



November 13, 2015

Phyllis Beaulieu  
Manager of Licensing  
Nunavut Water Board

**Re: City of Iqaluit's Response to 150710 3AM-IQA0612 DFO comment to NWB on Completeness-IMLE**

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Dear Ms. Beaulieu:

In support of the City of Iqaluit's (City) water licence renewal application, please accept the following letter as the response to the submission from Department of Fisheries and Oceans reference 150710 3AM-IQA0612 DFO comment to NWB on Completeness-IMLE, dated July 10, 2015.

**Recommendations**

1. The City of Iqaluit (the Applicant) should ensure that its information on the lack of fish communities in Lake Geraldine and the Apex River is correct and verify the lack of anticipated effects from works, undertakings, or activities associated with the proposed Project. This should include information on locally important commercial, recreational and Aboriginal fishery species and the forage fish that support them.

*Response: The Department of Aboriginal Affairs and Northern Development Canada in the submission "150710 3AM-IQA0612 AANDC TECHNICAL COMMENTS-ILAE", dated July 10<sup>th</sup>, 2015 recommended that the supplemental water source project not be included in the licence renewal as it will require NIRB Review. The City agrees with their recommendation and has requested that the supplemental recharge project not be included in the water licence renewal. The Supplemental Water Source project, if and when the City plans to implement it, will be dealt with as a water licence amendment, therefore this comment for Apex River will be addressed at that time.*

*As per Lake Geraldine, the City contends that the lake has been a water supply for the City for over 40 years and during that time there has been no evidence that it is a fish bearing water body. As such undertaking a study without justifiable reason is not warranted.*

2. The Applicant should provide information on the fish community that may use, or rely on, the outlet stream of Lake Geraldine and assess how operation of the Lake Geraldine Dam may affect that use – including a description of any planned ecological flow provisions that may be considered.

*Response: The City contends that Lake Geraldine has been a water supply for the City for over 40 years. As such, undertaking a study without justifiable reason is not warranted.*

3. The Applicant should provide a determination of potential impacts of water withdrawal from the Apex River on aquatic resources and potential avoidance, mitigation, and offsetting measures that might be implemented, including, in particular, a description of any planned ecological flow provisions that may be considered, with special reference to the potential importance of Apex River flows to fish use and fisheries at the river mouth.

Response: The Department of Aboriginal Affairs and Northern Development Canada in the submission "150710 3AM-IQA0612 AANDC TECHNICAL COMMENTS-ILAE", dated July 10<sup>th</sup>, 2015 recommended that the supplemental water source project not be included in the licence renewal as it will require NIRB Review. The City agrees with their recommendation and has requested that the supplemental recharge project not be included in the water licence renewal. The Supplemental Water Source if and when the City plans to implement will be dealt with as a water licence amendment, therefore this comment for Apex River will be addressed at that time.

4. The Applicant should determine if there are aquatic species at risk as listed under the *Species at Risk Act*, or their habitats, in the Project area that may be affected by the proposed works, undertaking, or activities, and describe what those effects may be;

Response: The Department of Aboriginal Affairs and Northern Development Canada in their submission "150710 3AM-IQA0612 AANDC TECHNICAL COMMENTS-ILAE", dated July 10<sup>th</sup>, 2015 recommended that the supplemental water source project not be included in the licence renewal as it will require NIRB Review. The City agrees with their recommendation and has requested that the supplemental recharge project not be included in the water licence renewal. The Supplemental Water Source if and when the City plans to implement will be dealt with as a water licence amendment, therefore this comment for Apex River will be addressed at that time.

5. The Applicant should review the Project works, undertakings, and activities, and plan to implement applicable avoidance and mitigation measures as identified on the DFO website as "Measures to Avoid Causing Harm to Fish and Fish Habitat" available at <http://www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures/index-eng.html>;

Response: The Department of Aboriginal Affairs and Northern Development Canada in their submission "150710 3AM-IQA0612 AANDC TECHNICAL COMMENTS-ILAE", dated July 10<sup>th</sup>, 2015 recommended that the supplemental water source project not be included in the licence renewal as it will require NIRB Review. The City agrees with their recommendation and has requested that the supplemental recharge project not be included in the water licence renewal. The Supplemental Water Source if and when the City plans to implement will be dealt with as a water licence amendment, therefore this comment for Apex River will be addressed at that time.

6. To protect fish in Lake Geraldine and the Apex River, the Applicant should ensure, if required, that a fish screen is installed on water intakes that meets the DFO "Freshwater Intake End-of-Pipe Fish Screen Guideline" (1995) if the anticipated water withdrawal rate is less than 2000 USGPM ( $<0.13\text{M}^3/\text{s}$ ), or the DFO "Fish Screening Guide for Water Intakes" (Katopodis 1992) if the anticipated withdrawal rate is greater than 2000 USGPM ( $>0.13\text{M}^3/\text{s}$ ).

Response: The City contends that Lake Geraldine is not a fish bearing water body, however to meet the condition of their 2006 water licence, the installation of a fish screen on the Lake Geraldine intake pipe has been scheduled for the 2016 construction season.

7. The proposed maximum annual withdrawal of water from Lake Geraldine is 1,100,000 m<sup>3</sup> relative to an approximate lake volume of 1,361,000 m<sup>3</sup>. If necessary to protect fish in Lake Geraldine, the Applicant should determine the annual lake recharge rate and ensure that the total combined annual water withdrawal from Lake Geraldine does not exceed 10% of the available water volume calculated using the appropriate maximum expected ice thickness as described in the "DFO Protocol for Winter Water Withdrawal from Ice-covered Waterbodies in the Northwest Territories and Nunavut" (2010).

*Response: The City contends that Lake Geraldine is not a fish bearing water body. Additionally Lake Geraldine has been the City's licenced water supply for over 40 years, and during that time there has been no evidence that it is a fish bearing water body; therefore this new condition to the operation of the City's water supply should not be introduced to the water licence.*

If you have any questions or require further information or clarification, please contact Matthew Hamp, Director of Public Works and Engineering at 867-979-5653.

Sincerely,



Muhamud Hassan  
Chief Administrative Officer  
City of Iqaluit