



AUG 20 2019

Ms. Jody Pellissey
Executive Director
Wek'èezhì Renewable Resources Board
102A 4504 49 AVENUE
YELLOWKNIFE NT X1A 1A7

Dear Ms. Pellissey:

Tłıchq All Season Road Wildlife Management and Monitoring Plan Responses

The Government of the Northwest Territories Department of Infrastructure (GNWT-INF) respectfully submits to the Wek'èezhì Renewable Resources Board (WRRB) the attached responses to their comments and recommendations provided on August 19, 2019, on Version 3.3 of the Wildlife Management and Monitoring Plan (WMMP). The attached document illustrates how the comments received will be incorporated into the WMMP, through the adaptive management process. These changes will be reviewed through the process outlined in the Adaptive Management Framework and will meet the mandate of the *Wildlife Act*.

The GNWT-INF looks forward to working collaboratively with all stakeholders to allow construction of the Tłıchq ASR to begin on September 2, 2019. Should you have any questions or concerns please contact me at (867) 767-9021 ext. 32004 or by email at Sandy_Kalgutkar@gov.nt.ca at your earliest convenience.

Sincerely,

Sandy Kalgutkar
Associate Deputy Minister
Infrastructure

Attachment

c. Distribution List

Distribution List

Ms. Laura Duncan, Tłıchǫ Executive Officer,
Tłıchǫ Government

Ms. Erin Kelly, Assistant Deputy Minister
Environment and Natural Resources

Ms. Loretta Ransom, Manager
Environment and Natural Resources

Mr. Ryan Fequet, Executive Director
Wek'èezhìi Renewable Resources Board

Item	Comment	Response
1	The Board asks that GNWT-INF provide confirmation that the following information detailed in the WMMP will be provided to the WRRB as it becomes available:	
	<ul style="list-style-type: none"> Methods and dust suppression techniques used throughout construction (Section 4.2.1); 	Methods and triggers for dust suppression are provided in Section 4.2.1 of the WMMP.
	<ul style="list-style-type: none"> Results of the modelling of impacts from construction and operation of the TASR on ṫdzı (Section 5.2.3); 	This information will be shared with WRRB when it is available.
	<ul style="list-style-type: none"> Methods for determining ṫdzı abundance in the NT1 range (Section 5.2.3); 	Methods will be provided to the WRRB when they are developed, and the WRRB will have the opportunity to review the associated wildlife research permit applications.
	<ul style="list-style-type: none"> Information on the “wildlife watch program” once it is developed (Section 5.2.6); 	The outcome of the GNWT inter-departmental working group for the wildlife collision and sighting reporting system for GNWT will be shared with the WRRB when it is available.
	<ul style="list-style-type: none"> Methods to assess predator population densities, movements, and predation rates (Section 5.2.7); 	This information will be provided to WRRB when it is available, and the WRRB will have the opportunity to review the associated wildlife research permit applications.
	<ul style="list-style-type: none"> Results of the thermal imaging pilot study (Section 6.2.2); 	Appendix F page F-26 clarifies that a summary of all surveys completed will be included in the Annual Report which will be provided to the WRRB, with a recommendation for the continued use of thermal imaging devices.
	<ul style="list-style-type: none"> Ṫdzı collar updates according to the schedule outlines in Table 1 of Appendix D. Additionally, collar maps should be provided on a weekly basis during the “less sensitive periods” (Appendix D); and, 	Collar maps can be requested from the GNWT Department of Environment and Natural Resources.
	<ul style="list-style-type: none"> Weekly updates from the Project Company regarding location and types of activities taking place during construction (Appendix D). 	A schedule of construction activities was provided to the WLWB public registry for W2016L8-0001 on 29 July 2019. Section 6.1.1 of the WMMP confirms that construction and monitoring activities for the upcoming week will be provided in the WMMP Weekly Reports.



2	<p>The WRRB recommends the Engagement Plan be revised to include the following items which are to be brought to the Corridor Working Group in order to discuss revisions to the WMMP to ensure that wildlife is being adaptively managed:</p>	
	<ul style="list-style-type: none"> Any wildlife incidents that may occur, including any information regarding nest pre-clearing timelines; 	<p>Wildlife incidents are already included as a trigger for engagement in the Engagement Plan. Further, incident reports will be provided to all parties to the Corridor Working Group through the Weekly Reports. It will be up to the Corridor Working Group to decide upon the agenda for each meeting, but this information can be made available. Regardless, reporting of nest pre-clearing timelines will be similarly considered for the next revision of the Engagement Plan.</p>
	<ul style="list-style-type: none"> Traffic levels exceeding the threshold of 50%, i.e. 20-40 vehicles a day to 30-60 vehicles a day occur; and, 	<p>This information will be provided in the WMMP Annual Report. It will be up to the Corridor Working Group to decide upon the agenda for each meeting, but this information can be provided. Regardless, this suggestion will be considered for the next revision of the Engagement Plan.</p>
	<ul style="list-style-type: none"> Timelines and temporal scope for the development and implementation of a non-mandatory Aboriginal harvest monitoring and reporting program. 	<p>This information will be brought to the Corridor Working Group, but may not be appropriate content for the Engagement Plan as the primary responsibility for this task lies with the Tlicho Government.</p>
3	<p>Throughout the WMMP <i>t̥dz̥i</i>, <i>ded̥i</i>, and <i>ejie</i> are consistently listed as the large mammals of concern. The WRRB would like this list updated to include <i>Sah Dez̥q̥</i> (black bear), <i>Diga</i> (wolf) and <i>N̥gh̥a</i> (wolverine). It should be noted that these large mammals and furbearers are not the only species of concern. All species contribute to a healthy and functioning ecosystem.</p>	<p>These species were identified through consultation and confirmed through the environmental assessment and all WMMP review to date. The WMMP does not exclude any wildlife from monitoring, but these species were highlighted through engagement as the species most likely to be observed and to require a response through the WMMP. This clarification will be included in the next revision of the WMMP.</p>
4	<p>The WRRB requests that wording regarding undisturbed habitat in <i>Wek'èezh̥i</i> as a limiting factor read: "Undisturbed habitat in the <i>Wek'èezh̥i</i> region may be limiting, as it is already above or near the 35% disturbance threshold" (Section 2.8.1).</p>	<p>The most recent analysis indicates that disturbance within the <i>Wek'èezh̥i</i> area of the NT1 range is approximately 34%. The specific wording of this section will be reviewed in the next revision of the WMMP.</p>
5	<p>Training should be provided to workers on preventing white nose syndrome in bats. White nose syndrome has not yet been documented in the Northwest Territories, however the Board requests that all precautions be taken to ensure this remains the case (Section 4.1.1).</p>	<p>The Draft Management Plan for Bats in the NWT suggests that the most effective mitigation is to manage human access to hibernacula. Access should only be permitted with a Wildlife Research Permit, and proper decontamination procedures should be followed. While hibernacula locations are not published to ensure their protection, there are no known bat hibernacula in the North Slave region, and the Tlicho Road area does not contain the karst habitat used by bats for hibernacula. In the unlikely</p>

		<p>event that a hibernacula is discovered near the Tlich Road, the area will be reported to ENR and appropriate protection will be implemented. This reporting to ENR will be added to the next version of the WMMP. Training of staff will not offer further protection to bats, as staff training is already extensive and this information is unlikely to be retained, particularly if there are no known hibernacula in the area and any discovered will be protected by an appropriate buffer and the location will not be published.</p>
6	<p>Related to migratory birds, the bullet point should be revised to read, "Incidents related to migratory birds including, damage or disturbance to nests or eggs, or bird mortalities (Section 5.1.7).</p>	<p>This suggested change is an improvement to the current text. This change will be made in the next revision of the WMMP.</p>
7	<p>The WRRB requests that the results of the traffic monitoring be included in the WMMP annual reports (Section 5.2.1).</p>	<p>This will be added to the content of the WMMP annual report (Section 6.1.2).</p>
8	<p>To ensure that Appendix C is complete, all wildlife regulators should be listed; therefore, contact information for ECCC, who will enforce the Migratory Birds Convention Act, should be included (Appendix C).</p>	<p>Regulators have responsibilities to enforce their legislation, but are not responsible for Project implementation. The next revision of the WMMP will include a revised Responsibility Hierarchy that reflects the requirements of the Wildlife Management and Monitoring Plan Guidelines, including updated contact information.</p>
9	<p>An oversight committee is mentioned; the WRRB would like more information on this committee, who is involved, and its role and mandate (Appendix D).</p>	<p>The oversight committee referred to is the Corridor Working Group, and this will be clarified in the next revision of Appendix D</p>
10	<p>It is the WRRB's understanding that Appendix D describes actions to be taken based on t̓q̓dz̓i collar data during all construction activities, and that these actions are complementary to monitoring protocols outlined in Appendix F. The Board acknowledges that access to collar data could simplify construction activity decisions but would like to emphasize that the vast majority of t̓q̓dz̓i in the Northwest Territories are not collared, and that collared t̓q̓dz̓i are often indicative of other individuals in an area. As the monitoring protocols, outlined in Appendix F, do not cover the entirety of the cautionary zones identified in Appendix D, the collar data and monitoring protocols do not provide adequate consideration for non-collared t̓q̓dz̓i. Additionally, uncertainty is added to the protocols outlined in Appendix D given that collar maps are only provided to project staff every 48 hours and t̓q̓dz̓i can move substantially in this timeframe.</p>	

	<p>Specific to blasting, the Board understands that, as outlined in Appendix D, blasting will be delayed if “within the last 48 hours collared t̄qdzi are within 2 km of an area where blasting will occur, and fresh signs of t̄qdzi are found within 500 m of the blast site. Blasting is to proceed once no caribou are found or seen within 500 m.” Based on our understanding of the above, the WRRB recommends for all construction activities:</p>	
	<ul style="list-style-type: none"> • It be made clear that activities identified in Table 1 are to be completed in addition to all other surveys, visual or otherwise, being conducted as part of the WMMP (Appendix D); 	<p>This will be confirmed in the next revision of Appendix D.</p>
	<ul style="list-style-type: none"> • The cautionary (buffer) zone around collared t̄qdzi be increased to 4km from 2km for the late-winter period, and to 6km from 3km for the calving period, which should provide residual protection to non-collared t̄qdzi by the collared animals, as well as protect collared t̄qdzi who may have moved (Appendix D); 	<p>The buffers of 2 km for the late-winter period and 3 km for the calving period are considered conservative buffers for limiting effects from human disturbance on boreal caribou based on the following information. Environment Canada (2011) demonstrated that boreal caribou avoidance is captured within a 500 m buffer around anthropogenic features. Dyer et al. (2001) noted that boreal caribou had maximum avoidance distances of 1,000 m from oil and gas wells and 250 m from roads. Similarly, Leblond et al. (2011) noted that boreal caribou avoided active roads by 1.25 km and Johnson et al. (2015) noted an avoidance distance of 1.8 km from roads. Polfus et al. (2011) also note that caribou avoid high use roads by approximately 2 km. The WRRB should note also the updated Pre-Clearing Wildlife Survey (Section 5.1.6), which confirms that a survey for wildlife will precede vegetation clearing by 48 hours (similar to the Late-Winter protocol). This revision made to Version 3.3 of the WMMP should provide the WRRB with confidence that construction methods will be respectful of caribou.</p>
	<ul style="list-style-type: none"> • As per the Board’s Tłıç hq Knowledge study on <i>T̄qdzi and the State of Their Habitat</i>, all habitat is important for the health of t̄qdzi. As such, the precautions set out in late winter should also be taken during the summer, fall, and early to mid-winter seasons (Appendix D); 	<p>The change to the Pre-Clearing Wildlife Surveys mentioned above already provides late-winter level protection to boreal caribou during the summer, fall, and early to mid-winter seasons. While it is agreed that all habitat is important to the health of caribou., the sensitive seasons were defined based on daily movement rates in the Status Report for Boreal Caribou (Species at Risk Committee 2012) and considering that it is easier for caribou to move away from disturbance during the summer, fall, and early to mid-winter seasons. Furthermore, Measure 10-2, Part 2 requires that construction activities consider</p>

		sensitive periods for wildlife. Considering this requirement and the consensus that this approach has gained through the environmental assessment and recent review through the Wek'èezhì Land and Water Board, any changes to Appendix D would require more justification and consultation with other parties.
	<ul style="list-style-type: none"> As collar data cannot be relied upon to identify all calving t̄odzı, visual surveys should occur during calving season, and be identified in Table 1 (Appendix D); and, 	The Wildlife Pre-Clearing Survey (Section 5.1.6 and Appendix F page F-20) already require visual surveys prior to any vegetation clearing. The Pre-Blasting Survey (Section 5.1.5 and Appendix F page F-16) already requires visual surveys for wildlife before blasting.
	<ul style="list-style-type: none"> Specific to blasting, a 500m survey, looking for fresh signs of t̄odzı and all other large mammals, should <i>always</i> be conducted prior to blasting (Appendix D and Appendix F). 	This request would require that an area of 78.5 hectares would have to be searched on foot for sign prior to each blast. Blasts are highly controlled to avoid flyrock (as the blasted material is highly valuable) and are preceded by days of drilling and heavy equipment activity that will deter wildlife away prior to the blast. As described in the responses to the recent review by of the WMMP by the WLWB, blasting is not necessarily louder than drilling, is of a very short duration, and helps reduce overall disturbance by reducing the need for excavation. GNWT-INF proposes that the recent update to the Pre-Blast Survey procedure, which includes use of thermal imaging devices and a pilot study to test their usefulness to detect caribou may help to improve detection of animals. The WRRB is invited by GNWT-INF for a tour of drilling and blasting operations, either on the Tlıcho All-Season Road or at other GNWT-INF locations. We are confident that this tour will address WRRB concerns regarding the impacts of blasting.
11	ECCC has provided 2 contact emails through their comment #20. So far, only one of those emails have been added. The WRRB asks that the Environmental Protection Operations Division and the Canadian Wildlife Service (ec.eenordrpntno-eanorthpnrnwt.ec@canada.ca) be included (Appendix F).	The Project prefers to have a single point of contact for ECCC.
12	It is not appropriate for the WRRB to be involved in pre-selecting a potential hunter to harvest bear(s) from their den. The Board asks that this task be left to Tłıç h̄ Government but would like to be notified if this activity occurs, and the mitigation measures that were attempted up to that point in time (Appendix F).	This change will be made in the next revision of the WMMP.

References

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Johnson, C.J., L.P.W. Ehlers, and D.R. Seip. 2015. Witnessing extinction: Cumulative impacts across landscapes and the future loss of an evolutionary significant unit of woodland caribou in Canada. *Conservation Biology* 186: 176-186.

Leblond, M., J. Frair, D. Fortin, C. Dussault, J.P. Ouellet and R. Courtois. 2011. Assessing the influence of resource covariates at multiple spatial scales: an application to forest dwelling caribou faced with intensive human activity. *Landscape Ecology* 26: 1433–1446.

Polfus, J.L., M. Hebblewhite, and K. Heinemeyer. 2011. Identifying indirect habitat loss and avoidance of human infrastructure by northern mountain woodland caribou. *Biological Conservation* 144:2637-2646.

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