

## Richard Dwyer <richard.dwyer@nwb-oen.ca>

## Fwd: FW: City of Igaluit - Lake Geraldine Reservoir Situation Assessment

Karén Kharatyan <a href="mailto:karen.kharatyan@nwb-oen.ca">karén Kharatyan@nwb-oen.ca</a> To: Licensing Department < licensing@nwb-oen.ca> Fri, Jul 27, 2018 at 2:49 PM

This is related to 3AM-IQA and should be just saved, no need to distribute anything at this stage. The City is going to submit in upcoming days a request for an emergency amendment.



## Karén Kharatyan, Ph. D- bへ bSハケ

Director Technical Services - Directeur des services technique →9⊂56∩

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NUNAVUT WATER BOARD - OFFICE DES EAUX DU NUNAVUT DOSC ALCOSC BOLLSO-NUNAVUT IMALIRIYIN KATIMAYINGI

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From: Weir, Dixon < Dixon. Weir@colliersprojectleaders.com >

Date: Fri, Jul 27, 2018 at 2:24 PM

Subject: FW: City of Iqaluit - Lake Geraldine Reservoir Situation Assessment

To: Karén Kharatyan < karen.kharatyan@nwb-oen.ca>

Cc: Dave Baines <ave.baines@nwb-oen.ca>, "Amy Elgersma (a.elgersma@city.iqaluit.nu.ca)" <a.elgersma@city.iqaluit.nu.ca>, Matthew Hamp <M.Hamp@city.iqaluit.nu.ca>, "Archibald, Steve"

<Steve.Archibald@colliersprojectleaders.com>

Further to your previous conversation with Matt Hamp, the City of Igaluit's Director of Public Works and Engineering, the City has asked me to provide to you with the following documents and explanation:

- Lake Geraldine Reservoir Assessment power point presentation, complete with speaking notes, and,
- A Golder Technical memorandum dated 25 July 2018 and titled, "Supplementary Lake Geraldine Water Balance Modelling document.

Read in conjunction, these documents describe the situation that the City now finds itself in, with the City's sole source of drinking water, the Lake Geraldine Reservoir, at levels that put at risk the City's ability to supply adequate drinking water to the City's residents and businesses through an entire winter period. As noted in the Golder report, for the Lake Geraldine Reservoir to refill through only rainfall contribution to the Lake Geraldine watershed in the balance of the open water season is not very likely and would require tremendously above average rainfall amounts. Given the critical significance of drinking water to the community, and the risk of relying only on rainfall to replenish the reservoir, the City is planning to take proactive measures now to address this situation.

As described in the PowerPoint presentation, the City is addressing this situation through a variety of Tasks, includina:

- Supplemental Pumping Task Team;
  - Led by Stantec
    - Addressing the following potential contributions:
      - Supplemental Pumping from Apex River.
      - Alternative Treatment Alternatives
      - Improved Efficiency of the Existing Water treatment Plant and Process
- Water Loss Control Task Team
  - Led by EXP Services Ltd.
    - Addressing/reducing water losses in the City's Utilidor water distribution system. This Team is expected to address a number of likely losses including watermain breaks, leaks and bleeds.
- Water Efficiency/Water Conservation Task Team
  - Led by Outcrop, with assistance by others
    - This Team is intended to address the community of Igaluit to make them aware of the situation that the City finds itself in and to encourage a reduced use of drinking water, through efficiency and conservation, in the community.

Each of these teams is addressing the task in their area of responsibility and it is expected through a combination of the work of each team that the City can deal with this situation successfully.

The work of the Task Teams is being overseen by a Task Force group led by the Mayor, Deputy Mayor and Chief Administrative Officer, who are meeting regularly with the Task Leads to receive progress reports.

Many of the actions that the Teams listed above are to take were already in place, but must now be significantly accelerated in order to address this pressing issue.

The City's Supplemental Water Task Team is currently researching the adequacy of the Apex River to meet the City's current needs. At this point, this Team has been given a target of providing 400,000 m3 of supplemental water from the Apex River over the balance of the open water season.

The City continues to develop a permanent supplemental water pumping station. Currently, the City has set aside \$1 million in its 2018 capital works budget. With that funding, the City is continuing field work in the Sylvia Grinnell River for intake sites and structures. It is expected that following this field work, preliminary engineering work may be able to begin this fall. At this time, the City anticipates that the operational status of this pumping station and piping system is between 2-3 years in the future. The City is intending to expedite this to the extent possible, but it is very clear that this is not a solution to the situation the City now faces.

I hope this brief summary provides you with the information you require to assist the City in finding and approving an immediate source of supplemental water for the City's drinking water system.

Should you have any questions regarding the above, we would be pleased to discuss them with you.

Thanks,

Dixon Weir, P. Eng.,

Colliers Project Leaders

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## 2 attachments



City of Iqaluit - Lake Geraldine Situational Assessment - Stakeholder Br....pptx 327K



**18106090-TM-Rev1-Water Balance Modelling-26Jul2018.pdf** 250K