

## Review Comment Table

<b>Board:</b>	WLWB
<b>Review Item:</b>	Community Government of Behchoko - Request for Water Use from Alternate Source (W2014L3-0002)
<b>File(s):</b>	<a href="#">W2014L3-0002</a>
<b>Proponent:</b>	Behchoko Community Government
<b>Document(s):</b>	<a href="#">Alternate Source Options for Water Use</a> (1MB)
<b>Item For Review Distributed On:</b>	Dec 1 at 10:59 <a href="#">Distribution List</a>
<b>Reviewer Comments Due By:</b>	Dec 8, 2014
<b>Proponent Responses Due By:</b>	Dec 9, 2014
<b>Item Description:</b>	<p>The Wek'eezhii Land and Water Board has received a request from the Community Government of Behchoko to use alternate water sources to supply the communities of Rae and Edzo with drinking water. In accordance with Part C, Items 1 and 2 of their Water Licence, the Community Government of Behchoko may obtain water from alternate water supplies when it is not possible to obtain water from the approved sources, upon approval by the Board.</p> <p>The existing Behchoko intake is in Marion Lake in an area where water levels were low this season and will likely freeze to the bottom (see Behchoko "Option A" on the document titled "Alternate Source Options for Water Use"). The proposal for Behchoko is to move the intake to a deeper part of the lake (see Behchoko "Option B" on the document titled "Alternate Source Options for Water Use").</p> <p>The existing Edzo intake is in the West channel, and is located in a pocket of water (by "Edzo Option A" on the document titled "Alternate Source Options for Water Use") that has become isolated by ice, so there is a limited supply. The proposal for Edzo is to begin by pumping water from the other side of the bridge, in the same water source (where the channel is frozen off) to refill the pocket where the existing intake is located. This is expected to provide water for an additional 2-3 weeks, but it is not expected that water will be accessible at this location for much longer as the channel is expected to freeze completely. The community was in a similar situation last year and they were able to use Frank's Channel as an alternative source. Community representatives met with MACA representatives to discuss options and the community representatives, with their local knowledge of the area helped to identify Frank's Channel as the best option for an alternative source for Edzo (see "Edzo Option B" on the document titled "Alternate Source Options for Water Use"). It is the nearest body of water with adequate depth to provide supply throughout the winter and it has the added benefit of having road access so that the trucks can access it easily. The intent would be for the community to truck water from Frank's Channel to the reservoir at the Edzo water treatment plant. The areas of Marian Lake that are close to Edzo as well as the North Arm of Great Slave lake are extremely</p>

	<p>shallow and are limited in access. The costs and the challenges of pumping a long distance will be more substantial than the already substantial trucking costs that the community will incur with the proposed plan.</p> <p>It is anticipated that the community will need to use the alternative sources for both Behchoko and Edzo from December 2014 to the end of April 2015. The community has been exploring a permanent solution for Edzo and they are planning to submit an application to perform dredging in West Channel. This solution can't be able to be implemented until next year given the season, but this will give the community the time they need to have the appropriate approvals in place to perform the work next season. It is expected that a more permanent solution will be explored for Behchoko as well.</p>
<b>General Reviewer Information:</b>	The WLWB requests that reviewers provide the Board with their comments and recommendations on the Community Government of Behchoko's request by December 8, 2014.
<b>Contact Information:</b>	Ryan Fequet 867-765-4589 Sarah Elsasser 867-765-4583

## Comment Summary

Environment Canada: Bradley Summerfield				
ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Response
1	General File	<b>Comment</b> <a href="#">(doc)</a> EC cover letter <b>Recommendation</b>		
2	Edzo Option B Alternate Water Source	<b>Comment</b> EC notes that the proposed Edzo Option B alternate water source is in Franks Channel downstream from the raw discharge location of the Rae sewage lagoon. Although the water is treated before use and discharges are not planned until September as per Water Licence W2014L3-0002, EC would like to draw awareness to the fact that this practice could lead to increased risk of water supply contamination. <b>Recommendation</b> For the Proponents information	<b>Dec 9:</b> We are aware of the sewage discharge location. Should an emergency decant be required during the time Franks Channel is being used as a water source, raw water withdrawal will cease temporarily and water from the raw water reservoir will be used. The reservoir provides approximately 3 days storage. Bacteriological sampling will be done to ensure that the raw water quality is sufficient for use.	Board staff believe that the Proponent response is appropriate.

Fisheries and Oceans Canada: Christi Horne				
ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Response
1	General File	<b>Comment</b> ( <a href="#">doc</a> ) DFO Letter of comment <b>Recommendation</b>		
GNWT - Environment and Natural Resources: Central Email GNWT				
ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Response
3	General File	<b>Comment</b> ( <a href="#">doc</a> ) ENR Letter with Comments and Recommendations <b>Recommendation</b>		
1	Topic 1: Sediment Control Practices	<b>Comment</b> Comment(s): The map provided with this application illustrates suggested water sources location changes for each community. As such, the alternate water source for Rae is located further East into Marion Lake, while the alternate water source for Edzo is moved from the West Channel to Frank Channel. The proposed alternate sources are to be used for approximately 5 months. Water extraction procedures from the alternate sources should be provided and specify that the proposed operations at these new locations will prevent sediments movements and/or entrainments into the water intake during withdrawal (either from the bottom or bank). In locations where bank or bottom sediment releases could be triggered, sediments control devices should be made easily accessible and used appropriately. <b>Recommendation</b> Recommendation(s): 1) ENR recommends that the Community Government of Behchoko clarify its procedures for each new alternate water intake location such that sediment disturbance and release is mitigated.	<b>Dec 9:</b> In each case, water will be drawn through a hole in the ice at the deepest part of the channel, with the intake being located just below the bottom of the ice. Extraction will not take place on the bottom of the water body or near the bank. No disturbance of sediment is expected.	Board staff believe that the Proponent response is appropriate.
2	Topic 2: Water Source Protection	<b>Comment</b> Comment(s): Water extraction procedures should be specified to ensure that any fuel-operated mechanical equipment is properly	<b>Dec 9:</b> Water will be withdrawn through a hole cut in the ice. A submersible pump will be housed in a temporary shack to	Board staff believe that the Proponent

		<p>operated. Any fuel that will be required for the operation should be properly stored such that it does not enter waters. Refueling activities and/or temporary placement/storage of fuels (if required) should be located at a minimum of 30 meters from the high water mark. This protection measure also applies to any other chemicals or substances that may be required to conduct water withdrawal at these new alternate locations.</p> <p><b>Recommendation</b> Recommendation(s): 1) ENR recommends that the Community Government of Behchoko specify its water withdrawal procedures that would include the operation and maintenance of mechanical pumps, equipment or vehicles. These details should be provided for water intake facilities proposed for both Rae and Edzo. These procedures, and any other special considerations for these undertakings, should also include any necessary Spill Contingency Planning details.</p>	<p>provide protection from the elements for the engine. Access for refuelling and other operations will be via snowmobile. Secondary containment will be provided to prevent any fuel spills. Due to the nature of the work and the need to refuel several times per day, it is not possible to conduct refuelling operations on shore, as the pump would need to be removed from service and transported back to shore. A spill cleanup kit will be located in the shack. The community of Behchoko also has a spill contingency plan on file with the water board, which would be followed in the event of a spill.</p>	<p>response is appropriate.</p>
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Environmental Protection Operations Directorate (EPOD)  
Prairie & Northern Region (PNR)  
5019 52<sup>nd</sup> Street, 4<sup>th</sup> Floor  
P.O. Box 2310  
Yellowknife, NT X1A 2P7

December 8, 2014

EC File: 5200 000 006/003  
WLWB File: W2014L3-0002

Ryan Fequet  
Regulatory Manager  
Wek'èezhii Land and Water Board  
#1-4905 48<sup>th</sup> St.  
Yellowknife, NT X1A 3S3

Via online submission

Attention: Ryan Fequet

**RE: W2014L3-0002 (Request for Water Use from Alternate Source – Municipal Water Licence - Tlicho Community Government of Behchoko)**

Environment Canada (EC) has reviewed the information submitted to the Wek'èezhii Land and Water Board (WLWB) regarding the above-mentioned request and is submitting comments on mitigation measures as well as other matters of importance to the project proposal via the online review system as requested by the WLWB. EC's specialist advice is provided pursuant to the *Canadian Environmental Protection Act 1999*, the pollution prevention provisions of the *Fisheries Act*, the *Migratory Birds Convention Act*, and the *Species at Risk Act*.

Should you require further information, please do not hesitate to contact me at (867) 669-4707 or [Bradley.Summerfield@ec.gc.ca](mailto:Bradley.Summerfield@ec.gc.ca).

Sincerely,

Bradley Summerfield  
Environmental Assessment Coordinator

Attachment(s) – (EC comments Excel Sheet)

cc: Loretta Ransom, A/Head, Environmental Assessment North (NT and NU), PNR-EPOD



Central & Arctic Region  
Fisheries Protection Program  
867 Lakeshore Road,  
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Your file / Votre référence  
W2014L3-0002

December 8, 2014

Our file / Notre référence  
14-HCAA-01774

Wek'eezhii Land and Water Board  
Attention: Ryan Frequet, Regulatory Manager  
#1-4905 48<sup>th</sup> Street  
Yellowknife, NT  
X1A 3S3

**Subject: Request for Water Use from Alternate Source (W2014L3-0002)**

The Fisheries Protection Program (the Program) of Fisheries and Oceans Canada (DFO) has reviewed the information provided on the Online Review System website for the Wek'eezhii Land and Water Board (WLWB) with respect to the temporary (December 2014 to April 2015) water withdrawals to supply drinking water to the communities of Rae and Edzo, NT. DFO is providing specialist advice and recommendations, as requested, on our assessment of potential impacts to fish and fish habitat pursuant to DFO's mandate under the *Fisheries Act* and the *Species at Risk Act*.

Based on our understanding that the temporary water withdrawal is urgently required this winter while a more permanent solution is considered, the Program recommends that the Proponent minimizes any impacts to fish and fish habitat by implementing, to the extent practical in the circumstances, avoidance and mitigation measures as identified on the DFO website as "Measures to Avoid Causing Harm to Fish and Fish Habitat" available at: <http://dfo-mpo.gc.ca/pnw-ppe/measures-mesures/measures-mesures-eng.html>

Please note that when planning the more permanent solution, the Proponent should refer to the general information for management of impacts to fish and fish habitat and self-assessment tools that describe *Fisheries Act* requirements available at DFO's "Projects Near Water" website at [www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html](http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html). Additionally, information about the fish community and its habitat, in particular fish that are part of commercial, recreational, or aboriginal fisheries and/or aquatic species at risk, as defined under the *Species at Risk Act*, should be provided to DFO in order for us to complete an assessment of the impacts of the permanent solution on fish and fish habitat at the proposed withdrawal sites.

The Proponent should also be advised that, while this urgent work should not be delayed, it is also their *Duty to Notify* DFO if they have caused, or are about to cause, serious harm to fish that are part of or support a commercial, recreational or Aboriginal fishery. Such notifications should be directed to <http://www.dfo-mpo.gc.ca/pnw-ppe/violation-infraction/index-eng.html>.

Thank you for the opportunity to review and comment on the proposed Request for Water Use from Alternate Source.

If you have any questions, please contact Christi Horne at our Winnipeg office at 204-984-5427, by fax at 204-984-2404, or by email at Christi.Horne@dfo-mpo.gc.ca.  
Please refer to the file number referenced above when corresponding with the Program.

Yours sincerely,



Debbie Ming  
Acting Regional Manager, Regulatory Reviews  
Fisheries Protection Program

c.c.: Christi Horne, DFO, Winnipeg

December 8, 2014

Ryan Fequet  
Regulatory Specialist  
Wekeezhii Land and Water Board  
#1-4905 48<sup>th</sup> Street  
Yellowknife, NT  
X1A 3S3

Dear Mr. Fequet,

Re: **Community of Behchoko**  
**Type A Water Licence – W2014L3-0002**  
**Request to Use Alternate Water Source**  
**Request for Review and Comments**

The Department of Environment and Natural Resources (ENR), Government of the Northwest Territories, has reviewed the request at reference based on its mandated responsibilities under the *Environmental Protection Act*, the *Forest Management Act*, the *Waters Act*, the *Forest Protection Act* and the *Wildlife Act* and has the following comments and recommendations for the consideration of the Board.

### **Topic 1: Sediment Control Practices**

#### **Comment(s):**

The map provided with this application illustrates suggested water sources location changes for each community. As such, the alternate water source for Rae is located further East into Marion Lake, while the alternate water source for Edzo is moved from the West Channel to Frank Channel. The proposed alternate sources are to be used for approximately 5 months.

Water extraction procedures from the alternate sources should be provided and specify that the proposed operations at these new locations will prevent sediments movements and/or entrainments into the water intake during withdrawal (either from the bottom or bank). In locations where bank or bottom sediment releases could be triggered, sediments control devices should be made easily accessible and used appropriately.

**Recommendation(s):**

- 1) ENR recommends that the Community Government of Behchoko clarify its procedures for each new alternate water intake location such that sediment disturbance and release is mitigated.

**Topic 2: Water Source Protection**

**Comment(s):**

Water extraction procedures should be specified to ensure that any fuel-operated mechanical equipment is properly operated. Any fuel that will be required for the operation should be properly stored such that it does not enter waters. Refueling activities and/or temporary placement/storage of fuels (if required) should be located at a minimum of 30 meters from the high water mark.

This protection measure also applies to any other chemicals or substances that may be required to conduct water withdrawal at these new alternate locations.

**Recommendation(s):**

- 1) ENR recommends that the Community Government of Behchoko specify its water withdrawal procedures that would include the operation and maintenance of mechanical pumps, equipment or vehicles. These details should be provided for water intake facilities proposed for both Rae and Edzo. These procedures, and any other special considerations for these undertakings, should also include any necessary Spill Contingency Planning details.

Comments and recommendations were provided by ENR technical experts in the Water Resources Division and the North Slave Region and were coordinated and collated by the Environmental Impact Assessment, Conservation, Assessment and Monitoring Division (CAM).

If you have any questions or concerns, please do not hesitate to contact me at 920-6118 or [patrick\\_clancy@gov.nt.ca](mailto:patrick_clancy@gov.nt.ca)

Sincerely,



Patrick Clancy  
Environmental Regulatory Analyst  
Environmental Impact Assessment  
Conservation, Assessment and Monitoring Division  
Department of Environment and Natural Resources  
Government of the Northwest Territories

## Sarah Elsasser

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**From:** Sarah Elsasser <selsasser@wlwb.ca>  
**Sent:** December 9, 2014 5:24 PM  
**To:** selsasser@wlwb.ca  
**Subject:** FW: Excel file of Reviewer Comments  
**Attachments:** Copy of PropRespReq\_2566.xlsx

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**From:** Jaime Goddard [mailto:Jaime\_Goddard@gov.nt.ca]  
**Sent:** December 9, 2014 4:59 PM  
**To:** selsasser@wlwb.ca  
**Cc:** Olivia Lee; Sudhir Jha; asao@behchoko.ca; works@behchoko.ca  
**Subject:** RE: Excel file of Reviewer Comments

Hi Sarah,

MACA and the operator from Behchoko have reviewed the comments and our responses are attached. If you require any additional clarification on any of our responses, please let me know and I will provide it ASAP.

DFO's comments were not in the Excel file; our response is as follows:

We have reviewed the recommended fish protection measures. The temporary water intake will not interfere with fish passage or change the channel width or flow. No fish will be trapped or relocated. The pump has a fish screen to prevent entrainment or impingement of fish. No explosives will be used.

Thanks,

**Jaime D. Goddard, P.Eng.**  
Acting Engineering Team Lead, Water and Sanitation  
Community Operations  
Department of Municipal and Community Affairs  
Government of the Northwest Territories  
Tel: 1-867-920-8725 | Fax: 1-867-873-0609