able to address these issues."

Development

The member representing this sector is relatively new to the PAC but was able to provide the following points for consideration:

- 1. The development sector is interested in the direction of the NPCA's Strategic Plan, local growth, watershed buffers, and providing affordable housing.
- 2. Updated mapping is important to the development sector and NPCA could help with mapping, which would help both industries work better together.

Chamber of Commerce/Tourism

The member representative for this sector does not have any issues at this time and is satisfied with the direction of the PAC in the last year or so.

Agriculture North

There are concerns within this sector on costs associated with their businesses.

- 1. Labour costs and applications for culverts/drainage/irrigation permits challenge
- 2. Issuing NPCA Permits

A quicker turnaround time on reviewing in-water works and plans would be beneficial. The timing of granting permits sometimes does not coordinate with production cycles making it difficult to perform the work once the permit is issued.

Agriculture South

The two issues identified by the member representative of this sector are water related.

- 1. Wetlands MNRF is the entity that designates wetlands but it is the NPCA who regulates the wetlands that are identified. Farmers and other landowners should have a reasonable expectation that activities allowed by the Provincial Policy Statement would be respected. "In the event that there are regulatory issues involving wetlands, farmers and other landowners should have a reasonable expectation that the conduct of Regulations Officers will be professional and polite. They should attempt to work with farmers and other landowners to resolve any issues as much as possible."
- 2. Watercourses Many farmers have made private ditches which are then designated as water courses. This has been an ongoing issue in the agricultural community and creates lots of opportunities for conflict.

Public at Large -Property Owners

The member representative for this sector said that "eighty-seven percent of land mass in Ontario is public land so why the interest in the less than thirteen percent which is private property?"

- Drainage "The municipalities gave the conservation authorities the responsibility to oversee drainage issues, which are causing problems with most of the new development in Niagara, especially to property owners whose properties are situated downhill from the development. The conservation authorities should take the responsibility to keep culverts clear of grass and debris, so that water is swept away, not causing water to flood people's properties."
- 2. **Property Rights** "As I look at the above question the first thing comes to mind is that all of these great initiatives will result in loss of my right to my private property. I am not opposed to anyone that wishes to embark on any of these initiatives, but it must not be on private property, unless permission has been given, by the property owner."

"The NPCA could present visions and ideas that would support the above initiatives, but this stewardship must be voluntary, as has been legislated in the Conservation Land Act."

Appendix 1: NPCA Public Advisory Committee Discussion Paper Report No. PAC 02-21

Public at Large (1)

The representative for this sector identified the following challenges:

- 1. **Stewardship and knowledge transfer** are important. How do you reach the most people, how do you affect behaviour change in organizations, how you communicate, and encourage contributing back by volunteering?
- 2. Transparency and notification of NPCA policies/programs to the public should be increased.

User/volunteers

This sector representative is new to the Committee and provided the following comments;

"Efforts of the NPCA are appreciated in identifying which services and activities are permitted or available at the various conservation areas within the Niagara region. It is important that the NPCA continues these communication initiatives, particularly since there are ever changing responses to the pandemic. "

Public at Large (2)

The member, another new member to the committee, offered the following comments:

- 1. There is a need for **sustainable land development** within the region location, density and design. I would like to see NPCA support local municipalities in continuing to move towards responsible development and restoration of ecosystems.
- 2. Watershed management and ecosystem health are important. Conservation Authorities support land stewardship even when mandates change. There are opportunities to partner for restoration, public awareness and educational programs, land management (through support and partnership with municipalities). CAs have an opportunity to support larger geographic areas because they are not bound by municipal boundaries.

Environment

The member representative for this sector contacted a number of leaders in the community and collected their thoughts on these questions. This is a brief summary of their extensive responses, further details are available.

- Natural systems preservation This is the most important environmental concern in the watershed and results in decreasing biodiversity, loss of the unique Carolinian natural systems. This is partially the result of planning and development processes which do not adequately address the values of natural systems and functions protection. The quality of Environmental Impact Studies (EIS) is universally cited as not being objective or science based and there is no public trust in the current EIS process.
- Land protection and remediation As well as participating in systems protection, specific lands will be best protected through acquisition and/or remediation. Many natural sites owned by NPCA are in need of remediation, especially given the high usage during the pandemic and it is

important that these issues be addressed so as to ensure diversity and specific features are not lost.

Beyond the legislation, the NPCA must be a strong voice for the wise use of our lands and resources, and ensure that natural systems, both aquatic and terrestrial, are adequately protected. This includes incorporating local protection mechanisms where needed and not relying exclusively on provincial legislation.

Closing discussion

Identified Issues, Challenges, and Opportunities by Sector

Sector	Top Issues				
First Nations	 Preserving natural flora and fauna Educating public on history of Niagara 				
Métis	 Protecting natural values of waterways - drainage Proper handling of nutrients 				
Urban/rural planning	 Incorporate sustainable planning methods Realistic environmental standards 				
Agricultural North	 Labour costs/applications for culverts/drainage/irrigation Timely Issuing NPCA permits 				
Agricultural South	 Wetland policy and enforcement Watercourse designation 				
Development	 Strategic plan, affordable housing Mapping 				
Chamber of Commerce/Tourism None					
Property owners/Public-at-large 1. Property rights 2. drainage management					
Public-at-large	 Stewardship and knowledge transfer Transparency 				
User/volunteer	1. Communications with public				
Public-at-large	 Sustainable development Watershed management/ecosystem health 				
Environment	 Natural systems preservation Land protection and remediation 				

Many similarities may be found across the discussion, as well as sector specific concerns an opportunities.

Sector specific

- The planning process minimizes environmental values
- The identification of issues with Environmental Impact Statements to ensure thoroughness, objectivity, and science based analysis and recommendations
- Slow NPCA permitting process and the challenges of 'jumping through hoops'
- Need for natural heritage protection with focus on unique Carolinian zone features
- Difficulties in incorporating new sustainability measures such as LID
- Water quality management throughout the watershed to protect quality and aquatic habitat
- Private lands rights
- Level playing field i.e. everyone is required to follow the same rules and ensure a transparent process government, agriculture, development, residents

Similarities

- How do we maintain, protect, and enhance the natural features of the watershed while encouraging efficiencies in how issues and conflicting goals are addressed?
- How do we deal with projected growth in a way that does includes retention of the important of natural functions such as wetlands and open spaces for water control and urban/rural forests for cooling and air quality?
- The need to address drainage issues (water quantity) with the focus ensuring all reaches within a subwatershed have needs met
- Ensuring adequate access to natural spaces (beyond conservation areas) for all residents as an important measure of quality of life

There have been many recent changes in the Niagara peninsula landscape and there are more to come. How do we provide the necessary amenities in an affordable, sustainable way which will keep what is important to residents of the watershed community?

The most important theme that emanated from our discussion was our love of the Niagara peninsula watershed, recognition of the uniqueness of the landscape (mosaic of natural features, agricultural lands and residential areas) and our commitment to make it a place that we can all be proud of regardless of our personal approaches and thoughts as to how this may be achieved.

Next steps

This was a good initial step in issue identification but it is apparent that further discussion is needed to flesh out details of this preliminary discussion.

The next step is in identifying associated areas of concern and stakeholders and from there begin the process of identifying how issues might best be addressed. Some matters may be addressed by NPCA, others may require participation of the broader community, and some show the need for broader

Appendix 1: NPCA Public Advisory Committee Discussion Paper Report No. PAC 02-21 communication about the role of the NPCA and what we can and can't control, but can work collaboratively with partners and other levels of government to address.

This information provides NPCA and its partners with the opportunity to ensure that relevant issues are addressed in the development of Strategic Plan and it is hoped that the Plan will reflect this input.

The Public Advisory Committee provides both the NPCA board and staff with valuable insight into issues and concerns of residents which falls under its jurisdiction. Further, the PAC is comprised of individuals with valuable expertise and experience in their sector. As such, the Board is encouraged to consult with the PAC on a regular basis, at a minimum annually, on issue and opportunity identification, with the intent of working towards shared solutions.