
Report To: Board of Directors

Subject: Official Status Re-designation of Niagara River ‘Beach Closings’ Beneficial Use Impairment (BUI)

Report No: FA-09-23

Date: March 24, 2023

Recommendation:

1. **THAT** Report No. FA-09-23 RE: Official Status Re-designation of Niagara River ‘Beach Closings’ Beneficial Use Impairment (BUI) **BE RECEIVED**.
2. **THAT** a letter **BE WRITTEN** to the Town of Niagara-on-the-Lake thanking them for their collaborative efforts with the NPCA to improve the Niagara River’s water quality and ecosystem health as part of the Niagara River Remedial Action Plan program.
3. **AND THAT** Report No. FA-09-23 **BE CIRCULATED** to the watershed municipalities and the Niagara Parks Commission.

Purpose:

The purpose of this report is to inform the NPCA Board of Directors about the official status re-designation of the Niagara River Beach Closings Beneficial Use Impairment (BUI) to ‘not impaired’. Re-designating the status of a BUI from ‘impaired’ to ‘not impaired’ is considered a tremendous environmental achievement for the RAP and its AOC.

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 RAP aims to restore up to fourteen (14) environmental challenges referred to as beneficial use impairments (BUIs) that are the result of historical environmental degradation. Improving BUIs is done through implementing targeted monitoring and/or remediation efforts.

When the Niagara River was first identified as a bi-national AOC, there were nine (9) impairments, two (2) requiring further assessment, and three (3) beneficial uses deemed not impaired. Since the early 1990s, water quality problems restricted recreational swimming at the only public swimming beach on the Canadian side of the Niagara River resulting in one of these impairments (i.e., *Beach Closings* BUI). There is no beach water quality impairment on the U.S. side of the Niagara River.

Re-designating the status of a BUI from ‘impaired’ to ‘not impaired’ is considered a tremendous environmental achievement for the RAP and its AOC. To re-designate the status of a BUI, a RAP team must demonstrate that all remedial actions are complete and specific delisting/restoration criteria are met through the completion of an assessment report. If there is community support for the re-designation, the RAP team submits its recommendation to the Governments of Canada and Ontario for final approval and removal of the BUI. A comprehensive *Beach Closings* BUI Status Assessment Report was completed in 2021, which indicated that the BUI delisting/restoration criteria were met and recommended that the status of the *Beach Closings* BUI for the Canadian side of the Niagara River be officially changed to ‘not impaired’ (Appendix 1).

Discussion:

Queen’s Royal Beach in the Town of Niagara-on-the-Lake (NOTL) is the only public swimming beach on the Canadian side of the Niagara River. Investigative monitoring carried out in the Niagara River from 2010-2018 indicated that the water quality issues at this beach were related to storm sewer outfall discharging near the beach. Eighteen (18) priority remediation actions within the sewer catchment area to improve water quality at the beach were identified by a technical expert working group and implemented by the Town of NOTL from 2018 to mid-2020. Actions included installing raccoon grates, sewer infrastructure improvements (fixing cracks, joint offset, connection problems), implementing several best management practices (e.g., regular maintenance of catch basins), disconnecting a wading pool from the storm system, and constructing a bioswale (low-impact development feature) in Simcoe Park.

To meet the RAP BUI criteria, at least 80% of beach sampling events had to meet the provincial water quality guideline (200 *E. coli* colony forming units per 100 mL) over three consecutive years. 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 100% of the time. Before remediation efforts began in 2018, 44% to 75% of the beach samples met provincial water quality targets. Water quality monitoring at the beach was carried out three times per week during the remediation process. Results indicate year-over-year improvements in water quality at the beach, with 83% to 91% of samples meeting targets in each swimming season from 2018-2020. Other low-level sources of *E. coli* (e.g., from wildlife, wind, waves, and upstream sources) may occasionally continue to impact beach water quality; however, risk management actions (e.g., continued monitoring, website communication, signage) are in place to inform visitors and protect human health. A comprehensive *Beach Closings* BUI Status Assessment Report was completed in 2021, which indicated that the BUI delisting/restoration criteria were met and recommended that the status of the *Beach Closings* BUI for the Canadian side of the Niagara River be officially changed to ‘not impaired’.

In a joint outreach and engagement effort with the Town of NOTL, NPCA staff and RAP partners conducted extensive outreach and engagement activities from June 2021 – May 2022 to seek input from the public, local First Nations, Métis Nation of Ontario, and U.S. RAP counterparts on the report’s recommendation. Given the restrictions due to the COVID-19 pandemic in 2021, virtual engagement tools and techniques were used to involve various stakeholders in the BUI re-designation process (e.g., social media, the [NPCA’s GetInvolved](#) online engagement portal, the [Niagara River RAP website](#), E-newsletter, and a YouTube video). To ensure access to technology was not a barrier to participation, other traditional (non-virtual) methods were also used (e.g., direct email, newspaper ad, radio interviews, place-based signage) to inform the public about the engagement opportunities. A paper survey was available upon request. Efforts to inform and engage a wide range of people in providing feedback was successful, as summarized in the infographic below:



The results of the outreach and engagement efforts showed overall support for the change in status of the Niagara River RAP's *Beach Closings* BUI to 'not impaired'. There were no concerns raised from local Indigenous communities and letters of support were received from U.S. counterparts. The results were summarized and included in the final assessment report (Appendix 1) which was submitted to Governments of Canada and Ontario for review and approval in July 2022.

On March 1, 2023, the NPCA received an official letter from Environment and Climate Change Canada to confirm that, after a comprehensive review of the submitted assessment report, the *Beach Closings* BUI in the Niagara River is officially designated 'not impaired' (Appendix 2).

The official re-designation of the *Beach Closings* BUI is a tremendous environmental accomplishment for the NPCA and all Niagara River RAP partners in their pursuit of improved water quality and ecosystem health in the Niagara River. Although this positive news signals an important milestone, there is more work to be done. The RAP team continues to implement priority actions, as identified in its 5-year [Delisting Strategy](#), to restore four (4) remaining impairments related to fish consumption, sediment quality, habitat, and fish & wildlife populations.

Financial Implications:

There are no financial implications. The Niagara River Remedial Action Plan program 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:

Goal 1.3: restore and enhance natural habitat, water resources, and forest cover; Goal 4.1: strengthen government relations toward collective outcomes and impact; Goal 4.2: foster relationships with the community, non-government organizations, businesses, agriculture, industry, and academic institutions for collective outcome and impact; Goal 4.3: improve engagement with local First Nations, Métis, and Inuit peoples that supports shared stewardship.

Related Reports and Appendices:

Report No. FA-36-21 RE: Niagara River 'Beach Closings' Beneficial Use Impairment (BUI) Status Assessment and Re-designation

Appendix 1: Beach Closings Beneficial Use Impairment Status Assessment Report for the Niagara River (Ontario) Area of Concern

Appendix 2: Official re-designation letter from Environment and Climate Change Canada

Authored by:

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