



Fisheries and Oceans
Canada

Pêches et Océans
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Fish Habitat Management
Suite 101, 5204-50th Avenue
Yellowknife, Northwest Territories
X1A 1E2

Gestion de l'Habitat du Poisson
Suite 101 5204, 50^e Avenue
Yellowknife (Territoires du Nord-Ouest)
X1A 1E2

Our file / Notre référence:
SC03063 (Notta)
SC03065 (Hellava)
SC03066 (Francis)
SC03067 (Elliot)
SC03068 (Hanna)
SC03069 (Gibson South)
SC03070 (Gibson North)
SC03072 (Tsintu)
SC03073 (Lynn)
SC04009 (Denise)

February 9, 2005

GNWT – Department of Transportation
c/o Rhonda Batchelor, Project Environmental Coordinator
4510 Franklin Avenue
P.O. Box 1320
Yellowknife, NT X1A 2L9

Dear Ms. Batchelor:

RE: Permanent Bridge Installations, Mackenzie Valley Winter Road, NT:

<u>Watercourse</u>	<u>Location</u>	<u>Span Length (m)</u>
Notta Creek	KM 982.3	24.2
Hellava Creek	KM 1002.7	18.2
Francis Creek	KM 1005.7	24.2
Denise Creek	KM 1124.0	24.0
Elliot Creek	KM 1072.4	24.2
Hanna Creek	KM 1084.4	30.2
Gibson Creek South	KM 1088.1	24.2
Gibson Creek North	KM 1088.5	18.2
Tsintu River	KM 1154.4	24.2
Lynn Creek	KM 1158.2	18.2

The Department of Fisheries and Oceans, Fish Habitat Management – Western Arctic Area (DFO) has reviewed the information you provided for the above proposals pursuant to the habitat protection provisions of the *Fisheries Act*.

It is my understanding that the proposed work involves:

- The installation of permanent clear span steel girder bridges on pile supported abutments with metal binwalls at the above locations.
- Temporary sediment control measures involve the installation of silt fencing at the toe edge of the abutments until permanent vegetative cover is established. Please note, these *sediment* control measures may not be sufficient to prevent sediment laden runoff from entering the above watercourses. Temporary *erosion* control measures (i.e. erosion control blankets) should also be implemented to stabilize disturbed areas until sufficient vegetation is established to act as a permanent erosion control measure.

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Based on the information provided, DFO concludes that since it is to occur near fish-bearing waters, the proposed work may result in the harmful alteration, disruption or destruction of fish habitat if the appropriate mitigation is not applied. In addition to the measures set out in the project proposal, the following mitigation measures, if incorporated into the project, are intended to prevent any potentially harmful impacts to fish and fish habitat:

- Where water withdrawal is required, the *DFO Protocol for Water Withdrawal for Oil and Gas Activities in the Northwest Territories* is applied. If water withdrawal is required from a watercourse, the withdrawal rate should not exceed 5% of the total flow volume. Please contact DFO if you do not have access to the protocol.
- The Freshwater Intake End-of-Pipe Fish Screen Guideline (DFO 1995) is applied to all water intakes. To prevent the entrainment of fish, the mesh size should not exceed 2.54 mm. To prevent impingement of fish onto the screen, the screen should be designed as per the guideline. The intake should not disturb the sediment and the screen should be cleaned regularly. Please contact DFO if you do not have access to these guidelines.
- Every reasonable effort should be made to minimize disturbance to the shoreline of the waterway. All disturbed areas, including the existing winter road alignments, should be stabilized as required upon completion of work.

Depositing deleterious substances into fish bearing waters is prohibited as stated under Subsection 36(3) of the *Fisheries Act*. The following additional mitigation measures are intended to prevent the deposition of deleterious substances and possible habitat disturbance or loss:

- Sediment and erosion control measures should be implemented and maintained prior to, during and after construction to prevent entry of sediment into the water. These measures should be maintained and monitored until vegetation has been demonstrated to control erosion.
- The physical stability of the structure and shorelines both at and beside the work sites are monitored. If monitoring identifies any problems, then appropriate actions are taken immediately to rectify the situation.
- Stockpiles should be stored, and excavated material disposed of, on land a minimum of one hundred meters from high water level and suitably contained/stabilized to prevent them from being a potential source of sediment for any water body.
- All activities including maintenance procedures and vehicular refuelling should be controlled to prevent the entry of petroleum products, debris, slash, rubble, or other deleterious substances into the water. Any sediment, sand, or

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debris introduced to the ice surface should be removed upon project completion and prior to spring thaw.

- All fuel caches should be located a minimum of one hundred metres from the normal high water mark of any water body, and be sufficiently bermed or otherwise contained to ensure that these substances do not enter any water body.
- Spills of oil, fuel or other deleterious material should be reported immediately, as per existing reporting protocols, to the NWT/Nunavut 24-hour Spill Report Line at (867) 920-8130, including all spills near or into a water body.

Any harmful alteration, disruption or destruction of fish habitat and/or the deposition of deleterious substances into fish bearing waters occurring as a result of a change in plans or failing to implement the necessary mitigation measures may result in contravention of the Fisheries Act.

I recommend keeping a copy of this letter at the work site during construction, providing one to all contractors prior to the commencement of work, and notifying DFO of any changes in plans, specifications, or operating conditions that have the potential to adversely affect fish or fish habitat.

Please note this letter does not constitute authorization of these undertakings pursuant to the Fisheries Act. It is the proponent's responsibility to obtain any approvals that may be required under any other legislation.

Please contact me at (867) 669-4927 if you have any questions or wish to discuss any of the foregoing in more detail.

Sincerely,



Ernest Watson
Arctic Habitat Biologist
Fish Habitat Management
Department of Fisheries and Oceans - Western Arctic Area

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