Fisheries and Oceans Canada
Pêches et Océans Canada

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December 5, 2008

DFO File : 08-HCAA-CA7-00035
NWB File : 2AM-LUP0008

Thomas Kabloona
Chairman
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0

via email: licensing@nunavutwaterboard.org

Dear Mr. Kabloona:

Subject: Fisheries and Oceans Canada Intervention Comments for the Nunavut Water Board Final Hearing on the Renewal Application for the Lupin Project Type "A" Water License

On November 17, 2008, Fisheries and Oceans Canada (DFO) participated in the technical meeting and pre-hearing conference by teleconference, with the prior submission of DFO's technical review comments for the Type "A" water license renewal application and supporting documents for the Lupin Project, proposed by Zinifex Canada Inc. (the "Proponent"). On November 25, 2008, DFO received the Board's decision on the pre-hearing conference and the procedures for the final written hearing.

During the technical meeting and pre-hearing conference, questions did not arise in relation to DFO's technical comments. It was agreed to between parties and the proponent that the technical submissions would be reviewed and responded to during the final written hearing. Therefore, DFO resubmits the technical review comments as the formal written submission for the final written hearing in accordance with the categories set out by the Nunavut Water Board (NWB).

Introduction

DFO's comments are based upon our departmental mandate under the *Fisheries Act*; specifically the management and protection of fish and their habitat. DFO's primary focus in reviewing proposed developments in and around fishery water is to ensure that the works and undertakings are conducted in such a way that the proponents are in compliance with the applicable provisions of the *Fisheries Act*.

The terms and conditions that apply to the Abandonment and Restoration Plan (Part 1,

item 1) in the NWB Water License NWB1LUP0008 signed on July 1, 2000 and the recent emergency water license approval dated October 6, 2008 were used as a reference in the technical review. DFO would like to bring to the Board's attention that the 2008 Abandonment and Restoration Plan submitted by the Proponent does not contain some of the detail requirements listed in Water License condition Part 1, item 1a-m, specifically the detailed description of the final desired landscape, with emphasis on the restoration of the stream banks and surface drainage over the restored units (Part 1, item 1c). The following comments outline the information required to ensure that fish and fish habitat is protected.

Lupin Mine is located on the west shore of Contwoyto Lake, approximately 285km southeast of Kugluktuk, Nunavut. The underground gold mine was in operation since 1982 and has been in care and maintenance since 2005. Reclamation activities continue on the mine site and are proposed to continue in the Tailings Containment Area (TCA).

Geotechnical

Dam Management

Dam 4

The Tailings Containment Area (TCA) consists of several dams which were constructed to create holding cells for the tailings as well as polishing ponds. The compartments within the TCA function with perimeter and internal dams. In order to ensure the stability of the TCA after abandonment activities, certain dams were assessed with the need to reinforce the structure. Dam 4 in particular separates Long Lake from the Cell 4 pond and has water against each toe. Presently the upstream side slope of Dam 4 is a minimum of 3H:1V and approximately 4.5H:1V at the west abutment. The Proponent proposes the enhancement of the structure through additional placement of rip rap on the sides of the dam to achieve a 2.5H:1V slope. This will ensure geotechnical stability and erosion protection.

1. *DFO recommends that the Proponent provide further clarification on how and why the proposal at dam 4 will enhance stability and erosion protection.*

Should the need be proven to enhance geotechnical stability and prevent erosion, DFO requests clarification on the details of the riprap placement on Long Lake. The placement of rip rap in fish habitat may result in a harmful alteration, disruption or destruction (HADD) of fish habitat which is prohibited under *Fisheries Act* section 35 unless authorized by the Minister of DFO.

2. *In order to confirm whether the works results in a HADD, DFO requests the Proponent provide fish habitat assessment of Long Lake, especially the fish population and shoreline characteristics at the location of Dam 4, design drawings of Dam 4 enhancement, construction technique, scheduling, and*

mitigation measures.

Outflow Spillway on Dam 1A

The Proponent states (page 31-32) that Dam1A is proposed to be the location of a outflow spillway to allow natural water flow into the environment, after it has been determined that the water quality guidelines are met. The outflow spillway will become a natural vertical barrier through designing the spillway with a 3 metre vertical drop. This design will prevent fish passage into the TCA.

DFO acknowledges that the outflow spillway will be constructed and in operation when the water quality has met the specified guidelines. The statement of the spillway being a natural barrier is unclear.

3. *DFO recommends that the Proponent provide clarification of the natural barrier and construction drawings, techniques and scheduling for Dam 1A to confirm that fish passage is prevented.*

Tailings Storage Facility

Tailings Lines

Two steel tailings lines were installed from the mill complex to the Tailings Containment Area (TCA) which spans a distance of approximately six kilometres. Figure 5 in Appendix 1 shows the tailings line route location. Tailings lines are proposed to be removed prior to closure.

4. *DFO recommends that the Proponent provide clarification of the tailings lines removal (how were the tailings line installed (e.g. using brackets?) and how the structure components will be removed, especially over watercourses?).*

Closure and Reclamation

Abandonment and Restoration Plan 2008 (A&R Plan)

Freshwater Supply

The planned activities within the abandonment and restoration plan involves the clean-up and removal of the mill complex, other major buildings, infrastructure support, fuel and chemical storage, roads and airstrips, sewage and refuse disposal facilities, the quarry, underground mine and the waste rock.

Part of the infrastructure support includes the freshwater supply which consists of a causeway and breakwater extending into Contowyto Lake, docks, building, electronics, pumps and a 1.5km insulated pipeline. All these structures will be removed except for the causeway and breakwater. The Proponent states (A&R Plan 2008 page 19) that the

breakwater and causeway will be left in place due to increased disturbance that the lake would incur during removal.

Contwoyto Lake is known to have a fish population containing lake trout, Arctic char, round whitefish, lake cisco, Arctic grayling, ninespine stickleback, and burbot. Some fish species, such as Arctic Char and lake trout juveniles, use the littoral zones of lakes as rearing and nursery areas during the summer months. The littoral zones are important in the development of many fish species. During the construction of the breakwater and causeway, the littoral zone was destroyed and access to these areas for rearing and nursery were removed. With the opportunity to reclaim the environment to pre-disturbed conditions or better, the Proponent should consider other alternatives to reclaim the breakwater and causeway such as lowering the elevation of the structures.

The Proponent's concern regarding the increased disturbance to the lake during the removal of the structure may be minimized through the use of appropriate mitigation measures. The removal of rock to lower the elevation of the breakwater and causeway to under the low water elevation will also minimize the disturbance to the lake. This will allow aquatic organisms to use an area that was once accessible to fish while simultaneously providing an opportunity to improve the habitat through creation of additional interstitial spaces.

The proponent should consult DFO during the development of these plans.

5. *DFO recommends that the Proponent consider and revise the abandonment and restoration plan to include reclamation of the breakwater and causeway in Contwoyto Lake. DFO recommends that the Proponent provide detailed construction drawings of the breakwater and causeway reclamation, and construction schedule and technique.*

<u>Roads</u>

The planned reclamation of the road involves the removal of the culverts while the rest of the road remains intact. Once the culverts are removed, the slopes are proposed to be sloped back to minimize erosion and restore drainage. It is also planned to restore any other areas where water may pool during spring melt to ensure drainage.

DFO has no objection to the removal of all culverts along the roads on the Lupin Mine site. However, the details of the removal of the culverts are unclear.

6. *DFO recommends that the Proponent provide a map showing all the culverts crossings that are proposed to be removed, details plans of removal technique and detailed construction drawings of watercourse restoration (i.e. restoration of watercourse bed and banks) with list of mitigation measures to be used.*

7. *DFO recommends that the following mitigation measures be incorporated into the*

Interim and Final Abandonment and Restoration Plan to ensure that impacts to fish and fish habitat are mitigated. Note that this list is not exhaustive and other additional measures should be implemented if required to protect fish and fish habitat.

- The bank slopes should be graded to match the upstream and downstream slopes upon removal of the culverts.
- Any placement of rock should not interfere with fish passage or constrict the channel width.
- Any rock material used should not be obtained from the ordinary high water mark of any water body.
- The use of acid-containing rocks, such as sulphide-producing materials commonly obtained from metal mines or poor quality limestone rocks, such as those that fracture and break down quickly when exposed to the elements, shall be avoided.

We look forward to working with the NWB on the water licensing renewal of the Lupin Mine Project. If you have any questions concerning the above, please contact me directly by telephone at (905) 639-8236 or by email at Amy.Liu@dfo-mpo.gc.ca.

Yours sincerely,

Amy Liu
Habitat Management Biologist
Fisheries and Oceans Canada – Eastern Arctic Area

Copy: Julie Dahl - Fisheries and Oceans Canada
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Pêches et Océans Canada

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ᑎᓴᕐᕕ 1, 2008

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ᐃᓕᓴᕆᔨᒃᑲᓐᓂᖅ ᒥᔪᑕ ᖃᐅᓪᓗᓈ:

**<u>ᐃᓗᓕᖅᑭᑦ</u>:ᐃᖃᓗᓕᕆᔨᒃᑯᑦ ᐃᒪᓕᕆᔨᒃᑯᑦᓗ ᑲᓇᑕᒥ ᐅᓕᐃᒋᐊᖅᓂᖏᓚᑦ ᐅᖃᐅᔨᓕᔪᖅᑭᑦ ᓄᓇᕗᓚᒥ ᐃᒪᓕᕆᓂᖏᓚᑦ ᑭᓯᓕᖅᑲᓪᓚᐃᑦ ᐅᖃᐅᔨᓕᔪᖅᑭᑦ ᓄᑦᓯᐊᑎᒥᓂᖅᑭᓐᓄᑦ ᓴᐃᖅᑲᓐᓂᕐᒥ ᐊᐅᓚᑦ ᐃᓕᓴᕆᔨᒃᑯᑦ ᐃᓗᓕᖅᑭᑦ ᑲᓇᑕᒥ ᐃᓕᓴᕆᔨᒃᑯᑦ ᐃᓗᓕᖅᑭᑦ ᑲᑎᒪᔨᖅᑕᐅᓂᖅ ᐊᐅᓚᑦ

ᑐᑭᖅᑕ ᐃᒪᐃᓕᖅᓯᓗᓚᕐᑎᓪᓗ ᐊᑎᑐᐊᓕ ᖃᐅᔨᓴᖅᑎᑦᑎᓐᓄᑦ ᐅᑎᖅᑎᑭᓯᓂᖅᑐᓪᓗ <ᖅᓇᐅᑎᒍᑦ (ᐃᓕᓴᐅ 1, ᓇᓱᐅᑎᓕᒃ 1) ᓄᓇᕗᒻᒥ ᐃᒪᓕᓚᐅᕐᓂᑦ ᐃᒪᖅᑦ ᓕᐃᐸᓴᐅᓴᐅ NWB1LUP0008 ᐊᑎᓕᐅᖅᑕᐅᓯᒪᔪᖅ ᔪᓕᐃ 1, 2000 ᐊᐱᒪᓗ ᒪᓴᓇᑭᑐᔪᖅ ᑐᐊᕕᖅᓇᖅᑐᒥᒃ ᐃᒪᖅᑦᑦ ᓕᐃᐸᓴᐅᓯᓂᓴᐅ ᐅᑦᑐᖅ ᐅᑦᑐᕐᓂ 6, 2008 ᐊᑐᖅᑕᐅᔪᓕᑦ ᑐᐅᑎᐊᑭᑕᐅᑦᔨᑎᓄᑦ ᐃᓗᓕᖅᑐᔪᓂᒃ ᖃᐅᒥᖅᑐᓂᖅᑲᖅᑎᑦᓗᑎᑦ. ᐃᒪᖅᒥᐅᑕᓕᓚᐅᓂᑦ ᐃᐸᐱᓗᔨᓂᔪᓕᑦ ᑲᑎᒪᑎᐅᓂᒃ 2008-Γ ᖃᐅᒪᐃᓴᐅᐃᓂᖅᑐᑦ ᐅᑎᖅᑎᑭᔨᓂᖅᑐᓪᓗ <ᖅᓇᐅᑎ ᑐᓂᔭᐅᔪᖅ ᑐᑭᔨᖅᔨᒪᔪᑦ ᐃᓗᓕᖅᑲᓇᖅᑭᒪᑦ ᐃᓕᓴᐅᓂᒃ ᓇᑎᑎᖅᔨᒪᔪᓂᒃ ᐃᒪᖅᒥᒃ ᓕᐃᐸᓴᐅᓴᐅᑎᓯᓂᖅᑐᓂᒃ ᐃᒪᓕᐅᖅᑕᐅᓯᒪᔪᑦ ᐃᒪᓕᐅᓴᐅᑎᒃ 1, ᐃᓗᓕᖅᑲ 1a-m, ᐱᓗᐊᖅᑐᒥᒃ ᓇᓗᓇᐃᔭᖅᔨᒪᔪᑦ ᖃᓄᐃᓕᓴᐅᓴᐅᓄᑦᓄᓂᒃ ᓄᓇᕗᑦ, ᱚᓗᐊᖅᑐᒥᒃ ᐅᑎᖅᑎᑭᔨᓂᖅᑐᓪᓗ ᑯᒃᓴᕐᓂ ᖃᐅᔨᓴᖅᑎᑦᑎᓐᓄᑦ ᐅᑎᖅᑎᑭᐅᔪᓂᖅᑐᑦ (ᐃᓕᓴᐅ 1, ᐃᓗᓕᖅᑲ 1c). ᐅᑯᐊ ᐅᖃᐅᔨᔨᓕᑦ ᓇᓗᓇᐃᔭᐃᓕᑦ ᑐᓴᖅᑕᐅᔨᒪᔪᓂᒃ ᖃᐅᔨᓴᖅᑕᐅᓯᒪᓄᑦᓄᓂᒃ ᐃᖃᓗᓕᒃ ᐃᓕᓴᐅᓂᒃ ᐃᓕᓴᐅᓯᒪᔪᓂᒃ ᐃᖃᓗᓕᒃ ᐃᓕᓴᐅᓂᒃ ᐃᓕᓴᐅᓯᒪᔪᓂᒃ ᑎᑎᖅᑐᓂᖅᑲᖅᑎᑦᑎᓐᓄᑦ ᐃᒪᖅᒥᐅᑕᓕᓚᐅᓂᑦ.

ᔭᐱᐢ ᐅᔭᖃᓂᐊᖅᓱᒃ ᐃᓂᖅᑲᖅᑐᖅ ᐱᖓᓱᓇᖓᓂ Contwoyto Lake, 285-ᑭᓗᒃᑕᐃᑦ ᒥᑦᓴᓄᑦᑐᓗ ᓂᑎᖅᑭᔨᐊᓂ ᑲᓇᖅᑭᑦᑐᖅᑭᔨᖓᓂ ᖃᐅᔨᔪᖅᑐᖅᑐᒃ, ᓄᓇᕗᒻᒥ. ᓄᓇᐅᒃ ᐊᒋᓂ ᔪᓗᓂᐃᓂᐊᖅᓱᒃ ᐊᐅᓚᓂᖅᑲᖅᑎᓕᕐᓂᖅ 1982-Γᓂᑦ ᐊᒻᒪᓗ ᑲᒪᒋᐅᔨᓕᐃᓇᖅᑐᖅ 2005-Γᓂᑦ. ᐅᑎᖅᑎᑭᓂᖅᑐᑦ ᐊᐅᓚᓂᐅᔨᑦ ᑲᔨᔨᓕᐃᓇᖅᑐᓂ ᐅᔭᖃᓂᐊᖅᑎᔨᒥ ᐊᒻᒪᓗ ᑐᑭᔨᖅᑐᓂᒃ ᑲᔪᔨᑎᕐᓂᑦ ᑭᖑᓪᓕᖅᓯᒪᓂᖅ.

ᓄᓇᒧᖏᓂᖏᑐ

ᔨᒥᑦᑐᖅᑲᓕᔪᓂ ᐊᐅᓚᑦᔨᓂᖅ

ᔨᒥᑦᑐᖅᑲᓕᔪᖅ 4

ᑭᖑᓇᐹᑎᖅᑲᐅᑎᒥ ᐱᑕᖅᖃᒪᑦ ᖃᑲᔨᑦᓚᓂᖅ ᔨᒥᑦᑐᖅᑲᓕᔪᓂᖅ ᓴᓇᘳᐅᔨᓕᔪᓂᖅ ᐃᓂᒋᐅᔨᐅᑎᖅᑎᑦᑎᓐᓄᑦ ᑭᖑᓇᐹᑎᖅᓄᑦ ᐊᒻᒪᓗ ᖃᑭᑦᓚᖅᓴᐃᐃᐅᑦᔨᔨᓂᖅ. ᐃᒪᒋᖅᑯᐊᖅᑎᑎᖅᑲᓕᔪᑦ ᑭᖑᓇᐹᑎᖅᑲᐅᑎᕐᓂᒃ ᐊᐅᓚᓂᖅᑲᖅᑎᑦᑎᓐᓄᑦ ᑭᑦᓚᓂᖅᓴᓂᖅ ᐃᓗᐊᐸᓂᑦᑐᓂᒃ ᐊᑐᖅᑭᑎᓂᓗᓂ ᔨᒥᑦᑐᖅᑲᓕᔪᖅ. ᖃᐅᔨᓴᖅᑲᐅᑎᑦᑎᓐᓄᑦᓗᐃ ᒪᑭᑦᑐᖅᑲᓕᔪᖅ ᑭᖑᓇᐹᑎᖅᑲᐅᑎᓕᕐᓂᒃ ᐊᐅᓚᓂᖅᑲᖅᑎᑦᑎᓐᓄᑦ ᑭᖑᓇᐹᑎᖅᑲᐅᑎᓕᕐᓂᒃ ᐊᑐᖅᑭᑎᓂᓗᓂ ᑭᖑᓇᐹᑎᖅᑲᐅᑎᓕᕐᓂᒃ ᐊᐅᓚᓂᖅᑲᖅᑎᑦᑎᓐᓄᑦ

ᑯᖏᕆᑲ ᓴᒥᑦᑐᖅᓴᓪᓗᒥ 1A

ᑐᑭᓴᖅᑐᖅ ᐅᖅᑫᒪᑦ (ᒪᐸᐱᖅᑐᒪᖅ 31-32) ᓴᒥᑦᑐᖅᓴᓪᓗᓐᖅ 1A ᑐᑭᓴᖏᓚᒪᑦ ᐃᓂᖅᑎᕆᖅᓴᓂ ᑯᖏᕆᒥ ᐱᕆᖅᑎᑯᓪᑕᔪ ᐃᒪᖅ ᑯᐟᓂᓐᒃ ᐊᖏᑎᒍᑦ, ᓇᑕᓇᐃᖅᑕᐅᓴᒪᓪᓂᖅᑎᓪᑕᔪ ᐃᒪᖅ ᐱᐅᔨᒋᐊᓐᒃ ᒪᓪᑐᒪᖅᑎᔪᑦ ᒪᓪᓪᑕᑎᑦ. ᑯᖏᕆᒥ ᒪᑭᑕᑕᓂ ᓴᒥᐅᖅᓂᐊᖅᑐᖅ ᐊᖅᑭᑦᑕᑎᑦ ᑯᖏᕆᒪᒥᑦ 3-ᒋᑕᒥᑦ >ᖅᑐᓂᓪᒥᑦ. ᑕᐃᒪᐃᓪᓐᓄᓪᑕᔪ ᐃᖅᑲᑕᐃᑦ ᐃᑎᐅᑭᓇᖅᑐᑦ ᑭᖓᐃᓇᖅᑎᖅᓴᖏᒪᔪᑦ.

ᐃᖅᑲᑕᓪᓚᐱᖅᑯᑦ ᐃᒪᖅᒥᐅᑕᓪᓚᐱᖅᑯᓪᑕ ᖅᑲᐅᐱᒪᔪᑦ ᑯᖏᕆᒪᒥᑦ ᐊᓘᒪᐅᓴᓚᓪᓐᓄᖅ ᐊᒪᒪᓗ ᐊᐅᓪᓂᖅᑲᓪᓂᖅᑎᓪᓗᑎᒃ ᐃᒪᐅᑦ ᐱᐅᓪᓂᖅᑲᓪᓂᖅᑎᑦ. ᐅᖅᑲᖅᓴᒪᓂᖅ ᑯᖏᕆᐅᑦ ᑐᑭᓴᖏᓚᒪᑦ ᐅᑭᐅᖅᑲᐃᓐᓇᖅᑐᖅ ᓴᓇᐅᖅᑲᖅᑐᑎᒃ.

3. *ᐃᖅᑲᑕᓪᓚᐱᖅᑯᑦ ᐃᒪᖅᒥᐅᑕᓪᓚᐱᖅᑯᓪᑕ ᐃᓴᒪᑕᐅᓚᒪᑦ ᑐᑭᓴᖏᓚᒪᔪᑦ ᑐᐅᓴᓇᖅᑎᖅᓴᖏᓚᐅᖅᑐᑎᒃ ᓴᓴᐅᖏᓚᖅᑐᒥᒃ ᐊᓚᒪᓗ ᓴᓇᓂᐅᑎᓚᖅᑐᓂ ᑎᑎᖅᑐᒪᖅᓂᒃ, ᐊᑐᖅᑕᐅᑎᓚᖅᑐᓂᓂᒃ ᐊᐅᑕᓂᕆᓂᓪᓗ ᓴᒥᑦᑐᖅᓴᖅᑎᔪᑦ 1A-ᒧᑦ ᓇᑕᓇᐃᖅᓴᓪᓐᓄᒃ ᐃᖅᑲᑕᐃᑦ ᐊᖅᑯᑎᖅᑲᖅᓴᓇᓕᕆᓂᑦ.*

ᑭᖓᐋᓴᑎᖅᐅᑎ

ᑭᖓᐋᓴᑎᓇᓂᒪᑦ

ᒪᖁᑉᐳᒃ ᓴᐃᕆᓴᒃ ᑭᖓᐋᓴᓇᓂᒪᑦ ᐊᖅᑯᓂᑕᐅᔪᑦ ᐅᓴᕆᓂᓚᐃᒪᖅᑕᒃ ᑭᖓᐋᓴᑎᖅᑎᐅᑎᓄᑦ ᐊᓂᓂᖅᑲᖅᑯᓂᓗ ᒥᑦᓴᓂᒃ 6 ᑭᓇᒋᑕᐃᑦ. ᑎᑎᖅᑐᒪᖅᑲᖅᓴᓇᖅᑐ 6 ᐃᓴᐃᓂᒋᑐᒥ 1-ᒥ ᑕᑯᑦᓴᐅᑎᑦᓴᓇᖅᑐ ᑭᖓᐋᓴᑎᓇᓄᑦ ᐊᖅᑯᑎᒍᒧᑦ ᐃᓂᒥᓴᐅᔪᓕᒥᒃ. ᑭᖓᐋᓴᑎᓇᓂᒪᑦ ᑐᑭᓴᖏᓚᒪᓕᒥᑦ ᐱᖅᑕᐅᑦᑯᓴᐅᓪᓐᓄᒃ ᒪᑐᓴᐅᑕᐅᓪᓚᖅᑎᓂᒃ.

4. *ᐃᖅᑲᑕᓪᓚᐱᖅᑯᑦ ᐃᒪᖅᒥᐅᑕᓪᓚᐱᖅᑯᓪᑕ ᐃᓴᒪᑕᐅᓚᓴᓴᒪᑕᒃ ᓇᓂᓇᐃᓴᐃᑯᑦᓴᓂᒃ ᑭᖓᐋᓴᑎᓇᓂᒪᑦ ᖃᓄᖅ ᐱᖅᑕᐅᓴᓴᖏᓚᖅᓗᑎᒃ (ᖃᓄᖅ ᑭᖓᐋᓴᑎᓇᓂᒪᑦ ᐊᖅᑯᑎᖅᑲᖅᓴᓇᓕᕆᓂᑦ ᐊᖅᑭᑦᑕᑎᑦ ᐊᐅᓪᓂᖅᑲᓪᓂᖅᑎᑦ) ᐊᒪᓗ ᖃᓄᖅ ᑐᓂᓗᒍᖅᑕᒃ ᐱᖅᑕᐅᓴᓇᖅᑐᑦ, ᐱᓗᐊᖅᑐᒥᒃ ᐃᒪᓕᕆᓂᑦᑐᒥᒃ).*

ᒪᑐᓴᓂᖅ ᐅᖅᑐᓕᓴᓪᓗᓐ

ᖃᑭᒪᐃᓂᓪᑎᑦ ᐅᑎᖅᑐᓕᓴᓪᑎᓪᓗᓐ ᕿᖏᐃᓂᐅᑎ 2008

ᐃᒥᑦᓴᐊᖅ

ᕿᖏᐃᑕᐅᓴᒪᓂᖅ ᐊᐅᑕᓂᑦᓴᐃᓐ ᖃᑭᒪᐃᓂᓪᑎᓪᓗᓐᓂᖅ ᐊᒪᒪᓗ ᐅᑎᖅᑐᓕᓴᓪᑎᓪᓗᓐ ᕿᖏᐃᐅᑎ ᐱᖅᑕᐅᓴᐅᖅᓱᒪᑦ ᓴᓇᓪᒪᓴᖅᑕᐅᓂᖅᑐᓂᒃ ᐃᓴᖅᑕᐅᓂᖅᑐᓂᓪᓗᓐ ᐅᓴᕆᓂᓚᐃᒪᖅᑕᒃ, ᐊᓴᖅᑎᓪᓗᓐ ᐃᓪᓗᐃᓐ, ᐊᖅᑭᑦᐅᐅᒪᔪᑦᑯᑦ, ᐅᖅᑲᓴᐊᓂᐃᓐ ᐊᒪᒪᓗ ᓴᓴᐃᖅᐃᓐ ᐃᓂᖅᑎᖅᑲᖅᑯᓂ, ᑭᐃᓕᖅᑐᖅ ᐊᒪᒪᓗ ᓴᓇᓂ, ᐅᓴᕆᓂᓚᐃᒪᖅᑕᒃ, ᓄᓇᐅᒃ ᐃᑭᐊᖅᑐᖅ ᐅᓴᕆᓂᓚᐃᒪᖅᑕᒃ ᐊᒪᒪᓗ ᐅᓴᕆᓂᓪᓗᓐ.

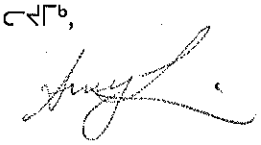
ᐃᓕᖅᑲᓗ ᐊᖅᑭᑦᐅᐅᒪᓂᒃ ᐃᑲᔪᖅᓴᒍᑕᐅᔪᖅᑐᒃ ᐱᖅᑯᓴᐅᓴᔪᖅᑐᒃ ᐃᒥᑦᓴᐊᒥᒃ ᐱᓴᒪᔪᒥᒃ ᒪᑦᓂᑐᐃᑎᑎᖅᑐᖅᑯᓂᖅᑲᖅᓴᓇᓕᕆᓂᑦ ᑭᖓᐋᓴᑎᓇᓂᒪᑦ ᑎᑎᖅᑐᒪᖅᑲᖅᓴᓇᖅᑐᑦ Contowyto ᑕᓴᖅᓱᓄᓂᑦ, ᑐᓕᑦᑕᖅᓴᖅᓄᓂᑦ, ᐃᑦᓂᓄᓂᑦ, ᐅᐊᖁᓂᖅᓄᓂᑦ, ᒥᑦᓂᐊᕈᑎᓄᓂᑦ ᐊᒪᒪᓗ 1.5 ᑭᓇᒋᑕᒥᒃ ᑕᑭᓂᓂᒃ ᓴᑦᓂᓂᒃ ᐃᑭᐊᖅᑎᓂᒃ. ᑕᒃᑯᐊ ᓇᐸᓂᒪᓴᓴᐊᑦ ᐱᖅᑯᓴᐅᓴᖅᑐᖅᑐᑦ ᐊᐃᓚᑐᐊᖅᑐᖅ ᒪᑦᓂᕿᒃᑯᑎᓐᓄᓐ ᑐᓕᑦᑕᖅᓴᖅᓐᓂᓗ. ᑐᑭᓴᖏᓚᒪᓕᖅᑐᖅ ᐅᖅᑲᖅᓴᒪᒪᓕᖅᑐᖅ (ᕿᖏᐃᑕᐅᓴᒪᓂᖅ ᐅᑎᖅᑐᓕᓴᓪᑎᓪᓗᓐ ᕿᖏᐃᐅᑎ 2008 ᒪᐸᐱᖅᑐᒪᖅ 19) ᒪᑦᓂᕿᒃᑯᑦ ᑐᓕᑦᑕᖅᓴᖅᓐᓂᓗ ᐃᓂᒥᓴᑐᐃᓐᓇᖅᓂᐊᓚᐊᖅᓄᑦ ᐸᖅᓴᕆᑕᐅᑎᓂᓕᐃᓐᓇᖅᓴᖅᑎᒍᑦ ᑕᓴᖅᓱᓄᑦ ᐱᖅᑯᓴᐅᓴᖅᑐᖅᑐᑦ.

Contwoyto ᑕᓯᖏᑦ ᖃᐅᔨᒪᔨᐅᔪᖅ ᐃᖃᓗᐊᖃᕆᐊᖏᑦ ᐃᖃᓗᑐᐃᓐᓇᖅᑐᒃ, ᐃᖃᓗᓐᓂᑐ, ᖃᐅᔨᖅᑕᖅᑐᒃ ᐊᓕᔾᔨᓐᓂᑕᑐᖅᓯᓗᒃ ᑕᐃᔨᐅᔪᖅᑐᒃ lake cisco, arctic grayling, ninespine stickleback ᐊᒻᒪᓗ burbot. ᐃᓕᓐᓂᑦ ᐃᖃᓗᓐᓇᑦ, ᓄᓇᓗ ᐅᑭᐅᖅᑕᖅᑐᖅᓴᓪᓕ ᐃᖃᓗᓐᓂᑦ ᐊᒻᒪᓗ ᐃᖃᓗᓐᓂᐃᓐᓇᐃᓐᓇᑦ, ᑕᓯᖏᑦ ᖃᑐᑐᖅᑎᑦᑎᐊᖅᑐᖃᖏᑦᑕ ᐊᐅᔨᐅᑎᓪᓗᒍ. ᒐᖅᑯᐊ ᐃᓂᓯᓚᖓᓂ ᐱᒪᒫᕐᓗᓐᓇᑦ ᐱᕈᖅᐸᓪᓕᐊᓂᖓᓐᓄᓐᓂᑦ ᐊᒥᓱᑦ ᐃᖃᓗᐃᓐᓇᑦ. ᖃᐅᔨᓴᖅᑯᓂᒃ ᑐᓴᓪᓚᖓ ᐃᓂᓯᓚᖓᓂ ᐊᒻᒪᓗ ᖃᑐᑐᖅᑎᑦᑎᐊᖅᑐᖃᖏᑦᑕ ᐊᐅᔨᐅᑎᓪᓗᒍ ᐅᑎᖅᑕᐅᓂᒃᑯᑦᑐ

- ᓯᑐᖅᑲᐅᓂᖏᑦ ᐊᓴᒪᐊᓕᒪᐊᓕᒋᑦ ᐊᕐᓇᖅᑎᓗᑎᒃ ᑯᓘᓂᖏᓘᓂᒃ ᐃᓘᐊᑭᓱᓂᓗ ᐱᖅᑕᐅᓪᓚᐅᖅᑎᑦᓗᑦ ᑯᓚᐅᕐᕕᖅᓴᖅ.
- ᐅᓴᖅᑲᐃᑦ ᐊᑯᖅᑭᑕᐅᔪᑦ ᐅᓪᓚᑭᐊᖅᓘᖏᑦᑐᑦ ᐃᖅᓗᐃᑦ ᐊᖅᑯᑎᖏᓘᓂᒃ ᓯᒥᑦᑕᐅᓯᒪᒋᐊᖅᑎᖅᓴᖅᑎᑦᓗ.
- ᐅᓴᖅᐃᑦ ᐊᑐᖅᑕᐅᔪᑦ ᐱᓴᐅᒋᐊᖅᘓᖏᑦᑐᑦ ᐃᒪᐅᔨ ᓯᓇᖅᑕ ᐅᖅᑕᑦᑐᖅ ᓇᒍᑐᘓᓇᖅ ᐃᒪᖏᑦᒧᑦ.
- ᐊᑐᖅᑕᐅᓂᖏᑦ ᓄᖓᓇᖅᑐᑦᑕ ᐅᓴᖅᐃᑦ, ᒪᑯᐊ ᑕᕆᐅᑦᑕ ᐱᓴᐅᓯᑦ ᓴᓇᖅᓴᓂᓕᒋᐊᓇᖅᑐᖅ ᐅᕐᕈᓗ ᐅᓴᖅᑦᓯᐊᕈᐅᘓᖏᑦᑐᑐᒃᓂᖅ, ᒪᑯᐊ ᓯᖏᒥᓯᐊᖅ ᐊᑐᖅᑕᐅᑦᑕᐃᓕᓚᒋᐊᓕᒋᑦ.

ᓂᕆᐅᓇᓂᖅᑕᓯᐊᖅᓴᒍᑦ ᐃᖅᑲᓇᐃᔭᖅᑎᖅᑕᓯᐊᖅᓂᖅᓚᖅ ᓄᓇᕗᒻᒥ ᐃᒪᓚᕆᐃᓕᓇᓂᖅ ᐃᒪᖏᑦᒧᑦ ᓕᐃᔪᖏᓚᓯᖅᓂᖏᑦᒧᑦ ᓄᑖᑭᕆᐊᑭᑎᒥ ᔭᐱᐅ ᐅᓴᖅᓇᓂᐊᖅᐃᐅᔨ ᐊᐅᓚᓂᖓᓄᓇᓂ. ᐊᐱᖅᑲᑎᑦᔪᖅᑭᑦᓯ ᓇᑦᓚᑐᐃᓇᖏᓇᓄᑦ ᑕᕀᐱᖅᑲᓇᑦ, ᖃᓄᐃᓚᑎᐊᑭᓇᖅᑐᑎᑦ ᐅᕐᕈᓄᑦ ᑐᐃᐊᓕᓇᖅᑐᑎᑦ ᐅᖃᖅᓚᐅᑎᖅᑯᑦ (905) 639-8236 ᐅᕐᕈᔭᓇᓂᑦ ᑲᓪᑕᐅᓴᖅᑯᑦ ᐅᑉᖏᓖᒃ Amy.Liu@dfo-mpo.gc.ca.

ᓯᓚᕐᒥᒃ,



ᐊᒥ ᓚᐅ
ᐃᓂᑎᕆᐅᕐᓂᖅ ᐊᐅᓚᕐᓯᓂᖏᓘᓂᑦ ᖃᑲᐅᕐᓴᕐᑎᑎᒃ
ᐃᖃᓗᓚᓪᓚᕆᑯᑦ ᐃᒪᖏᑎᐅᑕᓚᓪᓚᕆᑯᓘᓗ ᑲᓇᑕᒥ - ᑲᓇᓇᓚᒃᓂ ᐅᑭᐅᖃᖅᑕᖅᑐᒍᕐᓂ

ᐊᕐᓵᖓᓇᓂᖅ ᐱᓕᑦ: ᓴᓚ ᑕᑦ - ᐃᖃᓗᓚᓪᓚᕆᑯᑦ ᐃᒪᖏᑎᐅᑕᓚᓪᓚᕆᑯᓘᓗ ᑲᓇᑕᒥ
ᑭᖏ ᐱᐊᓚ - ᐃᖃᓗᓚᓪᓚᕆᑯᑦ ᐃᒪᖏᑎᐅᑕᓚᓪᓚᕆᑯᓘᓗ ᑲᓇᑕᒥ
ᑎᐅᓗ ᑯᐸ - ᐃᖃᓗᓚᓪᓚᕆᑯᑦ ᐃᒪᖏᑎᐅᑕᓚᓪᓚᕆᑯᓘᓗ ᑲᓇᑕᒥ
ᑕᓂᐊ ᔪᐊᑕᓂᐊ - ᐃᖃᓗᓚᓪᓚᕆᑯᑦ ᐃᒪᖏᑎᐅᑕᓚᓪᓚᕆᑯᓘᓗ ᑲᓇᑕᒥ