



Fisheries and Oceans
Canada

Pêches et Océans
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March 24, 2005

Your file Votre référence
NWB3GJO

Our file Notre référence
NU-05-0009

Ms. Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0

Via Electronic Mail
licensing@nwb.nunavut.ca

Dear Ms. Beaulieu:

Subject: Proposed works or undertakings will likely avoid negative effects to fish habitat.

Fisheries and Oceans Canada (DFO) received the proposal on January 18, 2005, concerning the renewal of the Gjoa Haven water licence and the associated construction of a new water intake to service the community. To expedite future correspondence or inquiries, please refer to your referral title and file numbers when you contact us.

Habitat File No.:
Referral Title:

NU-05-0009
Gjoa Haven Water Licence Renewal and water intake construction

It is our understanding that the proposal consists of:

- *Construction of a new water intake into Swan Lake.*
 - *The water intake pipe will be placed into Swan Lake for a total distance of 110 metres and rock fill will be placed over it.*
 - *Once placed, the rock fill will be above the water level for approximately 50 metres of the total length of pipe. For the remaining 60 metres the rock will slope underwater.*
 - *The rock fill will be approximately 1.25 metres wide with 3:1 (vertical:horizontal) side slopes.*
 - *The intake will be constructed over an area of predominately sand substrate.*
- *Construction of a new pump house on the shore of Swan Lake*
- *Construction of a new 3.4km service road and water intake line between the community and the new pump house.*
 - *The new road and water intake line will not cross any fish bearing watercourses however, equalizing culverts will be placed along the length of the road to ensure natural drainage patterns are maintained.*

as outlined in the following plans:

- *Water licence application form submitted by the Hamlet of Gjoa Haven*
- *Report Entitled "Water Supply for Gjoa Haven" completed by Dillon Consulting Limited and dated November 29, 2002.*

- *Engineering drawings completed by Dillion Consulting, submitted to Fisheries and Oceans Canada by Charlie Cahill, dated January 27, 2005.*
- *E-mail and photos submitted by Gary Strong of Dillion Consulting on the 15th of March, 2005.*

I have reviewed the proposal under the habitat protection provisions of the *Fisheries Act*. The measures described in the plans are not adequate to protect fish and fish habitat. Therefore, please ensure that the following additional measures are incorporated into the plans.

- All materials and equipment used for the purpose of site preparation and project completion should be operated and stored in a manner that prevents any deleterious substance from entering the water.
 - Any stockpiled materials should be stored and stabilized away from the water.
 - Vehicle and equipment re-fuelling and/or maintenance should be conducted away from the water.
 - Any part of a vehicle and/or equipment entering the water should be free of fluid leaks and externally cleaned/degreased to prevent any deleterious substance from entering the water.
 - Only clean material free of fine particulate matter should be placed in the water.
- Sediment and erosion control measures should be implemented prior to work and maintained during the work phase, and until the site has been stabilized, to prevent entry of sediment into the water.
 - All sediment and erosion control measures should be inspected daily to ensure that they are functioning properly and are maintained and/or upgraded as required to prevent entry of sediment into the water.
 - All disturbed areas of the work site should be stabilized immediately.
 - Sediment and erosion control measures should be left in place until all areas of the work site have been stabilized.

Extraction of water via intake from any water body is prohibited under Section 30 of the *Fisheries Act* unless the entrance of the intake is properly screened to prevent the entrainment of fish. Refer to the *Freshwater Intake End-of-Pipe Fish Screen Guideline* (DFO 1995), which is available upon request. No harm should come to fish during water removal as long as the following mitigation measures are implemented:

- Ensure that the holes in the screen are small enough that no fish of any size can pass through the screen and into the intake.
- The rate of water withdrawal should be such that fish do not become impinged on the screen.
- Make certain that the fish guard or screen is properly maintained, in a good state of repair, and is not removable except for renewal or repair.
- During the time in which a renewal or repair is being conducted, the entrance of the water intake should be closed in order to prevent the passage of fish into the intake.

By implementing these additional measures, it is our opinion that the proposed works and undertakings will not likely result in the harmful alteration, disruption or destruction (HADD) of fish habitat, which is prohibited unless authorized by DFO. These are recommendations to ensure that the proposed works will likely not result in a HADD of fish habitat. Therefore a subsection 35(2) authorization is not necessary.

The proponent could contravene subsection 35(1) of the *Fisheries Act* if a HADD of fish habitat results from any change to the proposed plan or from failure to properly implement these additional measures. Subsection 35(1) states, "*no person shall carry on any work or undertaking that results in the harmful alteration, disruption or destruction of fish habitat.*"

This letter of advice does not permit the deposit of a deleterious substance into waters frequented by fish nor does it release you from the responsibility to obtain any other federal (for example, the *Navigable Waters Protection Act*), territorial or municipal approvals.

If these plans have changed since the time of submission, the advice in this letter may no longer apply and we should be consulted to determine if further review is required.

We request that we are notified at least 10 working days before starting the work and that a copy of this letter be kept on site while work is in progress. If there are any questions concerning the above, or if my understanding of the proposal is either incorrect, incomplete, or if there are changes to the proposed works or undertakings, please contact me directly by telephone at 867-979-8007, or by fax at 867-979-8039.

Yours sincerely,

Original Signed By:

Tania Gordanier
Habitat Management Biologist

c.c.: Charlie Cahill, CAP Enterprises
Gary Strong, Dillion Consulting
Beth Guptill, Fisheries and Oceans Canada, Conservation & Protection