



Environmental
Assessment Office

EAO's Analysis of the National Energy Board Reconsideration Report

*Trans Mountain Expansion Project
EA Certificate #E17-01*

Draft Report for Public Comment

January 15, 2021



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ACRONYMS

B.C.	British Columbia
Certificate	Environmental Assessment Certificate
EAC	Environmental Assessment Certificate
EAO	Environmental Assessment Office
ECCC	Environment and Climate Change Canada
EMSA	Enhanced Maritime Situational Awareness
ENV	Ministry of Environment and Climate Change Strategy
GHG	Greenhouse Gas
GIC	Governor in Council
GSA	Georgia Strait Alliance
HCA	Heritage Conservation Act
Holder	Certificate Holder
IMO	International Maritime Organization
km	Kilometres
m ³	Cubic Metres
MNGD	Ministry of Natural Gas Development (now Ministry of Energy, Mines and Low Carbon Innovations)
MOE	Ministry of Environment and Climate Change Strategy
MOH	Ministry of Health
NEB	National Energy Board
NEEC	National Environmental Emergency Centre
NMCA	National Marine Conservation Area
OGC	Oil and Gas Commission
OPP	Oceans Protections Plan
OSCAR	Oil Spill Containment and Recovery
PIER	Planning for Integrated Environmental Response
PMV	Port Metro Vancouver
PPA	Pacific Pilotage Authority
QP	Qualified Professional
RO	Response Organization
SARA	Species at Risk Act
SCAT	Shoreline Cleanup Assessment techniques
SRKW	Southern Resident Killer Whales
TMEP	Trans Mountain Expansion Project
TMX	Trans Mountain Expansion Project
VFPA	Vancouver Fraser Port Authority
WCMRC	Western Canada Marine Response Corporation
WMT	Westridge Marine Terminal

1.0 INTRODUCTION AND PURPOSE

In September 2019 the British Columbia Court of Appeal (BCCA) made two decisions regarding the Trans Mountain Expansion Project's (TMX or the Project) Environmental Assessment Certificate (EAC) (*Squamish Nation v. British Columbia (Environment)*, 2019 BCCA 321 and *Vancouver (City) v. British Columbia (Environment)*, 2019 BCCA 322). The BCCA decisions upheld most aspects of the provincial environmental assessment process, and did not quash the EAC, but noted that the National Energy Board's (NEB¹) 2016 Report was used as the assessment report to inform the decision to grant the EAC. However, in February 2019 the NEB issued its Reconsideration Report, following a process directed by the Governor in Council (GIC). As a result, the BCCA concluded that the Minister of Environment and Climate Change Strategy and the then Minister of Energy, Mines and Petroleum Resources (Ministers) should have the opportunity to consider the portions of the Reconsideration Report that differed from the NEB's 2016 Report in order to adjust provincial conditions as they consider appropriate in response to those changes, within the limits of provincial jurisdiction.

Consistent with the BCCA decision, the Ministers directed the Environmental Assessment Office (EAO) to initiate a process to identify and consider the portions of the Reconsideration Report that differ from the 2016 Report and provide recommendations regarding any new or amended EAC conditions in response to those portions, within the limits of provincial jurisdiction.

This is a draft report developed for consultation, with the intent of the final version of this report being the EAO's report to Ministers following the provincial reconsideration process. [Sections 1.0](#) through [4.0](#) provide an overview of the background and context for the Project and the reconsideration process, and summarize engagement undertaken by the EAO and the scope of the provincial reconsideration process. [Sections 5.0](#) and [6.0](#) present the EAO's review of topics related to the routine operations of Project-related marine vessels and marine spills, the related concerns and views expressed during EAO's consultation and engagement, including submissions by interested parties, Trans Mountain Pipeline ULC (Trans Mountain), and the public, and EAO's conclusions, which reflect the engagement carried out by the EAO.

2.0 BACKGROUND AND CONTEXT

Trans Mountain is expanding the existing Trans Mountain pipeline system, which transports oil and other products between Edmonton, Alberta and Burnaby, British Columbia (B.C.), with the construction and operation of approximately 987 kilometres (km) of new pipeline. The Project will twin (or loop) the existing system, which consists of a 1147 km, 610 mm (or 24 inch) pipeline between Edmonton and Burnaby, and a distribution line from the tanks at Trans Mountain's Burnaby terminal to the Westridge Marine Terminal (WMT) on Burrard Inlet and another into Washington State. The expansion

¹ On August 28, 2019, the Canada Energy Regulator (CER) superseded the National Energy Board (NEB). As this report refers to the reconsideration process undertaken by the NEB, for clarity and simplicity the NEB will be the agency title referenced throughout this report.

approximately triples the capacity of the Trans Mountain pipeline system and enables an increase in overall pipeline capacity from 47,690 m³/day (m³/d) (300,000 barrels per day [bpd]) to 141,500 m³/d (890,000 bpd). The expansion will increase the WMT capacity from 5 to up to 34 Aframax tankers per month.

In May 2016, the NEB issued the 2016 Report, recommending that the GIC approve the Project. Project-related marine shipping was considered as part of that review under the *National Energy Board Act*, but not under the *Canadian Environmental Assessment Act, 2012* (CEAA 2012). TMX was approved on November 29, 2016 by the GIC, and the NEB issued a Certificate of Public Convenience and Necessity (CPCN OC-064) on December 1, 2016. The provincial EAC was issued on January 10, 2017 for the portions of the Project in B.C.

On August 30, 2018, the Federal Court of Appeal overturned the federal cabinet's approval of the Project, in part because, in the Court's view, the Board unjustifiably excluded Project-related marine shipping from the scope of the "designated project" reviewed under the CEAA 2012. The NEB was directed to reconsider aspects of the 2016 Report related to the application of the CEAA 2012 and the *Species at Risk Act* (SARA) to Project-related marine shipping. The Federal Court of Appeal also overturned the approval of the Project because it determined that Canada fell short of the minimum consultation requirements during Phase III consultation.

On February 22, 2019, the NEB delivered its Reconsideration Report to the Government of Canada, with an overall recommendation that the Project is in the Canadian public interest and should be approved. On June 18, 2019, the GIC directed the NEB to issue a CPCN (OC-065) to the Project, which it did on June 20, 2019. Following the federal approval and an amendment request by Trans Mountain, the EAO reviewed the NEB's Reconsideration Report and the changes to the NEB's conditions referenced in the EAC. An amendment was issued on August 28, 2019, maintaining consistency between the EAC conditions and NEB's conditions. This amendment process is described in further detail in [Section 2.3](#) of this report.

B.C. Supreme Court decisions resulting from judicial reviews challenging the EAC by the City of Vancouver and the Squamish First Nation were appealed to the BCCA. The BCCA held that the EAO's consultation with Squamish Nation was reasonable and met legal requirements and that there was no error in the approach taken by the EAO to the environmental assessment, but the court noted that what is now the NEB's assessment – the Reconsideration Report – was not the assessment report used in deciding to issue the EAC. The court did not quash the EAC but directed that provincial ministers reconsider the EAC conditions in light of the changes to the 2016 Report. The BCCA's Squamish decision noted that the Province cannot order assessments that the NEB expressly refused to order (para. 99).

In response to the BCCA decisions, the Ministers directed the EAO to undertake a review process of the EAC, which is the subject of this report. Ministers considered the BCCA decision and provided direction to the EAO to undertake the provincial reconsideration process. Consistent with the direction of the BCCA, the scope of the Ministers' direction to the EAO was to:

1. Identify and consider the portions of the NEB Reconsideration Report that differ from the NEB's 2016 Report; and

2. Provide recommendations regarding any new or amended EAC conditions in response to those portions, within the limits of provincial jurisdiction.

In this regard, Ministers directed that the EAO provide a report by October 2020, including any recommendations for new or amended conditions, for their consideration. In developing this report and any recommendations, Ministers directed that the EAO should:

- Engage directly and closely with Squamish Nation, Tsleil-Waututh Nation, and the City of Vancouver;
- Engage Trans Mountain to ensure it is fully consulted and its procedural rights are upheld;
- Consult all marine Indigenous nations identified in the EAC; and
- Provide an opportunity for public comment and stakeholder engagement on the draft report of no less than 30 days.

See [Section 4.0](#) of this report for further information on the process and scope of B.C.'s reconsideration process.

2.1 PROVINCIAL ENVIRONMENTAL ASSESSMENT OF TRANS MOUNTAIN

TMX constituted a reviewable project under B.C.'s *Environmental Assessment Act* (2002), and also required a federal environmental assessment (EA) under CEAA 2012 and the *National Energy Board Act*, which was undertaken by the NEB. In 2010 the Minister of Environment and the NEB entered into an EA Equivalency Agreement (NEB-EAO Agreement). The NEB-EAO Agreement stated that B.C. would accept the NEB's EA of a project that would otherwise have to be reviewed under B.C.'s *Environmental Assessment Act* (2002) as an equivalent assessment, and that the proposed project may proceed without a provincial EAC.

In January 2016, the B.C. Supreme Court, in *Coastal First Nations v. British Columbia (Environment)*, 2016 BCSC 34, upheld most of the NEB-EAO Agreement but ruled that projects subject to this agreement still required a decision regarding the issuance of a provincial EAC under the *Environmental Assessment Act* (2002). Therefore, provincial ministers considered Trans Mountain's application, and issued the EAC as described above.

Prior to the Ministers' decision, the EAO coordinated Indigenous consultation activities with Natural Resources Canada, including sharing information, conducting joint consultation meetings, and drafting a joint Consultation and Accommodation Report for the Ministers and the federal GIC. The joint Consultation and Accommodation Report described the consultation process, the key issues of concern raised by Indigenous groups and the potential mitigations, and the Crown's assessment of the seriousness of potential impacts of TMX on Indigenous groups asserted or determined Indigenous rights, including title, and treaty rights (Indigenous Interests). Based on what the EAO heard from this consultation, the EAO developed conditions to address concerns related to areas of provincial jurisdiction.

The EAO prepared a summary assessment report that summarized the key findings of the NEB Report

that were relevant to B.C.'s statutory decision makers (i.e., Minister of Environment and Minister of Natural Gas Development) to inform their decision regarding the issuance of the EAC, under Section 17(3) of the *Environmental Assessment Act* (2002). EAC conditions were developed, some of which incorporate by reference aspects of the conditions recommended by the NEB in its 2016 Report. The key issues of Provincial interest and jurisdiction were discussed in the EAO's Summary Assessment Report, and included vegetation and wildlife, parks, fish and fish habitat, greenhouse gas (GHG) emissions, and terrestrial and marine spills.

As noted above, the referral package was referred to Ministers on December 8, 2016, and Ministers issued the EAC to Trans Mountain on January 10, 2017.

2.2 FEDERAL RECONSIDERATION PROCESS

On August 30, 2018, the Federal Court of Appeal (FCA), in *Tsleil-Waututh Nation et al. v. Attorney General of Canada et al.*, 2018 FCA 153, set aside the federal Certificate (CPCN OC-64) for TMX, concluding that the NEB incorrectly excluded Project-related marine shipping – including effects on the Southern Resident Killer Whales (SRKW) and their use by Indigenous groups – from the scope of the “designated project” reviewed under CEAA 2012. It did note that Project-related marine shipping was considered as part of the original review and report, but under the *National Energy Board Act*.

The FCA stated that the issue of Project approval should be remitted to the federal GIC for redetermination, and the GIC must refer the NEB's recommendations and its terms and conditions back to the NEB for reconsideration. At paragraph 770 of its judgment, the FCA stated:

Specifically, the [NEB] ought to reconsider on a principled basis whether Project-related shipping is incidental to the Project, the application of Section 79 of the [SARA] to Project-related shipping, the [NEB's] environmental assessment of the Project in the light of the Project's definition, the [NEB's] recommendation under Subsection 29(1) of the [CEAA 2012] and any other matter the [GIC] should consider appropriate.

In response to this ruling, the GIC ordered the NEB to undertake a 155-day process to reconsider the following factors:

- the environmental effects of Project-related marine shipping in view of the requirements of CEAA 2012, and
- the adverse effects of Project-related maritime shipping on species at risk, including the Northeast Pacific southern resident killer whale population, and their critical habitat, in view of any requirements of Section 79 of SARA that may apply to TMX.

The process for the reconsideration was established in the NEB's Hearing Order of October 12, 2018.²

² The NEB's Hearing Order can be found here: https://docs2.cer-rec.gc.ca/ll-eng/llisapi.dll/fetch/2000/90464/90552/548311/956726/2392873/3614457/3635362/3620050/A94793-3_NEB_HO_-_Trans_Mountain_Expansion_-_Reconsideration_-_A617I8.pdf?nodeid=3621536&vernum=-2

The Hearing Order set out the List of Issues under consideration, the timeline, steps and procedures for participation. In response to the decision by the GIC and after public consultation the NEB included Project-related marine shipping between the WMT and the 12-nautical-mile territorial sea limit in the designated project to be assessed under the CEEA 2012. The focus of the reconsideration hearing was to consider any necessary changes or additions to the NEB's 2016 Report in light of this inclusion.

The reconsideration hearing involved 118 Intervenors, including 52 Indigenous groups and individuals, eight federal government departments, and the Province of British Columbia. There were also 25 individual Oral Indigenous Traditional Evidence sessions in Calgary, Victoria and Nanaimo. In carrying out the reconsideration, the evidence that was filed in the OH-001-2014 hearing (2014 hearing) was included as part of the record for the MH-052-2018 hearing (2018 hearing). In making its findings, the Reconsideration Panel considered new or updated evidence submitted during the 2018 hearing, as well as relevant evidence from the 2014 hearing.

Following the completion of the process, the NEB delivered its Reconsideration Report to the GIC on February 22, 2019, with an overall recommendation that the Project is in the Canadian public interest and should be approved.³ On June 18, 2019, the GIC issued an Order in Council directing the NEB to issue CPCN OC-065 to Trans Mountain.

NEB's Conclusions

In the 2016 Report, the NEB concluded that the designated Project (which did not, under CEEA 2012, include Project-related marine shipping) is not likely to cause significant adverse effects. However, the NEB found that Project-related marine vessels would contribute to and result in several significant adverse effects to the Southern resident killer whale (SRKW), to Indigenous cultural uses associated with the SRKW, and to GHG emissions from Project-related marine vessels.

After completing the reconsideration hearing, the NEB concluded that the designated Project, which now included Project-related marine shipping, is likely to cause significant adverse environmental effects. The NEB found that GHG emissions from Project-related marine vessels would result in measurable increases and, taking a precautionary approach, are likely to be significant. In addition, the NEB found that the routine operations of Project-related marine vessels are likely to cause significant adverse environmental effects on SRKW, and traditional marine and resource use associated with the SRKW. The NEB found that Project-related marine vessels are not likely to cause significant adverse environmental effects on air emissions, marine fish and fish habitat, marine mammals (other than SRKW) marine birds, socioeconomic conditions (including marine commercial, recreational and tourism use), heritage resources, traditional marine and resource use (other than those associated with the SRKW), and human health.

³ The NEB's Reconsideration Report can be found here: https://docs2.cer-rec.gc.ca/ll-eng/llisapi.dll/fetch/2000/90464/90552/548311/956726/2392873/3614457/3751789/3754555/A98021-1_NEB_-_NEB_Reconsideration_Report_-_Reconsideration_-_Trans_Mountain_Expansion_-_MH-052-2018_-_A6S2D8.pdf?nodeid=3754859&vernum=-2

The NEB also assessed the effects of spills that may occur in connection with Project-related marine shipping. The NEB found that the effects of a spill would be dependent on circumstances, such as the type of product spilled, the location, response time, effectiveness of response, the valued components impacted, weather, and time of year. The NEB remained of the view that although a credible worst-case spill would result in significant adverse environmental and socio-economic effects, such an event is unlikely.

Conditions and Recommendations

The NEB was directed by the GIC to reconsider all federal conditions relevant to addressing Project-related marine shipping.⁴ As a result of the reconsideration process, the NEB confirmed Condition 151, amended Conditions 2, 91, 132, 133, 134, and 144, and removed Condition 131 (Marine Public Outreach Program), but provided it as a recommendation to the federal government. Appendix 15 of the NEB's Reconsideration Report contains a summary of the comments received on the draft conditions and recommendations and a comparison of the draft and final versions.

The NEB also included 16 recommendations to the GIC for measures to mitigate, avoid, or lessen the effects of Project-related marine shipping that the NEB stated are beyond the scope of its regulatory authority or Trans Mountain's control, but within the authority of the federal government. These recommendations include those related to cumulative effects management for the Salish Sea, measures to offset increased underwater noise and increased strike risk posed to SARA-listed marine mammal and fish species, including the SRKW, marine oil spill response, marine shipping and small vessel safety, reduction of GHG emissions from marine vessels, and engagement on the marine safety system with the Indigenous Advisory and Monitoring Committee. The NEB noted that the recommendations were not considered in its significance evaluations, but if implemented they may assist in mitigating effects of all marine traffic in the area. In the recitals to the Order in Council issued on September 20, 2018 the GIC undertook to implement all the recommendations.

In response to outstanding Indigenous concerns raised in consultation, the GIC further amended the NEB's proposed certificate Conditions 6, 91, 98, 100, 124, and 151.

2.3 **TMX EA CERTIFICATE AMENDMENT #1**

On June 24, 2019, subsequent to the NEB's reconsideration process and second GIC decision to approve TMX, Trans Mountain sent a letter to the EAO requesting the following EAC amendments to

⁴ CPCN OC-064, containing the original federal conditions, can be found here: https://docs2.cer-rec.gc.ca/ll-eng/llisapi.dll/fetch/2000/90464/90552/548311/956726/2392873/2981674/3084359/A80871-3_NEB_-_Certificate_OC-064_-_Trans_Mountain_TMX_-_OH-001-2014.pdf?nodeid=3083938&vernum=-2.

GIC Order In Council 2019-0820, containing the GIC revisions to NEB conditions and the GIC commitment to implement all 16 recommendations, can be found here: <https://orders-in-council.canada.ca/attachment.php?attach=38147&lang=en>
CPCN OC-065 containing the revised, final federal conditions can be found here: <https://aeic-iaac.gc.ca/050/documents/p80061/130549E.pdf>.

reflect the changes to the NEB conditions as a result of the NEB reconsideration process:

1. Change the definition of “NEB Condition” in the definitions section of Schedule B of the EAC to reference NEB’s CPCN OC-065 dated June 21, 2019; and
2. Amend EAC Condition 11 (Aboriginal Marine Outreach Program) to remove reference to NEB Condition 131 (Marine Public Outreach Program), since NEB Condition 131 became a recommendation to the federal government and is no longer a NEB Condition.

The EAO sent a letter to all the Indigenous nations listed in Schedule B of the EAC outlining the changes being requested by Trans Mountain on July 16, 2019. The EAO received no comments on the proposed changes.

During this amendment process, the EAO reviewed the NEB’s Reconsideration Report and all other NEB conditions referenced in the EAC. The EAO determined that the only other changes made to the NEB conditions referenced by the EAC conditions were Condition 98 (referenced by EAC Condition 12 Involvement of Aboriginal Groups in Construction and Post-Construction Monitoring) and Condition 100 (referenced by EAC Condition 27 Archaeological – Heritage Resources). By the EAC conditions referencing CPCN OC-065, the changes to these NEB conditions as a result of the NEB reconsideration process became additional requirements in the EAC conditions and maintained consistency between the EAO conditions and the NEB conditions.

Since NEB Condition 131 (Marine Public Outreach Program) became a recommendation to the GIC and was removed from the NEB conditions, EAC Condition 11 (Aboriginal Marine Outreach Program) was amended to remove reference to NEB Condition 131, and the wording from the NEB condition was incorporated into EAC Condition 11 so that the original intent of the condition would not change.

This amendment was issued on August 28, 2019.⁵

3.0 ENGAGEMENT

SQUAMISH NATION, TSLEIL-WAUTUTH NATION, AND CITY OF VANCOUVER

Consistent with the direction from Ministers, the EAO invited Squamish Nation, Tsleil-Waututh Nation, and the City of Vancouver to participate in the provincial reconsideration process. Engagement with the three parties includes the following:

- Providing feedback on the approach and schedule for engagement;
- Reviewing and commenting in an iterative manner on drafts of this Report;
- Proposing changes or additions to EAC conditions, within the scope of the provincial reconsideration process;
- Meeting with the EAO to discuss any outstanding concerns; and

⁵ https://projects.eao.gov.bc.ca/api/public/document/5d67f2205b491e0021980b97/download/TMX%20-%20Amendment_1.pdf

- Reflecting the views of the party in the EAO's Report.

The EAO held meetings with Squamish Nation, Tsleil-Waututh Nation, and the City of Vancouver to discuss the provincial reconsideration process, review early drafts of the EAO's process schedule and report, and discuss perspectives on key issues. The three parties submitted letters to the EAO outlining their key concerns as well as 30 proposed new or revised EAC conditions and four proposed recommendations for the EAO's consideration.⁶ The views expressed are summarized throughout this report under the appropriate sections. The EAO notes that the concerns raised by the three parties are similar to those raised during the 2014 and 2018 NEB hearings, and the three parties consider their concerns to be unresolved or not adequately mitigated.

Squamish Nation, Tsleil-Waututh Nation and the City of Vancouver stated in their submissions that they remain opposed to TMX. The three parties noted that they continue to have significant concerns related to numerous aspects of the Project, including areas that fall outside of the scope of the provincial reconsideration process. The EAO notes that concerns regarding TMX are not limited to those raised during this process.

TRANS MOUNTAIN

Also consistent with Ministers' direction, the EAO engaged with Trans Mountain and provided the following opportunities:

- Providing feedback on the approach and schedule for the process;
- Reviewing and commenting on drafts of this Report;
- Responding to comments submitted to the EAO from parties;
- Reviewing and providing feedback on all proposed new and amended conditions; and
- Meeting with the EAO to discuss any outstanding concerns.

The EAO held meetings with Trans Mountain to discuss the provincial reconsideration process, receive feedback on drafts of the EAO's report, and discuss Trans Mountain's perspective on key issues raised and conditions proposed. Trans Mountain provided a number of submissions to the EAO that included feedback and Trans Mountain's views on the reconsideration process, the EAO's draft report and proposed new and amended condition, and the new and amended conditions proposed by Squamish Nation, Tsleil-Waututh Nation and the City of Vancouver. The views expressed by Trans Mountain are summarized throughout this report under the appropriate sections.

MARINE INDIGENOUS NATIONS

On May 6, 2020, marine Indigenous nations listed in Schedule B of EAC #E17-01 were notified of the commencement of the provincial reconsideration process, and on July 8, 2020 were invited to confirm their interest in participating in the process. Consultation with marine Indigenous nations includes the following:

⁶ Submissions from Squamish Nation, Tsleil-Waututh Nation, City of Vancouver and Trans Mountain can be found on the EAO's Project Information Centre: <https://projects.eao.gov.bc.ca/p/5885121eaecd9001b82b274/documents>

- Opportunities to identify initial perspectives on key changes identified in the NEB Reconsideration Report within provincial jurisdiction;
- Opportunities to meet with the EAO to discuss key interests and concerns;
- Notification of the commencement of the public comment period on the EAO's draft Report; and
- Opportunity to review and comment on the EAO's draft Report.

To date, the EAO has received responses from Malahat First Nation, Tsartlip First Nations, and T'Sou-ke First Nation. The EAO met with each Nation to discuss the provincial reconsideration process and the Nation's preliminary perspectives on key issues.

Snuneymuxw First Nation was not informed of the provincial reconsideration process on May 6, 2020, as they were not listed on the EAC (marine Indigenous nations). Since the EAC was issued in 2017, the EAO has become aware that Snuneymuxw First Nation has indicated that they exercise rights within an area that would be impacted by the Projects and Project-related marine shipping. Furthermore, Snuneymuxw First Nation participated as part of the NEB's reconsideration process. On December 4, 2020, the EAO sent the Snuneymuxw First Nation an introductory letter identifying the provincial reconsideration as a process they may be interested in being engaged. The EAO is seeking to work with Snuneymuxw First Nation to better understand how Snuneymuxw First Nation's distinct rights, interests and relationship to the Lower Mainland and lower Fraser marine areas might be impacted by projects in that area.

OTHER INTERESTED PARTIES

On June 29, 2020, local governments that were intervenors in the NEB reconsideration process were notified and provided a summary of B.C.'s reconsideration process. The EAO also notified these local governments at the commencement of the public comment period on the EAO's draft Report.

Prior to the drafting of this Report, the EAO also received letters and emails from interested parties and the public outside of the planned public comment period:

- The Georgia Strait Alliance submitted a briefing note and recommendations for condition amendments and new Project conditions around marine spill response and clean-up, human health, and spill remediation, recovery and compensation.⁷ The EAO also received over 2,500 emails from the public, requesting new conditions aligned with those submitted by the Georgia Strait Alliance.
- Burnaby Residents Opposed to Kinder Morgan (BROKE) provided concerns related to potential health impacts of accidents and malfunctions (including spills).

⁷ The Georgia Strait Alliance's letter and EAO's response can be found on EAO's Project Information Centre at: <https://projects.eao.gov.bc.ca/p/5885121eaaecd9001b82b274/documents>

- The B.C. branch of Canadian Association of Physicians for the Environment (CAPE) raised concerns regarding the potential direct and indirect health impacts of TMX and requested that the B.C. Government require a Cumulative Health Impact Assessment for the Project.

While the input received from these groups was unsolicited, the EAO has considered this input in drafting this report. Issues raised by interested parties and the public are reflected in [Sections 5.0](#) and [6.0](#) of this report.

PROVINCIAL AND FEDERAL AGENCIES

The EAO formed a Provincial Advisory Group to engage provincial agencies to provide technical expertise and support in understanding key issues of provincial interest and jurisdiction related to the reconsideration. The Provincial Advisory Group consisted of representatives from: Ministry of Environment and Climate Change Strategy; Ministry of Energy, Mines and Low Carbon Innovation; Ministry of Health; Ministry of Forests, Lands, Natural Resource Operations and Rural Development; Ministry of Attorney General; and B.C. Oil and Gas Commission (OGC).

The EAO engaged federal government departments, coordinated by Natural Resources Canada, to further understand the federal government's areas of responsibility, regulatory mechanisms, and initiatives related to the reconsideration. Natural Resources Canada facilitated engagement with the CER, Transport Canada, Environment and Climate Change Canada, Fisheries and Oceans Canada, and the Canadian Coast Guard. Natural Resources Canada also facilitated a meeting with Western Canada Marine Response Corporation to provide an opportunity for EAO to understand the response organization's roles and responsibilities in Canada's marine oil spill preparedness and response regime.

4.0 SCOPE OF THE PROVINCIAL RECONSIDERATION

This section summarizes the changes in the NEB's Reconsideration Report from the original 2016 Report that relate to areas of provincial interest and jurisdiction and provides an overview of the EAO's analysis of changes.

4.1 THE EAO'S REVIEW

The EAO undertook a detailed review of the changes between the two NEB reports, supported by feedback and issues raised through engagement throughout the reconsideration process (see [Section 3.0](#)). The engagement process resulted in many recommendations for changes to existing EAC conditions, as well as recommendations for new ones. In determining whether these recommendations should result in changes to the EAC conditions, or the addition of new ones, the EAO needed to establish appropriate criteria. The EAO employed the following criteria in this regard:

- Whether issues raised pertained to differences⁸ between the two NEB reports;
- The Ministers' jurisdiction to make changes to EAC conditions or add new ones;
- Avoiding unnecessary duplication, having regard for:
 - Existing EAC conditions;
 - Existing NEB conditions;
 - Existing federal or provincial regulatory mechanisms;
 - NEB recommendations to the GIC (which, as noted above, were accepted by it); and
 - Federal government accommodation measures⁹ and other federal government initiatives related to the matters covered in the differences between the two NEB reports.

As described in [Sections 2.0](#) and [3.0](#), the Ministers directed the EAO to engage and work closely with Squamish Nation, Tsleil-Waututh Nation and the City of Vancouver in the provincial reconsideration process. Appendix B presents the proposed amended and new conditions and recommendations to the TMX EAC #17-01 Table of Conditions by Squamish Nation, Tsleil-Waututh Nation and the City of Vancouver and the EAO's detailed analysis, based on the above criteria. In undertaking the analysis, the EAO sought feedback from and engaged heavily with provincial and federal agencies to inform its understanding of regulatory roles and appropriateness of any condition to recommend to Ministers.

4.1.1 CHANGES IDENTIFIED IN NEB'S RECONSIDERATION REPORT

The Reconsideration Report is structured to incorporate the information received during both the 2014 and the 2018 hearings, capturing all Project information in a single consolidated report. Table 1 provides an overview of what was changed between the 2016 Report and the Reconsideration Report.¹⁰

Table 1 Summary of Changes Between the NEB 2016 Report and NEB Reconsideration Report

NEB Reconsideration Report Chapter	Change from NEB 2016 Report
Introduction and disposition	New
Chapter 1 – The Board's review	Updated to reflect both hearing processes
Chapter 2 – Benefits, burdens, and recommendations	Updated to reflect the conclusions arising from the NEB reconsideration process
Chapter 3 – Regulating through the Project lifecycle	Unchanged
Chapter 4 – Public consultation	Unchanged
Chapter 5 – Indigenous matters	Section 5.2 includes new or updated evidence and views with respect to Indigenous matters
Chapter 6 – Pipeline and facility integrity	Unchanged
Chapter 7 – Construction and operations	Unchanged
Chapter 8 – Environmental behavior of spilled oil	Section 8.2 includes new or updated evidence and views with respect to the environmental behavior of spilled oil
Chapter 9 – Emergency prevention, preparedness, and	Unchanged

⁸ The EAO considered a difference between the two NEB reports to be any new content in the NEB Reconsideration Report that was not found in the original NEB Report.

⁹ <https://www.canada.ca/en/campaign/trans-mountain/what-is-tmx/the-decision/backgrounder11.html>

¹⁰ From NEB Reconsideration Report (p. 6)

response	
Chapter 10 – Environmental assessment	Mostly unchanged except for references about the scope of the EA
Chapter 11 – People, communities, and lands	Unchanged
Chapter 12 – Need for the Project and economic feasibility	Unchanged
Chapter 13 – Financial matters	Unchanged
Chapter 14 – Project-related increase in shipping activities	Revised substantially and includes the majority of the issues relevant to the NEB reconsideration process
Appendix 14 – Summary of Indigenous concerns, and applicant, government, and NEB responses	New, focusses on NEB reconsideration hearing
Appendix 15 – Summary of comments received on draft conditions and recommendations	New

The majority of changes in the NEB Reconsideration Report can be found in Chapter 14, entitled “Project-related increase in shipping activities”. The EAO reviewed and considered all changes from the NEB’s 2016 Report as set out in its Reconsideration Report. Through this review, and engagement activities undertaken as part of the provincial reconsideration process, topics were identified for further analysis. Table 2 identifies the portions of the NEB Reconsideration Report related to these topics. In considering the information in the Reconsideration Report, the EAO was mindful of the key issues of Provincial interest discussed in the EAO’s Summary Assessment Report from 2016: vegetation and wildlife, parks, fish and fish habitat, GHG emissions, and terrestrial and marine spills.

Table 2 Changes Identified in the NEB Reconsideration Report Applicable to the BC Reconsideration Process

NEB Reconsideration Report Chapter	Content Applicable to Provincial Reconsideration Process
Chapter 5 – Indigenous matters	<ul style="list-style-type: none"> EAO reviewed Section 5.2 to gain an understanding of key issues and concerns raised by Indigenous peoples in the NEB reconsideration hearing.
Chapter 8 – Environmental behavior of spilled oil	<ul style="list-style-type: none"> Updates in Section 8.2 relates to research on the fate and behaviour of spilled oil and marine spills
Chapter 14 – Project-related increase in shipping activities	<ul style="list-style-type: none"> Section 14.7 Environmental effects of increased marine shipping (routine operations of the tankers) Section 14.8 Socio-economic effects of increased marine shipping (routine operations of the tankers) Section 14.9 Environmental effects of malfunctions or accidents (spills) Section 14.10 Socio-economic effects of malfunctions or accidents (spills) Section 14.11 Spill prevention, risk analysis, and emergency preparedness
Appendix 14 – Summary of Indigenous concerns, and applicant, government, and NEB responses	<ul style="list-style-type: none"> EAO referred to this new section to gain an understanding of key issues and concerns
Appendix 15 – Summary of comments received on draft conditions and recommendations	<ul style="list-style-type: none"> EAO referred to this new section to gain an understanding of the changes made to the NEB’s conditions and recommendations to GIC

4.2 OVERVIEW OF EAO’S ANALYSIS OF CHANGES

As identified in Table 1, the differences identified between the two NEB reports focus on shipping and the marine environment. Reflecting the direction from the BCCA, the EAO remained cognizant of the

limits of provincial jurisdiction in reviewing the changes and in recommending changes to EAC conditions. For example, the federal government's power to legislate respecting navigation and shipping places some limitations on what Ministers are able to attach as conditions to the EAC, including the precise operation of Project-related shipping. However, the provincial and federal governments have shared jurisdiction over the environment and some of the socio-economic components that may be impacted by the Project. The provincial government has authority for the management of provincial lands and natural resources that may be impacted by the Project.

The EAO was also mindful of the existing NEB conditions, NEB recommendations to the GIC, and federal accommodation measures planned or underway related to the marine environment and in the Salish Sea that seek to address potential effects related to routine shipping as well as accidents and malfunctions, for example, the Co-Developing Community Response¹¹ program and the Salish Sea Initiative¹². Through the reconsideration process, the EAO was mindful of the efficiency of not duplicating regulatory and other initiatives already in place or underway.

Some issues raised through EAO's engagement did not pertain to differences between the two NEB reports or did not provide substantive information for the Ministers to consider. For example, issues raised regarding groundwater and contaminated sites did not pertain to differences between the two NEB reports. As such, the EAO considered these issues to be beyond the BCCA direction on what the Ministers were to consider through the provincial reconsideration process.

5.0 ROUTINE OPERATIONS OF PROJECT-RELATED MARINE VESSELS

Indigenous Groups, local governments, and other interested parties raised concerns regarding environmental and socio-economic effects of increased marine shipping and the routine operation of the Project-related marine vessels. The EAO conducted a thorough review of the issues raised in relation to any differences between the Reconsideration Report and the 2016 Report. The following sections present the EAO's review of topics related to the routine operations of Project-related marine vessels, the related concerns and views expressed during EAO's consultation and engagement, including submissions by interested parties, Trans Mountain, and the public, and EAO's conclusions, which reflect the engagement carried out by the EAO.

¹¹ The Co-Developing Community Response program, led by the Canadian Coast Guard and Transport Canada, aims to support communities along the marine route with knowledge, personnel, training, and equipment to protect culturally important and sacred sites on their traditional territories and mitigate risks posed by Project-related shipping and to define a clear role for Indigenous communities in the broader marine response system.

¹² The Salish Sea Initiative, led by Fisheries and Oceans Canada, aims to establish a co-developed governance arrangement between Indigenous communities and Canada, responding to cumulative effects. The Salish Sea Initiative governance structure and long-term funding is aimed to support capacity building, monitoring, research, knowledge acquisition, knowledge integration, and sharing to inform adaptive management.

5.1 GREENHOUSE GAS EMISSIONS FROM TANKERS

Concerns were raised during the NEB reconsideration hearing regarding GHG emissions from the routine operations of Project-related marine shipping. As set out in the NEB's 2016 Report and discussed in EAO's Summary Assessment Report, Trans Mountain conducted an air quality assessment to predict operational air and GHG emissions from Project-related marine shipping. In their Reconsideration Report, the NEB restates the expected increases in marine GHG emissions as a result of Project-related marine vessels from the 2016 Report. As an outcome of the NEB reconsideration process, the NEB found that the GHG emissions from Project-related shipping would be reduced as a result of new energy efficiency standards adopted by the International Maritime Organization (IMO), of which Canada is a member state, and the proposed federal Clean Fuel Standard regulations. The NEB also issued Recommendation 10 to the GIC, aligning with the IMO's strategy for reducing GHG emissions from ships. The IMO is responsible for regulating international marine shipping emissions.

SUMMARY OF VIEWS EXPRESSED DURING THE PROVINCIAL RECONSIDERATION PROCESS

Squamish Nation and the City of Vancouver raised concerns regarding the impacts of Project-related marine shipping with respect to GHGs. Concerns include an increase in GHG emissions from increased vessel traffic, and upstream extraction activities and downstream combustion of extracted product leading to an increase in GHG emissions and exacerbating sea level rise.

Squamish Nation, Tsleil-Waututh Nation and the City of Vancouver proposed amendments to existing EAC Conditions 28 (Greenhouse Gas Reporting) and 29 (Greenhouse Gas Offsets) to include Project operations and Project-related marine shipping in GHG reporting and offsetting requirements.

Trans Mountain is of the view that since Project operations (excluding marine shipping) were not the subject of the NEB Reconsideration process, any amendments to existing conditions specific to operations (excluding marine shipping) are outside the scope of the provincial reconsideration process. Existing EAC Conditions 28 and 29 are specific to Project operations (excluding marine shipping). Trans Mountain is also of the view that marine shipping activities are beyond the scope of the "reviewable project" and beyond Trans Mountain's control. Trans Mountain is also of the view that GHG offsets for Project-related marine vessels were considered in the NEB reconsideration process and that the NEB was not persuaded to impose any additional conditions to offset the GHG emissions of Project-related marine vessels.

SUMMARY OF THE EAO'S VIEWS

It is the EAO's view that there is no new information in the NEB reconsideration report that supports amending EAC Conditions 28 and 29 or adding a new EAC condition. The intent of EAC Conditions 28 and 29 is to build upon the requirements detailed in NEB Condition 140 (Post-construction greenhouse gas assessment report) and 142 (GHG Emissions Offset Plan – Project construction), which are specific to the pipeline, pump stations, terminals, and Westridge Marine Terminal. GHG emissions associated with Project operations were not within the scope of the reconsideration process.

In their Reconsideration Report, the NEB restates the expected increases in marine GHG emissions as a

result of Project-related marine vessels from the 2016 Report. As an outcome of the NEB reconsideration process, the NEB found that the GHG emissions from Project-related shipping would be reduced. Regarding Project operations, B.C. has legislated GHG reduction targets under the *Climate Change Accountability Act* and existing reporting requirements under the *Greenhouse Gas Industrial Reporting and Control Act*. B.C. also has a suite of regulatory and policy tools that allow for the general application of various approaches (e.g. taxes, offsets) to support meeting the province's GHG reduction targets.

5.2 SHIPPING IMPACTS ON ARCHAEOLOGICAL AND CULTURAL HERITAGE

The potential effects of Project-related marine shipping on heritage resources (cultural and physical heritage) were assessed in the NEB's 2016 Report. Indigenous nations continued to raise concerns during the NEB reconsideration process around potential impacts of shoreline erosion due to ship wake effects from Project-related marine shipping on archaeology and cultural heritage. In the Reconsideration Report, the NEB remained of the view that Project-related vessel wake will not be detectable from existing wave conditions and that there will not be an impact to archaeological sites due to an increase in marine traffic. The EAO acknowledges that under the *Canada Shipping Act, 2001*, the ship master has the responsibility for the safety of the ship, and under the *Pilotage Act*, the pilot is responsible for the safe conduct of the ship. This means that the master and pilot have the discretion to choose the route, speed and any other maneuver that keeps the ship safe, and that it is up to the pilot to modify vessel speed to minimize potential wake-related effects. The Pacific Pilotage Authority provides marine pilotage services in the coastal waters of B.C.

SUMMARY OF VIEWS EXPRESSED DURING THE PROVINCIAL RECONSIDERATION PROCESS

Squamish Nation and Tsleil-Waututh Nation raised concerns regarding the effects of routine operation of Project-related marine vessels on archaeological and cultural heritage and said that wake effects from the increase in vessel traffic will increase shoreline erosion.

Squamish Nation and Tsleil-Waututh Nation, with the support of the City of Vancouver, proposed new conditions that would require a heritage conservation plan to map and protect at-risk shoreline archaeological sites, an analysis of Project-related vessel wake and wash and its effects on shoreline erosion archaeological sites in Burrard Inlet and other shorelines proximate to the shipping route, and a shoreline erosion protection plan. The Nations also recommended that the *Heritage Conservation Act* be amended to include protections for archaeological sites impacted by shoreline erosion, that the EAO work with Trans Mountain and federal agencies to reduce shoreline erosion and related impacts to archaeology and cultural heritage, and that the provincial Archaeology Branch maintain regulatory authority over heritage resources and *Heritage Conservation Act* permits.

Trans Mountain is of the view that there is no evidentiary basis for the EAO to impose new conditions in the EAC to address impacts caused by vessel wake from Project-related vessels arising from the NEB Reconsideration Report. Trans Mountain notes that it was directed to conduct a study on the potential impacts of vessel wake from Project-related vessels on cultural heritage and archaeological sites as part

of the NEB reconsideration process. The NEB concluded that it concurred with Trans Mountain's conclusions that vessel wake wave heights at the shoreline would be within the range of natural conditions.

SUMMARY OF THE EAO'S VIEWS

It is the EAO's view that there is no new information in the NEB Reconsideration Report regarding shipping impacts on archaeological and cultural heritage that supports amending or adding a new EAC condition. In the NEB Reconsideration Report, the NEB noted that in the 2018 hearing, Indigenous intervenors raised concerns similar to those expressed in the 2014 hearing regarding the impact to archaeological and cultural heritage sites as a result of increased Project-related marine vessel traffic. The NEB remained of the view that Project-related vessel wake will not be detectable from existing wave conditions and that there will not be an impact to archaeological sites due to an increase in marine traffic.

5.3 HUMAN HEALTH

The potential effects on human health from the routine operations of marine transportation associated with the Project were assessed in the 2016 Report, including air quality and effects from noise and light. Numerous concerns were raised during the NEB reconsideration hearing regarding the potential effects on human health, including the impact of noise, lights and air pollution from increased shipping, and potential effects to air quality. The NEB maintains that the residual effects from Project-related marine shipping is not likely to cause significant adverse effects on human health, including the health of Indigenous people. The NEB acknowledged that there is an existing international and federal regulatory regime governing air emissions for tankers in transit. With regards to noise and light, tankers within the Vancouver Fraser Port Authority (VFPA) would be expected to adhere to VFPA's guidelines regarding noise and light pollution. The NEB noted that as it was not clear whether the VFPA has a formal complaint resolution process, the NEB included Recommendation 16 encouraging GIC, in conjunction with VFPA, to develop a formal complaint resolution program that gathers community feedback, brings together diverse community stakeholders to facilitate discussions about port-related impacts, and resolves complaints about vessels anchored at the VFPA-managed anchorages.

SUMMARY OF VIEWS EXPRESSED DURING THE PROVINCIAL RECONSIDERATION PROCESS

Squamish Nation, Tsleil-Waututh Nation and the City of Vancouver raised concerns regarding the effects of routine operation of Project-related marine vessels on human health. Squamish Nation said that increased air pollution has the potential to affect respiratory health and can have a subsequent impact on Indigenous nation cultural cohesion and mental health and damage to the environment can have corresponding community health impacts. Tsleil-Waututh Nation said that Project activities including increased mooring of tankers and increased shipping traffic will have a range of effects on human health within and around Burrard Inlet, including impacts to community health and wellbeing, which includes physical health, mental health, cultural transmission, community cohesiveness and overall quality of life from an Indigenous perspective.

Trans Mountain did not provide any views on the potential effects on human health from the routine

operations of marine transportation associated with the Project as there are currently no proposed conditions related to this topic.

SUMMARY OF THE EAO'S VIEWS

In its Reconsideration Report, the NEB acknowledged that air emissions from Project-related marine shipping are expected to remain below applicable ambient air quality objectives. The NEB also acknowledged that Trans Mountain would require all Project-related marine vessels to apply best practices during operations and adhere to federal requirements including Transport Canada's *Vessel Pollution and Dangerous Chemicals Regulations* under the *Canada Shipping Act, 2001* and Environment and Climate Change Canada's *Sulphur in Diesel Fuel Regulations*. Under the *Vessel Pollution and Dangerous Chemicals Regulations* tankers would be required to carry onboard a volatile organic compound management plan that meets the requirements of the International Convention for the Prevention of Pollution from Ships. It is the EAO's view that the existing regulatory frameworks such as the international and federal regulatory regime governing air emissions, the VFPA's guidelines regarding noise and light pollution, the *Canada Shipping Act, 2001*, federal initiatives such as the Oceans Protection Plan and Anchorages Initiative, and recommendations resulting from the NEB reconsideration process, adequately address concerns raised through the provincial reconsideration process.

5.4 INCREASE IN MARINE SHIPPING TRAFFIC

Concerns were raised during the NEB reconsideration hearing regarding the increase in marine shipping traffic related to topics including underwater noise, water quality and aquatic invasive species, marine travel, access, and impacts to marine protected areas. The potential effects related to these topics from the routine operations of marine transportation associated with the Project were assessed in the 2016 Report.

UNDERWATER NOISE

The Reconsideration Report includes new information, studies, and mitigation from the 2018 hearing, new overarching considerations for the mitigation of routine marine shipping on marine mammals and broad federal initiatives such as the Whales Initiative and Oceans Protection Plan. The NEB remains of the view that Project-related marine shipping is likely to result in significant adverse effects on SRKW. As a result of the NEB reconsideration process, the NEB made amendments to Condition 132 to more accurately reflect what Trans Mountain can control, given that it does not own or operate Project-related marine vessels. The NEB issued several recommendations to the GIC related to this topic, including Recommendation 5 to offset additional underwater noise and strike risk and Recommendation 6 to further consider specific broad federal-government-led mitigations raised during the 2018 hearing (i.e., slowdowns, limit impacts from whale watching boards, ferries noise reduction efforts, mitigation for specific congregation and migration areas for SARA-listed specific, and quiet vessel design). At present, there are various federal initiatives underway and federal agencies leading the development and implementation of measures to protect SRKW.

WATER QUALITY AND AQUATIC INVASIVE SPECIES

The Reconsideration Report identifies new information filed in the 2018 hearing regarding the introduction of aquatic invasive species from Project-related marine vessels ballast water, sensory disturbance, wake waves, and vessel strikes. The NEB accepted DFO's maintained position that potential effects on marine fish and fish habitat from Project-related routine marine shipping are likely to be low risk. The NEB noted that compliance with the Ballast Water Control and Management Regulations of the *Canada Shipping Act, 2001* would effectively minimize any potential introduction of aquatic invasive species from Project-related marine vessels.

MARINE TRAVEL AND ACCESS

Concerns related to marine travel and access were identified in the marine commercial, recreational, and tourism use, and traditional marine resource uses, cultural practices, and activities sections of the Reconsideration Report. The NEB reiterated the importance of marine resource use to Indigenous peoples' way of life. Regarding marine commercial, recreational, and tourism use, information from the 2018 hearing included concerns regarding access restrictions to fishing areas and timing, safety with respect to collisions or wakes, personal safety, and loss or damage of fishing vessels and gear. The NEB noted the initiatives being undertaken through the Oceans Protection Plan, including but not limited to Transport Canada's Enhanced Maritime Situational Awareness (EMSA) initiative, as well as other initiatives led by the VFPA and Pacific Pilotage Authority. The EMSA initiative improves access to a range of maritime information such as near real-time marine traffic information for Indigenous and coastal communities, and other marine partners. As a result of the reconsideration process, the NEB changed Condition 131 (Marine Public Outreach Program) to a Recommendation to GIC. The EAO notes that annual public reporting on several initiatives as part of Recommendation 2 would include the Oceans Protection Plan. Goals of the plan are to meaningfully improve marine safety and reduce accidents and impacts associated with shipping.

Regarding traditional marine resource uses, cultural practices, and activities, the Reconsideration Report identified information from the 2018 hearing that included traditional ecological knowledge and traditional marine resource use, and information that reinforced the importance of Indigenous communities' ability to exercise their Indigenous and Treaty rights to fish and harvest. During the 2018 hearing, Indigenous communities raised numerous concerns that include but are not limited to interruptions to the physical ability to access marine resources and to important traditional fishing groups, impacts on cultural and spiritual connections, marine safety, and the disruption of travel routes, specific traditional use sites, fishing and food harvesting activities, and cultural practices and activities. The Reconsideration Report also identified information from the 2018 hearing specific to the impacts of marine shipping on Indigenous nations' traditional marine use, activities, and practices associated with SRKW. The NEB acknowledged that the uses, practices, and activities are very important for Indigenous groups along the coastal areas of B.C., and that they are important for maintaining Indigenous cultures and intergenerational transmission.

The NEB noted information filed by Trans Mountain and Trans Mountain's commitments to provide regular updated information on Project-related marine vessel traffic to Indigenous communities, and to initiate a public outreach program with Transport Canada, the Canadian Coast Guard, the Chamber of Shipping for B.C., commercial and tourism associations, and potentially affected Indigenous groups. The

NEB was of the view that Indigenous marine vessel users will maintain the ability to continue to harvest marine resources and to access subsistence and cultural sites in the presence of periodic and short-term disruptions. The NEB was also of the view that disruptions that may result from interference or collisions with Project-related vessels are considered to be unlikely due to adherence to regulatory standards and navigational and safety measures by marine vessels. In response to safety concerns, the NEB included Recommendation 12, which involves continued vessel navigation engagement and awareness activities, led by the GIC in conjunction with the Pacific Pilotage Authority and Transport Canada. The NEB also noted Recommendations 1, 5, and 6: a regional cumulative effects management plan, an Offset Program, and specific mitigation for inclusion in the Offset Program.

MARINE PROTECTED AREAS

The Reconsideration Report included a new section (Section 14.7.5) that provides a discussion of marine park reserves, conservation areas, marine protected areas and ecological reserves. The NEB recognized that portions of the shipping route goes through the proposed Southern Strait of Georgia National Marine Conservation Area Reserve, noting that Parks Canada is responsible for establishing national marine conservation areas. Recommendation 4 to the GIC states that the GIC should expedite the work in completing the feasibility study for establishing a Southern Strait of Georgia Marine Conservation Area Reserve, publicly report on the outcomes of that study, and (if considered feasible) proceed to establish it, in consultation with affected Indigenous and coastal communities and relevant marine shipping stakeholders including Transport Canada, Canadian Coast Guard and the VPFA. The NEB noted that the effects of Project-related marine shipping on marine fish and fish habitat, marine mammals and marine birds within national marine conservation areas and ecological reserves were already considered in other sections of the report. These effects were also assessed in the 2016 Report.

SUMMARY OF VIEWS EXPRESSED DURING THE PROVINCIAL RECONSIDERATION PROCESS

Squamish Nation and Tsleil-Waututh Nation raised concerns regarding effects of increased marine shipping. Squamish Nation raised the following concerns:

- Vessel traffic will increase shoreline erosion; reduce water quality; alter landscape characteristics; lead to the loss of meaning in Squamish language place names; introduce exotic species; impede marine travel; hinder harvesting; reduce access to important social, cultural, or spiritual places; and/or foreclose opportunities to revitalize traditional practices;
- Increase in underwater noise levels will worsen the already diminished ability of SRKW to forage effectively, travel safely, and communicate clearly
- Tug activity and anchoring will increase marine turbidity resulting in harm to marine species
- Water quality concerns associated with the release of bilge
- Impacts to marine protected areas may compromise the health of these areas and their capacity to replenish the larger marine system and have a disproportionate effect on species/harvest stock

Squamish Nation and Tsleil-Waututh Nation, with the support of the City of Vancouver, proposed additions to EAC Condition 11 (Aboriginal Marine Outreach Program) to require discussion of changes

to Project-related-vessel movement or scheduling to enable the unfettered exercise of Aboriginal rights during narrow seasonal harvesting windows. The Nations also recommended that the Province align emergency response plans with park management plans in consultation with Park Boards.

Trans Mountain is of the view that the requested amendment would materially change the scope of EAC Condition 11 from an information sharing requirement to a requirement to change vessel schedules to enable unfettered exercise of Aboriginal rights. Trans Mountain said that it has limited influence around Project-related vessel schedules, and that concerns about potential interactions between Project-related vessels and Aboriginal marine harvesting were fully canvassed during the NEB hearings.

SUMMARY OF EAO'S VIEWS

With respect to the potential effects of Project-related vessel traffic on Indigenous marine vessels and users, the NEB remained of the view that these effects would be limited to the time during which the Project-related vessels are in transit and therefore, these effects would be temporary and Indigenous marine vessels will be able to continue their movements and to access areas outside of those brief periods of interruption. The NEB found that with the exception of effects on the traditional uses associated with the Southern resident killer whale, adverse effects of Project-related marine vessel traffic on traditional marine resource uses, activities and sites are not likely to be significant.

It is the EAO's view that the concerns raised through the provincial reconsideration process, with the exception of Indigenous outreach along the marine route, are adequately addressed through existing regulatory frameworks (e.g., *Canada Shipping Act, 2001*), VFPA's guidelines regarding noise and light pollution, federal initiatives such as the Oceans Protection Plan, and the Recommendations resulting from the NEB reconsideration process, as described in the sections above. The EAO notes EAC Condition 11 (Aboriginal Marine Outreach Program) requires Trans Mountain to develop an Indigenous marine outreach program in consultation with Indigenous groups along the marine shipping route. The EAO notes that under EAC Condition 11, Indigenous groups must be consulted to identify potential activities and actions that Trans Mountain may undertake to support safe traditional marine use. The EAO is not recommending any further changes to EAC Condition 11. See [Section 5.6](#) for further discussion of EAC Condition 11.

5.5 TANKER MOORING

Concerns were raised during the NEB reconsideration hearing regarding the effects of increased mooring of tankers. In this regard, NEB's Recommendation 16 states that the GIC, in conjunction with the VFPA, should develop a formal complaint resolution program that gathers community feedback, brings together diverse community stakeholders to facilitate discussion about port-related impacts, and resolves complaints about marine vessels docked at the VFPA managed anchorages. The VFPA has established a process for managing complaints regarding activities within the port's jurisdiction, including with respect to anchorages. Also, Transport Canada has launched a national Anchorages Initiative, which will include research and analysis of the environmental, economic, social, safety and security impacts of anchorages, as well as examine the management of anchorages outside public

ports.

SUMMARY OF VIEWS EXPRESSED DURING THE PROVINCIAL RECONSIDERATION PROCESS

Squamish Nation raised concerns that vessel anchorages can denude the seabed within the circumference of chain swing with a resulting loss of biodiversity and increased turbidity. Squamish Nation and Tsleil-Waututh Nation, with the support of the City of Vancouver, recommended that the Province work with the federal government to characterize the effects of deep sea vessel anchorages within the proposed Southern Strait of Georgia National Marine Conservation Area (NMCA), de-list the anchorages within the NMCA for the purpose of studying impacts, and modify or remove anchorages if the results of the study reveal significant adverse effects.

Trans Mountain did not provide specific responses to recommendations made to the EAO.

SUMMARY OF EAO'S VIEWS

Transport Canada and Canada Port Authorities have regulatory authority over marine anchorages. The NEB notes in their Reconsideration Report that Transport Canada said it is conducting research studies to inform the creation of a National Anchorages Framework and is consulting with the marine industry, Indigenous communities, community organizations, and stakeholders. Transport Canada said that it will also be undertaking a review and evaluation of the need for possible regulatory changes for oversight and management of anchorage sites. NEB Recommendation 4 to the GIC recommends expediting the feasibility study for establishing a Southern Strait of Georgia National Marine Conservation Area Reserve, and (if considered feasible) proceed to establish it and include consideration of other initiatives such as the National Anchorage Strategy. It is the EAO's view that the existing regulatory framework and federal initiatives such as the Oceans Protection Plan and Anchorages Initiative, and recommendations resulting from the NEB reconsideration process, adequately address concerns raised through the provincial reconsideration process.

5.6 EAO'S CONCLUSIONS REGARDING ROUTINE OPERATIONS OF PROJECT-RELATED MARINE VESSELS

While the federal government has constitutional authority for shipping and navigation, responsibility to protect and manage marine resources is a joint effort between provincial and federal agencies. Federal agencies such as Transport Canada, the Canadian Coast Guard, Environment and Climate Change Canada, and Fisheries and Oceans Canada regulate marine transportation in Canadian waters and Canadian vessels. VFPA is also a federal agency that regulates activities within the port authority area.

The concerns raised during the provincial reconsideration process by Squamish Nation, Tsleil-Waututh Nation and the City of Vancouver regarding environmental and socio-economic effects related to routine operations of Project-related marine shipping were similar to those raised during the 2014 and 2018 NEB hearings and include:

- Increase in GHG emissions and their contribution to climate change;

- Impacts on human health from direct effects of marine shipping from increased mooring of tankers and increased shipping traffic;
- Potential for emissions to reduce air quality;
- Vessel wake impacts on archaeological and cultural heritage;
- Increase in marine shipping traffic;
- Increase in mooring tankers; and
- Impacts to marine protected areas and compromising the health of marine life in these areas.

The EAO received recommendations to amend or add conditions to the provincial EAC related to GHG emissions, shoreline erosion, archaeological and cultural heritage protection marine shipping traffic, and anchorages. The EAO is mindful that the federal government is the lead regulator for marine shipping and navigation. As noted in [Section 4.2](#), the EAO is cognizant of the limits to provincial Ministers' jurisdiction to attach conditions to the EAC, as well as regulatory and other initiatives that have taken place or are underway, which need not be duplicated through EAC conditions. It is the EAO's view that the existing regulatory frameworks such as VFPA's guidelines regarding noise and light pollution, the *Canada Shipping Act, 2001*, federal initiatives such as the Oceans Protection Plan and Anchorages Initiative, and recommendations resulting from the NEB reconsideration process address concerns raised through the provincial reconsideration process, with the exception of Indigenous outreach along the marine route.

ABORIGINAL MARINE OUTREACH PROGRAM¹³

Specific to concerns of Indigenous groups along the marine route, EAC Condition 11 (Aboriginal Marine Outreach Program) requires Trans Mountain to develop an Indigenous marine outreach program in consultation with Indigenous groups along the marine shipping route¹⁴ that includes engagement related to marine initiatives, programs, and research that Trans Mountain is directly or indirectly involved in to address the impacts of increased Project-related tanker traffic in the Salish Sea.

In the reconsideration process, the NEB decided to change NEB Condition 131 (Marine Public Outreach Program) into a Recommendation to the GIC, proposing that the GIC, in conjunction with the Pacific Pilotage Authority and Transport Canada, continue engagement and awareness opportunities targeting coastal Indigenous communities, recreational boaters, fishing vessel operators, and operators of small vessels with respect to safety of navigation and prevention of collisions with larger vessels. During the NEB reconsideration hearing, several intervenors, including the Province of B.C., expressed concern regarding the change of NEB Condition 131 into a Recommendation. The NEB noted that Trans Mountain committed to initiate a public outreach program prior to the Project operations phase to mitigate the potential effects of disruption of subsistence hunting and commercial fishing activities due to increased Project-related marine vessel traffic, requiring Trans Mountain to continue to collaborate and work in partnership with active marine authorities and organization, and coastal communities to provide information about Project-related marine vessels and associated marine concerns. During the process leading to Amendment #1 to the EAC, the EAO considered that, as Trans Mountain committed

¹³ The term "Aboriginal" is used here in direct reference to the terminology used in Condition 11 in the EAC

¹⁴ Defined under "Aboriginal Groups – Marine Shipping" in the EAC

to undertake the work required for NEB Condition 131 as part of their commitments during the NEB process, and that the federal requirement to fulfill this commitment remained through the operation of NEB Condition 6 (Commitments tracking table), it was appropriate to amend EAC Condition 11 to incorporate the text of NEB Condition 131 so that the original intent of the condition did not change. As a result, the EAO is not recommending any further changes to EAC Condition 11.

6.0 MARINE SPILLS

During the 2014 and 2018 NEB hearings, many participants expressed concerns regarding increased spill risk as a result of increased Project-related tanker traffic and the environmental and socio-economic effects that would result from spills. Chapter 8 of the NEB Reconsideration Report contains the NEB's findings about the fate and behaviour of spilled oil, while Chapter 14, Sections 14.9 to 14.11 discuss the environmental and socio-economic effects of malfunctions and accidents, as well as spills and spill prevention, risk analysis, emergency preparedness and response. Section 14.2 provides a description of the liability and compensation regime that would apply in the case of a spill from a marine vessel. The following sections present the EAO's review of topics related to the potential effects of spills from Project-related marine vessels, the related concerns and views expressed during EAO's consultation and engagement, including submissions by interested parties, Trans Mountain, and the public, and EAO's conclusions, which reflect the engagement carried out by the EAO.

6.1 ENVIRONMENTAL BEHAVIOUR OF SPILLED OIL

SUMMARY OF CHANGES IN THE NEB'S RECONSIDERATION REPORT

During the 2014 NEB hearing, information was provided about the federal government's research concerning the fate and behaviour of oil products in the environment, particularly diluted bitumen. Concerns were raised about the need for more research in this regard to develop a better understanding of how to mitigate the risks of heavy oil in the event of a spill. As described in the EAO's 2016 Summary Assessment Report, the NEB concluded that an effective emergency response would not guarantee recovery of all spilled oil, and the oil spill preparedness and response commitments made by TMX could not ensure recovery of the majority of oil from a large spill. Recovery of the majority of spilled oil may be possible under some conditions, but experience indicates that oil recovery may be very low due to factors such as weather conditions, difficult access, and sub-optimal response time, particularly for large marine spills.

In the 2018 NEB hearing, several participants submitted updated information on the environmental behavior of spilled oil (including diluted bitumen). Section 8.2 of the Reconsideration Report provides a summary of the views of parties, largely describing research conducted since the NEB's 2016 Report. The NEB noted that a substantial amount of work related to the environmental behaviour of spilled oil has been conducted or is ongoing since the 2016 Report. The Reconsideration Report notes that federal departments and agencies said that it is important that spill responders have the information needed to predict the fate, behaviour, and trajectory of a spill. The NEB conclude that oil spill research will

continue to evolve and inform potential effects resulting from oil spills and spill response planning.

In the Reconsideration Report the NEB reiterated the view stated in the 2016 Report that the current level of understanding of the fate and behaviour of diluted bitumen is sufficient to inform the NEB's conclusions regarding potential spill-related effects and spill response planning in relation to the Project.

SUMMARY OF VIEWS EXPRESSED DURING CONSULTATION THE PROVINCIAL RECONSIDERATION PROCESS

Concerns were raised during the provincial reconsideration process by Squamish Nation, Tsleil-Waututh Nation, the City of Vancouver and the Georgia Strait Alliance regarding environmental behavior of spilled oil.

Squamish Nation raised concerns that there is not enough information about the fate and behaviour of diluted bitumen products to mount an effective spill response, or to determine whether mitigation measures would prevent a spill from harming Squamish's interests. Squamish Nation and Tsleil-Waututh Nation, supported by the City of Vancouver, recommended a new condition be imposed to ensure new information is brought forward and acted on to update response plans.

The Georgia Strait Alliance said that the topic of the fate and behaviour of diluted bitumen remains contentious with many contradictory statements on record. The Georgia Strait Alliance proposed amendments to existing EAC Condition 35 (Fate and Behaviour of Bitumen Research) to include additions to the research and reporting requirements, altered timelines for progress updates, and ensuring the report is made available to Indigenous groups, local governments, relevant agencies and the public

SUMMARY OF EAO'S VIEWS

In light of the changes to the NEB's Reconsideration Report on the topic of the fate and behaviour of diluted bitumen, the EAO has recommended changes to EAC Condition 35 (Fate and Behaviour of Bitumen Research). [Section 6.7.3](#) contains a description of the proposed changes, EAO's rationale, and the views received on the proposed condition. In response to the Georgia Strait Alliance's proposed additions and Squamish and Tsleil-Waututh Nations' proposed new condition, the EAO notes that Condition 35 (Fate and Behaviour of Bitumen Research) currently requires that Trans Mountain consult with the Ministry of Environment and Climate Change Strategy, the Ministry of Energy, Mines and Low Carbon Innovation, the B.C. Oil and Gas Commission, Environment and Climate Change Canada, the Canadian Coast Guard, and Indigenous groups when developing their report regarding current and future research programs. The EAO is proposing to amend Condition 35 to include potentially affected coastal local governments and increasing the frequency of reporting. The consultation requirement will ensure that the scope, objectives, methods and timeframe for the research topics are appropriate, and the applicable results will be incorporated into emergency preparedness and response plans. The reports will be publicly available and posted to the EAO's Project Information Centre.

6.2 ENVIRONMENTAL EFFECTS OF MALFUNCTIONS OR ACCIDENTS (SPILLS)

SUMMARY OF CHANGES IN THE NEB'S RECONSIDERATION REPORT

In both the 2016 Report and the Reconsideration Report, the NEB assessed the environmental effects of spills that may occur in connection with Project-related marine shipping. This included consideration of baseline data collection, air quality, shoreline and near shore habitats, marine fish, marine mammals and marine birds.

In the 2018 NEB hearing, intervenors raised concerns with respect to the adequacy of Trans Mountain's ecological risk assessment methods. The NEB found Trans Mountain's methods to assess effects from marine transportation spills to be acceptable. Similarly, the views of the NEB Reconsideration Panel on baseline data and air quality modelling were unchanged from the 2016 Report.

With respect to the impacts of a spill on shorelines and nearshore habitat, intervenors raised several concerns regarding the potential environmental effects of a spill on marine fish and fish habitat, marine mammals, and marine birds.

The NEB reiterated its views from the 2016 Report that the environmental effects of a spill from a tanker would be highly dependent on the particular circumstances, such as the amount and type of product(s) spilled, location of the spill, response time, the effectiveness of containment and clean-up, the valued components that are impacted, and the weather and time of year of the spill. The NEB reconsideration panel remained of the view stated in the 2016 Report that although impacts from a credible worst-case spill would probably be adverse and significant, natural recovery of the impacted areas and species would likely return most biological conditions to a state generally similar to pre-spill conditions, and that such an incident is unlikely to occur

SUMMARY OF VIEWS EXPRESSED DURING THE PROVINCIAL RECONSIDERATION PROCESS

Concerns were raised during the provincial reconsideration process by Squamish Nation, Tsleil-Waututh Nation, the City of Vancouver and the Georgia Strait Alliance regarding environmental effects of malfunctions or accidents.

Squamish Nation raised concerns that the spill of diluted bitumen may endanger entire anadromous species (salmon) cohorts or return-years, that persistent diluted bitumen has the potential to cause long-term effects on salmonid survival, growth and reproduction, that it is not clear that ecosystems return to pre-spill states over the long-term, that accidents may affect water quality and bivalve health, and that submerged oil may adversely affect marine species.

The City of Vancouver said that sustained environmental monitoring is needed to assist with spill prevention and response planning, inform spill response action, assist with effects assessment, and support recovery efforts.

Squamish Nation, Tsleil-Waututh Nation and the City of Vancouver proposed the following conditions

to mitigate the environmental effects of a marine spill:

- Develop reports documenting existing marine inter-tidal and foreshore conditions;
- Develop a shoreline protection plan that includes identifying at-risk shorelines and establishing response strategies;
- Develop and implement an ecological investment program focused on environmental health improvement to strengthen ecological resiliency; and
- Should a spill occur, an environmental restoration and recovery plan to restore and recover local ecosystems following completion of spill clean-up activities.
- The Georgia Strait Alliance proposed the following conditions: Baseline data collection that would require shoreline mapping, biophysical inventories, and shoreline inventories of economic, cultural, recreational, public space values and Indigenous knowledge;
- At-risk shoreline identification that would include modelling for spill behaviour; and
- A remediation and recovery plan should a spill occur.

Trans Mountain said that its emergency response program is confined to the pipeline and associated facilities, which are outside the scope of the EAO's reconsideration process. Trans Mountain also said that it does not have control over marine vessel spill preparedness or response, that there is an existing spill response regime, and that those matters are the responsibility of the vessel operator and various government agencies (including the WCMRC).

SUMMARY OF EAO'S VIEWS

As a result of the interrelationship in the regulatory regimes for marine spills, the EAO's views in relation to marine spills are discussed collectively in [Section 6.7](#). Detailed responses to individual recommendations are included in Appendix B.

6.3 SOCIO-ECONOMIC EFFECTS OF MALFUNCTIONS OR ACCIDENTS (SPILLS)

SUMMARY OF CHANGES IN THE NEB'S RECONSIDERATION REPORT

In both the 2016 Report and the Reconsideration Report, the NEB assessed the socio-economic effects of spills that may occur in connection with Project-related marine shipping. This included consideration of marine commercial, recreational and tourism use, heritage resources, community wellbeing, local infrastructure and services, traditional marine use, and human health. The NEB stated that after considering the relevant evidence in both the 2014 and 2018 NEB hearings, the views expressed in the 2016 Report were confirmed in the areas of marine commercial, recreation, and tourism use, heritage resources, and community wellbeing.

With respect to local infrastructure and services, the NEB acknowledged the concerns raised by municipalities around the impact of spills and restated its view that although a large spill would result in significant adverse environmental and socio-economic effects, such an event is not likely.

In both the 2014 and 2018 NEB hearings, several intervenors raised concerns regarding the impacts of an oil spill on coastal heritage resources, including the loss, damage or contamination of important archaeological resources. After considering the evidence filed in both hearings, the NEB confirmed in the Reconsideration Report the views and conclusions expressed in the 2016 Report. The NEB remained of the view stated in the 2016 Report that while the effects of a credible worst-case spill on heritage resources could be adverse and significant, the likelihood of such an event is very low.

A number of intervenors and commenters, including Indigenous Groups and municipal governments, raised concerns regarding potential effects on human health that may result from a spill, including: air quality, socio-economic effects, loss of access to marine resources, contamination of marine foods, replacement of traditional foods with store bought foods and resulting health effects like cancer and diabetes, and health risks to clean-up workers.

The Canadian Coast Guard explained emergency response planning for marine spills is within its mandate and its approach and principles are consistent with those described in Health Canada's *"Guidance for the Environmental Public Health Management of Crude Oil Incidents – A Guide Intended for Public Health and Emergency Management Practitioners"* (Health Canada 2018). The Canadian Coast Guard submitted version 2.0 of the Greater Vancouver Integrated Response Plan (GVIRP) for Marine Pollution Incidents, which integrates public health management into preparedness and response. It stated that the First Nations Health Authority and the Vancouver Coastal Authority (among others) agreed to support the implementation and ongoing maintenance of the GVIRP. The role of health authorities during response to marine pollutions incidents in the Greater Vancouver Area is provided in the GVIRP.

The NEB remained of the view that in the event of a spill in the marine environment during shipping, including a large spill, there would be adverse effects on human health; however, such an event is not likely. The NEB noted that since the 2014 hearing there have been improvements in the area of spill prevention, and emergency preparedness and response.

In response to suggestions that Trans Mountain expand its Marine Public Outreach Program to include risks to public health in the event of a marine spill, the NEB stated the view that it is within the authority of the federal government to address such matters.

SUMMARY OF VIEWS EXPRESSED DURING THE PROVINCIAL RECONSIDERATION PROCESS

Concerns were raised by Squamish Nation, Tsleil-Waututh Nation, the City of Vancouver and the Georgia Strait Alliance regarding the socio-economic effects of malfunctions or accidents from marine spills, particularly regarding the potential effects of Project-related marine spill on human health.

Squamish Nation said that adverse effects to anadromous species and bivalves will result in further changes to traditional diet and will lead to corresponding reductions in physical and community health and community identity. Squamish Nation raised concerns that air quality will be reduced in the event of spill. Tsleil-Waututh Nation said that the Project will pose significant impacts on community health and wellbeing and raised concerns regarding impacts on human health from toxins released in the

event of an oil spill, including exposure during clean up, inhaling volatile organic compounds and through eating contaminated marine food. The Nations said that a human health condition should include ensuring Indigenous health and well-being, which includes cultural health.

The City of Vancouver said that the potential impacts to first responders and broader community health is a key concern, and that conditions should include health risk mitigation and monitoring plans as well as a cumulative health impact assessment.

The Georgia Strait Alliance proposed conditions requiring Trans Mountain to complete a comprehensive cumulative health impacts assessment and a spill incident community health plan.

Squamish Nation and Tsleil-Waututh Nation also raised concerns about the impacts of stranded oil on archaeology and cultural heritage in the event of a spill. Tsleil-Waututh Nation said that stranded oil will physically degrade and damage archaeological artifacts and sites and oil response and clean-up activities may cause further impacts. Squamish Nation and Tsleil-Waututh Nation, supported by the City of Vancouver, proposed new conditions and recommendations discussed in [Section 5.2](#). Shipping Impacts on Archaeological and Cultural Heritage.

Trans Mountain said that there is no new information in the Reconsideration Report relative to the 2016 Report that justifies a new condition around impacts of marine spills on human health. Trans Mountain said that while the NEB dedicated a section of the Reconsideration Report to human health issues related to marine oil spills (Section 14.10.6), the only new information on this issue that was noted by the NEB was that there have been improvements in the areas of spill prevention and emergency planning and response relative to the evidence before the NEB at the time of the 2016 Report.

SUMMARY OF EAO'S VIEWS

Regarding the potential effects of marine spills on human health, the EAO notes that public health is an area of provincial interest. In light of the changes to the NEB's Reconsideration Report, the EAO is proposing a new condition. [Section 6.7.4](#) contains a description of the proposed changes, EAO's rationale, and the views received on the proposed condition.

In response to concerns raised regarding the potential effects of marine spills and clean-up activities on archaeological and cultural heritage, the EAO notes that there were no substantive changes in the NEB Reconsideration Report Section 14.10.2 Heritage Resources. In the NEB Reconsideration Report, Section 14.11.3, the Canadian Coast Guard said that they are working directly with Indigenous communities to develop geographically specific response plans. As part of the Oceans Protection Plan, Fisheries and Oceans Canada and Transport Canada are working with Indigenous partners, coastal communities and local stakeholders to determine key concerns and help collect coastal environmental baseline information under the Coastal Environmental Baseline Program. Coastal mapping and geographic response strategies are currently being developed by WCMRC along the shipping lanes to minimize impacts of spills to sensitive environmental, cultural, archaeological sites and economic resources through engagement with Indigenous nations and communities.

As a result of the interrelationship in the regulatory regimes for marine spills, the EAO's views in relation to marine spills are discussed collectively in [Section 6.7](#). Detailed responses to individual recommendations are included in Appendix B.

6.4 TRADITIONAL MARINE RESOURCE USE (SPILLS)

SUMMARY OF CHANGES IN THE NEB'S RECONSIDERATION REPORT

“Traditional marine resource use (spills)” is a subsection of the “socio-economic effects of malfunctions or accidents (spills)” section of the Reconsideration Report. In the Reconsideration Report the NEB recognized the high degree of concern Indigenous nations have regarding potential spills or contamination of the ocean and how it would affect their traditional marine use and cultural practices, activities and identity. Numerous Indigenous intervenors raised concerns about the impacts of a spill on traditional marine resource use. Concerns were raised about the impacts that spills would have on their Indigenous and Treaty rights, including interruptions to fishing and harvesting activities due to impacts to the environment and marine resources or spill-related closures. Indigenous intervenors also expressed concerns about the long-lasting impacts to their cultural practices and activities as a result of a spill, noting that the continuity of their culture and identity is dependent upon access to healthy marine resources.

The NEB acknowledged the concerns and restated the views of the 2016 Report that although the effects of a credible worst-case spill on the current use of lands, waters and resources for traditional purposes by Indigenous people would likely be adverse and significant, natural recovery of the impacted areas and species would likely return most biological conditions to a state generally similar to pre-spill conditions. The NEB acknowledged that environmental effects of a tanker spill would depend on numerous factors including the volume and type of product spilled, the location of the spill, the time required to respond to the spill, the effectiveness of spill containment and clean up, valued components that are impacted, weather conditions, and the time of year that the spill occurs. The NEB remained of the view that implementation of an appropriate spill response, and measures such as compensation and harvest restrictions or closures would lessen the effects experienced until resource-dependent species recover, and that the probability of a worst-case event is very low.

During the NEB reconsideration process, Trans Mountain and the Western Canada Marine Response Corporation (WCMRC) provided an update on the status of the enhanced marine oil spill response regime, the subject of NEB Condition 133 (Confirmation of marine spill prevention and response commitments). Trans Mountain has entered into a funding agreement with WCMRC to implement the enhanced regime, including 43 new response vessels, eight new spill response bases in the Salish Sea, approximately 120 new employees, and supporting operating infrastructure. Trans Mountain noted that Geographic Response Strategies (GRS) are being developed by WCMRC as part of implementing the Enhanced Response Regime (ERR). Trans Mountain further noted that WCMRC continues to develop partnerships with Indigenous and coastal communities as part of their overall community engagement process and in order to develop new GRSs and improve existing ones, including through the collection of Traditional Marine Resource Use/Traditional Ecological Knowledge information from

Indigenous communities. Trans Mountain stated that upon request of WCMRC it is ready to assist or facilitate conversations between WCMRC and Indigenous communities.

SUMMARY OF VIEWS EXPRESSED DURING THE PROVINCIAL RECONSIDERATION PROCESS

Tsleil-Waututh Nation raised concerns regarding the impacts from stranded oil on the Indigenous rights and interests of Tsleil-Waututh Nation. Tsleil-Waututh Nation said that impacts from stranded oil on the shoreline has the potential to impact Indigenous interests for years and said that shoreline recovery and proper disposal is critical.

Trans Mountain is of the view that there is no evidentiary basis for the EAO to impose new conditions related to stranded oil.

SUMMARY OF EAO'S VIEWS

The EAO acknowledges the concerns raised about the potential serious impacts on Indigenous interests in the event of a marine spill. Detailed responses to individual recommendations are included in Appendix B. As a result of the interrelationship in the regulatory regimes for marine spills, the EAO's views in relation to marine spills are discussed collectively in [Section 6.7](#).

6.5 SPILL PREVENTION, RISK ANALYSIS, EMERGENCY PREPAREDNESS AND RESPONSE

SUMMARY OF CHANGES IN THE NEB'S RECONSIDERATION REPORT

In the 2018 NEB hearing, intervenors raised concerns with respect to spill prevention, risk analysis and emergency preparedness and Response. The NEB recognized the concerns of intervenors, pointed to the continued improvement in the marine oil spill response regulatory framework, and stated that the NEB included Recommendation 7. That recommendation relates to the review and update of federal marine shipping oil spill response requirements, including consideration of how completed and ongoing research related to oil fate and behaviour and response methods and technology will be considered in response planning, procedures and equipment.

The NEB found that the existing marine shipping regulatory framework, safety measures (including Trans Mountain's commitment to support and adopt the Technical Review Process of Marine Terminal Systems and Transshipment Sites (TERMPOL) Review Committee's findings and recommendations), expert pilotage, and enhanced tug escort all play a significant role in spill prevention. The NEB remained of the view that although a large spill from a tanker associated with the Project would result in significant adverse environmental and socio-economic effects, such an event is not likely. The NEB found that Trans Mountain's marine emergency preparedness and response planning is adequate in light of the existing marine spill response regulatory framework, Trans Mountain's commitments to enhancing marine spill response capacity, and other improvements from federal departments and agencies, including the Canadian Coast Guard.

NEB Condition 124 (Implementing improvements to Trans Mountain's Emergency Management

Program) also requires Trans Mountain to file a detailed summary of its review of its Emergency Response Plans, which must include a discussion of how the results of research initiatives have been considered and incorporated into Tran's Mountain's emergency response planning, and a description of the models used in response planning, including oil trajectory, fate and behaviour. NEB conditions 91 (Plan for marine spill prevention and response commitments) and 133 (Confirmation of marine spill prevention and response commitments) require Trans Mountain to file a plan regarding marine spill prevention and response commitments.

SUMMARY OF VIEWS EXPRESSED DURING THE PROVINCIAL RECONSIDERATION PROCESS

Concerns were raised by Squamish Nation, Tsleil-Waututh Nation, the City of Vancouver and the Georgia Strait Alliance regarding marine spill emergency preparedness and response.

The City of Vancouver raised concerns regarding local governments' financial and technical capacity to respond to marine spills, the integration of local knowledge and values into spill prevention, lack of consultation with local governments on response and recovery plans, delays in incident notification and communication, spill response coordination, volunteer management, local wildlife response, human health risk assessment and monitoring, marine firefighting, shoreline protection, spill waste management, and environmental restoration and recovery.

Squamish Nation, Tsleil-Waututh Nation and the City of Vancouver proposed the following conditions:

- Amendments to EAC Condition 32 (Emergency Response Plans), including the addition of Project-related marine shipping in Trans Mountain's emergency response plans, consultation with Indigenous communities and local governments, additional detail around plans for oiled wildlife care and convergent volunteer management, and additional supplemental plans regarding human health risk assessment and monitoring and spill waste management;
- Amendments to EAC Condition 36 (Emergency Preparedness and Response Exercise and Training Program and Reporting) to include Project-related marine shipping in Trans Mountain's emergency preparedness and response exercise and training program and plans with respect to including aboriginal communities in the incident command system and response activities;
- Amendments to EAC Condition 37 (Pre-Operations Emergency Response Exercises) to include a marine tanker spill in emergency response exercises prior to operations;
- A requirement for third-party independent audits of the Trans Mountain's emergency spill response program;
- The funding and maintenance of a specialized marine firefighting vessel;
- The funding of an independent interagency oversight body to oversee Project-related marine spill response;
- A shoreline protection plan that includes the establishment of response strategies and clean-up actions;
- The completion of Coastal Geographic Response Plans.

The Georgia Strait Alliance raised concerns regarding emergency spill preparedness and response, including shoreline clean-up and the possibility for stranded oil, spill waste management, human health

monitoring and volunteer management. The Georgia Strait Alliance proposed the following conditions:

- Amendments to EAC Condition 32 (Emergency Response Plans) that include the addition of human health sampling and monitoring in supplemental emergency response plans and greater detail to convergent volunteer management plans;
- A shoreline and stranded oil response assessment report assessing the effectiveness of different shoreline response strategies;
- A shoreline and stranded oil clean-up plan; and
- Marine spill waste management plans.

Trans Mountain said that its emergency response program is confined to the pipeline and associated facilities, which are outside the scope of the EAO's reconsideration process. Trans Mountain also said that it does not have control over marine spill preparedness or response, that there is an existing marine spill response regime, and that those matters are the responsibility of the marine vessel operator and various government agencies (including the WCMRC).

SUMMARY OF EAO'S VIEWS

The EAO notes that shipping is a federally regulated activity and the responsibility for marine emergency preparedness associated with shipping rests primarily with the federal government, in collaboration with various parties. Transport Canada is responsible for Canada's Ship-Source Oil Spill Preparedness and Response Regime, ensuring that there is an appropriate level of preparedness to respond to marine oil spills within prescribed time standards and operating environments. The regime includes participation by other federal agencies, the provincial government, WCMRC (the certified response organization for B.C.), coastal communities, and Indigenous nations. Under the *Canada Shipping Act, 2001*, prescribed vessels and prescribed classes of oil handling facilities are required to have an arrangement with a certified response organization. Transport Canada oversees the response organization and sets planning standards, response capacity, response times, and monitors the response organization's oil spill exercises. WCMRC creates response plans that explain how the organization meets the standards and how exercises are carried out. The Canadian Coast Guard is the on-water federal lead agency for marine pollution response and has a National Exercise Program for marine spill response. Trans Mountain has also committed to enhancing marine spill response capacity in the Salish Sea, the subject of NEB Condition 133 (Confirmation of marine spill prevention and response commitments). The NEB also imposed Condition 91 (Plan for marine spill prevention and response commitments), requiring Trans Mountain to file a plan describing how it will meet the requirements of Condition 133.

As a result of the interrelationship in the regulatory regimes for marine spills, the EAO's views in relation to marine spills are discussed collectively in [Section 6.7](#). Detailed responses to individual recommendations are included in Appendix B.

6.6 FINANCIAL RESPONSIBILITY, LIABILITY AND INSURANCE

SUMMARY OF CHANGES IN THE NEB'S RECONSIDERATION REPORT

Both the NEB's 2016 and 2018 reports provided a description of the liability and compensation regime that would apply in the case of a marine spill. Concerns were raised by intervenors during both hearings about the amount of compensation available and limits to what is compensable in the event of a spill. The NEB Reconsideration Report describes amendments made in 2018 to modernize the *Marine Liability Act* to strengthen the Government of Canada's ability to compensate any person, entity, or organization for oil pollution damage resulting from a ship. The NEB remained of the view that there is an existing regulatory regime in place related to marine financial liability and compensation in the event of a spill. However, the NEB agreed that it is unclear if all losses are eligible to be claimed and noted that the Ship-Source Oil Pollution fund does not appear to compensate for losses to non-use values. The NEB included Recommendation 15, which encourages the GIC to work with Transport Canada to determine how a federal marine oil spill compensation regime can include compensation for non-use values for Indigenous and non-Indigenous communities, including any non-coastal communities that may be impacted as a result of a marine spill.

SUMMARY OF VIEWS EXPRESSED DURING THE PROVINCIAL RECONSIDERATION PROCESS

Concerns were raised during the provincial reconsideration process by Squamish Nation, Tsleil-Waututh Nation, the City of Vancouver and the Georgia Strait Alliance regarding compensation and clean-up costs in the event of a Project-related marine spill.

The City of Vancouver said that local governments play a key role in environmental spill response and recovery, but are not resourced to respond to marine spills, and that effort is needed to secure funds to support local emergency preparedness and cost-recovery.

Squamish Nation, Tsleil-Waututh Nation and the City of Vancouver proposed conditions including a full-cost assurance regime for spill preparedness, response and recovery, the establishment and maintenance of a catastrophe bond, and an environmental restoration and recovery plan that would include restorative and compensation investments to support ecological health recovery and improvement.

The Georgia Strait Alliance proposed a condition for a remediation and recovery plan that would include details regarding compensation, and a condition that would require posted ponds for spill clean-up operations, waste management and disposal and remediation and recovery efforts.

In response to the conditions proposed, Trans Mountain noted that the NEB heard concerns during both the 2014 and the 2018 hearings about the adequacy of this regime, and it addressed those concerns in its Recommendation 15 to the federal Governor in Council. Trans Mountain said that the regime for compensation resulting from spills from marine vessels is set out in the *Marine Liability Act* and that the EAO cannot impose any condition in the EAC that directly or indirectly conflicts with the *Marine Liability Act*.

SUMMARY OF EAO'S VIEWS

The EAO notes that both the NEB's 2016 and 2018 reports provided a description of the liability and compensation regime that would apply in the case of a marine ship-source spill. As noted by the NEB,

there is an existing regulatory regime in place related to marine financial liability and compensation in the event of a ship-source spill. The ship-source oil spill preparedness and response regime is based on the “polluter pays” principle, whereby the polluter is responsible for costs related to clean-up and pollution damage, including economic losses and environmental recovery. As per NEB Condition 121 (Financial Assurances Plan – Operations), Trans Mountain is required to maintain sufficient financial means or financial instruments in place to cover the costs of cleanup, damages, remediation and liabilities that may arise from potential malfunctions, accidents and failures from the oil pipeline and tank and terminal facilities. In the event of an oil spill from a tanker in Canadian waters, the owner of a tanker would be liable for the cost of clean-up and compensation to affected parties. Cost recovery for marine spills is administered under the Canadian Ship-source Oil Pollution Fund, established under the *Marine Liability Act*. Amendments were made in 2018 to strengthen the *Marine Liability Act*, ensuring 100 percent compensation for eligible claims regardless of the type of oil or size of the spill. The EAO understands that Transport Canada is currently reviewing compensation for non-economic losses based on Recommendation 15 in the NEB Reconsideration Report.

With regard to proposed conditions concerning restoration and recovery, in the event of an oil spill from a tanker in Canadian waters, the polluter (the responsible party) would be liable for the cost of cleanup and compensation to affected parties. The ship-source oil pollution liability and compensation regime provides compensation for reasonable costs of environmental remediation, which can include monitoring and post-spill studies.

6.7 EAO’S CONCLUSIONS REGARDING MARINE SPILLS

As described in [Section 5.6](#) while the federal government has constitutional authority for shipping and navigation, responsibility to protect and manage marine resources is a joint effort between provincial and federal agencies. The Province relies on federal authority and leadership to regulate ship-source spills in the marine environment. Federal agencies such as Transport Canada, the Canadian Coast Guard, Environment and Climate Change Canada, and Fisheries and Oceans Canada regulate marine transportation in Canadian waters and Canadian vessels. Provincial ministries, health authorities, and local and Indigenous governments work closely with these federal agencies to coordinate spill response activities.

The Province is involved in numerous external initiatives with partner agencies in areas related to spill coordination, response and emergency planning, including but not limited to:

- **Canada - US Joint Contingency Plan (JCP)** – a cooperative arrangement between Canada and the United States providing for a coordinated mechanism to plan, prepare for and respond to spills in contiguous waters or along the border between Canada and the US
- **Pacific States - British Columbia Oil Spill Task Force (OSTF)** – representatives from state and provincial environmental agencies in the Pacific coastal area collect and share data on oil spills, coordinate oil spill prevention projects and promote regulatory safeguards
- **Planning for Integrated Environmental Response (PIER)** – as part of its expanded area planning, the Canadian Coast Guard has initiated the [Greater Vancouver Integrated Response Plan](#), the

[Georgia Strait Integrated Response Plan](#), the [Juan de Fuca Integrated Response Plan](#), and the West Coast Vancouver Island Integrated Response Plan (as well as other coastal areas that are outside of the Project-related shipping area), which are intended to be a guide for multi-agency response to marine spill incidents, and are a product of a cooperative effort by federal departments, provincial ministries, Indigenous nations, local governments, health authorities, and the private sector

- **Places of Refuge Contingency Plan (Pacific Region)** – provides ships in distress with a designated location to stabilize their condition and reduce potential hazards led by Transport Canada

The concerns raised during the provincial reconsideration process by Indigenous Groups, local governments, and other interested parties regarding marine spills covered broad topics, included but were not limited to:

- Environmental behaviour of spilled diluted bitumen
- Environmental and socio-economic effects of spills
- Impacts to traditional marine use from spills
- Spill prevention, risk analysis, emergency preparedness and spill response
- Remediation and compensation in case of a spill

The EAO received many recommendations to amend or add conditions to the provincial EAC related to marine spills. The EAO also heard from Trans Mountain, which stated that the provincial reconsideration process was not an opportunity for parties to obtain conditions they could not persuade the NEB or GIC to impose through the federal process. The EAO is mindful that the federal government is the lead regulator for marine spills, with the provincial government already engaged in specific support roles. As noted in [Section 4.2](#), the EAO is cognizant of the limits to provincial Ministers' jurisdiction to attach conditions to the EAC, as well as regulatory and other initiatives that have taken place or are underway, which need not be duplicated through EAC conditions. The EAO has made recommendations that are the most pertinent to the most pressing concerns of participants in the reconsideration process while staying within the limits of the provincial reconsideration process as directed by the BCCA's decision and the areas of provincial interest and jurisdiction.

6.7.1 MARINE SPILL PREVENTION AND RESPONSE

Many concerns were raised during the provincial reconsideration process related to the marine spill prevention and response regime for Project-related marine shipping. Shipping is a federally regulated activity and the responsibility for emergency preparedness rests primarily with the federal government. The EAO acknowledges that under Part 8 of the *Canada Shipping Act, 2001*, Transport Canada is tasked with ensuring that there is an appropriate level of preparedness to respond to marine oil spills within prescribed time standards and operating environments. Canada's Ship-Source Oil Spill Preparedness and Response Regime includes collaboration and participation with other federal agencies, provincial agencies, WCMRC, coastal communities, and Indigenous nations.

NEB Condition 133 (Confirmation of marine spill prevention and response commitments) requires Trans Mountain to enhance the oil spill response regime for the Project. Towards the fulfillment of Condition 91 (Plan for marine spill prevention and response commitments), Trans Mountain submitted a report to the CER that includes discussion of the following supplemental plans developed by WCMRC: coastal mapping and development of Geographic Response Strategies; shoreline cleanup; wildlife management; waste management plan; sunken and submerged oil plan; and a convergent volunteer management plan.¹⁵ Transport Canada conducts audits of WCMRC against the *Canada Shipping Act, 2001*, requirements for response organizations. As committed to by Trans Mountain, a 3rd party verifier will undertake the review and certification role for the Enhanced Response Regime measure.

The NEB Recommendations to the GIC, which have been accepted by the GIC, include a recommendation for a federal review and update of federal marine shipping oil spill response requirements (Recommendation 7), and review of the federal marine oil spill compensation regimes with regards to compensation for non-use values (Recommendation 15). The federal government is also undertaking the Co-Developing Community Response initiative, an accommodation measure designed to build capacity in Indigenous groups to more actively involve them and local communities in oil spill preparedness and response.

Regarding environmental restoration and recovery in the event of a ship-source marine spill, the EAO has been informed that Environment and Climate Change Canada, specifically Environmental Emergencies Division, has established a Working Group on Recovery in the event of a marine spill. The working group will clarify federal and provincial roles and responsibilities for recovery from environmental emergencies involving ship-source oil spill incidents, with consideration of legal, environmental, social, economic and human health elements.

6.7.2 COASTAL GEOGRAPHIC RESPONSE

Spills in the marine environment can negatively impact B.C.'s coast. B.C. continues to work with federal agencies to align regulatory processes for a consistent spill response framework across the province. EAC Condition 34 (Coastal Geographic Response) requires that, if requested, Trans Mountain must participate in coastal geographic response planning undertaken by the provincial government, federal government or a certified response organization.

The EAO acknowledges that coastal mapping and geographic response strategies are currently being developed by WCMRC along the shipping lanes to minimize impacts of spills to sensitive environmental, cultural, archaeological sites and economic resources through engagement with Indigenous nations and communities. In Trans Mountain's "Plan for Marine Spill Prevention and Response Commitments" report¹⁶ filed with the CER to meet CER Condition 91 (Plan for marine spill prevention and response

¹⁵ https://docs2.cer-rec.gc.ca/ll-eng/llisapi.dll/fetch/2000/90464/90552/548311/956726/2392873/3781699/3902029/Condition_91_Plan_for_Marine_Spill_Prevention_%26_Response_Commitments_Jan_31_2020_-_A7D1F0.pdf?nodeid=3902030&vernum=-2

¹⁶ <https://docs2.cer-rec.gc.ca/ll->

commitments), Trans Mountain states that WCMRC has conducted sensitivity assessments of about 2,820 km of the total estimated 3,100 km of shoreline, which is publicly available on the Coastal Response Program website.¹⁷

Federal government agencies provided the EAO additional information on federal actions regarding geographic response planning. Under the lead of the Canadian Coast Guard, the Environment and Climate Change Canada (ECCC) National Environmental Emergency Centre is participating in the development of eight coastal Geographic Response Plan covering all of coastal B.C. ECCC participates in technical working groups, providing scientific expertise in areas such as resources at risk, Shoreline Cleanup Assessment Techniques, and sampling. The National Environmental Emergency Centre collects a wide set of environmental data, including data collected by others on shoreline classification. In the event of an incident, the National Environmental Emergency Centre can provide responders with information on local shoreline classification, as well as other sensitive resources at risk, in order that responders can establish an effective Shoreline Cleanup Assessment Techniques program for the spill. Under PIER, the Canadian Coast Guard collaborates with Indigenous communities, federal, provincial, and local governments as well as industry, response organizations and port/harbour authorities to develop Coast Guard area response plans.

In response to ongoing concerns related to effects of marine spills on shorelines, and the acknowledgement in the NEB's Reconsideration Report that impacts to certain values would be greater than others, the EAO notes that the province has committed to continued collaboration with the federal agencies on the development of coastal geographic response plans that identify areas of cultural, archaeological, economic, and ecological value to local communities and stakeholders, as well as important Indigenous nations cultural values and sites. The EAO acknowledges that identifying spill vulnerability requires incorporating input from Indigenous nations, local communities, industry, and responsible agencies.

6.7.3 FATE AND BEHAVIOUR OF BITUMEN RESEARCH

The EAO is of the view that the NEB Reconsideration Report highlights the importance of the ongoing research being undertaken by government, academia, and private industry at the provincial, national, and international level. This research is fundamental to continued improvement to spill response and recovery plans.

EAC Condition 35 (Fate and Behaviour of Bitumen Research) requires Trans Mountain to provide a report regarding the current and future research programs that Trans Mountain is leading, jointly leading, supporting, or otherwise involved in regarding the behaviour and recovery of heavy oils spilled in freshwater and marine aquatic environments, including research programs having the objective of providing spill responders with improved information on how to effectively respond to spills. The EAO proposed an amendment to EAC Condition 35 that would require Trans Mountain to provide progress

[eng/lisapi.dll/fetch/2000/90464/90552/548311/956726/2392873/3781699/3902029/Condition_91_Plan_for_Marine_Spill_Prevention_%26_Response_Commitments_Jan_31_2020_-_A7D1F0.pdf?nodeid=3902030](http://lisapi.dll/fetch/2000/90464/90552/548311/956726/2392873/3781699/3902029/Condition_91_Plan_for_Marine_Spill_Prevention_%26_Response_Commitments_Jan_31_2020_-_A7D1F0.pdf?nodeid=3902030)

¹⁷ <http://coastalresponse.ca/coastal-mapping/>

updates on the research program at one year and every five years during operations, or as otherwise authorized by the EAO (previously one year and five years after commencement of operations), as well as the requirement to provide the report to potentially affected coastal local governments (currently Trans Mountain must provide the report to EAO, Ministry of Environment [now Environment and Climate Change Strategy], Ministry of Natural Gas Development [now Energy, Mines and Low Carbon Innovation], OGC, Environment and Climate Change Canada, Canadian Coast Guard, and Aboriginal Groups). The EAO notes that Condition 35 requires that the above listed groups be consulted in the development of the reports, and that the reports will be posted publicly on the EAO's Project Information Centre.

SUMMARY OF VIEWS RECEIVED ON EAO'S PROPOSED AMENDMENT TO EAC CONDITION 35

Squamish Nation, Tsleil-Waututh Nation and the City of Vancouver support the proposed amendment to EAC Condition 35. These parties also recommended that an additional condition be imposed that would bind the proponent and Canada to sharing new information with B.C. and bind all parties to an adaptive management process to revise planning and upgrade technology.

Trans Mountain stated that it does not object to the proposed amendment. However, Trans Mountain suggests it would be reasonable to require updates at one and five years following commencement of Operations, and thereafter at the request of the EAO, as opposed to every 5 years. Trans Mountain also requested that the EAO identify in the condition which local governments would require copies of the reports.

SUMMARY OF EAO'S VIEWS

In response to the recommendation from Squamish Nation, Tsleil-Waututh Nation and the City of Vancouver, the EAO notes that Condition 35 (Fate and Behaviour of Bitumen Research) currently ensures that new information is brought forward and incorporated into response plans, and that the Ministers cannot condition parties other than the Certificate Holder (Trans Mountain). The EAO acknowledges Trans Mountain's input, however the EAO has retained the proposed new wording to require progress updates every 5 years during operations to acknowledge that this is a continually evolving area of research. It is the EAO's view that the proposed changes ensure that spill responders including provincial and federal agencies, Indigenous groups, and local governments will receive regularly updated information regarding current and future research programs around the behaviour and recovery of heavy oils spilled in freshwater and marine aquatic environments throughout Project operations, with the goal of providing spill responders with improved information on how to effectively respond to spills. See Appendix A for the EAO's proposed amended wording for EAC Condition 35.

6.7.4 EFFECTS OF PROJECT-RELATED MARINE SPILLS ON HUMAN HEALTH

An area of provincial interest is public health related to a marine spill. Under the *Public Health Act*, regional health authorities are responsible for ensuring the public is protected from health hazards. The EAO is of the view that the NEB Reconsideration Report highlights the importance of marine food and resources to Indigenous nations and recognizes the potential impact a spill would have on these

resources for Indigenous communities, directly through the potential loss of marine subsistence food, and indirectly through health effects of ingesting contaminated food. There is also the acknowledgment that chemical vapours emitted in the event of an oil spill could result in human health effects through inhaling volatile organic compounds.

The EAO notes that Environment and Climate Change Canada can convene the Environmental Emergencies Science Table to provide advice to the lead spill response agency, including information to minimize damage to human life or health. The Environmental Emergencies Science Table is a group of relevant experts in the field of environmental protection that may be activated during an environmental emergency response to identify environmental protection priorities, potentially impacted federal and provincial legislation and mandates and inform actions that reduce the consequences of environmental emergencies.

EAC Condition 32 (Emergency Response Plans) requires that emergency response plans must include environmental sampling and monitoring, including air quality monitoring for the pipeline, Sumas and Burnaby Terminals, and the Westridge Marine Terminal (WMT), but this condition does not address spills related to shipping.

To address issues raised regarding public health concerns if a marine shipping spill occurred in the marine environment, the EAO proposed a new condition that would require the development of a plan to: identify human exposure pathways in the event of a marine spill, including marine subsistence foods and airborne contaminants; roles and responsibilities of local, provincial and federal authorities as they relate to human health in marine spill response, including communication protocols; and the measures to reduce exposure in the event of a ship-source marine spill. This condition would include consultation with Indigenous nations along the shipping route and potentially affected coastal local governments in the preparation of the plan.

SUMMARY OF VIEWS RECEIVED ON EAO'S PROPOSED NEW HUMAN HEALTH CONDITION

Squamish Nation, Tsleil-Waututh Nation and the City of Vancouver support the EAO's proposed new condition with some proposed additions, such as including a cumulative effects assessment. Squamish Nation and Tsleil-Waututh Nation said that the condition must be amended to include ensuring Indigenous health and well-being, including cultural health and well-being.

Trans Mountain submitted that the proposed new condition is outside the EAO's jurisdiction in the provincial reconsideration process. Trans Mountain stated the following views:

- As the proposed new condition is intended to apply to ship-based marine spills, it is outside of the EAO's jurisdiction;
- There is no new information in the Reconsideration Report relative to the 2016 Report that justifies a new condition regarding human health issues related to marine oil spills;
- The proposed new condition would duplicate or conflict with the existing federal regime for marine spill preparedness and response, which exceeds the province's jurisdiction;
- The substance of the proposed new condition was considered and rejected by the NEB, as it was

deemed outside of the NEB's regulatory jurisdiction and within the responsibility of other federal agencies; and

- The proposed new condition is outside of the scope of the "reviewable project" (as defined in the EAO's Section 11 Order issued for the original review of TMX) and outside of Trans Mountain's control.

Tsleil-Waututh Nation, the City of Vancouver, and Trans Mountain provided subsequent views that further emphasized their positions. The submissions from these parties, briefly summarized below, can be found on the [EAO's Project Information Centre](#).

Trans Mountain raised particular concern around its ability to develop and implement a plan to respond to ship-sourced marine spills (for the purposes of addressing potential public health impacts), stating that Trans Mountain is not qualified or legally capable of doing so as there is an existing marine spill response regime. Trans Mountain said that it is not legally able to comply with a condition that requires it to potentially modify or implement spill response measures for ship-source marine spills in any particular way. Trans Mountain said that the NEB held in its Reconsideration Report that: marine oil spill preparedness and response is the responsibility of federal departments other than the NEB; that the regime is functioning appropriately; and changes to the oil spill preparedness and response regime would be within the responsibility of those departments. Trans Mountain further noted that the extent of its involvement in marine spill preparedness and response is to fund the enhanced oil spill response regime, the implementation of which rests with the WCMRC.

Tsleil-Waututh Nation disagreed with Trans Mountain's arguments and provided counter arguments, summarized as follows:

- As the NEB was required to include marine shipping as part of the designated project to be assessed in the federal reconsideration process, and the purpose of the provincial reconsideration process as directed by the BCCA is to review the changes in the NEB's Reconsideration Report, the "reviewable project" includes Project-related marine shipping.
- The Province's jurisdiction over marine spill preparedness and response was directly acknowledged by the NEB in its Reconsideration Report;
- The condition proposed by the EAO was not previously rejected by the NEB; and
- There is new information in the Reconsideration report on human health effects from a marine spill, and the NEB reviewed concerns raised by Indigenous groups and municipal governments including evidence provided by Tsleil-Waututh Nation.

The City of Vancouver also responded to Trans Mountain's submission and provided similar arguments to those expressed by Tsleil-Waututh Nation. The City of Vancouver also said that federal marine spill plans such as the GVI RP are intended to provide high-level response guidance and do not provide direction to address specific health risks posed by a Project-related spill, and as such a human health risk plan tailored to the effects associated with exposure to diluted bitumen would be complementary to the federal plans and support effective emergency response and the protection of human health.

Natural Resources Canada (NRCan) also provided their views regarding the proposed new condition.

NRCan noted that the NEB considered the human health effects of vessel-sources marine spills in the Reconsideration Report, however the NEB concluded that it does not have regulatory jurisdiction over marine preparedness and response planning. NRCan also said that Trans Mountain has limited direct control over vessels not at the Westridge Marine Terminal. The NEB imposed three conditions on Trans Mountain related to marine spill response (NEB Conditions 91, 133 and 144), and NRCan noted that these conditions are intentionally limited in scope due to Trans Mountain's limited authority in this area. While NRCan recognized that human health is a matter of shared federal and provincial jurisdiction, NRCan said that Canada has jurisdiction over marine safety and has put in place world-leading regimes for prevention, preparedness and response, and liability and compensation for the marine transportation of petroleum and other products. NRCan is of the view that concerns related to marine spill response may be more appropriately addressed through provincial engagement in broader federal initiatives.

The EAO received information regarding the Planning for Integrated Environmental Response (PIER) program from the team responsible for it. Led by the Canadian Coast Guard, PIER includes representatives from Transport Canada, Environment and Climate Change Canada and Fisheries and Oceans Canada. As part of its expanded area planning, the Canadian Coast Guard has initiated the [Greater Vancouver Integrated Response Plan](#), the [Georgia Strait Integrated Response Plan](#), the [Juan de Fuca Integrated Response Plan](#), and the West Coast Vancouver Island Integrated Response Plan which are intended to be a guide for multi-agency response to marine spill incidents, and are a product of a cooperative effort by Federal departments, Provincial ministries, Indigenous nations, local governments, health authorities, and the private sector. The EAO was told that although the Canadian Coast Guard is not the lead agency to identify the human health impacts during a marine spill response, a need was recognized to include human health appendices that will identify risks associated with human health during a marine spill, pathways of exposure, and a high-level overview of the roles and responsibilities of local, provincial and federal government agencies. The PIER program team is currently working to create appendices and annexes to the response plans based on the concerns, feedback and input received from participants during the planning process. Plans are reviewed and updated on an annual basis and potential content for the human health appendices will be discussed in the upcoming year for inclusion in the plans for 2022. It was noted by the Canadian Coast Guard that the content of the appendices will be dependent on the input received from planning participants.

SUMMARY OF EAO'S VIEWS

The EAO considered the views of Squamish Nation, Tsleil-Waututh Nation, City of Vancouver, Trans Mountain, and government agencies on the proposed condition. As noted above, in an early draft of this report, the EAO proposed a draft condition that would require Trans Mountain to prepare a plan to: identify human exposure pathways in the event of a marine spill, including marine subsistence foods and airborne contaminants; roles and responsibilities of local, provincial and federal authorities as they relate to human health in marine spill response, including communication protocols; and the measures to reduce exposure in the event of a ship-source marine spill.

Regarding the proposed condition as a plan condition, Squamish Nation, Tsleil-Waututh Nation, and the City of Vancouver were supportive of it with amendments, Trans Mountain opposed it for the reasons

discussed above. The EAO had in-depth discussions with provincial and federal agencies, several of which expressed an understanding of the intent of the condition but questioned it being a plan imposed on Trans Mountain. As a result of the discussions, the EAO received additional information from government agencies about the work being undertaken in new and existing programs, as described above.

The EAO is of the view that the risks posed to human health by TMX are not unique to that project, although the Project would contribute to the overall risks associated with a marine oil spill in the Salish Sea. Given the nature of spill preparedness and response, particularly in relation to managing potential impacts to human health, the EAO is of the view that the federal government is best positioned to have lead responsibility to ensure adequate preparedness, in collaboration with provincial government agencies, Indigenous nations, local government and the private sector. The EAO is of the view that the Canadian Coast Guard's plans to include human health within the integrated response plans through the PIER program would be an important action toward ensuring the human health is adequately protected in the event of a marine spill. However, as these plans are intended to provide high-level response guidance, more information is needed on the specific human health risks and response activities of a Project-related marine spill to support a robust response framework. Further, as the Canadian Coast Guard noted that they are not the lead agency to identify the human health impacts in the event of a ship-source spill, the adequacy of integrated response plans to address human health issues will be dependant on the information that is provided in that forum.

It is the EAO's view that while Trans Mountain does not have direct control of spill response activities pertaining to a Project-related marine vessel, it is well positioned to provide information to inform coordinated planning and spill response measures to ensure the health and safety of the public, including first responders, volunteers, coastal residents and Indigenous communities. In addition, the EAO notes that NEB Conditions 91 (Plan for marine spill response commitments) and 133 (Confirmation of marine spill response commitments) impose obligations on Trans Mountain, not other persons: Condition 91 includes the following requirements:

Trans Mountain must file with the NEB, within 6 months from the issuance date of the Certificate, a plan **describing how it will ensure** that it will meet the requirements of Condition 133 regarding marine spill prevention and response (emphasis added).

Condition 133 includes the following requirement:

Trans Mountain must file with the NEB, at least 3 months prior to loading the first tanker at the Westridge Marine Terminal with oil transported by the Project, confirmation, signed by an officer of the company, that [...]an enhanced marine oil spill response regime is in place that is capable of: a. delivering 20,000 tonnes of capacity within 36 hours of notification, with dedicated resources staged within the study area; and b. initiating a response within 2 hours for spills in Vancouver Harbour, and within 6 hours for the remainder of the Salish Sea shipping route to the 12 nautical-mile territorial sea limit.

The EAO proposes a new condition, set out in Appendix A below, that would require the development

of a report, rather than a plan, that would: identify human exposure pathways in the event of a marine spill, including marine subsistence foods and airborne contaminants; roles and responsibilities of local, provincial and federal authorities as they relate to human health in marine spill response, including communication protocols; and the measures to reduce exposure in the event of a ship-source marine spill. This condition would include consultation with Indigenous nations along the shipping route and potentially affected coastal local governments in the preparation of the plan. This report would, in the EAO's view, provide important information as the federal government and its agencies prepare plans that address the potential impact to human health from spills, including through the PIER program.

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7.0 APPENDIX A: THE EAO'S PROPOSED NEW AND ADMENDED CONDITIONS

No.	Condition
35.	<p>Fate and Behaviour of Bitumen Research</p> <p>The Holder must provide a report regarding the current and future research programs that the Holder is leading, jointly leading, supporting, or otherwise involved in regarding the behaviour and recovery of heavy oils spilled in freshwater and marine aquatic environments, including research programs having the objective of providing spill responders with improved information on how to effectively respond to spills. The report must be developed in consultation with the MOE, MNGD, OGC, ECCC, Canadian Coast Guard, Aboriginal Groups, and potentially affected coastal local governments.</p> <p>The report must include:</p> <ul style="list-style-type: none"> a) A statement of the funding provided or allocated to ensure the research is undertaken and concluded within a specified period; b) Specifics of the Holder's approach to ongoing engagement with the NEB, ECCC, Canadian Coast Guard, MOE, MNGD, OGC, Aboriginal Groups, and potentially affected coastal local governments in the research programs; c) Research topics, including the different physical and chemical properties of the oil and other products intended to be shipped from the Westridge Marine Terminal, product weathering, dispersion and oil/sediment interactions, product submergence, product behaviour and cleanup following in-situ burning, and cleanup and remediation options for sediments and shoreline; d) The scope, objectives, methods, and timeframe for the research topics; e) How the Holder will incorporate applicable results of the research into its emergency preparedness and response plans; f) How the Holder will work with spill responders to support the incorporation of the results of the research into their emergency preparedness plans and programs; and g) A plan for reporting to the NEB, ECCC, Canadian Coast Guard, MOE, MNGD, OGC, Aboriginal Groups, and potentially affected coastal local governments on the progress of the research program. <p>The Holder must provide the report to the EAO, MOE, MNGD, OGC, ECCC, Canadian Coast Guard, Aboriginal Groups, and potentially affected coastal local governments prior to the commencement of Operations, and must provide progress updates pursuant to g) above at one year following</p>

No.	Condition
	<p>commencement of Operations and every five years following during the period of Operations, or as otherwise authorized by the EAO. The EAO may amend these timelines and may request additional reports at any time by providing written notice to the Holder.</p>
New	<p>Human Health Risk Report</p> <p>The Holder must retain a Qualified Professional to prepare a report that describes ship-source marine spill human health risks, response, and monitoring, in accordance with the requirements set out below.</p> <p>The Report must be developed in consultation with MOE, MOH, federal agencies (to be confirmed), regional health authorities (Island Health Authority, Fraser Health Authority, Coastal Health Authority), B.C. First Nations Health Authority, Aboriginal Groups – Marine Shipping, and potentially affected coastal local governments.</p> <p>The report must include:</p> <ol style="list-style-type: none"> a) The identification of human exposure pathways in the event of a Project-related ship-source marine spill scenario of 16,500 m³ at Arachne Reef, including but not limited to exposure via marine subsistence foods and air emissions; b) The roles and responsibilities of local, provincial, and federal authorities related to impacts to human health in the event of a ship-source marine spill; c) In the event of a Project-related ship-source marine oil spill scenario of 16,500 m³ at Arachne Reef, the measures that should be taken to reduce exposure, and the appropriate party or parties to carry out the measures. <p>The Holder must provide the report to the EAO, MOE, MOH, federal agencies (to be confirmed), regional health authorities (Island Health Authority, Fraser Health Authority, Coastal Health Authority), B.C. First Nations Health Authority, Aboriginal Groups – Marine Shipping, and local governments no later than 90 days prior to Operations.</p> <p>The report, and any updates made pursuant to Condition 1 or 2(h), must be prepared under the direction of a Qualified Professional retained by the Holder and to the satisfaction of the EAO.</p> <p>If the Province or Canada establishes a planning process or monitoring program for responding to the human health impacts from a marine spill involving Project-related marine vessels, the Holder must, at the request of the Province or Canada, participate in the process or program.</p>

8.0 APPENDIX B: CONDITIONS PROPOSED BY THE PARTIES AND EAO'S ANALYSIS

As described in [Sections 2.0](#) and [3.0](#), the Ministers directed the EAO to engage and work closely with Squamish Nation, Tsleil-Waututh Nation and the City of Vancouver in the provincial reconsideration process. The following table presents the proposed amended and new conditions and recommendation to the TMX EAC #17-01 Table of Conditions by Squamish Nation, Tsleil-Waututh Nation and the City of Vancouver and the EAO's detailed analysis. In undertaking the analysis, the EAO sought feedback from and engaged heavily with provincial and federal agencies to inform its understanding of regulatory roles and appropriateness of any condition to recommend to Ministers. The table also includes Trans Mountain's responses.

In determining whether these recommendations should result in changes to the EAC conditions, or the addition of new ones, the EAO employed the following criteria in this regard ([Section 4.1](#)):

- Whether issues raised pertained to differences¹⁸ between the two NEB reports;
- The Ministers' jurisdiction to make changes to EAC conditions or add new ones;
- Avoiding unnecessary duplication, having regard for:
 - Existing EAC conditions;
 - Existing NEB conditions;
 - Existing federal or provincial regulatory mechanisms;
 - NEB Recommendations to the GIC (which, as noted above, were accepted by it); and
 - Federal government accommodation measures¹⁹ and other federal government initiatives related to the matters covered in the differences between the two NEB reports.

¹⁸ The EAO considered a difference between the two NEB reports to be any new content in the NEB Reconsideration Report that was not found in the original NEB Report.

¹⁹ <https://www.canada.ca/en/campaign/trans-mountain/what-is-tmx/the-decision/background11.html>

Proposed by	Existing EAC Condition or New Condition	Proposed New Conditions and Condition Amendments (amended or new condition language is denoted in <i>bold italicized text</i>)	Trans Mountain Response	EAO's Analysis
Squamish Nation, Tsleil-Waututh Nation and City of Vancouver	Existing EAC Condition 36	<p><u>Emergency Preparedness and Response Exercise and Training Program and Reporting</u></p> <p>The Holder must prepare an emergency preparedness and response exercise and training program for the pipeline, <i>Project-related marine shipping</i>, Sumas and Burnaby Terminals and the Westridge Marine Terminal. The program must, in addition to meeting all of the requirements set out in NEB Condition 119, show how the Holder will test its:</p> <ul style="list-style-type: none"> a) Plans with respect to the management of waste oil; b) Evacuation (shelter-in-place) plans; c) Oiled wildlife plans; d) Fire pre-plans; and e) Sampling and monitoring plans. <i>f) Plans with respect to including aboriginal communities in the incident command system and in response activities.</i> 	<p>EAC Condition #36 applies to spill preparedness for the TMEP pipeline and associated facilities. These aspects of the TMEP were not the subject of the NEB reconsideration process. For spills resulting from TMEP-related marine shipping, as Trans Mountain explained in its September 30, 2020 letter, Trans Mountain does not have control over spill preparedness or response. Those matters are the responsibility of the marine vessel operator and various government agencies (including the WCMRC). As a result, the requested amendments to EAC Condition #36 are inappropriate and unlawful because Trans Mountain would be unable to legally comply with them.</p>	<p>Shipping is a federally regulated activity and the responsibility for emergency preparedness rests primarily with the federal government, in collaboration with various parties.</p> <p>Transport Canada is responsible for Canada's Ship-Source Oil Spill Preparedness and Response Regime, ensuring that there is an appropriate level of preparedness to respond to marine oil spills within prescribed time standards and operating environments. The regime includes participation by other federal agencies, the provincial government, Western Canada Marine Response Corporation (the certified response organization (RO) for B.C.), coastal communities, and Indigenous nations.</p> <p>Under the <i>Canada Shipping Act, 2001</i>, prescribed vessels and prescribed classes of oil handling facilities are required to have an arrangement with a certified RO. Transport Canada oversees the RO and sets planning standards, response capacity, response times, and monitors the ROs' oil spill exercises. Western Canada Marine Response Corporation (WCMRC) creates response plans that explain how the organization meets the standards and how exercises are carried out. The Canadian Coast Guard is the on-water federal lead agency for marine pollution response and has a National Exercise Program for marine spill response.</p> <p>NEB Condition 133 (Confirmation of marine spill prevention and response commitments), requires confirmation from Trans Mountain that an enhanced marine oil spill response regime is in place. The NEB also imposed Condition 91 (Plan for marine spill prevention and response commitments), requiring Trans Mountain to file a plan describing how it will meet the requirements of Condition 133.</p>

<p>Squamish Nation, Tsleil-Waututh Nation and City of Vancouver</p>	<p>Existing EAC Condition 37</p>	<p><u>Pre-Operations Emergency Response Exercises</u></p> <p>Prior to commencing Operations, the Holder must undertake emergency response exercises that must, in addition to meeting all of the requirements set out in NEB Condition 136:</p> <p>a) Invite MOE, potentially affected municipalities, regional districts, Aboriginal Groups and first responders, as identified based on the location of each exercise, to observe or participate in the exercises;</p> <p>b) Complete exercises for each of the following scenarios:</p> <ul style="list-style-type: none"> i) full-scale full-bore rupture under ice and snow conditions in BC; ii) deployment of emergency equipment for a full-bore rupture into major river in BC under peak flow conditions; iii) deployment of emergency equipment for a tank fire at the Burnaby Terminal; and iv) a 16,000 cubic-metre diluted bitumen release into Burrard Inlet as a result of a release from a tanker at first or second narrows. <p>The Holder must provide the reports required by NEB Condition 136 to the EAO within three months after completing each exercise, along with a report on the exercises referenced in paragraph (b) that is consistent with the requirements of NEB Condition 136 (c).</p>	<p>EAC Condition #37 applies to spill preparedness for the TMEP pipeline and associated facilities. These aspects of the TMEP were not the subject of the NEB reconsideration process. For spills resulting from TMEP-related marine shipping, as Trans Mountain explained in its September 30, 2020 letter, Trans Mountain does not have control over spill preparedness or response. Those matters are the responsibility of the marine vessel operator and various government agencies (including the WCMRC). As a result, the requested amendments to EAC Condition #37 are inappropriate and unlawful because Trans Mountain would be unable to legally comply with them. Trans Mountain also notes that in the NEB’s Reconsideration Report, it noted that a spill of 16,000 cubic metres into Burrard Inlet as a result of a TMEP tanker was not a credible worst-case scenario (NEB Reconsideration Report at 517)</p>	<p>Shipping is a federally regulated activity and the responsibility for emergency preparedness rests primarily with the federal government, in collaboration with various parties.</p> <p>Transport Canada is responsible for Canada’s Ship-Source Oil Spill Preparedness and Response Regime, ensuring that there is an appropriate level of preparedness to respond to marine oil spills within prescribed time standards and operating environments. The regime includes participation by other federal agencies, the provincial government, Western Canada Marine Response Corporation (the certified response organization (RO) for B.C.), coastal communities, and Indigenous nations.</p> <p>Under the <i>Canada Shipping Act, 2001</i>, prescribed vessels and prescribed classes of oil handling facilities are required to have an arrangement with a certified RO. Transport Canada oversees the RO and sets planning standards, response capacity, response times, and monitors the ROs’ oil spill exercises. Western Canada Marine Response Corporation creates response plans that explain how the organization meets the standards and how exercises are carried out. The Canadian Coast Guard is the on-water federal lead agency for marine pollution response and has a National Exercise Program for marine spill response.</p> <p>NEB Condition 133 (Confirmation of marine spill prevention and response commitments), requires confirmation from Trans Mountain that an enhanced marine oil spill response regime is in place. The NEB also imposed Condition 91 (Plan for marine spill prevention and response commitments), requiring Trans Mountain to file a plan describing how it will meet the requirements of Condition 133.</p>
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<p>Squamish Nation, Tsleil-Waututh Nation and City of Vancouver</p>	<p>New Condition</p>	<p><u>Full-cost Assurance Regime for Spill Preparedness, Response and Recovery</u></p> <p>The Holder must establish a full-cost marine spill response regime to support local government marine spill response capacity for the life of the project. The regime must:</p> <ul style="list-style-type: none"> a) Be developed in consultation with Local Governments; b) Provide annual funding to support local emergency preparedness and response training for Project-related spills; c) Provide upfront financing and cost recovery for local emergency response services and wildlife response and recovery services; d) Provide financing for short-term and long-term environmental and socio-economical restoration and recovery. <p>The regime must be established at least six months prior to commencing operations and be based on cost information provided by service providers.</p>	<p>The regime for compensation resulting from spills from marine vessels is set out in the <i>Marine Liability Act</i>. The NEB heard concerns during the original OH-001-2014 hearing and the MH-052-2018 reconsideration process about the adequacy of this regime, and it addressed those concerns in its Recommendation 15 to the federal Governor in Council. The EAO cannot impose any condition in the EAC that directly or indirectly conflicts with the <i>Marine Liability Act</i>.</p>	<p>Both the NEB's 2016 and 2018 reports provided a description of the liability and compensation regime that would apply in the case of a marine ship-source spill. The NEB noted that there is an existing regulatory regime in place related to marine financial liability and compensation in the event of a ship-source spill. Transport Canada is responsible for Canada's Ship-Source Oil Spill Preparedness and Response Regime. The ship-source oil spill preparedness and response regime is based on the "polluter pays" principle, whereby the polluter is responsible for costs related to cleanup and pollution damage, including economic losses and environmental recovery. The NEB Reconsideration Report describes amendments made in 2018 to strengthen the <i>Marine Liability Act</i> ensuring 100 percent compensation for eligible claims regardless of the type of oil or size of the spill. Based on Recommendation 15 in the Reconsideration Report, Transport Canada is reviewing compensation for non-economic losses.</p>
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<p>Squamish Nation, Tsleil-Waututh Nation and City of Vancouver</p>	<p>New Condition</p>	<p><u>Establishment and Maintenance of a Catastrophe Bond</u></p> <p>The Holder must file with the EAO, at least 6 months prior to commencing operations and annually thereafter, evidence that it has secured a catastrophe bond of \$1.0 Billion which will provide compensation for:</p> <p>a) Direct costs of a spill from a Project-related tanker transporting oil products incurred by the Province, Indigenous communities, local governments and coastal communities from Westridge Marine Terminal for which there is not sufficient funding in the existing compensation mechanisms; and</p> <p>b) Indirect costs incurred by the Province, indigenous communities, local governments and coastal communities that may not be covered by existing compensation mechanisms, including loss due to closures of beaches and parks.</p>	<p>The regime for compensation resulting from spills from marine vessels is set out in the <i>Marine Liability Act</i>. The NEB heard concerns during the original OH-001-2014 hearing and the MH-052-2018 reconsideration process about the adequacy of this regime, and it addressed those concerns in its Recommendation 15 to the federal Governor in Council. The EAO cannot impose any condition in the EAC that directly or indirectly conflicts with the <i>Marine Liability Act</i>. Trans Mountain notes that the NEB specifically considered a request from parties for a compensation fund during the NEB reconsideration process and rejected that request on the basis that this concern was addressed through the existing regime for marine spill compensation (NEB Reconsideration Report at 540)</p>	<p>It is the EAO's view that there is no new information in the NEB Reconsideration Report that supports adding this condition. The EAO did not identify new information in the NEB Reconsideration Report related to bonds as compensation for direct and indirect costs associated with a ship-source marine spill.</p> <p>Both the NEB's 2016 and 2018 reports provided a description of the liability and compensation regime that would apply in the case of a ship-source marine spill. The NEB noted that there is an existing regulatory regime in place related to marine financial liability and compensation in the event of a ship-source spill. Transport Canada is responsible for Canada's Ship-Source Oil Spill Preparedness and Response Regime.</p> <p>The ship-source oil spill preparedness and response regime is based on the "polluter pays" principle, whereby the polluter is responsible for costs related to cleanup and pollution damage, including economic losses and environmental recovery. The NEB Reconsideration Report describes amendments made in 2018 to strengthen the <i>Marine Liability Act</i> ensuring 100 percent compensation for eligible claims regardless of the type of oil or size of the spill. Based on Recommendation 15 in the Reconsideration Report, Transport Canada is reviewing compensation for non-economic losses</p>
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<p>Squamish Nation, Tsleil-Waututh Nation and City of Vancouver</p>	<p>Existing EAC Condition 2</p>	<p><u>Plan Development</u></p> <p>Where a condition of this Certificate requires the Holder to develop a plan, program or other document, any such plan, program or other document must, at a minimum, include the following information:</p> <ul style="list-style-type: none"> a) Purpose and objectives of the plan, program or other document; b) Roles and responsibilities of the Holder, Project personnel and contractors; c) Names and if applicable, professional certifications and professional stamps/seals, for those responsible for the preparation of the plan, program, or other document; d) Schedule for implementing the plan, program or other document throughout the relevant Project phases; e) Methods for review of best available technology and best achievable practices for the protection of public health and environmental aspects considered in the plan, program or other document, and means by which it will be included in the plan, program or other document; f) Means by which the effectiveness of the mitigation measures will be evaluated, including a schedule for evaluating effectiveness; g) Adaptive management plan to address effects of the Project if those effects: <ul style="list-style-type: none"> i) Are not mitigated to the extent contemplated in the Application; or ii) Are not predicted in the Application; h) Schedules and methods for the submission of reporting to specific agencies, Aboriginal Group(s) and the public and the required form and content of those reports; and i) Process and timing for updating and revising the plan, program or other document, including updating the review of best available technology, recommendations from independent audits and any consultation with agencies, local governments and Aboriginal Groups that would occur in connection with such updates and revisions. 	<p>The Parties have not provided any explanation or justification for this requested amendment. This amendment would require changes to the process for EAC Conditions that have already been satisfied or are in the process of being satisfied. As a result, the amendment would unnecessarily frustrate Trans Mountain’s ability to comply with the EAC. Trans Mountain also notes that there is no new information in the NEB Reconsideration Report that would justify this amendment.</p>	<p>EAC condition 2 is applicable to all EAC conditions, therefore the proposed amendments would alter condition requirements for topics beyond the scope of the provincial reconsideration process.</p>
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<p>Squamish Nation, Tsleil-Waututh Nation and City of Vancouver</p>	<p>Existing EAC Condition 35</p>	<p><u>Fate and Behaviour of Bitumen Research</u></p> <p><i>The City supports the changes being proposed by the EAO denoted below.</i></p> <p>The Holder must provide a report regarding the current and future research programs that the Holder is leading, jointly leading, supporting, or otherwise involved in regarding the behaviour and recovery of heavy oils spilled in freshwater and marine aquatic environments, including research programs having the objective of providing spill responders with improved information on how to effectively respond to spills. The report must be developed in consultation with the MOE, MNGD, OGC, ECCC, Canadian Coast Guard, Aboriginal Groups and potentially affected coastal local governments.</p> <p>The report must include:</p> <ul style="list-style-type: none"> a) A statement of the funding provided or allocated to ensure the research is undertaken and concluded within a specified period; b) Specifics of the Holder’s approach to ongoing engagement with the NEB, ECCC, Canadian Coast Guard, MOE, MNGD, OGC, Aboriginal Groups, and potentially affected coastal local governments in the research programs; c) Research topics, including the different physical and chemical properties of the oil and other products intended to be shipped from the Westridge Marine Terminal, product weathering, dispersion and oil/sediment interactions, product submergence, product behaviour and cleanup following in-situ burning, and cleanup and remediation options for sediments and shoreline; d) The scope, objectives, methods, and timeframe for the research topics; e) How the Holder will incorporate applicable results of the research into its emergency preparedness and response plans; f) How the Holder will work with spill responders to support the incorporation of the results of the research into 	<p>See Trans Mountain’s comment letters dated September 30, 2020 and October 30, 2020 regarding the proposed amendments to EAC Condition #35. Attachment 2 includes a list of proposed local governments.</p>	<p>The EAO acknowledges support for the EAO's current proposed changes to EAC condition 35</p>
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		<p>their emergency preparedness plans and programs; and</p> <p>g) A plan for reporting to the NEB, ECCC, Canadian Coast Guard, MOE, MNGD, OGC, Aboriginal Groups, and <i>potentially affected coastal local governments</i> on the progress of the research program.</p> <p>The Holder must provide the report to EAO, MOE, MNGD, OGC, ECCC, Canadian Coast Guard, Aboriginal Groups, <i>and potentially affected coastal local governments</i> prior to the commencement of Operations, and must provide progress updates pursuant to g) above at <i>one year and every five years following</i> after commencement of Operations. The EAO may amend these timelines and may request additional reports at any time by providing written notice to the Holder.</p>		
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<p>Squamish Nation, Tsleil-Waututh Nation and City of Vancouver</p>	<p>New Condition</p>	<p><u>Independent Audits</u></p> <p>The Holder must provide a report regarding the third-party independent reviews of the emergency spill response program which are to be undertaken throughout the life of the Project. The Holder must provide the audit reports and responses to any recommendations to the EAO, Indigenous communities and local governments.</p>	<p>The scope of Trans Mountain’s emergency response program is confined to the TMEP pipeline and associated facilities, which were not the subject of the NEB reconsideration process. As a result, this request is outside the scope of the EAO’s reconsideration process as well. With respect to marine vessel-sourced spills, Trans Mountain does not have control over spill preparedness or response. Those matters are the responsibility of the marine vessel operator and various government agencies (including the WCMRC). Trans Mountain notes that the relevant federal government departments summarized the certification process for WCMRC in their evidence during the NEB reconsideration process (see p. 30 of Annex 05.E.01, Filing ID A6J6S0). Trans Mountain also explained in its evidence in the OH-001-2014 hearing that under the Enhanced Response Regime, WCMRC’s response capacity would need to be verified by an independent organization, unless certified by Transport Canada (see Table 5.5.3 of Volume 8A of Trans Mountain’s application, Filing ID A3S4Y6). As a result, even if this issue was within the EAO’s jurisdiction, which it is not, there is no evidentiary basis in the NEB Reconsideration Report to impose additional auditing requirements on top of this existing process.</p>	<p>It is the EAO’s view that there is no new information in the NEB Reconsideration Report that supports adding this condition. The EAO did not identify new information in the NEB Reconsideration Report related to independent audits associated with a ship-source marine spill. The Holder’s emergency spill response program applies to the pipeline and terminals, Transport Canada is responsible for Canada’s Ship-Source Oil Spill Preparedness and Response Regime. As the proposed condition would apply spills not related to marine shipping, the EAO views this proposed condition as out of scope of the provincial reconsideration process.</p> <p>The EAO notes that Transport Canada conducts audits of WCMRC against <i>Canada Shipping Act, 2001</i>, requirements for marine spill response organizations. As committed to by Trans Mountain, a 3rd party verifier will undertake the review and certification role for the Enhanced Response Regime measures unless certified by Transport Canada.</p>
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<p>Squamish Nation, Tsleil-Waututh Nation and City of Vancouver</p>	<p>Existing EAC Condition 32</p>	<p><u>Emergency Response Plans</u></p> <p>The Holder must prepare emergency response plans for the pipeline, Sumas and Burnaby Terminals, the Westridge Marine Terminal and <i>Project-related marine shipping as it impacts coastal communities</i> (Response Plans) that must, in addition to meeting all of the requirements set out in NEB Conditions 125 and 126:</p> <p>a) Be developed in consultation with Indigenous communities and local governments</p> <p>b) Demonstrate the Holder's intended use of the incident command system to respond to emergencies;</p> <p>c) Include supplemental plans and guidelines for:</p> <p>i) Incident notification and communications;</p> <p>ii) Oiled wildlife care, <i>including a description of how the holder will fund local oiled wildlife response capacity, including ongoing training, equipment, facilities, and program management;</i></p> <p>iii) Spill Response Service Coordination, including a description of how the Holder will coordinate the participation of first responders, agencies, local governments, and Indigenous communities that may be involved in an emergency response related to the Project;</p> <p>iv) Convergent volunteer management, including a description of how the holder will incorporate training, health and safety, logistics, and funding for volunteer support resources;</p> <p>v) Environmental sampling and monitoring (including, air monitoring);</p> <p>vi) Human health risk assessment and monitoring (responders and community); and</p> <p>vii) Spill waste management;</p> <p>d) Be reviewed and updated annually.</p> <p>The Holder must provide the emergency response plans to EAO, MOE, MNGD and OGC, Aboriginal Groups <i>and local governments</i> at least six months prior to the commencement of Operations.</p>	<p>EAC Condition #32 applies to spill preparedness for the TMEP pipeline and associated facilities. These aspects of the TMEP were not the subject of the NEB reconsideration process. For spills resulting from TMEP-related marine shipping, as Trans Mountain explained in its September 30, 2020 letter, Trans Mountain does not have control over spill preparedness or response. Those matters are the responsibility of the marine vessel operator and various government agencies (including the WCMRC). As a result, the requested amendments to EAC Condition #32 are inappropriate and unlawful because Trans Mountain would be unable to legally comply with them.</p>	<p>EAC Condition 32 applies to spill preparedness and response for the pipeline and associated facilities which are under the direct control of Trans Mountain Pipeline ULC. As described in the NEB Report Chapter 14.3, marine spill response is the responsibility of the federal government and the certified response organization Western Canada Marine Response Corporation (WCMRC).</p> <p>In Trans Mountain's "Plan for Marine Spill Prevention and Response Commitments" report filed with the CER to meet CER Condition 91, supplemental plans WCMRC is implementing as part of the enhanced response regime are listed, including wildlife management, waste management, and volunteer management. (https://docs2.cer-rec.gc.ca/ll-eng/llisapi.dll/fetch/2000/90464/90552/548311/956726/2392873/3781699/3902029/Condition_91_Plan_for_Marine_Spill_Prevention_%26_Response_Commitments_Jan_31_2020_-_A7D1F0.pdf?nodeid=3902030)</p> <p>In NEB's Reconsideration Report, the Canadian Coast Guard noted that incident-specific waste management plans are developed at the time of an incident based on the specific products, volumes and locations, and are reviewed to ensure that they meet local, provincial and federal laws and regulations. Waste management plans must be approved by unified Command, which would include representatives from the Ministry of Environment and Climate Change Strategy. Where waste is being disposed of in B.C., a Waste Management Specialist within the B.C. government is activated to create a Waste Management Plan to manage all material.</p> <p>Spill response service coordination is a function of the Incident Command System, the Canadian Coast Guard is the lead agency Incident Commander for marine spills from tankers.</p> <p>Regarding human health, response organizations are required</p>
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<p>Squamish Nation, Tsleil-Waututh Nation and City of Vancouver</p>	<p>Amendments to Proposed New EAO Condition</p>	<p><u>Human Health Impact Assessment and Mitigation Plan</u></p> <p>The Holder must retain a Qualified Professional to prepare a plan that describes ship-source marine spill human health risks, response, and monitoring, in accordance with the requirements set out below.</p> <p>The plan must be developed in consultation with MOE, MOH, federal agencies, regional health authorities (Island Health Authority, Fraser Health Authority, Coastal Health Authority), B.C. First Nations Health Authority, Aboriginal Groups – Marine Shipping, and potentially affected coastal local governments and must be updated every 5 years.</p> <p>The plan must include:</p> <p>a) The identification of human exposure pathways in the event of a ship-source marine spill, including but not limited to exposure via marine subsistence foods and air emissions;</p> <p>b) The assessment of cumulative effects of a ship-source marine spill in Burrard Inlet on coastal communities;</p>	<p>See Trans Mountain’s comments letters dated September 30, 2020 and October 30, 2020 as to why this new condition (including the new requested amendments) should not be imposed in the EAC.</p>	<p>The EAO acknowledges Squamish Nation, Tsleil-Waututh Nation, and the City of Vancouver's support for the EAO's draft proposed new condition (September 2020).</p> <p>Following discussions with provincial and federal agencies about the work being undertaken on new and existing programs such as the Canadian Coast Guard's Planning for Integrated Environmental Response (PIER) program, the EAO is proposing a new condition, set out in Appendix A, that would require the development of a report, rather than a plan. The EAO is of the view that the federal government is best positioned to have lead responsibility in response planning to ensure adequate preparedness, in collaboration with provincial government agencies, Indigenous nations, local government and the private sector. However, it is the EAO’s view that while Trans Mountain does not have care and control related to the spill response activities of a Project-related marine vessel, it is well positioned to provide</p>

		<p>c) The roles and responsibilities of local, provincial, and federal authorities related to impacts to human health in the event of a ship-source marine spill; and d) In the event of a Project related ship-source marine oil spill, the measures to protect human health including, but not limited to, risks to first responders, volunteers, coastal residents and Indigenous communities.</p> <p>The Holder must provide the plan to the EAO, MOE, MOH, federal agencies, regional health authorities (Island Health Authority, Fraser Health Authority, Coastal Health Authority), B.C. First Nations Health Authority, Aboriginal Groups – Marine Shipping, and local governments no later than 90 days prior to Operations. The plan, and any amendments thereto, must be implemented to the satisfaction of a Qualified Professional throughout Operations and to the satisfaction of the EAO.</p>		<p>information to inform coordinated planning and spill response measures to ensure the health and safety of the public, including first responders, volunteers, coastal residents and Indigenous communities. The proposed new condition would require the development of a report that must identify human exposure pathways in the event of a marine spill, including marine subsistence foods and airborne contaminants; roles and responsibilities of local, provincial and federal authorities as they relate to human health in marine spill response, including communication protocols; and the measures to reduce exposure in the event of a ship-source marine spill. This condition would include consultation with Indigenous nations along the shipping route and potentially affected coastal local governments in the preparation of the plan.</p>
<p>Jointly Proposed by Squamish Nation, Tsleil-Waututh Nation, and supported by City of Vancouver</p>	<p>Human Health Condition as recommended by EAO</p>	<p>This condition must be amended to include ensuring Indigenous health and well-being for local First Nations, which includes cultural health and well-being.</p>	<p>See Trans Mountain’s comments letters dated September 30, 2020 and October 30, 2020 as to why this new condition (including the new requested amendments) should not be imposed in the EAC.</p>	<p>The EAO is continuing to engage on the proposed human health condition</p>

<p>Squamish Nation, Tsleil-Waututh Nation and City of Vancouver</p>	<p>New Condition</p>	<p><u>Marine Firefighting</u></p> <p>The Holder must fund and maintain a specialized firefighting vessel at the Westridge Terminal of sufficient capacity to respond to a fire on a Project-related tanker. The Holder must file with the EAO, at least 6 months prior to commencing operations, confirmation, signed by an officer of the company, that it has acquired the specialized firefighting vessel and trained sufficient personnel to operate the vessel and respond to Project-related tanker and terminal fires.</p>	<p>The scope of Trans Mountain’s emergency response program is confined to the TMEP pipeline and associated facilities, which were not the subject of the NEB reconsideration process. As a result, this request is outside the scope of the EAO’s reconsideration process as well. With respect to marine vessel-sourced spills, Trans Mountain does not have control over spill preparedness or response. Those matters are the responsibility of the marine vessel operator and various government agencies (including the WCMRC). Trans Mountain further notes that marine firefighting was fully canvassed in the NEB hearings (OH-001-2014 and MH-052-2018). For clarity, Trans Mountain does not rely on City of Vancouver Fire Boats for fire suppression at the Westridge Marine Terminal. Every tanker is provided with its own Class approved fire detection, suppression and protection system, which is exercised and tested on a weekly basis, and is also tested during Transport Canada inspections (See response to City of Burnaby F-IR TERMPOL No. 2.20c from the OH-001-2014 Hearing, Filing ID A4L0V4).</p>	<p>It is the EAO's view that there is no new information in the NEB Reconsideration Report that supports this condition. The Westridge Marine Terminal is not within the scope of the reconsideration process, which focused on the potential effects of project-related marine shipping. There was no change to Chapter 9 of the NEB's Reconsideration Report, which addresses emergency prevention, preparedness and response related to the terminal facilities. NEB Conditions 118 and 138 require Trans Mountain to assess and evaluate resources and equipment to address fires, and a summary of consultation with appropriate municipal authorities and first responders that will help inform a Firefighting Capacity Framework.</p> <p>There were no changes to the sub-section "Response to Marine Vessel Fires" in the NEB's Reconsideration Report. In the 2014 hearing, Trans Mountain said that all tankers are required to carry firefighting systems that consist of water, foam, and other chemicals. It said that private tug operators operate fire-fighting capable tugs from their bases in Vancouver Harbour. The EAO notes that Transport Canada is the regulatory authority responsible for marine shipping safety and emergency preparedness.</p> <p>The EAO notes that as part of the Oceans Protection Plan, Canadian Coast Guard plans to have two emergency response vessels with towing and fire-fighting capability for the west coast of Canada.</p>
<p>Squamish Nation, Tsleil-Waututh Nation and City of Vancouver</p>	<p>New Condition</p>	<p><u>Shoreline Protection Plan</u></p> <p>Given the risks posed by a Project-related spill specific to this Project, the Holder must develop a shoreline protection plan that must:</p> <ul style="list-style-type: none"> a) be developed in consultation with ENV, BC Parks, Indigenous communities and local governments; b) incorporate relevant information from the reports prepared under proposed condition (VII); 	<p>The scope of Trans Mountain’s emergency response program is confined to the TMEP pipeline and associated facilities, which were not the subject of the NEB reconsideration process and are therefore outside the scope of the EAO’s reconsideration process as well. With respect to marine vessel-sourced spills, Trans Mountain does not have control over spill preparedness or response. Those matters are the responsibility of the marine vessel operator and various government agencies (including the WCMRC). As a result, this</p>	<p>There are no changes to the sub-section describing potential environmental effects of a tanker marine spill on shorelines and near shore habitat, Section 14.9.4, apart from concerns raised by Tsawout First Nation about impacts from Project-related marine shipping on the Sand-verbena moth’s critical habitat within Tsawout territory.</p> <p>Regarding the identification of at-risk shoreline, during the MH-052-2018 hearing, ECCC said that the south coast of B.C.</p>

		<p>c) identify at-risk shorelines, based on comprehensive peer-reviewed modelling for spill behaviour and worst-case credible scenario conditions;</p> <p>d) establish recommended response strategies, including but not limited to deployment of shoreline protection booms; and</p> <p>e) establish recommended clean-up actions specific to the unique characteristics of individual shorelines.</p>	<p>condition should not be imposed in the EAC. Trans Mountain also notes that WCMRC filed evidence about its shoreline protection measures in its evidence during the NEB reconsideration hearing (see, for example, page 21 of WCMRC’s evidence for the NEB reconsideration hearing MH-052-2018, Filing ID A6L5G5). This issue is also discussed at pages 520-522 and 534-535 of the NEB Reconsideration Report. The evidence demonstrates that the appropriate parties are already taking reasonable steps to protect the shoreline from vessel-sourced marine spills. There is no evidentiary justification for a new condition in the EAC in this regard.</p>	<p>and the Fraser River has an extensive shoreline data set collected over many years by several agencies. ECCC said that it utilizes shoreline data collected by the Province of B.C. and shared with ECCC for spill preparedness- and response-related activities. The NEB noted the work being conducted or planned for by ECCC through initiatives such as the Oceans Protections Plan (OPP). As part of the OPP, Fisheries and Oceans Canada and Transport Canada are working with Indigenous partners, coastal communities and local stakeholders to determine key concerns and help collect coastal environmental baseline information under the Coastal Environmental Baseline Program.</p> <p>The EAO notes that coastal mapping and geographic response strategies are currently being developed by WCMRC along the shipping lanes to minimize impacts of spills to sensitive environmental, cultural, archaeological sites and economic resources through engagement with Indigenous nations and communities. In Trans Mountain’s “Plan for Marine Spill Prevention and Response Commitments” report filed with the CER to meet CER Condition 91, Trans Mountain states that WCMRC has conducted sensitivity assessments of about 2820 km of the total estimated 3100 km of shoreline, which is publicly available on the Coastal Response Program website.</p> <p>The EAO notes that Transport Canada is responsible for Canada’s Ship-Source Oil Spill Preparedness and Response Regime. Section 14.11.3 Emergency preparedness and response contains new information on the marine spill response regime as a result of the 2018 hearing. WCMRC noted that its shoreline clean-up plan would be reviewed and updated during implementation of the enhanced response regime</p> <p>Federal government agencies provided the EAO additional information on federal actions regarding geographic response planning. Under the lead of the Canadian Coast Guard, The ECCC National Environmental Emergency Centre is</p>
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				<p>participating in the development of eight coastal Geographic Response Plan covering all of coastal B.C. ECCC participates in technical working groups, providing scientific expertise in areas such as resources at risk, Shoreline Cleanup Assessment techniques, and sampling. The ECCC centre collects a wide set of environmental data, including data collected by others on shoreline classification. In the event of an incident, NEEC can quickly provide responders with information on local shoreline classification, as well as other sensitive resources at risk, in order that responders can establish an effective Shoreline Cleanup Assessment program for the spill. Under PIER, the Canadian Coast Guard collaborates with Indigenous communities, federal, provincial, and local governments as well as industry, response organizations and port/harbour authorities to develop Coast Guard area response plans.</p> <p>In response to ongoing concerns related to effects of marine spills on shorelines, and the acknowledgement in the Reconsideration Report that impacts to certain values would be greater than others, the EAO notes that the province has committed to continued collaboration with the federal agencies on the development of coastal geographic response plans that identify areas of cultural, archaeological, economic, and ecological value to local communities and stakeholders, as well as important Indigenous nations cultural values and sites. The EAO acknowledges that identifying spill vulnerability requires incorporating input from Indigenous nations, local communities, industry, and responsible agencies. EAC Condition 34 requires the Holder to participate in coastal geographic response planning if it is undertaken by the provincial government, federal government or a certified response organization.</p>
<p>Squamish Nation, Tsleil-Waututh Nation and City of Vancouver</p>	<p>New Condition</p>	<p><u>Environmental Restoration and Recovery Plan</u></p> <p>The Holder must prepare an environmental restoration and recovery plan in the event of a Project- related marine spill that must:</p> <p>a) be developed in consultation with ENV, Indigenous</p>	<p>The scope of Trans Mountain’s emergency response program is confined to the TMEP pipeline and associated facilities, which were not the subject of the NEB reconsideration process and are therefore outside the scope of the EAO’s reconsideration process as well. With respect to marine vessel-sourced spills, Trans Mountain does not have control</p>	<p>In the event of an oil spill from a tanker in Canadian waters, the polluter (the responsible party) would be liable for the cost of cleanup and compensation to affected parties. The ship-source oil pollution liability and compensation regime provide compensation for reasonable costs of environmental remediation, which can include monitoring and post-spill</p>

	<p>communities and local governments;</p> <p>b) establish recovery standards which incorporate and reflect local environmental and socio- economic knowledge and values;</p> <p>c) include protocols for evaluating and reporting on the effectiveness of employed response techniques;</p> <p>d) include commitment to conduct long-term monitoring and assessments of shorelines and coastal zones impacted by a spill;</p> <p>e) establish commitment to include restorative and compensation investments to support ecological health recovery and improvement; and</p> <p>f) represent a net ecological gain in relation to environmental conditions.</p>	<p>over spill preparedness or response. Those matters are the responsibility of the marine vessel operator and various government agencies (including the WCMRC). For these reasons, this condition should not be imposed in the EAC.</p>	<p>studies.</p> <p>The EAO has been informed that Environment and Climate Change Canada, specifically Environmental Emergencies Division, has established a Working Group on Recovery in the event of a marine spill. The working group will clarify federal and provincial roles and responsibilities for recovery from environmental emergencies involving ship-source oil spill incidents, with consideration of legal, environmental, social, economic and human health elements.</p>
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<p>Squamish Nation, Tsleil-Waututh Nation and City of Vancouver</p>	<p>New Condition</p>	<p><u>Burrard Inlet Spill Preparedness and Response Oversight Entity</u></p> <p>The Holder must fund an independent interagency oversight body with the mandate and responsibility for overseeing Project-related spill response commitments as outlined in this EAC for the life of the Project.</p> <p>The oversight body shall:</p> <ul style="list-style-type: none"> a) ensure local environmental and socio-economic values and knowledge are effectively incorporated into Project-related spill response plans and programs; b) review compliance with approval commitments and comprehensively report out on Project-related spill response commitments; c) ensure integration and coordination amongst various response service providers is effective; d) review local spill response and recovery standards, including but not limited to identification of local sensitive sites for boom protection and shoreline recovery clean-up standards; e) undertake periodic review of overall spill response plans, capacity and spill recovery plans and review third-party audits; and f) facilitate integration of best practices as they evolve over time. <p>The oversight body is to include representation from Indigenous communities, applicable federal and provincial agencies, local governments, WCMRC and first responders.</p>	<p>The scope of Trans Mountain’s emergency response program is confined to the TMEP pipeline and associated facilities, which were not the subject of the NEB reconsideration process. As a result, this request is outside the scope of the EAO’s reconsideration process as well. Trans Mountain notes that oversight of spill preparedness and response is the responsibility of the CER for CER-regulated facilities, and the Canadian Coast Guard for marine vessels. There is no evidentiary basis in the NEB Reconsideration Report to impose a requirement in the EAC for additional oversight of spill preparedness and response.</p>	<p>It is the EAO's view that there is no new information in the NEB Reconsideration Report that supports adding this condition. NEB Conditions 6 and 133 include Trans Mountain's marine spill prevention and response commitments, the CER is responsible for compliance oversight of these commitments. Transport Canada is responsible for Canada’s Ship-Source Oil Spill Preparedness and Response Regime. The EAO notes that Ministers cannot compel groups other than the holder to participate in an oversight committee.</p>
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<p>Squamish Nation, Tsleil-Waututh Nation and City of Vancouver</p>	<p>New Condition</p>	<p><u>Intertidal and Foreshore Existing Conditions Data Report</u></p> <p>The Holder must prepare reports documenting existing marine inter-tidal and foreshore conditions in the area of Project related marine shipping for the purposes of informing intertidal and foreshore effects assessment and recovery response in the event of a Project-related spill. The report must be developed in consultation with the MOE, ECCC, DFO, Indigenous groups, and local governments and incorporate relevant data and information provided by these groups as appropriate. The report must include:</p> <ul style="list-style-type: none"> a) a description of the methods of data collection and assessment; b) a shoreline map of marine habitat (foreshore and inter-tidal), economic uses, cultural uses, recreational uses and public space values; c) the location, type, and total spatial area of critical habitat and ecologically sensitive features, including a description of the biophysical attributes, potentially affected by Project related marine shipping or a Project-related marine spill; d) a summary of consultation conducted with applicable federal and provincial agencies, Indigenous communities and local governments; and e) commitment that the Holder will include the relevant information from the report into Environmental Protection Plans, the Shoreline Protection Plan, and the Environmental Restoration and Recovery Plan. <p>The Holder must provide the report to EAO, MOE, MNGD, ECCC, Canadian Coast Guard, Indigenous communities, and local governments at least 6 months prior to the commencement of Operations and update the report every 5 years.</p>	<p>The scope of Trans Mountain’s emergency response program is confined to the TMEP pipeline and associated facilities, which were not the subject of the NEB reconsideration process and are therefore outside the scope of the EAO’s reconsideration process as well. With respect to marine vessel-sourced spills, Trans Mountain does not have control over spill preparedness or response. Those matters are the responsibility of the marine vessel operator and various government agencies (including the WCMRC). Trans Mountain also notes that very similar requests were made during the NEB reconsideration process and were expressly rejected by the NEB in its Reconsideration Report: In the OH-001-2014 hearing, numerous participants raised concerns about the sufficiency of marine resources baseline data. The Board of the Friends of Ecological Reserves and the City of Port Moody raised concerns over the adequacy of baseline data of marine resources (i.e., fish, vegetation, etc.) within Burrard Inlet and along the shipping lanes. They emphasized that such baseline data is crucial in considering what might be lost if there is a spill, determining effects after a spill, and in crafting criteria for monitoring during post-spill restoration efforts. In response, Trans Mountain said that it conducted the marine transportation effects assessment based on up-to-date research, does not believe that additional data collection would affect the conclusions presented in the Application, and that vessel traffic associated with the Project would represent a relatively small proportion of total vessel traffic along the marine shipping lanes.</p> <p>[...]</p> <p>The Board notes that there are many marine users in Burrard Inlet and along the shipping lanes. Therefore, in the Board’s view, it is not reasonable for Trans Mountain to take on the sole burden of baseline data collection and monitoring to determine the overall effects of potential accidents and malfunctions associated with all shipping operations. For these reasons, this condition should not be imposed in the EAC.</p>	<p>It is the EAO’s view that there is no new information in the NEB Reconsideration Report that supports adding this condition. The new information in Section 14.9.2 Baseline Data in the NEB Reconsideration Report focuses on additional information about the work initiated by federal agencies and departments. ECCC said that the south coast of B.C. and the Fraser River has an extensive shoreline data set collected over many years by several agencies. ECCC said that it utilizes shoreline data collected by the Province of B.C. and shared with ECCC for spill preparedness- and response-related activities. The NEB noted the work being conducted or planned for by ECCC through initiatives such as the OPP. The NEB repeated their view stated in the 2016 Report that it is not reasonable for Trans Mountain to take on the sole burden of baseline data collection and monitoring to determine the overall effects of potential accidents and malfunctions associated with all shipping operations.</p> <p>As part of the OPP, Fisheries and Oceans Canada and Transport Canada are working with Indigenous partners, coastal communities and local stakeholders to determine key concerns and help collect coastal environmental baseline information under the Coastal Environmental Baseline Program.</p> <p>The EAO notes that coastal mapping and geographic response strategies are currently being developed by WCMRC along the shipping lanes to minimize impacts of spills to sensitive environmental, cultural, archaeological sites and economic resources through engagement with Indigenous nations and communities. In Trans Mountain’s “Plan for Marine Spill Prevention and Response Commitments” report filed with the CER to meet CER Condition 91, Trans Mountain states that WCMRC has conducted sensitivity assessments of about 2820 km of the total estimated 3100 km of shoreline, which is publicly available on the Coastal Response Program website.</p>
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<p>Squamish Nation, Tsleil-Waututh Nation and City of Vancouver</p>	<p>New Condition</p>	<p><u>Burrard Inlet Coastal Area Investment Program</u></p> <p>The Holder must develop a Burrard Inlet Coastal Area Investment Program intended to strengthen the health of the foreshore and inter-tidal areas that could be affected by Project-related marine-shipping, including Project-related spills. The program should include funds to support ecological improvements to be made on an ongoing annual basis throughout the life of the Project.</p> <p>The program should be developed and implemented in consultation with all applicable parties, including federal and provincial agencies, Indigenous communities and local governments, and include an ecological contribution to be made on an ongoing annual basis throughout the life of the Project.</p> <p>The program should be regularly and periodically reviewed and updated throughout the life of the Project.</p>	<p>See Trans Mountain’s response to the Parties’ request above for a “Intertidal and Foreshore Existing Conditions Data Report”. In addition, this requested condition was originally requested to the NEB by the City of Port Moody during the OH-001-2014 proceeding (see Filing ID A4Y1Z2) and was not accepted by the NEB. The Government of Canada also submitted evidence during the NEB’s reconsideration process outlining the investments that it has made to strengthen the health of aquatic coastal environments (A6S2D8), which demonstrates that an additional condition in the EAC is not warranted based on the new information in the NEB Reconsideration Report.</p> <p>For all of these reasons, this condition should not be imposed in the EAC.</p>	<p>It is the EAO’s view that there is no new information in the NEB Reconsideration Report that supports adding this condition. The EAO did not identify new information in the NEB Reconsideration Report related to investment programs associated with marine shipping or a ship-source marine spill.</p>
<p>Squamish Nation, Tsleil-Waututh Nation and City of Vancouver</p>	<p>Existing EAC Condition 28</p>	<p><u>Greenhouse Gas Reporting</u></p> <p>The Holder must prepare a greenhouse gas assessment report that must, in addition to meeting all of the requirements set out in NEB Condition 140, quantify and report greenhouse gas (GHG) emissions resulting from Project Construction, Project Operation, and Project-related marine shipping in a manner that is consistent with British Columbia’s <i>Greenhouse Gas Industrial Reporting and Control Act</i> and regulations under that Act.</p> <p>The Holder must provide the assessment report to Climate Action Secretariat within two months after commencing Operations and notify the EAO on the same date.</p>	<p>GHG emissions resulting from operations of the TMEP (excluding marine shipping) were not the subject of the NEB reconsideration process. As a result, the request to add “Project Operation” to EAC Condition #28 is outside the scope of the EAO’s reconsideration process as well.</p> <p>With respect to “Project-related marine shipping”, the <i>Greenhouse Gas Industrial Reporting and Control Act</i> applies only to “facilities” located within the province of BC. The Act does not apply to marine shipping activities. Further, marine shipping activities are beyond the scope of the “reviewable project” and Trans Mountain’s control. As a result, “Project-related marine shipping” should not be added to EAC Condition #28.</p>	<p>GHG emissions associated with the operation of the Project is not within the scope of the reconsideration process.</p> <p>It is the EAO’s view that there is no new information in the NEB reconsideration report that supports amending EAC condition 28. The intent of EAC condition 28 is to build upon the requirements detailed in NEB condition 140, which are specific to the pipeline, pump stations, terminals, and Westridge marine terminal.</p> <p>In their Reconsideration Report, the NEB restates the expected increases in marine GHG emissions as a result of Project-related marine vessels from the 2016 Report. As an outcome of the NEB reconsideration process, the NEB found that the GHG emissions from Project-related shipping would be reduced as a result of new energy efficiency standards adopted by the International Maritime Organization (IMO) and the proposed federal Clean Fuel Standard regulations. The NEB also issued Recommendation 10 to the GIC, aligning with the IMO’s strategy for reducing GHG emissions from ships. The EAO acknowledges that the IMO is responsible for</p>

				<p>regulating international marine shipping emissions and that Canada is a member state of the IMO</p> <p>Regarding project operations, BC has legislated GHG reduction targets under the <i>Climate Change Accountability Act</i> and existing reporting requirements under the <i>Greenhouse Gas Industrial Reporting and Control Act</i>.</p>
<p>Squamish Nation, Tsleil-Waututh Nation and City of Vancouver</p>	<p>Existing EAC Condition 29</p>	<p><u>Greenhouse Gas Offsets</u></p> <p>The Holder must develop a plan to offset GHG emissions from the Project Construction, Project Operation, and Project-related marine shipping in B.C. The plan must:</p> <p>a) Meet all of the requirements of NEB Condition 142 as they pertain to Project Construction, Project Operation, and Project related marine shipping in British Columbia, and</p> <p>b) Demonstrate that the Holder will cause to be retired offset units under the <i>Greenhouse Gas Industrial Reporting and Control Act</i> equal to the greenhouse gas emissions from Project Construction, Project Operation, and Project related marine shipping in British Columbia.</p>	<p>GHG emissions resulting from operations of the TMEP (excluding marine shipping) were not the subject of the NEB reconsideration process. As a result, the request to add “Project Operation” to EAC Condition #29 is outside the scope of the EAO’s reconsideration process as well. With respect to “Project-related marine shipping”, the <i>Greenhouse Gas Industrial Reporting and Control Act</i> applies only to “facilities” located within the province of BC. The Act does not apply to marine shipping activities. Further, marine shipping activities are beyond the scope of the “reviewable project” and Trans Mountain’s control. Trans Mountain also notes that greenhouse gas offsets for TMEP-related marine vessels were expressly considered and rejected by the NEB in the Reconsideration Report: The Board received comments from Shackan Indian Band that the Board ought to recommend additional conditions be placed on Trans Mountain to offset the GHG emissions of Project-related marine vessels. The Board notes that Project-related marine vessels are required to adhere to all federal and international emission requirements, including standards for bunker fuel. In addition, Trans Mountain has set the age limits for tankers that would be acceptable to call at the WMT which will improve the efficiency of the vessels resulting in reduction of GHG emissions. In regard to requiring offsets, the Board notes that Trans Mountain does not own or operate the vessels. The Board also notes ECCC’s statement in regard to offsetting greenhouse gas emissions that Canada continues to work with the IMO on the next steps outlined in the Initial GHG Emissions Strategy and if a relevant measure such as an offset system for the sector was agreed to, Canada would need to develop and introduce regulations under an appropriate domestic legislation in line with the IMO</p>	<p>GHG emissions associated with the operation of the Project are not within the scope of the reconsideration process.</p> <p>It is the EAO's view that there is no new information in the NEB reconsideration report that supports amending EAC condition 29. The intent of EAC condition 29 is to build upon the requirements detailed in NEB condition 142, which are specific to the pipeline, pump stations, terminals, and Westridge marine terminal.</p> <p>The NEB restates the expected increases in marine GHG emissions as a result of Project-related marine vessels from the 2016 Report. As an outcome of the NEB reconsideration process, the NEB found that the GHG emissions from Project-related shipping would be reduced as a result of new energy efficiency standards adopted by the IMO and the proposed federal Clean Fuel Standard regulations. The NEB also issued Recommendation 10 to the GIC, aligning with the IMO’s strategy for reducing GHG emissions from ships. The EAO acknowledges that the IMO is responsible for regulating international marine shipping emissions and that Canada is a member state of the IMO.</p> <p>Regarding project operations, BC has legislated GHG reduction targets under the <i>Climate Change Accountability Act</i> and existing reporting requirements under the <i>Greenhouse Gas Industrial Reporting and Control Act</i>. BC also has a suite of regulatory and policy tools that allow for the general application of various approaches (e.g. taxes, offsets) to support meeting the province's GHG reduction targets.</p>

			<p>regulation. Therefore, the Board is not persuaded to impose any additional conditions on Trans Mountain to offset the GHG emissions of Project-related marine vessels. (NEB Reconsideration Report at 396-397). For all of these reasons, “Project-related marine shipping” should not be added to EAC Condition #29.</p>	
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<p>Jointly Proposed by Squamish Nation, Tsleil-Waututh Nation, and supported by City of Vancouver</p>	<p>Revised EAC Condition 3</p>	<p>Where a condition of this Certificate requires the Holder to consult a particular party or parties regarding the content of a plan, program or other document, the Holder must, to the satisfaction of the EAO:</p> <ul style="list-style-type: none"> a) Provide written notice to each such party that: <ul style="list-style-type: none"> i) Includes a copy of the plan, program or other document; ii) Invites the party to participate with it in the development¹ of such plan, program or other document; and iii) Indicates: <ul style="list-style-type: none"> A. If a timeframe providing such views to the Holder is specified in the relevant condition of this Certificate, that the party may participate with the Holder within such time frame; or B. If a timeframe is not specified in the relevant condition of this Certificate, specifies a reasonable period during which the party may participate; b) Undertake a full and impartial consideration of any views and other information provided by a party in accordance with the timelines specified in a notice given pursuant to paragraph (a); c) Provide a written explanation to each such party that provided comments in accordance with a notice given pursuant to paragraph (a) as to: <ul style="list-style-type: none"> i) How the views and information provided by such party to the Holder have been considered and addressed in a revised version of the plan, program or other document; or ii) Why such views and information have not been addressed in a revised version of the plan, program or other document; d) Maintain a record of consultation with each such party regarding the plan, program or other document; and e) Provide a copy of such consultation record to the EAO, the relevant party, or both, promptly upon the written 	<p>The Parties have not provided any explanation or justification for this requested amendment. This amendment would require changes to the process for EAC Conditions that have already been satisfied or are in the process of being satisfied. As a result, the amendment would unnecessarily frustrate Trans Mountain’s ability to comply with the EAC. Trans Mountain also notes that there is no new information in the NEB Reconsideration Report that would justify this amendment</p>	<p>It is the EAO's view that there is no new information in the NEB reconsideration report that supports amending EAC condition 3. The scope of this process to identify and consider the portions of the NEB’s reconsideration report that differ from the initial NEB panel report (2016 Report) and provide recommendations regarding any new or amended EAC conditions in response to those portions, within the limits of provincial jurisdiction. The EAO views this proposed condition as out of scope of the provincial reconsideration process.</p>
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		<p>request of the EAO or such party.</p> <p>(¹ While we understand that TMEP was approved under BCEAA, 2004, we believe that consistent with the thrust of BCEAA 2018 and the <i>BC Declaration of the Rights of Indigenous Peoples Act</i>, 2019 (BCDRIPA). Condition 3 should be amended to encourage collaborative planning rather than request for, and receipt of, comments.)</p>		
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<p>Jointly Proposed by Squamish Nation, Tsleil-Waututh Nation, and supported by City of Vancouver</p>	<p>Revised EAC Condition 7 (1st para)</p>	<p>The Holder must notify EAO and Aboriginal Groups, in writing, three months prior to commencing Construction or Operations, and must work collaboratively with the Aboriginal Groups(s) in whose territory the plan occurs² to develop component decommissioning plans in order that they be provided to the EAO with any application for decommissioning submitted to the NEB.</p> <p>(² Decommissioning plans are critical to the ability of a Nation to be able to exercise rights. Not only must Aboriginal Groups be notified but they must be participants in the development of decommissioning plans. To that end, the first paragraph of Condition 7 should be revised as indicated in the next column.)</p>	<p>The NEB reconsideration process did not address decommissioning of the TMEP. As a result, there is no new information in the NEB Reconsideration Report related to decommissioning that justifies this proposed amendment. Trans Mountain also notes that decommissioning and abandonment requirements for CER-regulated pipelines are prescribed by the Onshore Pipeline Regulations, which require consultation with affected Aboriginal groups prior to any abandonment application being submitted to the CER.</p>	<p>It is the EAO's view that there is no new information in the NEB reconsideration report that supports amending EAC condition 7. The scope of this process to identify and consider the portions of the NEB's reconsideration report that differ from the initial NEB panel report (2016 Report) and provide recommendations regarding any new or amended EAC conditions in response to those portions, within the limits of provincial jurisdiction. The EAO views this proposed condition as out of scope of the provincial reconsideration process.</p>
<p>Jointly Proposed by Squamish Nation, Tsleil-Waututh Nation, and supported by City of Vancouver</p>	<p>Revised EAC Condition 11</p>	<p>The Holder must develop and implement an Aboriginal marine outreach program in consultation with Aboriginal Groups – Marine Shipping that must include the means by which the Holder will:</p> <ul style="list-style-type: none"> a) communicate with Aboriginal Groups – Marine Shipping regarding relevant marine-related initiatives, programs, and research that the Holder is directly or indirectly involved in to address the impacts of increased Project- related tanker traffic in the Salish Sea; b) consult with Aboriginal Groups – Marine Shipping to identify potential activities and actions that the Holder may undertake to support safe Aboriginal traditional marine use and to support on-going education and planning related to spill preparedness and response, in consideration of the increased Project-related tanker traffic. This should include a discussion of changes to Project-related-vessel movement or scheduling to enable the unfettered exercise of Aboriginal rights during narrow seasonal harvesting windows³; and c) inform Aboriginal Groups – Marine Shipping of opportunities to participate in activities and actions or be informed of the marine-related initiatives, programs, and research activities referred to in paragraphs (a) and (b). 	<p>This requested amendment would materially change the scope of EAC Condition #11 from an information sharing requirement to a requirement to change vessel schedules to enable unfettered exercise of Aboriginal rights. While Trans Mountain has some limited influence around TMEP-related vessel schedules, scheduling is driven by various factors (weather, daylight, operations at Westridge, etc.), and it would not be feasible to schedule vessel movements around the exercise of rights (particularly to “enable the unfettered exercise of Aboriginal rights”). Concerns about potential interactions between TMEP-related vessels and Aboriginal marine harvesting were fully canvassed during the NEB hearings (OH-001-2014 and MH-052-2018). At pages 455 and 466 of the NEB Reconsideration Report, the NEB stated: In Certificate OC-064, the Board imposed Condition 131 requiring Trans Mountain to develop a public outreach program prior to Project operations in order to ensure that the program is designed in consultation with the PPA and implemented in a manner that is appropriate to its intended audience. The Board has decided to revise Condition 131 into a Recommendation to the GIC which has the necessary authority to address such matters. As such, the Board proposes Recommendation 12 that encourages GIC, in</p>	<p>With respect to the potential effects of Project-related vessel traffic on Indigenous marine vessels and users, the NEB remained of the view that these effects would be limited to the time during which the Project related vessels are in transit and therefore, these effects would be temporary and Indigenous marine vessels will be able to continue their movements and to access areas outside of those brief periods of interruption. The NEB found that with the exception of effects on the traditional uses associated with the Southern resident killer whale, adverse effects of Project-related marine vessel traffic on traditional marine resource uses, activities and sites are not likely to be significant. The EAO notes that under sub-section b of EAC Condition 11, Indigenous groups have the ability to identify discussion topics to identify potential activities and actions that the Holder may undertake to support safe traditional marine use</p>

	<p>The Holder must provide reports on the completed activities and results of the marine outreach program to EAO and Aboriginal Groups – Marine Shipping at least three months prior to the planned commencement of Operations, and at one year and five years after commencement of Operations. The reports must also include:</p> <ul style="list-style-type: none"> a) a summary of Trans Mountain’s consultation with the Pacific Pilotage Authority regarding the scope of work and activities to be undertaken through the program, including: <ul style="list-style-type: none"> i) the resources and information that the Holder has provided or will provide to the Pacific Pilotage Authority to addresses the impacts of increased Project-related tanker traffic in the Salish Sea; ii) the activities or actions that the Holder will undertake to communicate applicable information on Project- related vessel timing and scheduling to fishing industry organizations, commercial and recreational vessel operators, Aboriginal groups, and other affected, in conjunction with the Pacific Pilotage Authority’s activities; iii) the activities that the Holder will take to alter Project-related-vessel routing or scheduling to give priority to Aboriginal Groups so they may harvest during narrow seasonal windows set by federal regulators, and, iv) any issues or concerns raised by the Pacific Pilotage Authority and how the Holder has or will address them. b) a description of the actions or activities that the Holder has or will undertake to incorporate into its own public engagement efforts the activities of the Pacific Pilotage Authority and Transport Canada regarding enhanced safe boating practice education for small vessel operators; c) a plan and schedule for all ongoing and future activities and actions under the program, including anticipated completion dates; and d) a summary of its consultations with Transport Canada, the Canadian Coast Guard, the Chamber of Shipping for 	<p>conjunction with the PPA and Transport Canada, to continue engagement and awareness activities targeting coastal Indigenous communities, recreational boaters, fishing vessel operators, and operators of small vessels with respect to safety of navigation and prevention of collisions with larger vessels. While some intervenors argued that the Board has authority to impose and assess compliance with conditions outside its regulatory authority, no specific authority was provided by intervenors to support that the Board can enforce marine shipping conditions not linked to WMT. ...Many concerns raised by participants regarding marine shipping are under the jurisdiction of several federal and international authorities. The Board expects that Project-related marine vessels will be fully compliant with all applicable navigational, communications and safety regulations including those of Transport Canada, the Canadian Coast Guard, the Pacific Pilotage Authority and Port Metro Vancouver (PMV). The Board sees value in the work the Federal Authorities are doing to enhance sharing of marine traffic information with local communities and promote safer navigation, including the Enhanced Maritime Situational Awareness initiative and the proposed extension of the Automatic Identification System to smaller passenger vessels. The Board proposes Recommendation 13 that encourages GIC to accelerate the development and implementation of these programs. [...]</p> <p>The Board is of the view that increased marine shipping is not likely to have significant adverse effects on socio-economic conditions, including marine commercial, recreational and tourism use. [...]</p> <p>With respect to the effects of Project-related marine vessel traffic on traditional marine resource uses, activities and sites, the Board finds that there will be disruptions to Indigenous marine vessels and harvesters, and that this may disrupt activities or access to sites. The Board is of the view that these disruptions will be temporary, only occurring</p>	
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		<p>British Columbia, <i>the Department of Fisheries and Oceans (regarding harvesting windows)</i>, commercial and tourism associations and potentially affected Aboriginal Groups – Marine Shipping.</p> <p>(³ In the context of reducing impacts to Aboriginal Groups, mitigation is any action that avoids or otherwise reduces adverse impacts to that group. Any program that provides information about project vessel movements that requires Aboriginal Groups to change their behaviour to protect their own safety or property in response to project-related traffic deeply impacts Aboriginal Groups and cannot be considered ‘mitigation.’ To mitigate for additional Project traffic, Condition 11 must be revised.)</p>	<p>during the period of time when Project-related tanker vessels are in transit. The Board is of the view that Indigenous marine vessel users will maintain the ability to continue to harvest marine resources and to access subsistence and cultural sites in the presence of these periodic and short-term disruptions. ... The Board is also of the view that that any disruptions to Indigenous marine vessel users that would result from Project- related Marine vessel traffic would be temporary, that the frequency of Project-related marine vessels would be one return transit per day, and that all other marine vessels, including Indigenous marine vessel users, would be able to continue their movements very shortly after the transit of the tanker</p> <p>Based on the above, there is no evidentiary basis in the Reconsideration Report to impose the proposed amendment.</p>	
<p>Jointly Proposed by Squamish Nation, Tsleil-Waututh Nation, and supported by City of Vancouver</p>	<p>Consolidation of EAC Conditions 4, 5, and 8</p>	<p>For clarity, EAC Conditions 4 and 5 should be combined with each other and with Condition 8 regarding notification of non-compliance.</p>	<p>The Parties have not explained the rationale for this request, and it is unrelated to the NEB Reconsideration Report. As a result, there is no basis to grant this amendment request.</p>	<p>These conditions reflect standard EAO conditions at the time the EAC was issued. It is the EAO's view that there is no new information in the NEB reconsideration report that supports amending EAC conditions 4, 5 and 8. The scope of this process to identify and consider the portions of the NEB's reconsideration report that differ from the initial NEB panel report (2016 Report) and provide recommendations regarding any new or amended EAC conditions in response to those portions, within the limits of provincial jurisdiction. The EAO views this proposed condition as out of scope of the provincial reconsideration process.</p>
<p>Jointly Proposed by Squamish Nation, Tsleil-Waututh Nation, and supported by City of Vancouver</p>	<p>Revised EAC Condition 31</p>	<p>Before commencing Operations, the Holder must:</p> <ul style="list-style-type: none"> a) Undertake a risk assessment and gap analysis to determine the need for additional Oil Spill Containment and Recovery (OSCAR) units, trained responders and operational support, and the most effective locations for placement of those resources, with particular consideration taken to the ability of, and interest by, Aboriginal Groups⁴ to respond to spills within their territories; b) Establish any additional OSCAR units, trained responders and operational support required, as per the analysis conducted pursuant to a); and c) Ensure that sufficient spill response resources are 	<p>EAC Condition #31 applies to spill preparedness for the TMEP pipeline and associated facilities. These aspects of the TMEP were not the subject of the NEB reconsideration process. As a result, this request is outside the scope of the EAO's reconsideration process as well.</p>	<p>EAC condition 31 relates to pipeline and facilities accidents and malfunctions. The scope of this process to identify and consider the portions of the NEB's reconsideration report that differ from the initial NEB panel report (2016 Report) and provide recommendations regarding any new or amended EAC conditions in response to those portions, within the limits of provincial jurisdiction. The EAO views this proposed condition as out of scope of the provincial reconsideration process.</p>

		<p>available for each fixed facility (terminal and tank farm) to respond to a worst-case spill as defined by MOE. The Holder must fulfill the requirements of this condition in consultation with MOE. The Holder must demonstrate completion of this condition to EAO and MOE at least six months prior to the commencement of Operations. (⁴ It is well understood that Aboriginal Groups are intimately connected to their territory and are often the first groups to identify accidents within their territory. It is important that this capacity be explicitly fostered with appropriate provision of resources)</p>		
<p>Jointly Proposed by Squamish Nation, Tsleil-Waututh Nation, and supported by City of Vancouver</p>	<p>New Condition</p>	<p><u>Heritage Conservation Mapping</u></p> <p>The holder shall complete and implement a heritage conservation plan to map and protect at-risk shoreline archaeological sites in collaboration with the BC Archaeology Branch and affected First Nations, to be included in Emergency Response Plans in the event of an oil spill.</p>	<p>Spill preparedness and response for the TMEP pipeline and associated facilities were not the subject of the NEB reconsideration process. For spills resulting from TMEP-related marine shipping, as Trans Mountain explained in its September 30, 2020 letter, Trans Mountain does not have control over spill preparedness or response. Those matters are the responsibility of the marine vessel operator and various government agencies (including the WCMRC). For the reasons set out in our September 30, 2020 letter, Trans Mountain submits that this requested condition should not be added to the EAC.</p>	<p>There were no substantive changes in the NEB Reconsideration Report Section 14.10.2 Heritage Resources. In both reports, the NEB encourages Indigenous groups to participate in the spill response planning process with regulatory authorities such as the Canadian Coast Guard and Transport Canada, and the certified response organization WCMRC.</p> <p>In the NEB Reconsideration Report Section 14.11.3 the Canadian Coast Guard said that they are working directly with indigenous communities to develop geographically specific response plans</p> <p>As part of the OPP, Fisheries and Oceans Canada and Transport Canada are working with Indigenous partners, coastal communities and local stakeholders to determine key concerns and help collect coastal environmental baseline information under the Coastal Environmental Baseline Program.</p> <p>Coastal mapping and geographic response strategies are currently being developed by WCMRC along the shipping lanes to minimize impacts of spills to sensitive environmental, cultural, archaeological sites and economic resources through engagement with Indigenous nations and communities. In Trans Mountain’s “Plan for Marine Spill Prevention and Response Commitments” report, filed with the CER to meet</p>

				<p>CER Condition 91, Trans Mountain states that WCMRC has conducted sensitivity assessments of about 2820 km of the total estimated 3100 km of shoreline, which is publicly available on the Coastal Response Program website.</p>
<p>Jointly Proposed by Squamish Nation, Tsleil-Waututh Nation, and supported by City of Vancouver</p>	<p>New Condition</p>	<p>The Holder must develop a report identifying at-risk shorelines in the Project Area, 2 years prior to the commencement of Project operations. This report must incorporate reference to:</p> <ul style="list-style-type: none"> a) locations identified by Trans Mountain as at higher risk of a spill in their submissions to the National Energy Board: <ul style="list-style-type: none"> i) Westridge Marine Terminal (Location A); ii) Strait of Georgia (Location D); iii) Arachne Reef (Location E); iv) Strait of Juan de Fuca (south of Race Rocks) (Location G); and v) Buoy J (Location H); b) medium case (8,250 m³ for marine sites and 10 m³ for Westridge Terminal) and worst case (16,500 m³ for the marine sites and 160 m³ for the Westridge Terminal) credible spill scenarios; c) comprehensive peer-reviewed stochastic modelling for spill behaviour; and d) seasonality and a range of weather conditions found at associated sites, including the most adverse weather conditions. <p>Once published, this report must be immediately made available to Aboriginal Groups, local governments, and relevant agencies. Within 2 weeks of submission, the report, with culturally sensitive and security details removed, as well as a plain language version, must be made available to the public.</p> <p>This report should be provided to the Oversight Entity identified in New Condition Z.</p> <p>⁽⁵⁾ This condition was prepared by the Georgia Strait Alliance (GSA) as part of a broader set of recommendations. The GSA work has informed and influenced our current work and</p>	<p>The scope of Trans Mountain’s emergency response program is confined to the TMEP pipeline and associated facilities, which were not the subject of the NEB reconsideration process and are therefore outside the scope of the EAO’s reconsideration process as well. With respect to marine vessel-sourced spills, Trans Mountain does not have control over spill preparedness or response. Those matters are the responsibility of the marine vessel operator and various government agencies (including the WCMRC). Trans Mountain also notes that the NEB Reconsideration Report stated that WCMRC was updating its coastal sensitivity maps with an enhanced coastal mapping system for the B.C. Coast, which will include coastal sensitivities, associated Geographic Response Strategies and all associated logistical support information for the entire tanker-shipping route (p. 520). This information in the NEB Reconsideration Report does not support the requested condition.</p> <p>For all of these reasons, this condition should not be imposed in the EAC.</p>	<p>There are no changes to the sub-section describing potential environmental effects of a tanker marine spill on shorelines and near shore habitat, Section 14.9.4, apart from concerns raised by Tsawout First Nation about impacts from Project-related marine shipping on the Sand-verbena moth’s critical habitat within Tsawout territory.</p> <p>Regarding the identification of at-risk shoreline, during the MH-052-2018 hearing, ECCC said that the south coast of B.C. and the Fraser River has an extensive shoreline data set collected over many years by several agencies. ECCC said that it utilizes shoreline data collected by the Province of B.C. and shared with ECCC for spill preparedness- and response-related activities. The NEB noted the work being conducted or planned for by ECCC through initiatives such as the OPP. As part of the OPP, Fisheries and Oceans Canada and Transport Canada are working with Indigenous partners, coastal communities and local stakeholders to determine key concerns and help collect coastal environmental baseline information under the Coastal Environmental Baseline Program.</p> <p>The EAO notes that Transport Canada is responsible for Canada’s Ship-Source Oil Spill Preparedness and Response Regime. Section 14.11.3 Emergency preparedness and response contains new information on the marine spill response regime as a result of the 2018 hearing. WCMRC noted that its shoreline clean-up plan would be reviewed and updated during implementation of the enhanced response regime.</p> <p>Regarding the Westridge Marine Terminal, the Environmental Response Regulations require oil handling facilities to identify in the oil pollution emergency plan the surrounding areas of</p>

		<p>have our broad support.)</p>		<p>environmental sensitivities that would likely be affected by a discharge, as well as the measures to be taken for clean-up following the oil pollution incident, including with respect to areas of environmental sensitivities and surrounding ecosystems. The Response Organizations Standards require response organizations to describe in their response plans the measures they will take, in response to an oil spill, to protect and treat areas of environmental sensitivities within the affected operating environment.</p> <p>In response to ongoing concerns related to effects of marine spills on shorelines, and the acknowledgement in the Reconsideration Report that impacts to certain values would be greater than others, the EAO notes that the province has committed to continued collaboration with the federal agencies on the development of coastal geographic response plans that identify areas of cultural, archaeological, economic, and ecological value to local communities and stakeholders, as well as important Indigenous nations cultural values and sites. The EAO acknowledges that identifying spill vulnerability requires incorporating input from Indigenous nations, local communities, industry, and responsible agencies. EAC Condition 34 requires the Holder to participate in coastal geographic response planning if it is undertaken by the provincial government, federal government or a certified response organization.</p>
<p>Jointly Proposed by Squamish Nation, Tsleil-Waututh Nation, and supported by City of Vancouver</p>	<p>New Condition</p>	<p>The Coastal Geographic Response Plans must be completed six months prior to commencement of Operations and must be updated no less frequently than every five years.</p>	<p>This requested condition is directed to WCMRC's Geographic Response Plans, which are publicly available on WCMRC's Coastal Response Website: www.coastalresponse.ca. Trans Mountain is not responsible for updating these plans and cannot control when such updates will be completed. As a result, Trans Mountain would have no ability to control whether or not this condition is satisfied. For these reasons, it would be inappropriate and unreasonable to include this condition in the EAC.</p>	<p>Condition 34 requires the Holder to participate in British Columbia coastal geographic response planning undertaken by the provincial government, federal government or a certified response organization, if requested, not to develop Coastal Geographic Response Plans. Given the care and control responsibilities of Trans Mountain, it was determined that a more appropriate and effective approach would be for Trans Mountain to participate in any government initiative.</p> <p>See EAO's response to proposed condition "G" for current federal government initiatives in this area.</p>

<p>Jointly Proposed by Squamish Nation, Tsleil-Waututh Nation, and supported by City of Vancouver</p>	<p>New Condition</p>	<p>The holder shall complete a comprehensive analysis of Project-related vessel wake and wash⁶ and its effects on shoreline erosion, including the effects on shoreline archaeological sites in Burrard Inlet and other shorelines proximate to the shipping route.</p> <p>If impacts to the shoreline are detected in the comprehensive analysis, the holder shall complete and implement a shoreline erosion protection plan to protect the shoreline from erosion related to project vessel wake and wash, including a heritage conservation plan to map and protect at-risk shoreline archaeological sites in collaboration with the BC Archaeology Branch and affected Indigenous groups.</p> <p>(⁶ Based on the available information about vessel wake and wash, it is highly likely that the increase in tanker traffic from the Trans-Mountain Expansion project would cause an increase in shoreline erosion in Burrard Inlet and other shorelines close to the shipping route. This increase in shoreline erosion will cause damage to archaeological sites located along the shoreline. The <i>BC Heritage Conservation Act</i> (HCA) requires that a person must not damage, desecrate or alter a Provincial heritage site.)</p>	<p>As discussed in the body of Trans Mountain’s reply submissions above, vessel wake from TMEP-related vessels was studied during the NEB reconsideration process and based on those studies the NEB concluded that TMEP-related vessel traffic will not cause any material change to baseline wave conditions. For the reasons discussed in the body of Trans Mountain’s reply submissions, there is no evidentiary basis in the NEB Reconsideration Report to impose the requested condition.</p>	<p>It is the EAO’s view that there is no new information in the NEB reconsideration report that supports this condition. In the NEB Reconsideration Report, the NEB noted that in the 2018 hearing, Indigenous intervenors raised concerns similar to those expressed in the 2014 hearing regarding the impact to archaeological and cultural heritage sites as a result of increased Project-related marine vessel traffic. The NEB remained of the view that Project-related vessel wake will not be detectable from existing wave conditions and that there will not be an impact to archaeological sites due to an increase in marine traffic.</p>
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<p>Jointly Proposed by Squamish Nation, Tsleil-Waututh Nation, and supported by City of Vancouver</p>	<p>Revised Existing EAC Condition 16 (para (c))</p>	<p>This condition must be amended to articulate a commitment to work with other levels of government in protecting species at risk and their habitats from harm. One means to do this will be revision of para (c) as follows:</p> <p>c) Identify species listed as Threatened or Endangered under Schedule 1 of the Species at Risk Act (SARA), associated draft, candidate, proposed or final critical habitat identified under SARA, and any species and related habitat designated as Threatened or Endangered by COSEWIC that would be directly or indirectly impacted by the Project, as determined by a Qualified Professional⁷;</p> <p>(⁷ Because a number of anadromous fish populations have been identified as in danger by COSEWIC but have not yet been designated under the Species at Risk Act (SARA), the language of this condition obscures its intent. The condition must be amended to clarify that offset plans are required for all provincially red- and blue-listed species and ecosystems, for all SARA-listed species, and for those species designated by COSEWIC. The condition must stipulate the process by which these plans are prepared, how indigenous communities will be involved in oversight, and how performance criteria for these plans are being established, monitored, and reported on. Reference to an adaptive management planning process is required for each, in the event that the plan is not working as intended.)</p>	<p>EAC Condition #16 applies to Trans Mountain’s Wildlife Species at Risk Mitigation and Offset Plans for the operations of the TMEP pipeline and associated facilities. These aspects of the TMEP, as well as the Plans affected by EAC Condition #16, were not the subject of the NEB reconsideration process. As a result, this request is outside the scope of the EAO’s reconsideration process as well.</p>	<p>It is the EAO's view that there is no new information in the NEB reconsideration report that supports amending this condition. The scope of this process to identify and consider the portions of the NEB’s reconsideration report that differ from the initial NEB panel report (2016 Report) and provide recommendations regarding any new or amended EAC conditions in response to those portions, within the limits of provincial jurisdiction. The EAO views this proposed condition as out of scope of the provincial reconsideration process.</p>
<p>Jointly Proposed by Squamish Nation, Tsleil-Waututh Nation, and supported by City of Vancouver</p>	<p>Revised Existing EAC Condition 17 (para (b))</p>	<p>b) Describe the measures to offset⁸ impacts to traditional use plants; and</p> <p>(⁸ Consistent with the requirement for offset plans in Condition 16, offset plans (rather than mitigation plans) should be established for medicinal or other culturally important plant and tree species.)</p>	<p>EAC Condition #17 applies to Trans Mountain’s Weed and Vegetation Management Plans for the operations of the TMEP pipeline and associated facilities. These aspects of the TMEP, as well as the Plans affected by EAC Condition #17, were not the subject of the NEB reconsideration process. As a result, this request is outside the scope of the EAO’s reconsideration process as well.</p>	<p>It is the EAO's view that there is no new information in the NEB reconsideration report that supports amending this condition to include an offset requirement. The scope of this process to identify and consider the portions of the NEB’s reconsideration report that differ from the initial NEB panel report (2016 Report) and provide recommendations regarding any new or amended EAC conditions in response to those portions, within the limits of provincial jurisdiction. The EAO views this proposed condition as out of scope of the provincial reconsideration process.</p>

<p>Jointly Proposed by Squamish Nation, Tsleil-Waututh Nation, and supported by City of Vancouver</p>	<p>Revised Existing EAC Condition 21 (new para)</p>	<p>g) Describe the adaptive management⁹ structure and process, including the participation of Aboriginal Groups, that will be put into effect in the event that adverse project effect are greater than those predicted in the Application.</p> <p>(⁹ Adaptive management is recognized as the best practice associated with monitoring. should have an additional paragraph (para g) that requires the park offsetting plan to identify.)</p>	<p>EAC Condition #21 applies to construction and operations of the TMEP pipeline and associated facilities within Provincial Parks and any other designated protected areas. These aspects of the TMEP were not the subject of the NEB reconsideration process. As a result, this request is outside the scope of the EAO’s reconsideration process as well.</p>	<p>It is the EAO’s view that there is no new information in the NEB reconsideration report that supports amending this condition. The scope of this process to identify and consider the portions of the NEB’s reconsideration report that differ from the initial NEB panel report (2016 Report) and provide recommendations regarding any new or amended EAC conditions in response to those portions, within the limits of provincial jurisdiction. The EAO views this proposed change to EAC condition 21 as out of scope of the provincial reconsideration process.</p>
<p>Jointly Proposed by Squamish Nation, Tsleil-Waututh Nation, and supported by City of Vancouver</p>	<p>Revised Existing EAC Condition 26 (or, a NEW condition associated with groundwater)</p>	<p>In the event that a spill originating from the Project is confirmed to have contaminated drinking water, as determined by a Qualified Professional, the Holder must provide one or more alternate source(s) of drinking water for all persons who use water for human or animal consumption from the contaminated water source for the period of time during which contamination exists.</p> <p>In the event that, following spill response, residual stranded / weathered bitumen has the potential to affect groundwater¹⁰, the Holder must monitor the potentially affected groundwater quality and, within 3 months of the spill, must prepare a plan to remediate the spill in a manner consistent with federal and provincial standards for contaminants of concern.</p> <p>If the Qualified Professional has determined that a spill from the Project has contaminated drinking water, the Holder must notify EAO and MOE within the following time periods after the determination:</p> <ul style="list-style-type: none"> a) As soon as practicable, or b) within 72 hours, <p>Whichever is less.</p> <p>(¹⁰ Condition 26 is wholly insufficient given the Province’s jurisdiction over both groundwater and contaminated sites.)</p>	<p>EAC Condition #26 applies to spills originating from the “Project”, which does not include TMEP-related marine shipping. Possible spills associated with the “Project”, excluding marine shipping, were not the subject of the NEB reconsideration process. As a result, this request is outside the scope of the EAO’s reconsideration process as well. For spills resulting from TMEP-related marine shipping, as Trans Mountain explained in its September 30, 2020 letter, Trans Mountain does not have control over spill preparedness or response. Those matters are the responsibility of the marine vessel operator and various government agencies (including the WCMRC). Any remediation or compensation resulting from a vessel-sourced spill is similarly the responsibility of the vessel operator under the <i>Marine Liability Act</i>. The NEB heard concerns during the original OH-001-2014 hearing and the MH-052-2018 reconsideration process about the adequacy of the marine liability regime, and it addressed those concerns in its Recommendation 15 to the federal Governor in Council. There is no new information in the NEB’s Reconsideration Report that justifies imposing a new condition in the EAC requiring Trans Mountain to remediate groundwater from a vessel-sourced spill, and Trans Mountain submits that such a condition would be unlawful because it conflicts with the <i>Marine Liability Act</i> and would frustrate the purpose of that legislation.</p>	<p>It is the EAO’s view that there is no new information in the NEB reconsideration report that supports amending this condition. The scope of this process to identify and consider the portions of the NEB’s reconsideration report that differ from the initial NEB panel report (2016 Report) and provide recommendations regarding any new or amended EAC conditions in response to those portions, within the limits of provincial jurisdiction. The EAO views this proposed change to EAC condition 26 as out of scope of the provincial reconsideration process.</p>

<p>Jointly Proposed by Squamish Nation, Tsleil-Waututh Nation, and supported by City of Vancouver</p>	<p>New Condition</p>	<p>The Holder must demonstrate that project operations, including Project-related marine shipping, will not prevent the updated Water Quality Objectives for Burrard Inlet as established by BC ENV and TWN from being attained. The Burrard Inlet Water Quality Objectives are for the protection of human consumption of shellfish, human consumption of finfish, aquatic life, wildlife, cultural practices, recreational uses, and institutional uses.</p>	<p>The environmental effects of TMEP were fully assessed during the NEB hearings, including the potential impacts of marine shipping to Burrard Inlet (operations as well as accidents and malfunctions). For TMEP construction at the Westridge Marine Terminal, the NEB addressed possible marine water quality impacts through Certificate Condition 35 and concluded that with the implementation of that Condition, TMEP effects on marine water quality would be within applicable criteria and that the TMEP's contribution to cumulative effects would be inconsequential (NEB Reconsideration Report at 267.) For TMEP-related marine shipping, the NEB concluded that it had enough information to complete its cumulative effects assessment for TMEP-related marine shipping and that the contribution of TMEP-related marine shipping to cumulative effects in the marine shipping lanes would be inconsequential (NEB Reconsideration Report at 429-431.) As a result, there is no evidentiary basis in the NEB Reconsideration Report to impose the requested condition.</p>	<p>It is the EAO's view that there is no new information in the NEB reconsideration report that supports amending this condition. The scope of this process to identify and consider the portions of the NEB's reconsideration report that differ from the initial NEB panel report (2016 Report) and provide recommendations regarding any new or amended EAC conditions in response to those portions, within the limits of provincial jurisdiction. The EAO views this proposed condition as out of scope of the provincial reconsideration process.</p>
<p>RECOMMENDATIONS TO THE EAO</p>				
<p>Jointly Proposed by Squamish Nation, Tsleil-Waututh Nation, and supported by City of Vancouver</p>	<p>Emergency Planning and Preparedness</p>	<p>Given the ongoing concern that currently there remains insufficient information regarding dilbits fate and behaviour to allow the Province to mount an effective spill response in areas of its own jurisdiction, Squamish feels an additional condition should be imposed that ensures that new information is a) brought forward and b) acted on to update response plans. The condition must: a) Bind the proponent and GOC to sharing new dilbits fate/behaviour info with BC, and b) Bind all parties to an adaptive management process that continually revises planning and upgrades technology in the face of new information.</p>	<p>Table 2 attached to the Parties' letters contains recommendations to the EAO, as well as other provincial and federal authorities. As these requests were not directed to Trans Mountain, Trans Mountain will not provide specific responses. However, Trans Mountain submits that any such recommendations cannot form conditions to the EAC because Trans Mountain has no ability to comply with them. Further, the four factors that Trans Mountain identified in its September 30, 2020 letter should also apply to any recommendations from the EAO to other government authorities. Trans Mountain explained in its September 30, 2020 submission that any new or modified conditions resulting from the EAO's reconsideration process must be: (1) based on new information in the NEB's Reconsideration Report relative to its 2016 Report, (2) within an area of provincial jurisdiction, (3) conditions that were not already considered</p>	<p>The EAO acknowledges the recommendation. The EAO is not in a legal position to place binding requirements on Canada or "all parties". The EAO notes that Condition 35 fate and behaviour of bitumen research ensures that new information is brought forward and incorporated into response plans. The Ministers cannot condition parties other than the holder.</p>

			and rejected by the NEB, and (4) within the scope of the TMEP (as reflected in the scope of “reviewable project” set out in the EAO’s Section 11 Order) and Trans Mountain’s control. Requested conditions that do not meet these conditions should not be accepted by the EAO in this reconsideration process for the reasons set out in our September 30, 2020 submission.	
Jointly Proposed by Squamish Nation, Tsleil-Waututh Nation, and supported by City of Vancouver	Archaeology	<p>We recommend that:</p> <p>a) The Province amend the BC <i>Heritage Conservation Act</i> to include protections for archaeological sites that are impacted by shoreline erosion.</p> <p>b) The BC EAO work with the Holder, First Nations, federal agencies including Transport Canada, the Vancouver Fraser Port Authority, the Pacific Pilotage Authority and others to avoid, reduce or mitigate impacts from project-related vessel wake wash from tug and tanker traffic in Burrard Inlet to reduce shoreline erosion and related impacts to cultural heritage and archaeology.</p> <p>c) The BC EAO require that the Archaeology Branch maintain regulatory authority over heritage resources and Heritage Conservation Act permits and not transfer the regulatory authority to the BC Oil and Gas Commission for heritage management for this project.</p>		EAO acknowledges the recommendation. Ministers cannot condition parties other than the Holder.
Jointly Proposed by Squamish Nation, Tsleil-Waututh Nation, and supported by City of Vancouver	Parks and Protected Areas	<p>Recognizing that seabed impacts from vessel anchorages are poorly understood but potentially significant, we recommend that the Province seek to work with the federal government to:</p> <p>a) characterize the effects of deep sea vessel anchorages within the Southern Strait of Georgia National Marine Conservation Area (NMCA).</p> <p>b) agree to de-list at least the current anchorages within the NMCA for the purposes of studying impacts; and</p> <p>c) modify or remove remaining anchorages if the results of the study reveal significant adverse effects to the NMCA.</p>		<p>EAO acknowledges the recommendation.</p> <p>The EAO notes that Transport Canada and Canada Port Authorities have regulatory authority over marine anchorages. The EAO notes new information in the NEB Reconsideration Report "Transport Canada noted that through the National Anchorages Initiative it is conducting research studies to inform the creation of a National Anchorages Framework, which are expected to be completed in 2019. Transport Canada said that it is consulting with the marine industry, Indigenous communities, community organizations, and stakeholders as it works to develop an approach to identify anchorage sites, and traditional knowledge from First Nations will be collected during this process. Finally, Transport Canada said that it will also be</p>

				<p>undertaking a review and evaluation of the need for possible regulatory changes for oversight and management of anchorage sites. It said that these activities will allow for the development of a national anchorage framework and best practice guide for ships at anchor." (p. 92)</p> <p>NEB Recommendation 4 to the GIC recommends expediting the feasibility study for establishing a Southern Strait of Georgia National Marine Conservation Area Reserve, and (if considered feasible) proceed to establish it, and include consideration of other initiatives under the Oceans Protection Plan, such as the Port's Modernization Review and the National Anchorage Strategy. The NEB recommended this work be done in consultation with potentially affected Indigenous and coastal communities and with relevant marine shipping stakeholders including Transport Canada, Canadian Coast Guard and the Vancouver Fraser Port Authority.</p>
<p>Jointly Proposed by Squamish Nation, Tsleil-Waututh Nation, and supported by City of Vancouver</p>	<p>Parks and Protected Areas</p>	<p>Recognizing that parks and protected areas abutting the marine environment may be affected by marine spills, we recommend that the Province align emergency response plans, including Coastal Geographic Response Plans, with park management plans in the receiving environment including the Say Nuth Khaw Yum / Indian Arm Park Management Plan in consultation with Park Boards to ensure Park values are protected in the event of an oil spill.</p>		<p>The EAO acknowledges the recommendation.</p> <p>Federal agencies and WCMRC provided additional information regarding this recommendation. WCMRC said their Geographic Response Strategies allow for new input and data sources as part of the regular maintenance cycle for the program. WCMRC is prepared to work with Parks Canada for input into existing strategies.</p> <p>The Response Organizations Regulations state that a response organization's response plan must take into account any contingency plan for its geographical area that is issued by the Canadian Coast Guard.</p> <p>Under PIER, Canadian Coast Guard area response plans will include a Resources at Risk section. Representatives from Indigenous communities, provincial parks, and national parks are invited to participate in Coast Guard response planning, so that appropriate linkages can be made to existing park</p>

				management plans. The Canadian Coast Guard noted that content development for the Resources at Risk section and linkages to park management plans are dependent on input received from planning participants.
Jointly Proposed by Squamish Nation, Tsleil-Waututh Nation, and supported by City of Vancouver	Seabed issues	See Recommendation for Parks and Protected Areas		See above.

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