



December 15, 2017

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**Re: WRRB Closing Argument – EA1617-01: Tłı̄cho All-Season Road**

Mr. Toogood:

As per the required deadline of the Mackenzie Valley Environmental Impact Review Board, please find attached the Wek'èezhì Renewable Resources Board's closing argument related to EA1617-01: Tłı̄cho All-Season Road (TASR). If you have any questions, please contact our office at (867) 873-5740 or [jpellissey@wrrb.ca](mailto:jpellissey@wrrb.ca).

Sincerely,

A handwritten signature in blue ink that reads "J. Grant Pryznyk".

J. Grant Pryznyk  
Chair

Cc Michael Conway, Superintendent, Infrastructure, GNWT  
Jessica Hum, Manager, Culture and Lands Protection, Tłı̄cho Government

# Wek'èezhìi Renewable Resources Board

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## Closing Argument

Submission to the  
Mackenzie Valley Environmental  
Impact Review Board  
for the  
Tłjchq All-Season Road Project  
EA-1617-01

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15 December 2017

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## 1.0 Executive Summary

As per Chapters 12, 13, 14 and 16 of the Tłıchq Agreement, the Wek'èezhìi Renewable Resources Board (WRRB) has a mandate for wildlife, plant and forest management in Wek'èezhìi, and adheres to the principles and practices of conservation in fulfilling its duties. The Board is an institution of public government, which uses the best available Tłıchq and local knowledge, scientific information, and expert opinion to make balanced management decisions on an ecosystemic basis.

The WRRB's Closing Argument for EA1617-01: Tłıchq All-Season Road emphasizes the importance of *tqdzı* (boreal caribou), *ɔekwq̄* (barren-ground caribou), and *łıwe* (fish), and that the WRRB has outstanding concerns about uncertainty, spatial boundaries, monitoring and mitigation, and harvest and access.

The WRRB has four main recommendations: 1) to strengthen, review and complete the wildlife management and monitoring plan, 2) to establish a collaborative steering group, 3) to develop and implement an integrated fisheries management plan, and 4) to establish as an offset mitigation, a special conservation area for *tqdzı*.

## 2.0 Introduction

The Wek'èezhìi Renewable Resources Board (WRRB) submits its final comments to the Mackenzie Valley Environmental Impact Review Board (MVEIRB) as evidence to assist in the MVEIRB's review of the proposed Tłıchq All-Season Road Project (TASR), EA-1617-01. The Developer is the Government of the Northwest Territories (GNWT).

## 3.0 Background

As per Chapters 12, 13, 14 and 16 of the Tłıchq Agreement, the WRRB has a mandate for wildlife, plant and forest management in Wek'èezhìi, and adheres to the principles and practices of conservation in fulfilling its duties. The Board is an institution of public government, which uses the best available Tłıchq and local knowledge, scientific information, and expert opinion to make balanced management decisions on an ecosystemic basis.

The WRRB requested participant status in the MVEIRB's environmental assessment (EA) on December 7, 2016. The WRRB submitted information requests and received responses related to *tqdzı* and *ɔekwq̄* on July 21, 2017. Responses to the information requests helped but did not answer all WRRB's concerns about the evidence. The Board staff attended the August 15-17, 2017 technical sessions and agreed to wording for commitments #3, 10, and 11. The Board submitted additional questions about *łıwe* management and Tłıchq knowledge (TK) monitoring on September 8, 2017, which the Developer responded to on October 3, 2017. The Board provided information for Commitment #11 on October 4, 2017. On October 11, 2017, the WRRB submitted its technical report on *tqdzı* (Tłıchq knowledge only), *ɔekwq̄* (science and Tłıchq knowledge), and *łıwe* (science and Tłıchq knowledge); on October 23, 2017, the Board submitted its technical report on *tqdzı* (science only). The WRRB attended and presented on wildlife and fisheries at the MVEIRB's public hearing in Whatı, NT, on November 15-17, 2017.

## 4.0 Tòdzı and ʔekwò

### 4.1 Uncertainty

Throughout the TASR EA, the WRRB's primary and overarching concern is the uncertainty of the impacts of the road on wildlife and wildlife habitat, particularly those species that have been given a threatened status under both the territorial and national *Species at Risk Acts*. The GNWT's position is that no significant adverse environmental impacts are likely to occur during the development and operation of the TASR that cannot be mitigated and adaptively managed through the Wildlife Management and Monitoring Plan (WMMP) and all additional management plans that the GNWT has committed to during this EA.

The WRRB believes the conservation status of the tòdzı and ʔekwò requires a cautious approach with strong evidence to demonstrate either no effects or the effectiveness of mitigation. The WRRB notes uncertainties at each stage in the assessment, making it difficult to predict effects on threatened wildlife, and how to effectively monitor and mitigate the effects. By uncertainties, the WRRB means missing information, incomplete analyses, and not tailoring monitoring and mitigation for tòdzı and ʔekwò already in trouble. In particular, the WRRB continues to differ with the GNWT over the extent of habitat loss for wildlife, mainly tòdzı, the likelihood of ʔekwò exposure to the road (currently low but high risk), and uncertainty over roads opening access to hunters who may not know the proper Tłıchq rules associated with harvesting and using tòdzı and ʔekwò. Disrespectful harvest has the potential for overharvest and inappropriate use of the tòdzı and ʔekwò on a fragmented landscape.

The importance of the uncertainty is that the WRRB finds it difficult to accept the GNWT's description of effects on threatened wildlife and, consequently, the WRRB finds deficiencies in how to effectively mitigate the effects. The WRRB does acknowledge that while the GNWT did provide additional detail throughout the assessment, the effectiveness of mitigation and adaptive management are missing from the current WMMP. The WRRB is concerned about the lack of attention paid to adaptive management as this is the most effective approach to accommodate uncertainties.

### 4.2 Spatial Boundaries and Risk to Tòdzı

The WRRB has consistently argued that the appropriate spatial boundary for tòdzı is Wek'èezhıı, which led the GNWT to provide some additional information specific to Wek'èezhıı. However, the GNWT has also reiterated its argument that the appropriate boundary for assessing the TASR is over the entire NWT tòdzı range, or NT1, while acknowledging that there is a higher rate of habitat loss in NWT South. The selection of the spatial boundaries influences the amount of disturbed habitat included. The large amount of habitat burnt during forest fires in Wek'èezhıı means the overall percentage of habitat loss (fire and human disturbance) is higher in Wek'èezhıı than that the larger entire NWT range.

The question of spatial boundary is important to the WRRB because the National Recovery Strategy for tòdzı establishes a threshold for the amount of habitat necessary for the tòdzı to be

likely to persist. To be clear, this threshold does not preclude a decline, just that a decline would not lead to a likelihood of disappearance. With a lower threshold of undisturbed habitat, the likelihood of t̄qdzı persisting is further reduced, i.e. the risk to t̄qdzı is increased. The amount of disturbed habitat between 35 and 45% for NT1 and Wek'èezhìi, respectively, is rated in the National Recovery Strategy as having the highest uncertainty about whether t̄qdzı will persist. More than 45% disturbed habitat is high to very high risk that t̄qdzı will not persist. The WRRB's emphasis is that t̄qdzı habitat is already at or below the threshold required for their likely persistence.

By not applying the most conservative spatial boundary, the WRRB sees this as an example of uncertainty and possibly underestimating the effects on t̄qdzı. This is compounded by delays in the NWT recovery planning process as there is no Wek'èezhìi t̄qdzı range plan. The importance of range planning is that it would establish thresholds for habitat loss, and define the extent of critical habitat, which is a necessary step for protecting that critical habitat (a statutory requirement under the *Species at Risk Act*).

T̄qdzı are found throughout the taiga plains within Wek'èezhìi. One area that has healthy habitat is associated with the TASR. Between 2012 and 2016, the WRRB's t̄qdzı research found that elders and harvesters from Whatì stated that decision-makers must understand and recognize that t̄qdzı need all of their current habitat within their range to maintain a healthy population. There were concerns that recent wildfires are more severe and intense, leaving limited habitat, and that decision makers may misinterpret or use elder's knowledge to justify protecting only certain t̄qdzı habitats contributing to further fragmentation.

In addition to the T̄jchq̄ elder's concerns, the WRRB is concerned that the GNWT has underestimated habitat loss. The GNWT used a distance of 500 metres by which t̄qdzı may avoid the road. The WRRB suggests from studies elsewhere that the impacts of the road may cause t̄qdzı to avoid the disturbance at a greater distance than 500 metres. Thus, the use of a 500 metre buffer underestimates the indirect habitat loss. This is another example of uncertainty. The WRRB suggests that by increasing the disturbance buffer to 2500 metres on either side of the road, the indirect habitat loss is less likely to be underestimated.

#### 4.3 Monitoring & Mitigation

The WRRB is concerned about the under-estimated exposure of ɤekwò to the TASR. At the present, exposure may be unlikely, but risk is high if ɤekwò do try to return to western ranges, due to recovery or trends in wildfires. The WRRB is concerned about the uncertainties, and that the Developer does not clearly explain how monitoring and mitigation will be adjusted if ɤekwò numbers and distribution change as ɤekwò recover from the current decline. The risk is that as ɤekwò return to the western ranges, the effect of any deflection from the TASR relative to ɤekwò recovery and re-occupation of their historic ranges is uncertain.

The WRRB notes that the uncertainties for predicting the effects on t̄qdzı and ɤekwò place additional needs for highly effective monitoring and adaptive mitigation. But the WRRB is not confident that the current monitoring and mitigation is adequate especially for adaptive

mitigation. The GNWT states that the TASR is just another highway, that the WMMP is primarily for construction, and that there is no commitment to monitoring beyond five years (except the use of satellite collars on t̄odzı). Along with these concerns, the WRRB notes that a warmer climate may mean drought conditions and more fires; these will affect t̄odzı and ɤekw̄ habitat and likely reduce it and/or change distribution. Also as ɤekw̄ recover, accommodations must be made for changes in movement and distribution. Therefore, it is important that a collaborative reappraisal of monitoring occurs at regular intervals, and relates to ongoing management planning. This should be done separately for both the construction and operational phases.

Roads open up areas for development so the WRRB is concerned about the TASR opening up areas that are critical habitat for t̄odzı and ɤekw̄. The GNWT lists very few likely developments but given the indefinite life of the TASR, this is uncertain and the GNWT does acknowledge that they are less confident about predicting cumulative effects. Further, the WRRB is concerned about the lack of information on monitoring and mitigating cumulative effects in the Adequacy Statement Report, especially since the GNWT has stated that cumulative effects are not a part of the WMMP. The GNWT states that cumulative effects are being addressed through the GNWT-ENR mandate to manage wildlife, and through initiatives such as the Bathurst Caribou Range Plan, which is not completed, the Boreal Caribou Range Planning Framework, which has not been started, and the Cumulative Impact Monitoring Program.

The uncertainties about cumulative effects are important to the WRRB because there are few mechanisms to explicitly monitor and mitigate them until the various plans and initiatives are finalized. An alternative approach to the lack of completed plans is to expand and intensify mitigation as a precautionary approach based on the uncertainties.

Intensifying mitigation includes applying the third tier of mitigation. During the Fortune NICO and Jay Pit public hearings, the GNWT agreed that the third tier of mitigation, after avoiding or minimizing effects, is to restore, recover or offset effects. The GNWT recognized the value of offsetting as a cumulative effects management strategy and acknowledged the need to develop guidance and identify potential offsetting projects.

The GNWT has given a similar response to offsetting for the TASR. However, initial comments regarding offsetting and regeneration have changed throughout the process, and there is uncertainty as to how they may be approached. The WRRB is concerned about the delays associated with developing a policy, particularly since offsetting is considered a relatively standard mitigation tool used elsewhere in Canada and throughout the world.

#### 4.4 Harvest & Access

Now that community members are not harvesting ɤekw̄ as much, t̄odzı have become more important to the T̄ıch̄ communities. Elders and harvesters have noted their concerns about the potential of hunters that will use the TASR as easy access to t̄odzı. The WRRB is concerned about the minimal consideration given by the GNWT related to harvesting, especially disrespectful harvesting, relative to t̄odzı responses to roads and traffic. The WRRB notes there

is currently no accurate population estimate for ṯdzı in Wek'èezhì, and no plans for population surveys, which raises the question of how the effects of any increased harvesting for ṯdzı will be detected. The WRRB identified in its Technical Report that the use of survival rates and productivity from the satellite-collared ṯdzı will not be sensitive to detecting slow rates of decline; however, Ṯjcẖ harvesters, who are mindfully observing and regularly assessing the state of the ṯdzı and their habitat, will be sensitive to detecting change.

Ṯjcẖ have rules associated with harvesting and using any animal. Ṯdzı and Ɂekw̱ are respected by harvesting them, and using all that has been harvested in an appropriate way. Often roads allow access to hunters who are less knowledgeable about how to respect ṯdzı and Ɂekw̱. Roads open access to hunters who may not know the proper Ṯjcẖ rules associated with harvesting and using ṯdzı and Ɂekw̱. Disrespectful harvest has the potential for overharvest and inappropriate use of the ṯdzı and Ɂekw̱ on a fragmented landscape.

## 5.0 Łıwe

Roads have long been known to cause effects on terrestrial and aquatic ecosystems. Fisheries are notoriously challenging to manage, requiring an understanding of both fishing effort and the reaction of the łıwe resource to fishing pressure. The GNWT has noted that *“there is a reasonable level of certainty that the access created by the all-season road will not pose a risk to the ongoing productivity of local fisheries”*. However, Fisheries & Oceans Canada has indicated that it *“...does expect increased sport and subsistence fishing pressure on some fish stocks along the proposed road route, particularly at the major river crossings such as the James River, Dupont River and La Martre River, due to improved access to these sites.”*

During the WRRB's łıwe TK research program in 2016 and 2017, elders and harvesters noted their concerns about the potential of fishers that will use the TASR as easy access to łıwe. The Ṯjcẖ that live in Whatì have relied on łıwe as an important food resource as far back as memory serves. Relying solely on ṯdzı, Ɂekw̱ or moose was and is not possible, as these animals don't always come to be harvested. The elders repeatedly stressed the importance of respecting łıwe; that respecting łıwe was necessary to ensure they would continue to be available.

Local monitoring is an integral part of using and respecting łıwe. The Ṯjcẖ Aquatic Ecosystem Monitoring Program uses science-based methodology to collect information on fish, sediment and water near each of the four Ṯjcẖ communities. The fish camp will return to Whatì in fall 2018, and information will be collected and compared to baseline results obtained in 2014. Though information collected via the Ṯjcẖ Aquatic Ecosystem Monitoring Program helps to assess health of fish and aquatic ecosystems, the WRRB cautions that specific questions related to potential TASR impacts, including increased harvest pressure, require additional monitoring.

The benefit of local monitoring is clearly demonstrated with the example of the commercial łıwe plant. In 1969-70, a man named Casey Jones built and opened a commercial fish plant in Whatì. Men set nets and fished with boats and motors, and women worked at the plant cleaning łıwe. At this time, łıwe was very plentiful; Ṯjcẖ people showed respect for łıwe. Based

on their respect for łwe, and their observations and knowledge of łwe, the leaders and elders decided to close the plant, to help ensure the łwe thrived.

Whatł elders and harvesters have recently experienced some negative changes to the success of local fish populations: smaller sizes, unusual distribution, fewer numbers, and different species. As harvesters, they constantly monitor conditions and quickly become aware of change. At the same time, there is some uncertainty about how these changes will evolve in the near and distant future, especially given the multiple factors that contribute to change—some known and some as yet unknown.

The WRRB believes that the GNWT’s assessment of fishing impact in water bodies directly connected to the TASR is underestimated, and is based on a limited appreciation of fisher behaviour in the North Slave region of the NWT. It is WRRB’s opinion that łwe presence close to the TASR, such as in Upper La Martre River as well as other smaller stream crossings, and in the lake here, will likely experience moderate to high localized effects, if active management is absent.

## 6.0 Recommendations

### 6.1 Wildlife Management & Monitoring Plan

The WRRB recommends completing a robust multi-species research and planning approach, using both Tłchq knowledge and science, to the WMMP for both the construction and operational phases of the TASR. The WMMP should include a focus on addressing environmental impacts for adaptive management, and the use of monitoring to specifically test the effectiveness of mitigation. Reliable and available information will provide greater clarity, improved consistency, less uncertainty and allow for better informed decision making for management authorities, including the WRRB.

Given the importance of the WMMP for monitoring and mitigating tqdzı and ɤekwò habitat, and the limited capacity of the WRRB and other parties, the WRRB recommends that the GNWT obtain an independent technical review of the draft WMMP using knowledgeable experts in both traditional knowledge and science from universities and/or non-government organizations.

The WRRB recommends accelerated completion of the Wek’èezhì Boreal Caribou Range Plan, the Bathurst Caribou Management Plan and Range Plan, Wek’èezhì Land Use Plan, and updated fire management legislation.

The WRRB recommends interim measures and thresholds for development and habitat should be implemented through the WMMP until the various range and management plans are completed. In the absence of clear information, as set out in the Tłchq Agreement, a precautionary approach should apply.

## 6.2 Collaborative Steering Group

The WRRB makes balanced wildlife management decisions by bringing together Tłıchq knowledge and science. As such, the WRRB welcomes the GNWT's commitment to an "overarching working group", similar to the Inuvik Tuktoyaktuk Highway Corridor Working Group. The Board does note that the group should be collaborative, including the involvement of the WRRB, should actively pursue outside expertise to conduct timely multi-species analyses and research as required, and should be active during both the construction and operational phases of the TASR.

The WRRB recommends that the collaborative steering group has the role of advising the GNWT on monitoring and mitigating the effects of the TASR. A collaborative steering group will strengthen the role of the invited representatives so that the group is more than just a place for the GNWT to share information but to exchange expertise and reach consensus about monitoring and adaptive mitigation for the TASR.

## 6.3 Integrated Fisheries Management Plan

The WRRB recommends that concerns related to access, tourism and increased fishing be considered carefully. In addition, it is essential to continue to build on the elders' and harvesters' knowledge and to monitor fiwe and water with a system that coincides with Tłıchq knowledge. Only this approach will help ensure the future success of Whatı fiwe populations.

It is unreasonable to conclude that no additional management or monitoring is required along the TASR and associated watersheds. In Canada, Fisheries & Oceans Canada manages commercial fisheries using Integrated Fisheries Management Plans. Some plans apply across broad waterscapes while others focus on a specific body of water or fishery. It would be irresponsible to expose a fishery to additional fishing pressure along the TASR and all the way to Lac La Martre without an Integrated Fisheries Management Plan.

The WRRB recommends that Fisheries & Oceans Canada and the Tłıchq Government, along with WRRB and GNWT involvement, work together to scope out, and, as appropriate, design and implement an Integrated Fisheries Management Plan, using both Tłıchq knowledge and science, for the TASR corridor. The Plan would establish fishery objectives, assess yield and harvest, identify management issues, such as access, and their associated measures, clarify management and stewardship arrangements, design and implement a regulatory and compliance plan, and design an adaptive management plan.

## 6.4 Special Conservation Area for Tqdzı Habitat

As an interim step until the GNWT can complete a policy on offsetting and complete range planning for Wek'èezhıı, the WRRB recommends that the GNWT work with Tłıchq elders and the GNWT's satellite telemetry monitoring project to identify, within Wek'èezhıı, tqdzı habitat to be set aside as a special conservation area equal to the TASR corridor buffered by 2.5 km on either side of the road. Further, the WRRB recommends that offsetting the TASR footprint

should be established within a conservation agreement (as mentioned in the Federal Action Plan) to provide a framework to achieving population and distribution objectives for t̄qdz̄ı.

## 7.0 Conclusion

The WRRB believes that increased certainty is required regarding the impacts of the road on wildlife (including t̄ıwe) and wildlife habitat in Wek'èezhìı, particularly for t̄qdz̄ı and ɔ̄ekwò that have been listed and assessed, respectively, with a threatened status under both the territorial and national *Species at Risk Acts*.

There is much work that remains to be done for short and longer-term monitoring and adaptive mitigation for both road construction and operations. The GNWT has listed commitments for the next version of the WMMP to contain missing components. However, the WRRB lacks confidence in the GNWT's impact predictions and proposed mitigations.

The WRRB believes that its recommendations will reduce these concerns and will increase certainty. Further, the WRRB trusts that lessons learned during the Fortune NICO, Jay Project and CanZinc EAs, most notably concepts related to uncertainty, the precautionary approach and adaptive management, will assist the MVEIRB in their deliberations.