

Niagara River RAP Beneficial Use Impairment (BUI) Status Sheet

Degradation of Fish and Wildlife Habitat

Impaired

Status of BUI assessment: Completed February 2014.

The Niagara River AOC Remedial Action Plan now has up-to-date information on habitat conditions in the AOC, addressing the information gap that was highlighted by the stakeholders in the Stage 1 report. The information was instrumental in allowing the RAP team to determine progress towards achieving the delisting criteria for the *Loss of Fish and Wildlife Habitat* BUI.

The assessment of natural habitat data for the Niagara River AOC against the delisting criteria 1 to 5 for the “*Loss of Fish and Wildlife Habitat*” BUI indicated that the following RAP targets have been achieved.

Updated information on the Unique Habitats (delisting criterion #6) in the AOC indicates that land securement and management strategies are in place and being implemented for long-term conservation purposes.

Updated information on municipal Official Plans confirms that the AOC municipalities are in conformity, or soon-to-be in conformity with the applicable Provincial or Regional natural heritage policies, as per delisting criterion #7.

Current Niagara River RAP Delisting Objectives:

1. The percentage by area of wetland cover within the AOC and the percentage by stream length of riparian buffers within the AOC are not significantly different when compared to suitable non-AOC reference sites.
2. 75% of the potential barriers to fish movement (as identified through the Niagara River AOC Fish Barriers Project 2001 – Phase 1 Photo Library) must be removed or remediated.
3. The percentage of woodland and wetland habitat by area in the AOC, and the percentage of stream length with (at least) a 30m vegetated buffer in the AOC is not significantly different when compared to suitable non-AOC reference sites.
4. The percentage by area of wetland buffers (50, 120 and 240m width) in the AOC and of core woodland areas (within 100 and 200m of forest edge) in the AOC is not significantly different when compared to suitable non-AOC reference sites.
5. The proximity, patch size, and patch density of key habitat types (forests and wetlands) in the AOC, is not significantly different when compared to suitable non-AOC reference sites.
6. The existing aerial extent of unique wildlife habitats (Wainfleet Bog complex, Niagara Gorge) is at least 80% secured and managed for long-term conservation purposes.
7. Approval of Official Plan environmental policies for AOC municipalities that protect and enhance the natural heritage system, in conformity with the applicable Provincial or Regional natural heritage policies.

Canadian/American AOC Comparisons: In the Niagara River (New York State) RAP, this BUI is designated as “Impaired” and the likely cause is contributed to physical disturbance. Habitat loss is more dramatic on the upper Niagara River compared to below the falls.

Lead agencies: Niagara Peninsula Conservation Authority, Environment Canada, Ministry of Natural Resources and Forestry, municipalities.

What was the problem?

- The RAP Stage 1 report (1993) stated that **fish habitat** was largely unchanged by human activity within the Niagara River itself but, in the tributary streams, activity by humans has caused a large loss in aquatic habitat through filling, channelization, drainage, shoreline reconstruction and development.
- Regarding **wildlife habitat**, the report acknowledged that there was little data on wildlife habitat in the AOC and that human activity has led to a decrease in the native wildlife habitat, which, in turn, has contributed to the extinction or endangerment of several species.

What Do We Know?

- A BUI assessment through a landscape G.I.S. analysis was carried out in 2011 using data from the Natural Areas Inventory project led by the NPCA (2006-2009). The focus at the time was on the Welland River watershed. The BUI assessment report was completed in February 2014.
- The Niagara Restoration Council remediated fish barriers within the Welland River watershed and, in doing so, met the requirements of RAP delisting criterion #2 above.
- The Niagara Gorge is protected, enhanced and managed along the Niagara River corridor by the Niagara Parks Commission (NPC).

- The NPC and Ontario Power Generation (OPG) work closely together in managing their lands near the Niagara Gorge and expanding areas with natural heritage features. Their stewardship addresses RAP delisting criterion #6 above.
- The NPCA has a land stewardship/land acquisition strategy for the protection of significant species and features (e.g. Wainfleet Bog) within its administrative area for future generations. This strategy addresses RAP delisting criterion #6 above.
- AOC municipalities are updating their Official Plans to be in compliance with Niagara Region's environmental policy. These updates address RAP delisting criterion #7.

What Has Been Done?

- The NPCA completed the Natural Heritage System Project for the Niagara watershed, subsequent to coordinating the Natural Heritage Areas Inventory (NAI) (2006-2009). The final report entitled "Nature for Niagara's Future" (2012) is available on the NPCA web site.
- The NAI data was used in a GIS landscape analysis for the BUI and the results of the analyses presented to stakeholders at a workshop (March 29, 2011) to determine progress in achieving the BUI's delisting criteria. The BUI assessment report (February 2014) includes the workshop proceedings.
- In 2012, the Niagara Restoration Council received funding from the Great Lakes Sustainability Fund (GLSF) to restore habitat, create wildlife corridors, enhance core forest habitat, etc. through the "Naturalizing Fort Erie's Creek Drains" project. Project partners included the Town of Fort Erie, the NPCA and local environmental groups.
- The Town of Fort Erie implemented a water quality and habitat improvement program for Beaver Creek and results are documented in the "Beaver Creek 2012 Monitoring Report", submitted to the GLSF.
- The Niagara Restoration Council removed over 160 barriers to flow and fish migration in the AOC through the Fish Barrier Project (2001-2010).
- The E.C. Brown Wetland project was carried out by the NPCA with implementation and funding assistance from many community partners.
- The NPCA is the lead agency in implementation of the Fort Erie's Creeks Watershed Plan (2008).
- In 2007, the NPCA entered into an agreement with OPG to implement "soft engineering" restoration strategies along the Welland River to mitigate the impact of flow reversal and improve habitat, etc.
- The NPCA and the Niagara Parks Commission partnered through the GLSF to implement the Ussher's Creek Island Bioengineering project (2010). The benefits of the project included improved water quality, increased fish and bird habitat, reduced erosion and migration by Northern Pike for spawning along Ussher's Creek.
- The NPCA developed the Welland River Watershed Strategy (1999) with partners and stakeholders.
- The Friends of Fort Erie's Creeks conducted the Frenchman's Creek Stream Rehabilitation project, 1995-2000. The group also implemented a natural channel design project and riparian restoration of Black Creek in the 1990s.

What Still Needs To Happen?

- RAP stakeholders will pursue the following actions to address the overall RAP goal of protecting habitat on both sides of the Niagara River as one ecosystem. However, these actions are not required to achieve delisting of the AOC.
 1. Opportunities for habitat projects in the small tributaries to the upper Niagara River will be identified by RAP stakeholders.
 2. Opportunities for RAP stakeholders to work with U.S. on joint habitat enhancement projects in the Niagara River will continue
- To initiate public consultation, a public guidance document will be released to summarize the BUI assessment reports. The guidance document will explain how the assessment for each of the "Impaired" BUIs were completed, provide the rationale for the "Not Impaired" re-designation and how to obtain more information. Following consultation with all stakeholders and the public, the RAP Coordinating Committee will complete a final evaluation and recommend whether or not all BUIs have been remediated or restored, resulting in the "delisting" of the AOC. The final decision to delist the Niagara River AOC will then be made by federal, provincial, and local RAP participants, with advice from the International Joint Commission.

When Will The Status Change?

- Goal 2017

May 2016