

**NIRB File No.: 19WA006**  
**NWB File No.: 3AM-IQA1626**  
**DFO File No.: 18-HCAA-01025**

March 21, 2019

Serge Beaudoin  
Assistant Deputy Minister  
Northern Affairs Organization  
15 Eddy ST, 10<sup>th</sup> Floor  
Gatineau, QC K1A 0H4

*Sent via email:* [serge.beaudoin@canada.ca](mailto:serge.beaudoin@canada.ca)

**Re: Provision of the Nunavut Impact Review Board's Corrected Report regarding the City of Iqaluit's "Temporary/Emergency Supplemental Water Supply" Project Originally Issued February 11, 2019.**

Dear Serge Beaudoin,

It has come to the Nunavut Impact Review Board's (NIRB or Board) attention that, in the Report issued by the NIRB on February 11, 2019 regarding the City of Iqaluit's "Temporary/Emergency Supplemental Water Supply" project, contained a few incorrect date references. Specifically, on pages 3 and 4 several dates referenced the incorrect year; to accurately reflect the correct dates of the activities, the Board is re-issuing the attached report with the corrected dates for your files.

The Board apologizes for any inconvenience caused by this omission and erratum; if you have any questions or require clarification regarding this matter, please contact the Board's Executive Director, Ryan Barry at (867) 983-4608 or [rbarry@nirb.ca](mailto:rbarry@nirb.ca).

All documents received and pertaining to this project proposal can be accessed from the NIRB's online public registry at [www.nirb.ca/project/125439](http://www.nirb.ca/project/125439).

Sincerely,



Elizabeth Copland  
Chairperson  
Nunavut Impact Review Board

cc: Kim Pawley, Crown-Indigenous Relations and Northern Affairs Canada  
Mark D'Aguiar, Fisheries and Oceans Canada  
Sharon Ehloak, Nunavut Planning Commission  
Stephanie Autut, Nunavut Water Board  
Her Worship Madeline Redfern, Mayor of Iqaluit  
Amy Elgersma, City of Iqaluit  
Erica Bonhomme, Stantec/Nunami Stantec Ltd.

Attached: Erratum - Nunavut Impact Review Board Report on the City of Iqaluit's Temporary/Emergency Supplemental Water Supply project, NIRB File No. 19WA006 (February 11, 2019)



Commission (the Commission), Nunavut Impact Review Board (NIRB), and Nunavut Water Board (NWB) to seek approvals to refill the reservoir by withdrawing up to 400,000 cubic metres (m<sup>3</sup>) of water from the Niaqunguk (Apex) River watershed and unnamed water bodies as well as temporarily alter the flow of water within the watershed. On August 1, 2018 the Nunavut Planning Commission circulated a letter acknowledging the application and requesting additional clarification on how the proposal satisfied the criteria to be declared an emergency under s. 152 of the *NuPPAA*. Additional information was provided to the Commission, NIRB, and NWB on August 2 and 3, 2018.

On August 10, 2018 the Minister of Crown-Indigenous Relations declared that pursuant to s. 152(1)(c) of the *NuPPAA* an emergency situation existed and the City of Iqaluit's "Temporary/Emergency Supplemental Water Supply" proposal should be carried out without delay to secure the health of the general public.

On January 11, 2019 the NIRB received a referral to screen City of Iqaluit's "Apex Drinking Water Proposal" project from the Nunavut Planning Commission, the Apex Drinking Water Proposal involves a permanent amendment to the City's Water Licence to authorize the use of up to 500,000 m<sup>3</sup> from the Apex River water sources for replenishment of the reservoir over the term of Type "A" Water Licence 3AM-IQA1626 (the 2019 Amendment Application). As a result of the previous emergency situation and new request to amend the Water Licence to authorized replenishment of the City's reservoir from the Apex River water sources, under s. 152(5) of the *NuPPAA* the NIRB issued an information request letter on January 16, 2019 to get clarification on the emergency undertaking, the status of the required reporting, and clarification regarding how the new amendment activities would be carried out in relation to the emergency project. On January 28, 2019 the NIRB received additional information on the emergency undertaking and notes that:

- on August 14, 2018 the Nunavut Water Board issued 3AM-IQA1626/Amendment No. 1;
- on August 16, 2018 Fisheries and Oceans Canada (DFO) issued a Paragraph 35(2)(b) *Fisheries Act* Authorization – Emergency Circumstances; and
- the water withdrawal from Niaqunguk (Apex) River occurred between August 19 and October 4, 2018 with a total of 193,074 m<sup>3</sup> of water transferred from the river into Lake Geraldine reservoir.

### Technical Assessment

In accordance with s. 152(4) of the *Nunavut Planning and Project Assessment Act*, S.C. 2013, c. 14, s. 2 (*NuPPAA*) the NIRB has prepared this report to acknowledge receipt of the Final Report submitted for the City of Iqaluit on the emergency undertaking, to highlight key issues related to the completed reservoir refill, and to provide clarity on the issues that should be considered in the assessment of the 2019 Amendment Application.

From the materials received by the NIRB to date detailing the Temporary/Emergency Supplemental Water Supply project, the scope of activities and components related to the emergency undertaking included:

- withdrawal of approximately 400,000 m<sup>3</sup> (not to exceed 500,000 m<sup>3</sup>) water from the Niaqunguk (Apex) River and surrounding watershed in August and September 2018 to

supplement the Lake Geraldine reservoir, which temporarily altered the flow of water within the watershed.

- Activities regulated through an amended Type “A” Water Licence for the City of Iqaluit, and a *Fisheries Act* Authorization which imposed conditions for implementing mitigation measures to avoid and mitigate serious harm to fish during the pumping operations.
- Monitoring of project activities to be conducted according to the requirements of these two authorizations.

Key observations documented in the final report<sup>1</sup>:

- 1) Project Requirements: pre-pumping surveys were conducted to establish water levels, fish and fish habitat; and observations were taken during pumping activities.
- 2) Pre-pumping assessment:
  - a) Activity creates risk to Arctic char if water levels dropped in locations where fish were present, which could cause stranding of individuals or a lack of sufficient water depth to allow fish to overwinter.
  - b) Fish and fish habitat assessment indicated that the population of Arctic char was primarily located in another section of the river and a permanent barrier at the outlet of the Niaqunguk River prevented fish from moving further up the river.
- 3) Observations during pumping activities:
  - a) Cumulative water withdrawal exceeded the 10% instantaneous flow threshold for 10 days of the pumping period, but water levels did not fall below the 30% Mean Annual Discharge with the exception of one station upstream of the pump location.
  - b) During pumping activities no fish observed, no stranding of fish reported.
  - c) It was unknown if water depth in the area where Arctic char was observed, or might overwinter, were ultimately decreased due to the project; however, the flow of the Niaqunguk River was expected to return to natural levels shortly after the cessation of water withdrawal and the pools/overwintering areas would be recharged.
  - d) Reductions of wetted width both upstream and downstream of the pumping sites was noted; however, as the reduction could occur naturally related to different precipitation events, temperature, bank slope, river bed morphology and water depth, it was unclear how much of this effect was caused by the project or other natural causes. The conclusion was made that the observed reduction would not have an impact to fish habitat as there was ample higher quality habitat that still existed.
- 4) Summary: potential effects to fish and fish habitat, if any, were temporary and of low magnitude. It is unlikely that water withdrawal from the Niaqunguk River resulted in serious harm to fish.

Through the final report and additional materials provided on the emergency undertaking, the NIRB would note the following points in relation to the potential for impacts from the project:

- 1) The area has been experiencing decreased precipitation in recent years;
- 2) Increased municipal demand for water has contributed to the drawdown of the reservoir; and
- 3) Seasonal supplementation of the reservoir has become necessary prior to freeze-up to ensure adequate supply of potable water through the winter.

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<sup>1</sup> Iqaluit Emergency Water Supply Project: Apex River Supplementary Pumping – DFO Authorization Monitoring Report (January 2019), NIRB Registry Document No: 322398 (Emergency Report), and 322518 (Final Report)

Components of the environment that could be impacted by this undertaking included: the quantity and quality of freshwater resources; fish, birds, other wildlife and their habitat, and use of the land and its resources for traditional pursuits. The Proponent has provided information on the resources that have the potential to be most acutely affected by the project (i.e., fish and fish habitat), and due to the temporary nature of the activities and short duration of the undertaking, it is likely that the other environmental components listed above would not be subject to residual or cumulative effects from the temporary emergency water extraction. However, the NIRB would note that as the need for this project arose due to various factors, some of which were the effects of climate on long term re-supply of the municipal reservoir, these natural pressures as well as the project activities could compound and result in more significant or longer-term effects especially if low precipitation and drawdown of the surrounding water bodies continue.

At this time, acknowledging the regulatory mechanisms in place to manage project activities, and recognizing that a NIRB screening will be initiated for the longer-term extraction of water for replenishment of the community reservoir as proposed under the 2019 Amendment Application, the NIRB is not expecting to recommend any terms and conditions related to the emergency undertaking.

#### Next Steps

After reviewing the Final Report required for the emergency undertaking and other associated materials for the “Temporary/Emergency Supplemental Water Supply” project, and understanding the situation which required the City of Iqaluit to submit its “Apex Drinking Water Proposal” and the 2019 Amendment Application to permanently amend the Water Licence over the term for ongoing replenishment of the community’s reservoir, the NIRB respectfully submits this report to the Minister’s office and will commence assessment of the 2019 Amendment Application. Through the NIRB’s assessment of the “Apex Drinking Water Proposal” the issues highlighted in this report will be considered and parties’ input will be used to identify specific impacts from the reservoir replenishment activities, and inform the development of terms and conditions to mitigate any potential residual or cumulative effects. Through this assessment the NIRB will also work with the Proponent to ensure that the appropriate mitigation plans, and monitoring reports are filed to inform the Board’s decision and subsequent permitting processes.