

TRANS MOUNTAIN PROJECT RECONSIDERATION

**Hearing Order MH-052-2018
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MÉTIS KNOWLEDGE ASSESSMENT FINAL REPORT



Prepared for:

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Many thanks to community leaders, staff and contractors who worked diligently on this project for the past month, and who helped put this final report together in such a short time frame.

EXECUTIVE SUMMARY

This report presents the protocol and results of the desktop review and Métis Knowledge Assessment of the proposed Trans Mountain Expansion Project pursuant to the National Energy Board's Hearing Order MH-052-2018: a reconsideration of aspects of its Recommendations Report as Directed by Order in Council P.C. 2018-1177.

This report outlines the background, methods, and results of the Métis Knowledge Assessment conducted for this reconsideration. Recommendations for mitigation of effects are provided.

LIST OF ACRONYMS

GHG	Green House Gas
MK	Métis Knowledge
NEB	National Energy Board

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1 INTRODUCTION

This report presents the protocol and results of the desktop review and Métis Knowledge (MK) assessment of the proposed Trans Mountain Expansion Project (the Project) pursuant to the National Energy Board's (NEB) Hearing Order MH-052-2018 (the Hearing Order): a reconsideration of aspects of its Recommendations Report as Directed by Order in Council P.C. 2018-1177. The BC Métis Federation was granted Intervenor status in this hearing in mid October, 2018.

The BC Métis Federation Board of Directors submit this report to the NEB for consideration. This evidence which has been prepared to the best of our ability in the time provided, and with the resources allotted. This report documents baseline environmental conditions, cumulative effects, and assesses potential project effects from the perspective of members of the BC Métis Federation.

This report does not include data or information related to marine or land use by Métis people as the scope of this reconsideration was limited to marine impacts of the Project as outlined in the Hearing Order.

1.1 REGULATORY SETTING

This reconsideration is focused on impacts of marine shipping including tanker traffic, significance of those impacts, alternative means, mitigation measures, feasible alternatives, monitoring, and measures to avoid impacts to the habitat of *Species at Risk*. Integration of Métis knowledge into the decision is the role of the regulators, and enacting any recommendations is the responsibility of the proponent.

1.2 MÉTIS KNOWLEDGE

The Project falls within the Province of British Columbia which, in accordance with the *United Nations Declaration on the Rights of Indigenous People*, represents the area in which our members exercise their right to self-government in matters related to Métis governance, Métis community and individual, family and community well-being. Métis people have been closely connected to the diverse social, cultural and economic fabric of the area known today as British Columbia since the early 1800s. The Métis of British Columbia are diverse and a range of traditional and non-traditional lifeways within this territory; Métis people has asked for voice in regulatory processes, and have valuable insight into to the social, cultural, environmental and economic impacts of the Project (BC Métis Federation, 2018).

2 METHODS

The methods used in this Métis Knowledge Assessment are outlined in this section and include the framework by which Métis Knowledge is considered, the guiding principles contextualizing this research, the methods by which it was collected, and the administrative and research processes supporting this study.

2.1 FRAMEWORK

Métis Knowledge is a valuable source of local and environmental (or ecological) knowledge and presents an opportunity for governments and regulators to actively engage in relationship-building and reconciliation with Métis peoples. Integration of Métis Knowledge into environmental assessments ensures that the culture, values and voices of Métis People are not silenced by the dominant colonial paradigm; robust representation of Métis Knowledge in regulatory studies of this nature is a pragmatic way to ensure that regulatory decisions are inclusive of a variety of perspectives. Proponents and regulators can use Métis Knowledge to increase the amount of information considered in assessment, strengthen and legitimize project design and operational decisions, and document, clarify and mitigate or avoid potential effects of a proposed project on the lands, environment, economy and/or community.

The framework in which this assessment is grounded, then, is reconciliation. Community, family, the natural environment and the ability to make a living are sacred to Métis people, and the participation in assessments such as this reconsideration are as much about reconciliation as they are about Métis people reclaiming and restoring their voice and their identity. In a time of rapid change and development, participation in environmental assessments supports cultural stewardship and revitalization, and fosters positive mutual outcomes for government, for industry proponents and for Métis people in British Columbia who deeply value self-reliance, self-determination, and safety and security of their way of life.

2.2 GUIDING PRINCIPLES

The collection and use of Métis Knowledge for this reconsideration hearing was guided by the following ethical considerations, derived from World Intellectual Property Organization standards, professional experience, and principles of informed consent:

- Métis knowledge is the intellectual property of individual participants and, collectively, the community as represented by the BC Métis Federation Board of Directors;

- Decisions regarding the distribution and release of this intellectual property of those of individual participants and the community;
- Use of knowledge in the assessment (or reconsideration) is established through permission with the individual participant and the community;
- Métis Knowledge is both valued and valuable, and can strengthen and compliment western scientific biophysical environmental and socioeconomic assessments;
- The results of the study are validated and adopted by the BC Métis Federation Board of Directors before release of the report: this Board speaks with one voice;
- Materials generated by the study are the intellectual property of the community, and are intended for the one-time use in this submission;
- Participation is completely voluntary, and participants are free to withdraw their information from the final report before submission;
- Transmittal or reproduction of this report, in part or in whole, in any form, without the express consent of the community is prohibited.

2.3 STUDY FACILITATION

Project personnel served as facilitators and worked collaboratively with membership to scope, coordinate and execute the study protocol, and worked directly with knowledge holders to clarify, document and present study results.

2.4 DATA COLLECTION

Knowledge for this assessment was collected from a convenience sample of nine grassroots BC Métis Federation members, partner community leadership, Board members, and from knowledge holders using social media (the BC Métis Federation website), in-person, and telephone recruitment. This sample is cross-sectional in nature and included four women and five men with the following general age breakdown: two youth, two Elders, and four adult board members. Education and experience levels were diverse. Participants reside in communities throughout the province. The following people participated in this assessment:

- Sherry Daniels
- Angel Fisher

- Baillie Redfern
- Joe Desjarlais
- Drake Henry
- Rene Therrien
- Betty Fisher
- Darren Tice
- Shenine Letendre
- Keith Henry
- Loretta Morin

A group interview was held on November 25th, 2018. During this interview, participants considered questions placed in the Hearing Order and provided their knowledge and recommendations as appropriate. Detailed notes were taken by a board member, the meeting facilitator, and by a youth participant, and were cross-compared, ensuring internal validity of the emergent themes and recommendations, which were confirmed by participants in the final phase of the meeting. Emergent themes form the structure (major headings) of the results section of this report.

2.4.1 RESEARCH MATERIALS

Research materials were developed for this study with the goal of supporting free, prior and informed consent. Preparation of study materials, review of technical documents, analysis and reporting, and general technical support was provided by Kelly S. Davison (7726929 Canada Inc.). A basic questionnaire and consent form were developed, along with an interview guide. A review of key technical reports available through the regulatory portal used to provide context to inform the context for the regulatory reconsideration questions.

3 MÉTIS KNOWLEDGE ASSESSMENT

This section presents the questions posed to participants, and the themes that emerged from our discussion. It is important to note that regulatory decisions often emphasize quantitative, statistical analyses of effects to form the basis of their decisions. And although significance is typically considered a statistical term, it is understood by participants in this study to mean the qualitative, subjective, individual assessment of the *severity* of potential effects that emerges from the life experience of the knowledge holder. The term “effects” is understood to include both negative (i.e. pollution, contamination) or positive (i.e. economic growth, poverty reduction) meanings. Effects are presented from the perspective

of participants. This Métis Knowledge Assessment is grounded in the following questions, outlined in the hearing order, and are followed by results:

- What are the environmental effects of Project-related marine shipping, and the significance of those effects?
- What are measures that are technically and economically feasible, and that would mitigate any significant adverse environmental effects of Project-related marine shipping?
- What are alternative means to carrying out Project-related marine shipping that are technically and economically feasible, and the environmental effects of those alternative means?
- What are requirements in respect of Project-related marine shipping?
- What are measures to avoid or lessen the adverse effects of Project-related marine shipping on SARA-listed wildlife species and their critical habitat, monitoring of those measures, and consideration of how to ensure the measures and monitoring are undertaken?

3.1 CONSULTATION

The overarching message from participants is that meaningful, timely, transparent, and culturally sensitive consultation was not carried out for the Trans Mountain Project, including during the assessment and subsequent decision for the pipeline expansion. Participants have little to no understanding of any of the *plans* to mitigate anticipated effects (i.e. a spill), much less how they might fit into the plan. In general, members have not been informed about potential impacts, the proponent has not engaged in discussion with members about how they might be impacted by the Project, nor about the role that they and their community might play in addressing those impacts. In this context, one participant asked: “How [then] do we make educated recommendations?”

Communication is at the core of meaningful consultation, and it is important that communication about project effects and project safety plans, etc., are done in a way that effectively conveys the intended message in a manner that is consistent with Métis culture and traditions. Participants in this interview had the following recommendations regarding consultation going forward:

- 1) Commitment to a plan that supports meaningful, transparent, and effective communication between the proponent and BC Métis Federation members;

- 2) Commitment to a clear plan of engagement of BC Métis members related to project status and the efforts of the proponent and the government to mitigate effects;
- 3) Commitment to an Industry Liaison-type position: a professional who can effectively communicate complex technical information in plain language via appropriate means, so that all BC Métis Federation members can access the intended message.

3.2 MARINE SHIPPING AND AIR QUALITY

Project-related marine shipping will impact air quality (and human health), water quality (and wildlife habitat), and the significance of those effects depends on the degree to which mitigation measures are actively adopted by industry and enforced or supported by government.

Tankers are a primary source of greenhouse gas emissions (GHGs) and contribute substantially to both the local, and the global burden of GHGs. Project-related tanker emissions will directly affect air quality: a single tanker, depending on its size and the quality of the fuel that it burns, can emit GHGs at a rate equivalent to millions of automobiles. The annual emissions from just a handful of tankers is the equivalent of all the cars in Canada. There are thousands of tankers in operation globally. Ultra high GHG emissions are the result the chemical composition of the fuel being used, and the nature of the technology that uses that fuel. International efforts to reduce the total amount of GHGs emitted by tankers are hamstrung by global geopolitics. A disruptive change in the shipping fuel market is required, and Canada is in a position to lead the way. Clean technologies exist. If tanker technology is not drastically improved, then our efforts to introduce low-emission technologies for land transportation (i.e. electric cars) are essentially meaningless.

The following recommendations for mitigation were put forward by participants during the group interview:

- 1) Disrupt the market for low quality diesel fuel and become world leaders in the manufacture and use of clean marine shipping;
- 2) Set firm limits on tanker speed in local waters in order to minimize the amount of fuel burned, and therefore limit the amount of emissions and particulates;

- 3) Limit the distance that product is shipped overseas by piping it eastward, overland, using pipelines, for shipment to ports from Atlantic Canada;
- 4) Refine our own oil here in Canada and sell it to Canadians to meet local demand before shipping it overseas.

3.3 AIR QUALITY AND HUMAN HEALTH

Short of suspending a person in the exhaust port of common diesel-burning tanker engine, the direct effect(s) of Project-related marine shipping (i.e. tanker emissions) on human health are difficult to accurately measure, but they should not be discounted. Impacts of air quality to human health are both cumulative and chronic in nature and are multi-factorial. It is therefore difficult to define a causal relationship between Project-related effects to air quality and human health. However, we do know that the incidence of pulmonary disease increases as air quality declines. This was a primary lesson from the Industrial Revolution. Tankers that burn diesel high in nitrogen and sulfur compounds will continue to contribute to poor air quality. Dirtier air means a dirtier environment for humans, more pollution, and more deaths. A marginal increase in the incidence of pulmonary disease could be reasonably anticipated.

The following recommendations for mitigation were put forward by participants during the group interview:

- 1) Fund the First Nations Health Authority and other Indigenous health organizations to provide primary prevention education and primary care, including robust screening, for Indigenous people, including Métis.

3.4 MARINE SHIPPING, WATER QUALITY AND WILDLIFE

Two primary concerns were raised with regard to marine shipping and water quality. First, bilge water is viewed by participants as a potential source of serious contamination. Sea water that is highly contaminated with sewage, viruses, bacteria, mussels and other crustaceans that is drawn up in one part of the world at the start of a transport run can be deposited thousands of kilometers away (i.e. in the Port of Vancouver): “We don’t want that water here,” said one participant, noting that water in other parts of the world may be far more contaminated than those of the Salish Sea.

The second concern regarding impacts of marine shipping raised by participants is contamination of the Salish Sea (and beyond) in the event of a spill. Participants raised concern about potential impacts to

water quality, to people who fish and make a living from the ocean and their way of life, as well as the devastating effects that spills have to marine habitat and wildlife along affected shores. One participant stated that it seems as though it would be nearly impossible to right a tanker in the case of a spill, or if a tanker sinks, citing the difficulty that authorities seems to have with a small tug boat that capsized in the Fraser River just this year: August of 2018, the George H. Ledcor, a tug boat containing 22,000 litres of diesel fuel, capsized in the Fraser River and spilled an unknown amount of diesel that made its way downstream. Tankers hold thousands of times the amount of fuel, and in the case of oil tankers, a vast amount of potentially harmful cargo. A tanker spill could be absolutely devastating to the waters, the people, and to the wildlife that call this place home: “They talk about contracting and jobs, but nothing that will alleviate our concerns. I have huge concerns.”

Participants stated that, in addition to reducing impacts to air quality, limiting the speed of tankers in the Salish Sea could reduce the amount of noise pollution-related effects to the resident Killer Whales and reduce the incidence of collisions. Further, effects might be reduced by paying close attention to the migratory patterns of the whales and focusing activity around times when we know their distance from the tankers.

The following recommendations for mitigation were put forward by participants during the group interview:

- 1) Commitment to a plan that supports meaningful, transparent, and effective communication between the proponent and BC Métis Federation members about emergency spill response planning and coastal monitoring;
- 2) Commitment to a clear plan of engagement of BC Métis members related to marine shipping, spill risk, and emergency spill response planning;
- 3) Commitment to an Industry Liaison-type position: a professional who can effectively communicate complex technical information in plain language via appropriate means, so that all BC Métis Federation members can access the intended message;
- 4) Set firm limits on tanker speed in local waters to minimize aquatic noise pollutions and reduce incidence of collisions with resident wildlife. Fund conservation research.

4 LETTER OF CLOSURE

The BC Métis Federation has prepared this report for the National Energy Board as their submission in this reconsideration hearing. The author(s) reserve the right to modify its contents.

5 REFERENCES CITED

The BC Métis Federation. (2018). *The BC Métis Federation Community Reconciliation and Daniels Survey: Understanding Reconciliation for BC Métis Federation Members*. Community report. Vancouver, BC.