



**Tsawwassen First Nation Closing Remarks to the Roberts Bank
Terminal 2 Environmental Assessment Review Panel**

Submitted to:

**The Joint Review Panel
Canadian Environmental Assessment Agency**
22nd Floor, 160 Elgin Street
Ottawa, ON K1A 0H3
Email: ceaa.panelrbt2-commissionrbt2.acee@canada.ca

Submitted by:

**Tim Dickson, Mark Gustafson, Robin Phillips
Counsel for the Tsawwassen First Nation**

JFK Law Corporation
<contact information removed>

Contents

PART I – OVERVIEW OF SUBMISSIONS..... 4

 Opening Statement..... 4

 Summary of TFN position and organization of this submission 5

PART II - REGULATORY FRAMEWORK 6

 Panel responsibilities in relation to considering environmental effects –
 acknowledgement of systemic imbalances of resources and biases in EAs..... 6

 Additional Panel responsibilities when considering impacts to Aboriginal and Treaty
 rights and impacts to Aboriginal peoples more generally..... 9

 a. Duty to first understand the cumulative context of historical and current
 barriers to and limits on the exercise of rights and culture 9

 b. Duty to consider how cultural and social values inform impacts 10

 c. Duty to consider the Indigenous perspective 10

 d. Duty to consider rights, and not be limited to current use 10

 e. Duty to consider non-biophysical effect pathways 11

 f. Duty to consider Project impacts in the context of reconciliation..... 11

 Panel responsibilities when making recommendations..... 12

 Matters outside the scope of the Review Panel 12

PART III – PROJECT EFFECTS ON TFN’S RIGHTS AND WAY OF LIFE..... 13

 TFN history, rights and way of life..... 13

 History and culture 13

 Roberts Bank’s critical importance to TFN..... 14

 Traditional Resources..... 15

 Relationship to other nations 16

 Government Structure 16

 Increased challenges in maintaining TFN’s way of life 17

 Potential Project Effects on TFN and TFN rights 19

 Need for further development and discussion of potential mitigation and
 accommodation measures..... 23

PART IV – FURTHER CONCERNS AND UNCERTAINTY REGARDING PROJECT
EFFECTS..... 25

 General Comment 25

Marine fish 26

Crab 28

Orange Sea Pens 30

Marine Mammals 31

Marine Vegetation and Marshland 32

Geomorphology, sedimentation and the foreshore 33

Human Health 33

Invasive Species 34

Increased Traffic 35

Increased Noise 35

Light Pollution 36

Marine Accidents 36

Cumulative Effects 37

Possible Alternatives 39

PART V - CONCLUSION 40

APPENDIX – LIST OF TFN RECOMMENDATIONS 42

PART I – OVERVIEW OF SUBMISSIONS

Opening Statement

1. The people of the Tsawwassen First Nation (“TFN” or “Tsawwassen”) are, above all else, the “People facing the sea.”¹ Since time immemorial, TFN has maintained a way of life that embodies all that this phrase entails, including exercising their Aboriginal rights to fish and harvest resources from the sea they have faced for centuries.²
2. There is a deep, inherent relationship between Tsawwassen Members and the lands, waters and resources of their Territory.³ The health of the Members – in the broadest possible sense of the word “health” – is inextricably linked to the health of the sea they rely upon and the health of their relationship with the sea they face. TFN continues to express its relationship to its lands and waters through its constitution, laws and other governing documents.
3. The Tsawwassen people are stewards of their Territory.⁴ Tsawwassen Members work to ensure their resources are healthy and protected for generations to come. Where large projects may negatively impact Tsawwassen Territory, it is not simply that the lands and environment may be affected; it is the well-being and health of the entire community that are at issue.⁵
4. This is the context in which the Roberts Bank Terminal 2 Project (the “**Project**”) proposed by the Vancouver Fraser Port Authority (the “**Port**” or “**Proponent**”) is situated. And it is why the Project has created real concerns for Tsawwassen

¹ Review Panel Public Hearing Transcript Volume 16, 1 June 2019, Page 3947, Lines 14-17; Tsawwassen First Nation, *Declaration of Tsawwassen Identity and Nationhood*, 3 April 2009 [Tsawwassen Declaration].

² *Tsawwassen First Nation Final Agreement between Tsawwassen First Nation, the Government of Canada and the Government of British Columbia*, 6 December 2007 (entered into force 3 April 2009) [Final Agreement].

³ Hearing Transcript Volume 16, Page 3945, Lines 5-7 [Hearing Transcript Volume 16]; Tsawwassen Oral Presentation for the June 1, 2019 Public Hearing Session, 1 June 2019, slide 7 [Tsawwassen Oral Presentation].

⁴ Tsawwassen Oral Presentation, Slide 6.

⁵ See, for example: Hearing Transcript Volume 16, Page 4015, Lines 21-23.

Members about potential adverse impacts to the connections, values and way of life that support their distinctive cultural identity as the “People facing the sea.”⁶

5. Understandably, the Review Panel process for the Project is of great importance to TFN. While the report of the Review Panel is not a decision on the Project, it is a critical part of the ongoing regulatory process for the Project and will be an important guide for confirming the outstanding issues that must be resolved before government decision-makers can responsibly decide whether to approve or reject the Project.

Summary of TFN position and organization of this submission

6. TFN is submitting these closing remarks as part of the Environmental Assessment (“**EA**”) of the Project. TFN’s aims are to provide principles to help guide the Review Panel’s assessment of the evidence (Part II) and to delineate key community concerns and to highlight issues that TFN submits need to be resolved before a final decision on the Project (Parts III and IV).
7. TFN’s position is that the Review Panel must conclude that the Project will have significant adverse impacts on TFN, TFN’s Treaty rights and other components of the environment under s. 5(1) of *CEAA 2012*. The evidence before the Review Panel clearly establishes that many of the mitigations currently proposed by the Proponent are insufficient for resolving adverse impacts on TFN and its lands and resources.
8. In certain instances, there is also a lack of information to substantiate the Port’s conclusions that the Project will have negligible impacts on certain environmental components. The statutory and constitutional framework for the Review Panel requires that the Panel take a precautionary approach to situations where a concern has been raised but there is some uncertainty about the likelihood of the effect. Here, that means the Review Panel should approach uncertainty and

⁶ Hearing Transcript Volume 16, Page 3947, Lines 14-17; Tsawwassen Declaration.

information gaps by concluding that the Project may cause significant adverse effects, hence providing a foundation for decision-makers to evaluate Project risks and the sufficiency of mitigation measures on that basis.

9. It is clear that much more work needs to be done before decisions on the Project are made. Accordingly, TFN urges the Review Panel to recommend that the Proponent and the Governments of Canada and British Columbia commit to address outstanding information gaps and to develop robust mitigation measures relating to Project impacts on TFN, its constitutionally protected rights and the environment. This work must be completed before the federal and provincial governments decide whether or not to approve the Project.

PART II - REGULATORY FRAMEWORK

10. In this Part of the closing submission, we set out the constitutional and statutory framework for this environmental assessment that must guide the Review Panel when considering evidence respecting Project effects, particularly with respect to effects on TFN's rights and way of life.

Panel responsibilities in relation to considering environmental effects – acknowledgement of systemic imbalances of resources and biases in EAs

11. It is vital to bear in mind when considering the applicable framework for the Review Panel process that this is not a trial between two equally armed combatants, where the role of the Panel is merely to decide which side has won the battle at the end. Rather, there is a degree of systemic bias inherent in any such review process where, by and large, the manner in which information is marshalled, framed and provided is dictated by the Proponent.
12. In the environmental assessment process, the Panel is tasked with the obligation to carry out an assessment of the potential impacts of the Project so that government decision makers can make rational and properly informed decisions, understanding the consequences of their decisions.

13. As a practical matter, however, it is the Proponent who is best positioned in terms of financial resources to properly design the Project, gather information, commission studies and ensure that the necessary data is collected and analyzed, in order to put the Review Panel in a position where it can assess the potential impacts of the Project and recommend mitigation measures.
14. While participants, such as TFN, may be able to supplement the Proponent's information or analysis, or point out gaps or deficiencies in them, there should not be a burden placed upon interveners to address requirements that the Proponent has failed to address. This consideration is crucial in this proceeding because the evidence demonstrates that the Port has either not addressed adequately, or not addressed at all, important information gaps and has not presented detailed information about crucial mitigation measures. Failing to recommend that the Port address these gaps before a decision on the Project is made would entrench the systemic bias in the assessment process and disadvantage TFN in its efforts to protect the rights and way of life of its members.
15. Another active step that the Review Panel must take as part of its duty to conduct a fair process is to always place a high and equal value on TFN's perspective, knowledge and cultural values equivalent to the value it places on materials provided by the Port. This responsibility is part of what balances the scales to assist decision makers to engage in unbiased decision making.

Panel responsibilities in relation to considering environmental effects – application of a precautionary approach

16. Environmental assessment is tasked with the management of future risk and so must be guided by the precautionary principle.⁷

⁷ *Canadian Environmental Assessment Act*, SC 2012, c 19, s 52, s 4(1)(b) [CEAA, 2012].

17. The precautionary principle is built into the *Canadian Environmental Assessment Act, 2012* (“**CEAA 2012**”). Section 4(1)(b) specifies that a purpose of *CEAA, 2012* is “to ensure that designated projects that require the exercise of a power or performance of a duty or function by a federal authority under any Act of Parliament other than this Act to be carried out, are considered in a careful and **precautionary manner** to avoid significant adverse environmental effects” (emphasis added). Section 4(2) goes on to confirm that those exercising powers under the Act “must exercise their powers in a manner that protects the environment and human health and applies the precautionary principle.”⁸
18. Here, the Panel must carry out an assessment taking into account the precautionary principle, so that government decision makers can make rational and informed decisions with an understanding of the consequences of their decisions. In so doing, the Panel should keep in mind that the consequences of decisions on this Project will ultimately be borne by current and future generations of TFN people who rely upon the environment in and around the Project for their personal, cultural, and social health.
19. The application of the precautionary principle to this proceeding has two important implications for how the Review Panel discharges its mandate to identify significant adverse environmental effects. First, where a concern has been raised about an effect on the environment but the evidence about the likelihood or severity of the potential effect is unclear or inconclusive, the Panel should answer that the Project may have the more serious or more likely of the potential environmental effects so that mitigation measures are designed to meet the potentially more serious outcome. Second, where there is insufficient information about proposed mitigations to fully evaluate their effectiveness, the precautionary principle mandates that the Review Panel should refrain from concluding that the proposed mitigations will reduce the likelihood, magnitude or duration of the effect. Instead, the Panel should confirm the potential

⁸ *CEAA, 2012*, s 4(2).

environmental effect and recommend that decision-makers require the Port to develop new or more detailed mitigation measures before a federal decision on the Project.⁹

20. This approach allows government decision-makers receiving the Review Panel's report to be clear eyed about the risks associated with the Project before making their decision.

Additional Panel responsibilities when considering impacts to Aboriginal and Treaty rights and impacts to Aboriginal peoples more generally

21. Unlike some previous environmental assessment processes, the Terms of Reference for the Review Panel clearly require the Review Panel to consider potential impacts to Aboriginal rights. The Panel's Terms of Reference impose two different types of requirements on the Panel with respect to Aboriginal rights and interests: a procedural requirement to accept and review certain types of information, and a substantive requirement to consider and comment on the seriousness of potential adverse impacts of the Project on Aboriginal and Treaty rights.¹⁰
22. TFN provides the following factors that are unique to the Panel's evaluation of Project effects on TFN's constitutionally protected rights and on TFN more generally.

- a. **Duty to first understand the cumulative context of historical and current barriers to and limits on the exercise of rights and culture:** Assessing impacts on Treaty rights requires you to understand the context of cumulative effects in which rights are exercised.¹¹ The Project must be considered in a historical and cumulative context in order to account for the impacts that have already affected TFN's ability to exercise their

⁹ 114957 *Canada Lteé (Spraytech, Société d'arrosage) v Hudson (Town)*, 2001 SCC 40.

¹⁰ Roberts Bank Terminal 2 Project Amended Review Panel Terms of Reference, s 3.9.

¹¹ *West Moberly First Nations v. British Columbia (Chief Inspector of Mines)*, 2011 BCCA 247 at paras 237, 241.

Aboriginal and Treaty rights, and the extent to which the exercise of those rights has already been lost. This context needs to be considered prior to considering the Project's effects on rights.

- b. **Duty to consider how cultural and social values inform impacts:** Your assessment of effects on Treaty rights must also be based on an understanding that there are historical, cultural, familial and spiritual reasons why certain areas and resources are particularly critical. It would be an error to assume that TFN Members can “go elsewhere” in response to Project impacts, because it would ignore TFN's undisputed evidence about TFN's values and the critical cultural importance of the Project area.¹²
- c. **Duty to consider the Indigenous perspective:** The perspective of the Aboriginal community must be taken into account in a meaningful way in order to adequately consider impacts to Aboriginal and Treaty rights and Aboriginal peoples more generally. To truly understand impacts to Treaty rights and what mitigations are required, you must consider the factors that influence whether and how TFN Members exercise their rights and culture. That includes giving real consideration to the avoidance of areas and resources that can result from perceived contamination or incompatibility with cultural values.¹³
- d. **Duty to consider rights, and not be limited to current use:** The Panel's duty to consider Project effects on TFN's rights requires it to consider factors that go beyond “current use.” Furthermore, when considering the statutory framework under s. 5(1)(c)(iii), the Panel should be informed by the *Technical Guidance for Assessing the Current Use of Lands and Resources for Traditional Purposes under CEAA 2012*, which clearly sets

¹² Joint Review Panel Report, Shell Canada Energy Jackpine Mine Expansion Project, 2013 at para 1790 [*Shell Jackpine Report*].

¹³ Shell Jackpine Report at paras 1789, 1792.

out that this provision of *CEAA 2012* must be understood through a rights-based lens in the sense of considering past practices and a community's vision of future desired uses of its lands and resources.¹⁴

- e. **Duty to consider non-biophysical effect pathways:** There are fundamental differences between the evaluation of environmental effects and the consideration of effects on Section 35 rights. It is now recognized that a biophysical approach to impact assessment is unduly restrictive and inappropriate for assessing impacts to Section 35 Rights.¹⁵¹⁶ A proper assessment must recognize that impacts to a community, effects on cultural way of life and continuity and changes to a cultural landscape can occur regardless of the level of anticipated physical change to the environment.
 - f. **Duty to consider Project impacts in the context of reconciliation:** The responsibility of the Panel to consider Project effects on Aboriginal and Treaty rights imports a duty to consider reconciliation when making decisions and formulating recommendations. The fundamental purpose of s. 35 of the *Constitution Act, 1982* is the “reconciliation of Aboriginal and non-Aboriginal Canadians in a mutually respectful long-term relationship.”¹⁷
23. At all times, the Panel must recognize that the well-being of TFN Members is tied to their relationship with the waters and resources in and around the Project area and to the exercise of the Aboriginal and Treaty rights for which successive generations of TFN Members have fought for so long.

¹⁴ Canada, Canadian Environmental Assessment Agency, *Technical Guidance for Assessing the Current Use of Lands and Resources for Traditional Purposes under CEAA 2012*, Page 4.

¹⁵ Shell Jackpine Report at para 1801.

¹⁶ *Clyde River (Hamlet) v Petroleum Geo-Services Inc*, 2017 SCC 40 at para 45.

¹⁷ *Beckman v Little Salmon/Carmacks First Nation*, 2010 SCC 53 at para 10; *Mitchell v Minister of National Revenue*, 2001 SCC 33 at para 29.

24. Taken together, these factors form a single methodology that will assist the Panel in discharging its duty to evaluate Project effects on the rights of TFN and its duty to consider Project effects on TFN more generally pursuant to s.5(1)(c) of *CEAA 2012*.

Panel responsibilities when making recommendations

25. Lastly, it is important for the Panel to recognize that your duty to act constitutionally also applies to the recommendations you formulate. The Federal Court has held that the obligation of an administrative body to act constitutionally also arises when the body is making recommendations only, as opposed to final and binding decisions, in fulfilling its statutory mandate.¹⁸
26. This means that when you are considering recommendations for measures to mitigate effects on Treaty rights and TFN more generally, you must be informed by the imperative of reconciliation and the factors set out above. Elder Adams spoke eloquently about how the Review Panel should approach its role in making recommendations

So I depend on all of the ears here today that are listening to me, that you will think of our generations; that we have opened up our arms, and all we're asking is that we can still live with what we have here, that you will help us, that we know we cannot stop things from happening, but you can make it better for us. Because we are the ones living right here in the middle of everything, and we are not going to move.¹⁹

Matters outside the scope of the Review Panel

27. While the Panel's Terms of Reference prevent the Panel from making any conclusions or recommendations relating to Crown consultation, TFN notes that the governments of Canada and British Columbia have not discharged their duty to consult and accommodate TFN. It is TFN's expectation that Canada and

¹⁸ *Canada (Attorney General) v Telbani*, 2012 FC 474.

¹⁹ Hearing Transcript Volume 16, Page 3988, Lines 14-23.

British Columbia will discharge that duty prior to making their respective decisions on the Project.²⁰

28. It is essential that the Review Panel not interpret section 3.8 of its Terms of Reference as limiting its ability to make recommendations to government on the role that government can or must play in mitigating concerns about adverse effects of the Project. The evidence before the Review Panel establishes that the Port does not have the ability to mitigate certain Project effects on TFN but that governments may have tools for mitigating effects. Where governments can take actions that may assist with mitigating or offsetting Project effects, the Review Panel should include relevant recommendations in its report and be clear that such recommendations must be implemented before a decision on the Project.

PART III – PROJECT EFFECTS ON TFN’S RIGHTS AND WAY OF LIFE

TFN history, rights and way of life

29. Before summarizing TFN’s position on Project effects and mitigation, we briefly summarize the evidence describing TFN’s way of life and values. This information is essential for considering the types and scope of Project effects on TFN and its rights and culture.

History and culture

30. The people of Tsawwassen have lived in their Territory sustaining themselves and their way of life for thousands of years. Tsawwassen is a hun’qum’i’num word that means “Land Facing the Sea.”²¹ There is and has always been a fundamental connection between Tsawwassen Members and the lands, waters, and resources of their Territory.²²

²⁰ Tsawwassen First Nation Written Submission to the Roberts Bank Terminal 2 Environmental Assessment Review Panel, 15 April 2009, Page 5 [*Tsawwassen Written Submission*].

²¹ Hearing Transcript Volume 16, Page 3945, Lines 3-4.

²² Hearing Transcript Volume 16, Page 3945, Lines 5-7; Tsawwassen Written Submission, Page 3.

31. The Tsawwassen language is indelibly linked to the lands and waters of their Territory. The language is not only a way of communicating. It describes place names and their uses, and ways of relating to the lands and waters, and to other people.²³ In short, the Tsawwassen language expresses a way of life. It is an expression of identity.²⁴
32. The Tsawwassen are the salmon people – sce:lhtun xwelmxw – which reflects the critical importance of salmon as a staple food of the Nation.²⁵
33. Since time immemorial, the Tsawwassen people have used and occupied their large coastal Territory, which historically has been rich with fish, wildlife, and other natural resources.²⁶ Archaeological records show evidence of occupation of the Tsawwassen Territory for thousands of years.²⁷ Tsawwassen Territory ranges across southern sections of what is now British Columbia—as far east as New Westminster, south to the international border, and west to the southern Gulf Islands.²⁸ Tsawwassen First Nation’s home and Treaty lands are situated near Roberts Bank on the shore of the Salish Sea.²⁹
34. TFN claims Aboriginal rights based on their unique current and historical cultural connection to the lands, waters and resources of their Territory, including Roberts Bank.³⁰

Roberts Bank’s critical importance to TFN

35. The Project is not simply “located in TFN Territory”; it is immediately adjacent to the homes of the Members.³¹ It lies directly in the line of sight of many Members when they look to the sea. The Project area is part of what enables Tsawwassen

²³ Hearing Transcript Volume 16, Page 4007, Lines 21-23.

²⁴ Tsawwassen Declaration.

²⁵ Hearing Transcript Volume 16, Page 4009, Lines 1-2.

²⁶ Hearing Transcript Volume 16, Page 4064, Lines 3-6.

²⁷ Hearing Transcript Volume 16, Page 3945, Lines 7-10.

²⁸ Tsawwassen Oral Presentation, Slide 5.

²⁹ Final Agreement, c 4 s 1; Final Agreement Appendix C-4.

³⁰ Final Agreement, Preamble s B.

³¹ Hearing Transcript Volume 16, Page 3948, Lines 16-18.

Members to say they are the “People facing the sea.”³² Traditionally, the sea has provided not only physical sustenance, but also spiritual nourishment. Throughout time, Members of the nation have used the ocean to cleanse their spirit and to bathe.³³

36. The area around the Project is particularly important for harvesting activities. For example, Chinook salmon, a traditional staple of the Nation, resides temporarily on Roberts Bank.³⁴ Chinook are relied on heavily by Tsawwassen.³⁵

Traditional Resources

37. Historically, the Territory contained an abundance of natural resources, including salmon, sturgeon, shellfish, elk, deer, marine mammals, eulachon, and migratory birds.³⁶ The bounty of the foreshore is reflected in the saying: “When the tide goes out, the table is set.”³⁷ TFN Members used to be able to harvest easily clams and shellfish in what is akin to their ‘front yard.’³⁸
38. Traditional resources such as salmon, eulachon and crab remain a key part of the lifestyle of the TFN, despite the way certain species have diminished. Fish and other marine resources continue to provide for cultural and social processes that are very important to TFN identity and are integral to the past and future of the Nation.³⁹ The ability of the Tsawwassen to be able to continue to fish, and to provide food such as salmon and crab to the Nation, is of great importance to Tsawwassen.

³² Tsawwassen Declaration.

³³ Hearing Transcript Volume 16, Page 4008, Lines 22-24.

³⁴ Hearing Transcript Volume 16, Page 3965, Lines 15-18.

³⁵ Hearing Transcript Volume 16, Page 3965, Lines 24-25.

³⁶ Hearing Transcript Volume 16, Page 3947, Lines 4-7.

³⁷ Hearing Transcript Volume 16, Page 3949, Line 1.

³⁸ Hearing Transcript Volume 16, Page 3949, Lines 2-3.

³⁹ Hearing Transcript Volume 16, Page 4001, Lines 3-19.

Relationship to other nations

39. The abundance of resources in TFN territory supported a complex economic system based on trade and barter, as well as the provision of specialized services.⁴⁰ As TFN is located close to the mouth of the Fraser River, the Tsawwassen Nation has always been a host nation.⁴¹ All the Stó:lō Nations would trade with one another and with the Tsawwassen Nation by travelling along the river on canoe.⁴²
40. The TFN was known for hosting meals on their territory with other First Nations because of the abundance of seafood and resources in their territory. Tsawwassen was a meeting location for the First Nations.⁴³ Today, the Tsawwassen continue to allow other First Nations to fish in their Territory.⁴⁴

Government Structure

41. Tsawwassen First Nation is a modern Treaty First Nation.⁴⁵ The Final Agreement is both the land claim and self-government agreement. It provides certainty of land ownership and law-making authority. Through its powers, TFN is charting a new path based on self-determination, community health and well-being and prosperity. TFN's vision for its Members is that they are united, proud and confident in their culture, with a strong connection to and caring relationship for their lands and resources.⁴⁶
42. Pursuant to its Final Agreement, TFN is able to exercise constitutionally protected self-government over its lands, Members, and residents. Tsawwassen's laws are enforced by principles carried forth through each

⁴⁰ Hearing Transcript Volume 16, Page 3947, Lines 8-10.

⁴¹ Hearing Transcript Volume 16, Page 3992, Lines 19-21.

⁴² Hearing Transcript Volume 16, Page 4009, Lines 4-7.

⁴³ Hearing Transcript Volume 16, Page 4064, Lines 2-6.

⁴⁴ Hearing Transcript Volume 16, Page 4041, Lines 23-25.

⁴⁵ Hearing Transcript Volume 16, Page 3945, Lines 22-23.

⁴⁶ Hearing Transcript Volume 16, Page 3946, Lines 1-8.

generation.⁴⁷ The declaration Tsawwassen made on the effective date of the Final Agreement explains how traditional principles and values are reflected in contemporary laws.⁴⁸ Projects in Tsawwassen interact with Tsawwassen governance and jurisdiction, as TFN law-making is rooted in Tsawwassen tradition and culture, including the connection to the lands and waters.⁴⁹

43. The Final Agreement provides that TFN has Treaty rights within its Territory, including Roberts Bank and the surrounding areas.⁵⁰ Within Tsawwassen Territory, Tsawwassen Members have fishing⁵¹, hunting⁵², migratory bird harvesting⁵³ and plant gathering rights⁵⁴ in defined areas, and the right to practice Tsawwassen culture.⁵⁵

Increased challenges in maintaining TFN's way of life

44. Existing development has already disrupted the lands and culture of the Tsawwassen Nation. As Elder Adams stated so eloquently:

And I remember not being separated on the other side there because that was where we all met with each other. No one knows how much we have lost. And losing that identity with us in the water. There is nothing that we can say that would tell you how much that means to us.⁵⁶

45. The Tsawwassen language – hun'qum'i'num – has come under attack by way of Canada's colonial history and institutions such as residential schools. The impacts of residential schools left Members reluctant to teach their language for fear that others would face persecution.⁵⁷

⁴⁷ Final Agreement, c 16.

⁴⁸ Tsawwassen Declaration.

⁴⁹ Tsawwassen Written Submission, Page 3.

⁵⁰ Final Agreement, Preamble, B.

⁵¹ Final Agreement, Appendix J.

⁵² Final Agreement, Appendix K.

⁵³ Final Agreement, Appendix L.

⁵⁴ Final Agreement, Appendix M.

⁵⁵ Final Agreement, Preamble, J; Hearing Transcript Volume 16, Page 3930, Lines 14-18.

⁵⁶ Hearing Transcript Volume 16, Page 3986, Lines 10-17.

⁵⁷ Hearing Transcript Volume 16, Page 4007, Lines 17-20.

46. After decades of unrestrained development within and around TFN Territory, the foreshore, rivers, landscape and plants and wildlife have been irreparably altered.⁵⁸ Tsawwassen Members now live within the centre of multiple large scale works, including BC Ferries, highways, and the Port.⁵⁹ TFN testified how a Tsawwassen longhouse was demolished to accommodate the BC Ferries causeway.⁶⁰ A longhouse serves as a site for political and ceremonial gatherings and is of irreplaceable cultural significance.⁶¹
47. Due to the environmental effects from existing development, Tsawwassen Members can no longer walk along their foreshore or gather along the coast for communal activities.⁶² The foreshore, once the site of community gatherings, is now deemed unusable for cultural and community purposes because of black sludge.⁶³ The ability to play in the 'front yard' of the Nation has been taken from the Nation's youth and its future generations.⁶⁴
48. TFN's evidence demonstrates that traditional resources are in steep decline. TFN testified that the Tsawwassen allocation of Eulachon does not meet the needs of the Members.⁶⁵ Eulachon is, therefore, conserved and saved for elders, who have traditionally relied on this fish.⁶⁶ Tsawwassen Members were once able to harvest eulachon in Canoe Pass, but they are no longer able to engage in this traditional activity.⁶⁷ The number of Chinook has also been declining, and Tsawwassen is often unable to reach its allocation.⁶⁸

⁵⁸ Hearing Transcript Volume 16 Page 3967, Lines 3-5; Tsawwassen Written Submission, Page 11.

⁵⁹ Hearing Transcript Volume 16, p 3958 line 12-19; Tsawwassen Oral Presentation, Slide 23.

⁶⁰ Hearing Transcript Volume 16, Page 4008, Lines 9-11.

⁶¹ Hearing Transcript Volume 16, Page 4008, Lines 14-15.

⁶² Hearing Transcript Volume 16, Page 3993, Lines 9-13.

⁶³ Hearing Transcript Volume 16, Page 3993, Lines 11-13.

⁶⁴ Hearing Transcript Volume 16, Page 3949, Lines 2-3.

⁶⁵ Hearing Transcript Volume 16, Page 3968, Lines 2-3.

⁶⁶ Hearing Transcript Volume 16, Page 3968, Lines 5-10.

⁶⁷ Hearing Transcript Volume 16, Page 3971, Lines 1-3.

⁶⁸ Hearing Transcript Volume 16, Page 3966, Lines 1-9.

49. Members gave evidence regarding how they remember going to the foreshore in their youth to collect crab for their family. In addition, Members would ask the youth to go and collect crab and that this was one of the ways in which camaraderie was established in this community. Traditionally, providing food for the community this was an essential part of growing up. Due to detrimental effects to the foreshore, this rite of passage can no longer be practiced.⁶⁹
50. Tsawwassen is a young and growing Nation.⁷⁰ More than 40% of their Members are less than 20 years old, and over 70% of the Members are under 40.⁷¹ The Nation is deeply concerned with its ability to pass down its knowledge and culture to young and future generations.⁷²

Potential Project Effects on TFN and TFN rights

51. The evidence before the Panel clearly shows that the Project is likely to add to the existing level of effects that are already making it challenging for Tsawwassen Members to maintain their way of life and exercise their rights. To assist the Review Panel, we summarize the evidence of potential Project effects on TFN and its rights in relation to three pillars of TFN life: (1) social and human health, including TFN's enjoyment of Tsawwassen Lands; (2) harvesting rights; and (3) cultural heritage.⁷³
52. The first of these pillars of TFN's way of life – social and human health – stands to be significantly and adversely impacted by the Project for decades. If the Project is approved, new physical infrastructure and changed vessel movements will become a permanent feature of the Territorial landscape, both of which will permanently alienate Tsawwassen Members from an important part of their Territory. Given the location of the Project, there will be no respite for Tsawwassen Members. Unlike others, Tsawwassen Members are not be able to

⁶⁹ Hearing Transcript Volume 16, Page 4024, Lines 5-15.

⁷⁰ Hearing Transcript Volume 16, Page 3945, Line 15.

⁷¹ Hearing Transcript Volume 16, Page 3945, Lines 11-17.

⁷² Hearing Transcript Volume 16, Page 3945, Lines 19-21.

⁷³ These pillars are distilled from the oral presentations by Chief Baird, Elder Ruth Adams, Louise Ahlm, Laura Baird, Victoria William, Elder Merle Williams, Steven Stark and Elder Laura Cassidy.

leave the Port behind when they go home; rather, they look out at the Port from their homes.⁷⁴ The Project will stand directly in the vantage point of “the people facing the sea.”⁷⁵

53. In words of Chief Baird:

The port doesn't just lie in our territory, it is directly adjacent to our homes and where we fish and gather our food. Tsawwassen First Nation will feel the most impact among those who may be affected by a terminal expansion.⁷⁶

54. Evidence that TFN has put before the Panel details how Tsawwassen Members will experience the adverse human and social health impacts referenced by Chief Baird, particularly through experiences of Tsawwassen Members on Tsawwassen Lands. The evidence includes community concerns about the physical and mental health of Members on Tsawwassen Lands from contamination, dust, noise, increased traffic, increased risks of accidents and malfunctions, and increased stress, among other effect pathways.⁷⁷ As stated by Chief Baird, individually and together, these effects, even if they are just small additions by the Port's standards, constitute a significant adverse impact on Tsawwassen people within the meaning of s .5(1)(c).⁷⁸

55. A second pillar of TFN's way of life – the right to harvest resources – is also put at risk by the Project. The Project will be situated in and impact an important area where Members have the right to fish and gather food for social and ceremonial purposes.⁷⁹ At present, the Tsawwassen fishery is often unable to harvest the full amount of their allocation (quotas).⁸⁰ TFN Members testified about their

⁷⁴ Hearing Transcript Volume 16, Page 4058, Lines 22-24.

⁷⁵ Tsawwassen Declaration.

⁷⁶ Hearing Transcript Volume 16, Page 3948, Lines 16-18.

⁷⁷ Hearing Transcript Volume 16, Page 4061, Lines 9-13; Hearing Transcript Volume 16, Page 3987, Lines 15-23; Hearing Transcript Volume 16, Page 3989, Lines 17-21.

⁷⁸ CEAA, 2012, s 5(1)(c).

⁷⁹ Hearing Transcript Volume 16, Page 3948, Lines 16-18.

⁸⁰ Hearing Transcript Volume 16, Page 3960, Lines 19-20.

significant concern about what it will mean to the Nation should the Project affect harvesting rights.⁸¹

56. Due to a decrease in fish species such as salmon, sturgeon and eulachon, crab has come to be increasingly relied on for the Tsawwassen fishery.⁸² The Project's location within the Tsawwassen fishing area will alter the way Tsawwassen fishers harvest crab, as further discussed below.⁸³
57. TFN is also concerned that the Project will negatively impact Tsawwassen's Treaty rights to harvest migratory birds.⁸⁴ Any impacts to migratory bird harvesting results in a loss of TFN's overall harvesting ability. The significance of this loss must be acknowledged in the EA process. If the Project results in more restrictions on firearms use on Tsawwassen Lands, then the result will be fewer opportunities for TFN Members to exercise their hunting and harvesting rights. Effects of the Project within the Tsawwassen Migratory Bird Harvest Area must be adequately considered.
58. A third pillar of TFN's way of life – intangible cultural heritage – is similarly put at risk of significant adverse impacts from the Project. For example, TFN Members testified about their spiritual relationship with killer whales, including that southern resident killer whales in particular hold significant and unique cultural values to the TFN way of life.⁸⁵ TFN Members worry that the Project may impact that relationship through disruption of critical habitat, the addition of cumulative effects, and its presence more generally.⁸⁶

⁸¹ Hearing Transcript Volume 16, Page 3955, Lines 11-16; Hearing Transcript Volume 16, Page 4003, Lines 4-7.

⁸² Tsawwassen Oral Presentation, Slide 11.

⁸³ Hearing Transcript Volume 16, Page 3952, Lines 2-5.

⁸⁴ Tsawwassen Written Submission, Page 11; see also Undertakings #53 & #54.

⁸⁵ Hearing Transcript Volume 16, Page 3955, Lines 9-10.

⁸⁶ Hearing Transcript Volume 16, Page 3955, Lines 2-5; Hearing Transcript Volume 16, Page 3955, Lines 5-11; Tsawwassen Oral Presentation, Slide 18.

59. Concerns about environmental quality and safety in the water will make it difficult for Members to teach their youth TFN culture out on the water. TFN's written submissions set out this risk in clear terms:

The Project will have an immediate effect on TFN's ability to transmit knowledge across generations. There are words, including geographical names, in hə́h̓qə́mih̓ə́m̓ (the Coast Salish language spoken by Tsawwassen Members) that may lose or change their meaning if they can no longer be associated with specific reference points that were previously visible to Tsawwassen Members.⁸⁷

60. Today, young Members of the Tsawwassen Nation are working to reclaim the culture and language that was almost lost.⁸⁸ Loss of access to the land and sea can impact Tsawwassen's ability to teach its language, and is detrimental to the work being done to reclaim language.

61. Elder Adams put the consequences of cultural loss in stark terms, stating

And if we lose our identity then they are nothing, and I refuse to see that happen... Because we are the ones living right here in the middle of everything, and we are not going to move. This is where our ancestors come from and this is where we come from, and this is what I want to leave for our children. And I want to leave that identity with them.⁸⁹

62. In summary, the evidence demonstrates that, unless effective mitigation measures can be developed and are actually implemented, the Project will likely have a range of significant adverse effects on TFN.

⁸⁷ Tsawwassen Written Submission, Page 10.

⁸⁸ Hearing Transcript Volume 16, Page 4083, Lines 2-5.

⁸⁹ Hearing Transcript Volume 16, Page 3988-3989, Line 13-14, 21-25.

Need for further development and discussion of potential mitigation and accommodation measures

63. In light of the evidence just summarized, the Panel must conclude that the Project will likely have significant adverse effects under s.5(1)(c) of *CEAA, 2012*, as well as significant adverse effects on TFN's Treaty rights, unless the impacts will be effectively mitigated.
64. The Proponent has identified various types of mitigation measures during the environmental assessment that it suggests are responsive to concerns relating to "current use" of lands and resources. TFN's evidence demonstrates, however, that these proposals have not reached the point of having enough detail and relevance to Project effects on TFN that the Review Panel can consider the likely impacts on TFN to have been effectively mitigated. As noted further under Part IV below, the Port acknowledges – particularly in the Updated Project Commitments, dated July 5, 2019 – that critical mitigation plans have not yet been developed.
65. Further, as also discussed more under Part IV below, to the extent that some of the proposed mitigations can be assessed at this time, it is clear that they will, at best, only *partially* mitigate the impacts on TFN and that significant adverse effects will remain. The expansion of the Navigational Closure Area (NCA) in order to reduce the impacts on TFN's crabbing is such an example.
66. Last, some of the proposed mitigations may even have their own impacts on pillars of TFN's way of life without modification or refinement. For example:
 - a. Use of TFN lands: Measures such as our Members paying for new windows to reduce noise concerns *add* impacts to our Members, rather than reduces them.

- b. Harvesting: The Proponent has proposed changes to the navigational closure area but TFN's evidence demonstrates that those mitigations are not yet supported by adequate information, they will impose difficulties on our Members when crabbing, and they may in fact put TFN Members in legal jeopardy, physical danger, or may lead to economic losses through damage to gear.⁹⁰
 - c. Physical and social health of TFN Members: The Proponent has indicated that it will develop measures relating to dust, noise and light. TFN's evidence, however, again demonstrates that these measures have not been defined and it has not been established that they will be sufficiently responsive to community experiences with the Project.⁹¹
 - d. Cultural retention: The Proponent has proposed the development of cultural offsetting measures. Such measures, however, have not been developed at this time and it has not been established that they will be sufficiently responsive to community experiences with the Project. Cultural offsetting is complex and it cannot be assumed, in the absence of evidence of TFN consent, that offsetting will be effective.⁹²
67. Given the incomplete nature of many of the mitigations that have been suggested in relation to the probable Project effects on TFN, TFN submits that the Review Panel must conclude that the Project will have significant adverse impacts on TFN under all components of s.5(1)(c) of *CEAA, 2012*. The Panel must also conclude that, in the absence of additional mitigation measures by the Port, Canada and British Columbia, the Project is likely to have significant adverse impacts on TFN's Treaty rights.

⁹⁰ Undertaking #55: From the Vancouver Fraser Port Authority - Navigational Closure Area. 17 June 2019.

⁹¹ Updated Project Commitments, Appendix C.

⁹² See, e.g., Hearing Transcript Volume 16, Page 4057, Lines 4-6; Hearing Transcript Volume 16, Page 4076, Lines 12-15; Hearing Transcript Volume 16, Page 4082, Line 25 to Page 4083, Line 1.

68. TFN appreciates the commitment by Canada, through the Canadian Environmental Assessment Agency, to undertake a rights-based assessment of the Project's impacts on TFN's Treaty rights to assist with developing a more comprehensive list of potential Proponent and government mitigation measures. While it is unfortunate that this was not completed in time for the Panel to consider it, there is still an opportunity for the rights-based assessment to be of assistance to the Port and governments if it is completed promptly.

PART IV – FURTHER CONCERNS AND UNCERTAINTY REGARDING PROJECT EFFECTS

General Comment

69. In this Part, TFN provides further details about particular effects of the Project on components of the environment. TFN's focus here is on identifying for the Panel the more important information gaps in the Proponent's assessment that should lead the Panel to conclude that the Project will have significant adverse environmental effects for components of the environment beyond those set out in s.5(1)(c) of *CEAA, 2012*. A particular focus on this Part of these closing remarks is to identify areas where the Panel must recommend that additional studies and mitigation measures be developed so that decision-makers can properly evaluate potential Project effects before making a decision on the Project.
70. Overall, the evidentiary record is perforated throughout by information gaps, such that information that is necessary for the evaluation of proposed mitigation measures are not available to TFN or the Review Panel. The Proponent's July 5, 2019 update on project commitments acknowledges again and again that essential offset and mitigation plans have not yet been fully developed.⁹³ This

⁹³ From the Vancouver Fraser Port Authority to the Review Panel re: Updated Project Commitments, 5 July 2019, see, for example: Commitment #14 (the Port will develop a Construction Environmental Management Plan); Commitment #19 (the Port will develop Air Emission Management Plans); Commitment #20 (the Port will develop Archaeological Monitoring and Management Plans); Commitment #22 (the Port will develop Environmental Training Plans); Commitment #24 (the Port will develop

leaves the Review Panel with a difficult choice: assume, with insufficient evidence, that currently undefined mitigation plans will reduce the significance or likelihood of environmental effects, or take a precautionary approach and conclude that the potential effects on many of the components of the environment set out in the following paragraphs, including Tsawwassen's rights, are likely to be significant.

71. It is Tsawwassen's view that, in many instances, the Review Panel has only one credible path: conclude that the Project is likely to have significant adverse effects on TFN and the components of the environment set out below and recommend that the Proponent and government undertake, with TFN, significant work to develop effective and detailed mitigation measures before a decision on the Project. In making such recommendations, the Review Panel must be perfectly clear that the development of offset and mitigation plans must include reference to TFN's constitutionally-protected Aboriginal and Treaty rights.
72. The sections below highlight key gaps that have been raised previously but by no means represents an exhaustive list of all potential impacts.

Marine fish

73. TFN has raised various concerns about the Project's likely significant adverse impacts on marine fish and their habitat.⁹⁴ Tsawwassen Members have Aboriginal and Treaty rights to harvest fish in their traditional harvesting areas – a right that is deeply connected to Tsawwassen identity and culture.
74. TFN's Final Agreement was negotiated with the view to ensuring that Tsawwassen would have continued access to salmon, which as noted in the oral hearing on June 1, 2019, have been in steady decline.⁹⁵ In accordance with the

Light Management Plans); Commitment #25 (the Port will develop Noise and Vibration Management Plans) etc.

⁹⁴ Hearing Transcript Volume 16, Page 3954, Lines 4-6; Tsawwassen Oral Presentation, Slide 17.

⁹⁵ Hearing Transcript Volume 16, Page 3949, Lines 23-25.

Final Agreement, Project effects that will be felt within the Tsawwassen fishing area must be thoroughly assessed and considered.⁹⁶

75. Throughout the environmental assessment process, TFN has expressed unease about the impacts of the Project on traditionally harvested fish species such as salmon, eulachon, and sturgeon.⁹⁷ Already the Tsawwassen eulachon fishery is essentially negligible.⁹⁸ Tsawwassen has been unable to harvest sturgeon for some time.⁹⁹ Given that the eulachon and sturgeon fisheries no longer support the exercise of TFN's rights, any additional adverse impact, even if small, should be considered to be "significant." Support is needed to conduct additional eulachon and sturgeon studies before the Project is approved.¹⁰⁰
76. In addition, TFN is concerned that the adverse impacts to emerging fisheries are potentially significant have not yet been adequately examined.¹⁰¹
77. The information provided to date by the Proponent does not sufficiently disaggregate by species to allow an understanding of effects on TFN diet and cultural experience. Specifically, the Proponent has treated all anadromous fish as generically interchangeable "salmon" for the purpose of assessing effects. TNF relies on each subspecies for different food, social, cultural, and ceremonial processes and therefore individual effects assessments to each subspecies must be undertaken to understand impacts and develop appropriate mitigations for TFN.¹⁰²

⁹⁶ Tsawwassen Written Submission, Page 8.

⁹⁷ Hearing Transcript Volume 16, Page 3954, Lines 8-9.

⁹⁸ Hearing Transcript Volume 16, Page 3967, Line 24 to Page 3968, Line 13.

⁹⁹ Hearing Transcript Volume 16, Page 3972, Line 8 to Page 3973, Line 5.

¹⁰⁰ Per Appendix A, Commitment # 52 In the document titled 'From the Vancouver Fraser Port Authority to the Review Panel re: Updated Project Commitments, 5 July 2019, at p 4,' "[t]he VFPA has committed to providing \$500,000 in funding for programs or studies that build on recent and ongoing work related to eulachon and sturgeon in the lower Fraser River. Such programs or studies will be conducted in partnership with Tsawwassen First Nation and Musqueam First Nation, following Project approval." TFN recognizes this commitment and looks forward to collaborating on this important issue.

¹⁰¹ Tsawwassen Written Submissions, Page 8.

¹⁰² Hearing Transcript Volume 16, Page 3965, Lines 23-25; Hearing Transcript Volume 16, Page 3964, Lines 21-22.

78. At a minimum, individual assessment of effects to Chinook and Sockeye are required. Chinook populations have been in decline.¹⁰³ As this species resides temporarily on Roberts Bank, it stands to be significantly affected by the Project. Proposed offsetting to mitigate the Project's effects remains uncertain in terms of success and may be non-responsive to access-related concerns of TFN members.¹⁰⁴ Access to Sockeye salmon by Tsawwassen Members is also in decline. For many Members, salmon fishing is changing from an annual tradition to an event they can participate in only occasionally.¹⁰⁵
79. There has been insufficient investigation to confirm that the Project is unlikely to have significant impacts on species of fish that were not directly evaluated in the assessments completed to date, including eulachon and sturgeon. The Nation requires sufficient information about the impacts of the Project on all affected fish species that are significant to Tsawwassen culture.

Crab

80. Tsawwassen has grown increasingly reliant on crab for its FSC fishery. The increasing importance of crab means that Tsawwassen is highly concerned about any adverse effects on crab populations, health or habitat.¹⁰⁶ In order to better understand the effects of the Project, and the adequacy of proposed mitigation measures, TFN commissioned its own independent crab study.¹⁰⁷

¹⁰³ Hearing Transcript Volume 16, Page 3966, Lines 1-9.

¹⁰⁴ Hearing Transcript Volume 16, Page 3965, Lines 15-18.

¹⁰⁵ Hearing Transcript Volume 16, Page 3949, Lines 23-25; We note that this year has been catastrophic for salmon return at the Fraser River, with only 13% of the original forecast returning; Jen St. Denis and Ainslie Cruickshank, "4.8 million sockeye salmon were expected at B.C.'s Fraser River – just 628,000 showed up", *The Star* (22 August 2019), online: <<https://www.thestar.com/vancouver/2019/08/22/48-million-sockeye-salmon-were-expected-at-bcs-fraser-river-but-just-628000-showed-up.html>>; CBC News, "Sockeye returns plunge in B.C., official calls 2019 'extremely challenging'" (22 August 2019), online: <<https://www.cbc.ca/news/canada/british-columbia/sockeye-returns-plunge-in-b-c-official-calls-2019-extremely-challenging-1.5256443>>.

¹⁰⁶ Tsawwassen Oral Presentation, Slide 17.

¹⁰⁷ Tsawwassen First Nation, Dungeness Crab Abundance and Movement Study in the Roberts Bank Terminal 2 Project Area, Prepared by LGI Limited, Page 17 [*Dungeness Crab Abundance and Movement Study*].

81. The independent crab study reported, among other things, likely significant adverse effects on TFN's ability to harvest crab from the Project.¹⁰⁸ TFN's subsequent responses to undertakings further outlined the likely significant adverse effects of the Project on TFN crabbing.
82. TFN is also concerned about the Project's impact of gravid female crab, and their numbers within the current and proposed Navigational Closure Area (the "NCA").¹⁰⁹ Significant work is required protect their productivity, but this work has yet to be accomplished by the Proponent. In the absence of that information, the Review Panel should conclude that the Project is likely to have significant adverse impacts to reproductive rates among crab by removing habitat in which gravid, or 'pregnant' crabs preferentially reside. The Panel must, in turn, conclude that this has the potential to affect harvests.
83. To expand on this point, the increase in the size of the NCA comes at the expense of losing high quality habitat to the footprint of the Project. Further, 43% of the proposed expanded NCA is located in deep water habitat (> 50 meters) that Tsawwassen First Nation FSC fishermen cannot fish due to gear limitations, and 30% of the expanded NCA is located in habitat that is too shallow (< 2 meters). In the result, a total of 73% of the proposed expanded NCA is either too deep or too shallow for crab fishing.¹¹⁰
84. The expanded NCA will only provide temporary refuge from the commercial fishery as males move inside and outside the current NCA. Overall, the study shows that there will be a 50% reduction in optimal (2-20 meter) FSC crab fishing area, and a 20% reduction in accessible (2-50 meter) FSC crab fishing area due to the Project. Therefore, the proposed configuration of the expanded NCA does not adequately offset the loss in FSC fishing opportunity and catch, as more fishing area will be lost than gained.¹¹¹

¹⁰⁸ Dungeness Crab Abundance and Movement Study, Page 16.

¹⁰⁹ Dungeness Crab Abundance and Movement Study, Page 21.

¹¹⁰ Dungeness Crab Abundance and Movement Study, Page ii.

¹¹¹ Dungeness Crab Abundance and Movement Study, Page ii.

85. The losses identified by the study represent a best case scenario for TFN. If the mitigation measures proposed are less effective than predicted, then Tsawwassen's access to its crab fishery will be reduced to an even greater degree than indicated above.¹¹²
86. In summary, the proposed mitigation measures for crab – chief among which is expanding the NCA – remain uncertain, partial and unsatisfactory. TFN's independent crab study demonstrates that expanding the NCA is not an adequate accommodation, as the Project will occupy optimal crabbing area that cannot be replaced.¹¹³ In addition, there are issues with the water depth in the expanded area, the equipment required to crab in that location, and competing regulatory regimes.¹¹⁴
87. Accordingly, TFN submits that the Review Panel should conclude that the Project is likely to have significant adverse impacts on crab and TFN crabbing and must recommend that the Port, DFO and TFN undertake further collaborative efforts to seek to resolve these concerns before a decision on the Project.

Orange Sea Pens

88. TFN is also concerned about the uncertainty of the proposed mitigation strategy with respect to Orange Sea Pens. In particular, TFN is concerned that studies to date indicate that Orange Sea Pen transplanting has only a moderate likelihood of success and that there are no suitable mitigation alternatives.¹¹⁵
89. More work is required in this area to determine whether and how potential adverse effects of the Project can be mitigated. The Proponent has stated that it

¹¹² Letter to Review Panel from Tsawwassen First Nation Re: Submission of Tsawwassen First Nation independent crab study, 12 July 2017.

¹¹³ Hearing Transcript Volume 16, Page 3952, Lines 6-9; Dungeness Crab Abundance and Movement Study, Page ii.

¹¹⁴ Dungeness Crab Abundance and Movement Study, Page 17.

¹¹⁵ Tsawwassen Written Submission, Page 9.

is not logistically feasible to transplant the entire orange sea pen aggregation out of the Project's footprint.¹¹⁶ TFN requires information about the environmental outcomes of a scenario in which the translocation is unsuccessful and the local population of sea pens becomes depleted or extirpated.

90. The Proponent asserts that transplanting a portion of the existing aggregation of Orange Sea Pens is achievable and that the Proponent will work with regulators and other stakeholders to determine an appropriate transplant target.¹¹⁷ Tsawwassen's views and perspectives must inform any discussion or consideration as to what is considered an appropriate target.

Marine Mammals

91. The Project stands to cause adverse impacts to marine mammals in Tsawwassen Territory in various ways. Tsawwassen is deeply troubled about the possible significant impact to species of primary importance to its culture. As noted above, Southern Resident Killer Whales have significant value to TFN and are critical for Tsawwassen identity, as described in the oral hearing on June 1, 2019: they are "central to [TFN] culture and... identity."¹¹⁸
92. TFN finds it extremely troubling to hear that the Project will result in the destruction of critical habitat for Southern Resident Killer Whales.¹¹⁹ Cumulative effects from developments on the Salish Sea have serious impacts on the outlook of the species.¹²⁰ As Southern Resident Killer Whales are central to Tsawwassen culture, the anticipated direct loss of marine habitat within the Project footprint is highly alarming. The Review Panel should conclude that that the destruction of any critical habitat is a significant adverse effect.

¹¹⁶ Roberts Bank Terminal 2 Sufficiency Information Request #05 (IR5-05), Page 2.

¹¹⁷ Roberts Bank Terminal 2 Sufficiency Information Request #05 (IR5-05), Page 2.

¹¹⁸ Hearing Transcript Volume 16, Page 3955, Lines 9-10.

¹¹⁹ Hearing Transcript Volume 16, Page 3955, Lines 5-7.

¹²⁰ Hearing Transcript Volume 16, Page 3955, Lines 5-11.

93. There is also concern about the effects of underwater noise on Southern Resident Killer Whales. Underwater noise from the Project stands to disrupt the natural behaviour of the whales, as well as other mammals and biota of significance to TFN, such as baleen whales and pinnipeds. In addition, increased noise may affect the main prey for marine mammals, thus affecting them by reducing their ability to locate prey.¹²¹ As such, the Review Panel must recommend that further consideration be given to protecting the Southern Resident Killer Whale population against the additional marine traffic expected from the Project before a decision on the Project.

Marine Vegetation and Marshland

94. TFN is troubled by the fact that that their marshes are already in severely diminished condition, and will continue to deteriorate.¹²² TFN's concerns about the potential incremental addition of adverse environmental effects of the Project on marine vegetation, particularly the brackish marshes and eelgrass beds of the Fraser River delta, may be significant (given the cumulative deterioration of those environments to date) and have not been satisfactorily addressed.¹²³ Tsawwassen has a Treaty right to gather plants in areas that overlap the Project footprint, including marine plants and those that grow on the foreshore.¹²⁴ TFN is concerned about cargo or fuel spills on the marshes and the lack of information about how such spills would be remediated.
95. TFN encourages the Panel to think strategically about the kind of coordinated work that will be required to restore and enhance the area's marine vegetation, should the Project proceed. Any recommendation must include a plan to restore and protect TFN marshland. TFN requires a more detailed assessment of its concerns by Canada to assess whether proposed mitigation measures are sufficient.

¹²¹ Hearing Transcript Volume 16, Page 3955, Lines 2-5; Tsawwassen Oral Presentation, Slide 18.

¹²² Hearing Transcript Volume 16, Page 3957, Lines 6-13; Tsawwassen Oral Presentation, Slide 21.

¹²³ Tsawwassen Written Submission, Page 14.

¹²⁴ Tsawwassen Written Submission, Page 14.

Geomorphology, sedimentation and the foreshore

96. TFN is concerned that the Project may change the geomorphology of the area, including natural systems and river dynamics in the Fraser River.¹²⁵ Tsawwassen is worried about increased sedimentation, and the way this will affect the foreshore.¹²⁶ TFN's concerns related to geomorphology and sedimentation have yet to be addressed in a satisfactory manner.
97. TFN's view is that the damaged foreshore must be rejuvenated instead of simply enhancing new areas to offset the Project's effects. TFN is interested in exploring the possibility of breaching the causeway to help restore the conditions on the foreshore.¹²⁷
98. The Proponent has proposed to build marshes, mud flats, eelgrass, rocky reefs and gravel beaches in order to mitigate the Project effects.¹²⁸ There is a great deal of uncertainty about the success of these proposals. Due to this uncertainty, TFN is unable to comment substantively on whether these are appropriate mitigation measures. As a procedural matter, TFN says that these proposals must be developed and assessed in detail before a decision can be made on the Project.

Human Health

99. Health Canada has indicated that it does not accept the Proponent's predictions that the effects to health from impacts to air quality will be negligible. It recommends monitoring to verify the Proponent's predictions.¹²⁹ Given the doubt about the Proponent's findings, the Review Panel should recommend that the Port be required to develop, prior to a decision on the Project, clear plans for responding in the event that monitoring confirms Health Canada's concerns. The

¹²⁵ Tsawwassen Written Submission, Page 14.

¹²⁶ Hearing Transcript Volume 16, Page 3957, Lines 22-24; Tsawwassen Oral Presentation, Slide 22; Tsawwassen Written Submission, Page 14.

¹²⁷ Hearing Transcript Volume 16, Page 3958, Lines 6-8.

¹²⁸ Hearing Transcript Volume 16, Page 3966, Lines 15-19.

¹²⁹ Hearing Transcript Volume 16, Page 3956, Lines 11-18.

Proponent must be required to define an adaptive monitoring protocol and process for air issues, with details about regular meetings, data sharing, and triggers for action.¹³⁰ The Proponent must work with TFN to devise health and air quality initiatives specific to Tsawwassen Members.

100. A study of TFN Members' consumption rates, particularly of crab, is required to test the assumptions underlying Health Canada's Human Health Risk Assessment and determine whether that assessment represents a reliable predictor of health effects from the Project on members. If TFN crab consumption is above the value identified by Health Canada as the "average consumption rate," then the health study completed is of little weight and must be redone with the TFN-appropriate consumption values.¹³¹

Invasive Species

101. Tsawwassen Members have raised numerous concerns about the potential for the Project to contribute to an increase in invasive species in Tsawwassen Territory. TFN worries that invasive species will be introduced by truck and rail. Invasive plant species have already displaced plants traditionally used for medicine and other purposes. Berries that were traditionally enjoyed, such as thimbleberries and huckleberries, have been displaced by invasive species, such as blackberries.¹³² Habitat restoration is required to restore various species that have been traditionally relied on by Tsawwassen Members.
102. TFN is also worried about the potential for invasive species to be introduced by ship, which may lead to aquatic invasive species along the shores.¹³³ Invasive species can have a devastating effect on the native plants along British Columbia's coast. Various measures are required to address this issue, such as

¹³⁰ Hearing Transcript Volume 16, Page 3956, Lines 15-18.

¹³¹ Tsawwassen Written Submission, Page 12; Hearing Transcript Volume 16, Page 2956, Lines 2-18; Tsawwassen Oral Presentation, Slide 20.

¹³² Hearing Transcript Volume 16, Page 3994, Lines 2-10.

¹³³ Hearing Transcript Volume 16, Page 3951, Lines 20-21.

monitoring, reporting, adaptive management, and eradication. TFN must have a meaningful role in any such mitigation measures.¹³⁴

103. Neither the Proponent nor Canada has provided adequate responses to TFN's concerns about invasive species. As noted, TFN is interested in exploring potential habitat restoration in order to restore native plants to Tsawwassen Lands. Proposed habitat restoration projects require further discussion and examination, which must be done in collaboration with TFN, taking into account Indigenous knowledge.

Increased Traffic

104. Access to Tsawwassen Lands is already constrained by the George Massey Tunnel bottleneck. In addition, there has been increased traffic from other recent developments that must be taken into account. TFN is concerned that the Project will result in even greater increased road and rail traffic through Tsawwassen Lands.¹³⁵
105. TFN is also worried that the additional traffic will make it hard for Members, residents and others to travel within Tsawwassen Lands and the surrounding area. Appropriate mitigation measure requires a joint effort by Canada and British Columbia.¹³⁶ The effective mitigation of this problem would also help with air quality issues.

Increased Noise

106. Members of Tsawwassen have provided evidence regarding the impact of noise on their community, including the effects felt by the current levels of noise. One member gave a compelling first-hand account of the way the noise causes stress, and that current noise levels have already had an effect on animals,

¹³⁴ Hearing Transcript Volume 16, Page 3951, Lines 12-20.

¹³⁵ Hearing Transcript Volume 16, Page 3951, Lines 1-7; Tsawwassen Oral Presentation, Slide 12.

¹³⁶ Hearing Transcript Volume 16, Page 3951, Lines 7-9; Tsawwassen Oral Presentation, Slide 12.

causing dogs and cats to lose hair.¹³⁷ This member also explained how the stress that comes from living with constant noise affects interpersonal relationships.¹³⁸

107. Noise pollution is a complex issue. Noise cannot be easily contained. Further investigation on recommendations to mitigate the effects of noise is required. Health Canada has taken TFN's concerns regarding low frequency noise seriously and is recommending mitigations for cumulative effects.¹³⁹
108. Health Canada has also taken seriously TFN's concerns regarding noise effects, and Health Canada has recommended additional assessment specific to worst case scenarios in order to identify effects on experience of the environment. The additional noise assessment that Health Canada is requiring must be undertaken in conjunction with TFN.

Light Pollution

109. A gap remains in identifying a means to assess and mitigate cumulative effects of increased lighting from the Project on TFN's culture and way of life. This issue is connected to the cumulative effects on rights. Further investigation is required regarding impacts and potential mitigation measured. The effects of light pollution on the use of Brunswick point must be explicitly included in the assessment of cumulative effects on rights.¹⁴⁰

Marine Accidents

110. Tsawwassen has also not been provided sufficient information to alleviate its marine shipping concerns, in particular its concerns about accidents and malfunctions. Canada's request for modelling is important and is welcomed by TFN. It is crucial that any modelling includes a release location near the mouth of

¹³⁷ Hearing Transcript Volume 16, Page 3987, Lines 15-24.

¹³⁸ Hearing Transcript Volume 16, Page 3987, Line 14 to Page 3988, Line 4.

¹³⁹ Hearing Transcript Volume 16, Page 3956, Lines 21-25.

¹⁴⁰ Tsawwassen Written Submission, Page 11-12.

the Fraser River to understand whether currents and salinity conditions will result in a trajectory up the Fraser River.¹⁴¹

111. The collection of shore-zone and pre-SCAT data (mapping and segmentation) and the development and testing of Geographic Response Plans for the Fraser River estuary should be top priorities. TFN must be involved in these data collection exercises. Moreover, an emergency response program and facilities must be set up on TFN lands.¹⁴²
112. TFN is also concerned that increases in ship traffic, or vessel size, could pose safety hazards to Members out on the water. TFN has raised concerns about vessel collisions, loss of fishing gear, and reduced access to preferred fishing sites. It appears the Proponent's mitigation measure would be for TFN fishers to change their behaviour, as opposed to the Project being changed to accommodate TFN fishers.¹⁴³ Given that TFN Members have constitutionally-protected rights to fish in their Territory, moving out of a ship's way does not represent mitigation. Acceptable mitigation strategies must be explored before governments decide whether or not to approve the Project.

Cumulative Effects

113. It is important for the Review Panel to recognize that all of the potential adverse environmental effects and increased risks described above will take place in a context in there are many existing cumulative effects from pre-existing developments. The Review Panel has not been presented with adequate information about how the Proponent or governments will address this concern
114. TFN has long advocated for a cumulative effects assessment conducted on a regional basis for the entire Fraser River Lowland. As committed stewards of the lands, waters and resources of Tsawwassen Territory, TFN supports such an

¹⁴¹ Tsawwassen Written Submission, Page 7.

¹⁴² Tsawwassen Written Submission, Page 7.

¹⁴³ Hearing Transcript Volume 16, Page 3953, Lines 1-11.

initiative not only to describe the environmental state of the present situation, but also to guide management decisions to ensure the sustainability of valued components of crucial importance to TFN.¹⁴⁴

115. An example of a high priority for a cumulative effects assessment is the foreshore marshes. The foreshore (intertidal) marshes of the Fraser River Delta comprise critical habitat for many high-profile species of central importance to TFN. Unfortunately, those marshes are experiencing an ongoing decline due to cumulative adverse effects caused by such forces as industrial developments occupying foreshore land, dredging that alters riverbed profiles, diking and drainage that have altered marsh hydrology, grazing and grubbing by an overabundant population of snow geese, and rising sea levels that cause “coastal squeeze” (the incremental loss of shoreline habitats in front of immovable shoreline structures such as dikes).¹⁴⁵
116. TFN’s view is that the ecosystem is in dire need of a strategic marsh restoration program, one that goes beyond project-by-project offsetting (as contemplated by the RBT2 project). A regional environmental assessment is required to be initiated and undertaken at a government level, which must involve TFN in a very substantial and meaningful way.¹⁴⁶
117. TFN Members already experience black soot in their homes, which they have been told originates from diesel trucks and ships at the port.¹⁴⁷ The presence of soot in homes negatively impacts the well-being of the community, particularly when this problem affects the homes of Elders.¹⁴⁸ This issue has yet to be resolved and there is no compelling basis on which to believe that this problem will not be exacerbated by the increased traffic associated with the Project.

¹⁴⁴ Hearing Transcript Volume 16, Page 3958, Lines 12-19; Tsawwassen Oral Presentation, Slide 23.

¹⁴⁵ Tsawwassen Oral Presentation, Slide 21.

¹⁴⁶ Hearing Transcript Volume 16, Page 3959, Lines 1-3.

¹⁴⁷ Hearing Transcript Volume 16, Page 3994, Line 22 to Page 3995, Line 1.

¹⁴⁸ Hearing Transcript Volume 16, Page 3995, Line 22 to Page 3996, Line 1; Hearing Transcript Volume 16, Page 3998, Line 15 to Page 3999, Line 13.

118. If the Project proceeds, TFN also has concerns about storm pollution.¹⁴⁹ Environment and Climate Change Canada (“**ECCC**”) supports TFN’s position and ECCC has requested additional information about water quality effects of storm discharge. Depending on the results of this additional information, TFN may request detention facilities or other mitigations for managing storm releases.¹⁵⁰

Possible Alternatives

119. In addition, TFN understands that a land-based intermodal yard (“**IY**”) is possible. TFN submits that this option requires further investigation prior to recommending the Project.¹⁵¹ At this time, TFN remains unable to properly assess the Project without being given detailed information on the advantages and disadvantages of a land-based IY.
120. To properly consider the feasibility of a land-based IY, TFN requests that an assessment be completed regarding the possibility of locating the IY on the mainland adjacent to Deltaport Way. This alternative appears likely to mitigate impacts on Tsawwassen Treaty rights, including impacts on access to crabbing areas.¹⁵²
121. The Proponent has confirmed that a land-based intermodal yard is “a technically and economically feasible option.”¹⁵³ In order to properly assess the Project, options that are technically and economically feasible options that may reduce impacts on Aboriginal and Treaty rights must be thoroughly examined before the federal and provincial governments decide whether or not to approve the Project after receiving the Review Panel’s report.

¹⁴⁹ Tsawwassen Written Submission, Page 13.

¹⁵⁰ Tsawwassen Written Submission, Page 14.

¹⁵¹ Hearing Transcript Volume 16, Page 3951, Lines 23-25; Tsawwassen Oral Presentation, Slide 14.

¹⁵² Tsawwassen Oral Presentation, Slide 14.

¹⁵³ Hearing Transcript Volume 16, Page 3952, Lines 11-13.

PART V - CONCLUSION

122. In his closing remarks at the community hearing, Chief Baird explained that he hoped that the Review Panel and the Port realize how serious an issue the Project is for TFN and “how serious[ly] it affects the Tsawwassen people.”¹⁵⁴ Among other things, the Project will constitute a large step in the progressive alienation of Tsawwassen people from the sea that has always been the backbone of their culture. The Project’s impacts on Tsawwassen are particularly grave given that the marine area has taken on increased significance over the last century in light of the heavy development of the terrestrial portion of TFN territory.
123. Tsawwassen’s participation in this environmental assessment has been constructively directed at assisting the Review Panel to discharge its mandate to identify the potentially significant impacts of the Project on TFN’s rights, including culture, lands, and community.
124. TFN respectfully submits that the Panel must conclude come to the following conclusions:
- a. **The Project will likely result in significant impacts on Tsawwassen under s.5(1)(c) of CEEA, 2012 and on Tsawwassen’s constitutionally-protected rights.** The evidence clearly demonstrates that the Project is likely to have a range of adverse impacts on TFN across multiple pillars supporting TFN’s way of life. The potential emissions, air quality, additional traffic, dust levels and noise levels, among other Project effects, will have significant impacts on TFN’s traditional way of life, including fishing, crabbing, gathering and overall quality of life. Critical mitigation measures are yet to be developed, such that it is not possible to conclude at this time that they will effectively mitigate the impacts on TFN.

¹⁵⁴ Hearing Transcript Volume 16, Page 4082, Lines 17-25.

- b. **The Project will likely cause significant adverse environmental effects and further efforts are required to evaluate and mitigate the Project's potential environmental effect.** In light of the large scale of existing cumulative effects and the Review Panel's duty to apply the precautionary principle, the Review Panel should conclude that the Project is likely to have significant environmental effects on a number of valued components important for TFN – such as crab, killer whales, and others – and, in any event, considerably more work is required to gather information and develop mitigation measures before it can reasonably conclude that environmental effects will not be significant.
125. It is appropriate to end this submission just as Chief Baird closed the community hearing, by reiterating TFN's expectation that the Review Panel will consider how to move forward in a "positive and healthy way"¹⁵⁵ for Tsawwassen people. With that sentiment in mind, TFN asks the Review Panel to assist the Proponent, the Crown and TFN in the work ahead by clearly setting out recommendations that the Proponent and the Crown must undertake, through further engagement with TFN, before governments decide whether or not to approve the Project.
126. More clearly than anything else, this environmental assessment process has confirmed that there is much more work to be done.

¹⁵⁵ Hearing Transcript Volume 16, Page 4082, Lines 23-24.

APPENDIX – LIST OF TFN RECOMMENDATIONS

Recommendations**

***Please note that the fact that TFN is providing a list of recommendations should not be taken as indication that these recommendations will be adequate to address the concerns raised by TFN or that these recommendations are sufficient for the Crown to adequately discharge its duty to consult and accommodate adverse impacts of the Project on TFN. TFN also notes the difficulty in developing effective or concrete recommendations given the many gaps in the Port's materials.*

TFN recognizes that the Port has made numerous commitments to develop and implement a range of management, offsetting and mitigation plans, which are to include input and approvals from qualified professionals. Although a qualified professional provides valuable guidance, the input from a qualified professional is not a substitute for TFN knowledge. Any management, offsetting or mitigation plans must be developed in partnership with and to the satisfaction of TFN. TFN must be provided the necessary resources to participate fully in the development of such plans.

No.	Related Project Concern/Effect:	TFN Recommendation
1.	<i>Effects on TFN Treaty rights</i>	Canada to complete, prior to a federal decision on the Project, an assessment of impacts of the Project on TFN rights using a methodology co-developed with TFN. Canada to reflect measures relating to that assessment in the decision statement for the Project.
2.	<i>Effect on TFN Treaty rights, culture and way of life</i>	Canada to require that the Port submit a TFN-specific cultural and community mitigation and offset plan, co-developed with TFN, prior to the federal decision on the Project.
3.	<i>Effect on TFN Treaty rights</i>	Canada to establish and fund a government-to-government oversight body for the Project, inclusive of TFN, to assist with regulatory oversight and compliance of the Project. In addition, the Review Panel should recommend that, if the Project is approved, this oversight body have broad power in respect of any draft mitigation and monitoring plans to either not approve inadequate plans, give further directions with respect to steps

		that must be taken to remedy any deficiencies, or to impose terms or conditions.
4.	<i>Effect on TFN Treaty rights, culture and way of life; insufficient information regarding alternatives</i>	The Port to complete an assessment of alternatives regarding locating the intermodal yard on the mainland adjacent to Deltaport Way, including an evaluation of the benefits of such an alternative for mitigating TFN concerns. Canada to require the Port to submit that assessment prior to the federal decision on the Project.
5.	<i>Effect on TFN Treaty rights, culture and way of life; insufficient information regarding alternatives</i>	The Port to undertake new efforts to assess the option of breaching the causeway and to provide to TFN any research that has previously been undertaken with respect to this issue. Canada to require the Port to undertake a collaborative process with TFN for this assessment and confirm that it must be completed prior to the federal decision on the Project.
6.	<i>Effect on TFN Treaty rights, culture and way of life; effects on crabs and crabbing</i>	The Port and Canada, particularly DFO, to design measures to address TFN's concerns with the Navigational Closure Area, prior to the federal decision on the Project. Canada to require that a notice confirming TFN's consent to the measures developed to address TFN's crabbing-related concern before the issuance of any Fisheries Act authorizations for the Project.
7.	<i>Effect on TFN Treaty rights, culture and way of life; effects on crabs and crabbing</i>	The Port and Canada to work with TFN to develop a process for monitoring effects on crab and TFN crabbing and to require concrete mitigation and adaptive management responses to Project effects identified in the TFN crab study.
8.	<i>Effect on TFN Treaty rights, culture and way of life</i>	The Port and Canada, including relevant agencies such as the Coast Guard, to construct and maintain, at no cost to TFN, new marina facilities to be used by TFN to facilitate TFN's continued access to the sea and to support TFN exercise of its sea-based culture.
9.	<i>Effect on TFN Treaty rights, culture and way of life; effects on TFN use of lands and resources</i>	The Port and Canada each to develop new measures to support TFN harvesting marine resources for the life of the Project with the objective of creating a net gain in TFN's ability to

		access and use marine harvesting areas. Canada to require that these measures be confirmed prior to the federal decision on the Project.
10.	<i>Effect on TFN Treaty rights, culture and way of life</i>	The Port and/or Canada to co-develop commitments for supporting TFN language protection, such as sea-based learning activities
11.	<i>Cumulative environmental effects on TFN Treaty rights, culture and way of life; effects on TFN use of land</i>	Canada, British Columbia, Metro Vancouver and the Port to fund and undertake a cumulative effects assessment conducted on a regional basis for the entire Fraser River Lowland. The terms of reference of reference for this assessment should be co-developed with TFN and other indigenous groups and include a commitment to a process to work on reversing effects that exceed ecological thresholds. The terms of reference should be completed before a federal decision on the Project.
12.	<i>Cumulative environmental effects on TFN Treaty rights, culture and way of life</i>	The Port to develop a cumulative effects monitoring and mitigation plan for the life of the Project that: <ul style="list-style-type: none"> a. includes a list of valued components (“VC”) supplied by TFN (including those with non-quantifiable parameters, such as cultural identify and language) b. identifies monitoring parameters that indicate potential adverse effects to the Cumulative Effects VCs c. specifies the role of TFN (and funding for TFN involvement) in monitoring and reporting on the Cumulative Effects VCs during operations; d. specifies mitigation and protocols to reduce effects and reverse Cumulative Effects VCs during operations, including VC-specific management plans developed with TFN; and e. identifies thresholds for triggering adaptive management or mitigation strategies (including evaluation and possible implementation of project-specific mitigation to halt an adverse trend

13.	<i>Effect on human health</i>	The Port to fund a TFN diet study to confirm assumptions regarding consumption in the HHRA and, if TFN crab consumption is above the value identified by health Canada as the “average consumption rate,” redo the health study with the TFN-appropriate consumption values.
14.	<i>Human Health – Air Quality</i>	The Port to define, with full and effective involvement by TFN, an adaptive monitoring protocol and process for air issues with details about regular meetings, data sharing, and triggers for action. This should be completed before a federal decision on the Project so that details can be included in the federal decision statement.
15.	<i>Noise concerns</i>	The Port to undertake an additional noise assessment in conjunction with TFN. This should be completed before a federal decision on the Project so that additional mitigation measures identified through the assessment can be included in the federal decision statement.
16.	<i>Effect on human health</i>	The Port and/or Canada to fund health initiatives on TFN Lands to assist TFN members already affected from the adverse effects of the Port in their Territory and to enable a more proactive approach to health concerns, including initiatives to revitalize and grow traditional medicines.
17.	<i>Accidents, malfunctions, spill preparedness</i>	Canada and/or the Port to collect, in collaboration with TFN, shorezone and pre-SCAT data and the development and testing of Geographic Response Plans (GRPs) for the Fraser River estuary. All data to be shared with TFN.
18.	<i>Accidents, malfunctions, spill preparedness</i>	The Port and/or Canada to establish an emergency response program and facilities on TFN Lands, if the Project is approved
19.	<i>Fish</i>	The Port and/or Canada to undertake studies regarding Project effects on Sturgeon; Eulachon; and Emerging Fisheries (TFN recognizes the Port’s commitment to funding up to \$500,000 for programs or studies). A list of studies should be co-developed by the time of the federal decision on

		the Project so that it can be included in the federal decision statement.
20.	<i>Fish</i>	Canada to require the Port to provide further detail on the proposed salmon offsetting plan for inclusion in the federal decision statement. Canada to require that the Port submit a notice confirming TFN consent to the planned offset measures.
21.	<i>Habitat restoration and offsetting</i>	The Port to prioritize restoration of TFN deteriorated marshland and foreshore in its habit restoration and offsetting plan and to put funds sufficient for undertaking that work into escrow. A list of TFN marshlands and foreshore areas for restoration, with confirmed costing, should be completed before a decision on the Project.
22.	<i>Invasive species</i>	The Port to develop a Marine and Terrestrial Invasive Species Management Plan to TFN's satisfaction. The Plan must include, among other things, measures relating to TFN VCs and measures to create a net increase of traditional plants (through, e.g., habitat restoration activities) in TFN territory. Canada to require that these measures be confirmed with TFN prior to the federal decision on the Project.
23.	<i>Light</i>	Canada to require that the Port's Light Management Plan include measures, co-developed with TFN, to reduce the effects of light pollution on use of Brunswick Point. The Port and Canada to develop measures with TFN to offset unmitigated light effects on TFN.
24.	<i>Marine mammals</i>	The Port to develop a Marine Mammal Management Plan to TFN's satisfaction. The Plan must include, among other things, measures relating to TFN valued components and fully include and fund TFN involvement in all monitoring during construction and operation.

25.	<i>Marine vegetation</i>	Canada to require the Port to develop a plan to create and fund to restore and protect TFN marshlands and other marine vegetation in TFN's territory to result in a net gain in productivity of marshlands and other marine vegetation identified by TFN.
26.	<i>Orange Sea Pens</i>	The Port to include and fund TFN's participation in the determination of an appropriate target for transplant of Orange Sea Pens and an adaptive management strategy with appropriate triggers, targets, and funds, in the event that transplantation efforts do not succeed as predicted.
27.	<i>Storm pollution</i>	The Port to include and fund TFN involvement in the design of storm pollution and drainage measures and in all monitoring relating to storm pollution.
28.	<i>Traffic</i>	Canada and British Columbia to co-develop measures to mitigate traffic concerns before government decisions on the Project, including undertaking a traffic impact assessment and traffic management plans that includes consideration of concerns specific to TFN.
29.	<i>Effects on TFN's rights and culture</i>	Canada to require that all mitigation and management plans developed by the Port require <u>approval</u> before the Port can proceed with construction and operation. Given the lack of details regarding many mitigation plans at this point, a condition that simply requires the "submission of a plan" is inadequate to ensure that effects on TFN and the environment are mitigated and/or accommodated. The Review Panel should recommend that CEAA, in consultation with the government-to-government committee referred to in recommendation #3 above, be responsible for approving or rejecting mitigation plans.

30.	<i>Effects on TFN's rights and culture</i>	The Port to, prior to being able to commence with construction, negotiate and reach agreement with TFN regarding the activities the First Nation will participate in or engage in respect of the post-Project approval regulatory phase – such as environmental monitoring – and an agreement on a budget to support these activities.
31.	<i>Effects on TFN's rights and culture</i>	Canada to develop measures with TFN to address and/or accommodate TFN concerns that are not mitigated by the Port, in the event the Project is approved.
32.	<i>Effects on TFN's rights and culture</i>	British Columbia to develop measures with TFN to address and/or accommodate TFN concerns that are not mitigated by the Port, in the event the Project is approved.
33.	<i>Effects on TFN's rights and culture</i>	The Port and/or Canada to develop, in consultation with TFN, and fund an insurance regime that will fully compensate TFN for any loss to its culture and/or constitutionally protected rights resulting from a spill or other accident or malfunction in connection with the development or operation of the Project, including where such loss is the result of third-party actions or omissions.