



R2-SRRB-02

Topic: Fish Harvest

Preamble from the Sahtu Renewable Resources Board:

In Section 17.0 of the DAR, Assessment of Potential Effects on Fish and Fish Habitat, the text notes an anticipated adverse effect to large-bodied fishes as a result of increased harvest.

Request from the SRRB:

1. Does the Proponent currently have an estimate of total fish harvest from all sectors?
2. Can the Proponent elaborate on which sector(s) (Indigenous, subsistence, recreational) they anticipate this additional harvest coming from? The text in the DAR seems to imply the increase is expected in the recreational sector, using Arctic Grayling as an example.



Response from the Government of the Northwest Territories (GNWT):

Estimates for potential subsistence and commercial harvesting of fish in the Pehdzéh Kì N'deh area are provided in IMG-Golder (2006). The GNWT recognizes that this data may not reflect contemporary trends in subsistence and commercial fishing; however, access has not changed significantly from 2006 when the report was issued.

The GNWT identified that increased fishing pressure could result due to the improved access to watercourses containing large-bodied fish. Arctic grayling were identified as a targeted fish species since it is a sportfish and is a desirable fish for recreational fishing purposes; however, other large-bodied fish species found in the local assessment area may be of interest (e.g., salmonids, northern pike). Subsistence fishing efforts typically target lake whitefish, lake trout, inconnu, and northern pike. It is not known whether subsistence fishing would increase in rivers that will be intersected by the highway. Recreational fishing in watercourses intersected by the Project could be by both Indigenous and non-Indigenous people.

The GNWT is interested in discussing with the SRRB and other resource managers, including Fisheries and Oceans Canada, how the uncertainty regarding fishing pressure could be addressed.

References

IMG-Golder Corporation. 2006. Renewable Resource Assessment of the Pehdzéh Kì N'deh Area of Interest. Prepared for Canadian Parks and Wilderness Society by IMG-Golder Corporation. March 2006.



R2-SRRB-03

Topic: Fish and Fish Habitat

Preamble from the Sahtu Renewable Resources Board (SRRB):

Volume 3 (11), Appendix 17A, the Fish and Fish Habitat Technical Data Report. This question focuses on whether the information on hand will be enough to assess impacts down the road. In section 4.2, at the bottom of the first page, the text notes that no contaminant studies have been conducted for the Project area.

Request from the SRRB:

1. Does the Proponent assume a baseline contaminant level of 0, plan to gather contaminant data or TK prior to construction, or is there a proxy they intend to use to evaluate change?
2. Section 17.4.3.1: water withdrawals. Are best practices for water withdrawals adjusted during drought conditions? Is it known if/which areas of the proposed construction are currently impacted by the drought conditions?
3. Is it correct that erosion and sediment control options like sediment fences are only to be used during the construction phase? Has the Proponent considered the potential impact to streams of ongoing sediment loading from dust beyond the construction period?
4. For DFO: In considering the length of the road being discussed and the number of culverts being planned, does DFO believe that the mitigation measures proposed in section 17.4.4.3 will be sufficient to maintain fish passage/movement in the northern climate?



Response from the Government of the Northwest Territories (GNWT):

1. The baseline conditions reported by the GNWT do not necessarily indicate a pre-existing contaminant level of 0, for any parameter; rather, they reflect a reasonable reliance on existing reports and studies relevant to the Project. The GNWT has heard concerns about the effects of the Project on water quality through traditional land and resource use studies and engagement input, but no contamination or water quality concerns or locations were noted within the assessment areas. Noting the potential for the Project – specifically in-stream works to change water quality (and fish health), water quality monitoring will be conducted during in-stream construction, both upstream and downstream of the workspace to confirm mitigations are functioning as intended. Baseline conditions and subsequent monitoring programs will be designed to focus on key parameters of concern as they relate to fish and fish habitat.
2. The GNWT will confirm that water withdrawals comply with the conditions in the issued water licence for the work. Drought conditions may change between completion of environmental studies and the start of construction and will therefore be evaluated at that stage to determine the most appropriate water sources to withdraw from or identify alternative opportunities for water. The water withdrawal protocol for lakes (Fisheries and Oceans Canada [DFO], 2010) and the framework for assessing ecological flow requirements (DFO, 2013) do not specifically mention drought.
3. Erosion and sediment control measures will be installed during construction and will be maintained, replaced, and upgraded, as needed, to mitigate the potential for sediment migration, per the Erosion and Sedimentation Control Plan. Temporary erosion and sediment control measures are expected to remain in place until the surrounding environment is stable and permanent erosion and sediment control measures are in place and are functioning as intended. Potential effects of sedimentation to water quality and fish and fish habitat during the operational phase of the Project are discussed in the Developer’s Assessment Report.
4. This request is directed to DFO. GNWT will submit culvert designs and associated hydrotechnical and fish and fish habitat information to DFO during the regulatory phase of the Project.

References

- DFO (Fisheries and Oceans Canada). 2010. DFO Protocol for Winter Water Withdrawal in the Northwest Territories. Current as of January 31, 2005.
- DFO. 2013. Framework for Assessing the Ecological Flow Requirements to Support Fisheries in Canada. Canadian Science Advisory Secretariat. Science Advisory Report 2013/017.