

APPENDIX F – ABORIGINAL INTERESTS AND CONCERNS THAT INFLUENCED PROJECT DESIGN¹

¹ Provided by Kinder Morgan Canada, August 2016

Throughout the regulatory process for the Trans Mountain Expansion Project (TMEP), Trans Mountain has engaged with Aboriginal groups and has considered Aboriginal interests and/or concerns with Project planning and development. This table includes Project changes that have occurred to date as a result of input from Aboriginal groups. Project changes for this table are categorised as:

- changes to the route (e.g. reroute to avoid a site or area of environmental significance or traditional use importance);
- changes to engineering design or construction methods (e.g. change in watercourse crossing method); and,
- changes to existing mitigation or addition of new mitigation (e.g. inclusion of specific mitigation important to an Aboriginal group(s)).

Additional interests and/or concerns identified during ongoing engagement with Aboriginal groups will be reviewed and incorporated into the mitigation, planning and development where appropriate, prior to construction and in compliance with the filing of relevant National Energy Board certificate conditions.

PROJECT CHANGES TO INCORPORATE ABORIGINAL INTERESTS - TERRESTRIAL

Aboriginal Group	Interest and/or Concern Expressed	Nature of Project Change			Details of Incorporation of Interest	References
		Route	Construction Method	Mitigation		
Multiple groups	Aboriginal groups expressed interest in training and educational opportunities for the Project.			X	<p>In response to input from Aboriginal groups Trans Mountain developed the Trans Mountain Expansion Project Employment Policy and the Training Policy for Aboriginal Peoples. These policies incorporate concerns and interests raised by Aboriginal groups and support the fulfilment of NEB Conditions #11, #12, #58 and #107.</p> <p>The Trans Mountain Expansion Project is committed to maximizing pipeline and facilities construction employment opportunities for Aboriginal, local and regional communities located along the proposed pipeline corridor. As directed by the Trans Mountain Expansion Project Employment Policy, the following activities will direct the execution of the Employment Program:</p> <ul style="list-style-type: none"> • Provide contractors and sub-contractors with Project expectations for employment, recruitment and retention standards and policies • Provide timely information to Aboriginal, local and regional communities on potential employment opportunities and requisite qualifications • Identify relevant and timely Project information on employment opportunities to inform training institutions and employment organizations • Consult with employment service delivery organizations, unions, associations and local communities to establish recruitment processes linking applicants with Major Contractors and sub-contractors • Collaborate with Major Contractors, sub-contractors, and employment service delivery organizations to ensure the recruitment of those qualified to work on the Project • Monitor Major Contractors' commitments to identify and implement retention measures to ensure Aboriginal people continue to be employed to the completion of the work they are hired for and for which they have the necessary qualifications • Develop a liaison process for managing Aboriginal and local community concerns during construction • Ensure Major Contractors, sub-contractors, and camp policies are inclusive and supportive of a diverse workplace. • Support existing and develop where necessary, dispute resolution and escalation processes to resolve issues in a timely and effective manner. <p>Trans Mountain is committed to the following training objectives, as outlined in the Training Policy for Aboriginal Peoples .The following objectives provide for enhanced access to employment opportunities and resources for Aboriginal Peoples to benefit from the development of the proposed Project:</p> <ul style="list-style-type: none"> • Develop working relationships with Aboriginal groups to foster an understanding of their current human resource capacity • Collaborate with Aboriginal organizations, industry partners, educational institutions and all levels of government to leverage training funds for the provision of relevant and timely training programs to ensure participation to the greatest extent possible of Aboriginal Peoples in employment opportunities of this Project • Establish communications to maintain information exchange between Trans Mountain, Aboriginal groups and relevant organizations on the status of the Project to ensure training is planned, scheduled and implemented to meet Project timelines • Develop and implement an evaluation plan including tools to assess training and recruitment effectiveness. • Maintain a referral system for all participants of the Training Program. 	NEB_IR_No._1.22e
	Aboriginal groups expressed concerns about the socio-economic effects of the Project including effects on housing, existing infrastructure and community services, and requested that communities be provided opportunities for benefits such as employment from the Project.			X	<p>In response to Aboriginal concerns, Trans Mountain committed to preparing a Socio-Economic Effects Monitoring Plan (SEMP) for the Project. Input from Aboriginal groups will be incorporated into the SEMP which will be filed with the NEB in fulfilment of NEB Condition 13 Socio Economic Effects Monitoring Plan.</p>	

Aboriginal Group	Interest and/or Concern Expressed	Nature of Project Change			Details of Incorporation of Interest	References
		Route	Construction Method	Mitigation		
	Aboriginal groups requested that those potentially affected by noise receive company contact information in the event that there are concerns about noise.			X	In response to concerns raised by Aboriginal groups Trans Mountain committed to provide company contact information to those potentially affected by noise in the event there are noise concerns related to the construction and operation of the pipeline system.	NEB_IR_No._1.19b
	Aboriginal groups expressed concerns about Emergency Response planning and requested that they be included in the Emergency Response Planning Process.			X	In response to concerns raised by Aboriginal groups, Trans Mountain committed to engaging Aboriginal groups in the development of its Emergency Response Planning and Programs (ERP) Aboriginal groups will be invited to participate in regional workshops regarding emergency response planning. Trans Mountain committed to filing a consultation plan related to its Emergency Management Program (EMP) including its ERPs. As follow up to this commitment Trans Mountain will report on Emergency Response planning to the NEB in fulfilment of NEB Condition #90 Consultation on improvements to Trans Mountain's Emergency Management Program, NEB Condition #89 Emergency Response Plans for Construction and NEB Condition #119 Emergency Preparedness and Response Exercise and Training Program.	Cheam and Chawathil FN IR_No_2(b).1.2
	Aboriginal groups expressed interest in participating as Aboriginal monitors during construction and participating in access management planning.			X	In response to requests from Aboriginal groups, Trans Mountain committed to hiring Aboriginal monitors as part of the onsite Environmental Inspection Teams to provide traditional knowledge to the construction program, to ensure protection of the environment and to ensure the successful protection, mitigation and monitoring requirements set out in the EPPs. Trans Mountain also committed to manage access along portions of the right-of-way by implementing mitigation measures during pre-construction, construction and post-construction phases. As follow up to this commitment the NEB made the hiring of Aboriginal monitors a condition of Project Approval with NEB Condition #98 Plan for Aboriginal group participation in construction monitoring.	
	Aboriginal groups requested that Trans Mountain consider reducing the number of Fraser River crossings since in the Application the Fraser River was crossed twice near Rearguard Station.	X			Trans Mountain considered the requests from Aboriginal groups to reduce the number of Fraser River crossings as well as engineering design considerations. As a result Trans Mountain modified the routing in the upper Fraser River area and eliminated two crossings of the Fraser River.	

Aboriginal Group	Interest and/or Concern Expressed	Nature of Project Change			Details of Incorporation of Interest	References
		Route	Construction Method	Mitigation		
	Aboriginal groups requested that they be allowed to harvest culturally used plants prior to construction.			X	In response to these concerns, Trans Mountain committed to notify Aboriginal groups of construction activities two weeks prior to construction and allow for activities such as the harvest of traditionally used plants upon request. Upon further consideration Trans Mountain extended the notification of construction activities to Aboriginal groups to four weeks prior to construction.	
Adams Lake Indian Band	Adams Lake Indian Band requested that Trans Mountain develop and have reviewed and approved by regulatory agencies a viable fish habitat compensation plan to offset the increase in access and potential losses due to construction. Adams Lake Indian Band requested that a specific plan be provided including potential siting and methods that would be used to offer compensation for any 'net loss' of habitat or fisheries.			X	In response to concerns regarding the potential for serious harm and offset plans and as part of the Project planning and development, Trans Mountain provided the results of the serious harm self-assessment for all fish-bearing watercourses associated with the Project to the NEB in Q1 2015.	ALIB_IR_No.1.3.21
	Adams Lake Indian Band expressed concerns about the potential contamination of food fish in the event of a spill.			X	In the unlikely event of a spill with the potential to contaminate food fish, Trans Mountain will consult with Fisheries and Oceans Canada and potentially affected Aboriginal groups to identify mutually acceptable in-kind or replacement measures to replace or offset impacts directly related to and caused by the spill.	ALIB_IR_1.3.38
	Adams Lake Indian Band expressed concerns regarding the adequacy of post construction monitoring plans.			X	In response to concerns regarding the adequacy of post-construction environmental monitoring programs (PCEM), Trans Mountain made the following commitments: <ul style="list-style-type: none"> • As part of the PCEM, Trans Mountain will monitor the success of access control measures implemented along segments of the construction right-of-way by visually assessing evidence of human access; • In areas where natural recovery is unsuccessful, remedial measures will be implemented and may include but not be limited to: soil stability or erosion control measures, seeding areas using an approved native seed mix, planting tree and/or shrubs, or additional access control measures to assist in vegetation establishment, survival and growth; • In the event that construction-related issues persist past 5 years of monitoring the PCEM program will continue until measures are considered to be effective and the issue resolved; and • Measurable targets will be developed as part of the PCEM program by which the success of mitigation measures can be measured and the need for adaptive measures identified. • As a follow-up to these PCEM commitments, Trans Mountain has also committed to preparing the following NEB Conditions: <ul style="list-style-type: none"> • Caribou Habitat Restoration and Offset Measures Monitoring Program (#149) • Caribou Habitat Restoration and Offset Measures Monitoring Report(s) (#150) • Post-Construction Environmental Monitoring Reports (#151) • Riparian Habitat Reclamation Evaluation Report and Offset Plan (#154) • Rare Ecological Community and rare Plant Population Mitigation Evaluation Report and Offset Plan (#155) • Wetland Reclamation Evaluation Report and Offset Plan (#156) • Grasslands Reclamation Evaluation Report and Offset Plan (#157) 	ALIB IR 1.5.6, 1.5.7, 1.6.08, 1.5.2

Aboriginal Group	Interest and/or Concern Expressed	Nature of Project Change			Details of Incorporation of Interest	References
		Route	Construction Method	Mitigation		
	Adams Lake Indian Band expressed concerns related to cumulative effects on grizzly bear mortality risk.			X	<p>In response to concerns raised and in addition to the Project specific mitigation developed, Trans Mountain will coordinate access and new clearing requirements with other industrial users in the area to minimize human activity in grizzly bear habitat and to control access where access cannot be avoided. Trans Mountain expects that the implementation of the Wildlife Conflict Management Plan and the Grizzly Bear Management Plan, as part of the environmental protection plans would prevent or reduce any direct bear mortalities associated with Project construction and operations.</p> <p>In addition, Trans Mountain is committed to continued development and implementation of the mitigation strategy for the North Cascades, Grande Cache, and Yellowhead Grizzly Bear Population Units. The grizzly bear mitigation strategy includes objectives consistent with current regulatory guidelines and will be developed in consultation with the appropriate regulatory authorities and affected Aboriginal groups.</p> <p>As follow up to this commitment the NEB required that the Grizzly Bear Mitigation Plan be prepared as a condition of Project approval (NEB Condition #56) and incorporate input from Aboriginal groups.</p>	
Coldwater Indian Band	Coldwater Indian Band expressed concerns about routing of the pipeline through Coldwater Indian Reserve.	X			<p>In response to this concern, Trans Mountain committed to not pursuing on-Reserve routing options without the express consent of the community.</p> <p>Based on discussions between Trans Mountain and Coldwater Indian Band the pipeline route will not cross the Coldwater Indian Reserve.</p>	CIB IR 1.1
	<p>Coldwater Indian Band expressed concerns that the Project could affect groundwater from local aquifers used by Coldwater Indian Band to meet all domestic and fire-protection needs. In addition Coldwater Indian Band expressed concerns about the effects of the existing TMPL pipeline that runs through the Coldwater Indian Reserve.</p> <p>The Coldwater Indian Band raised concerns about Trans Mountain's preferred pipeline corridor outside of the east boundary of the Coldwater Indian Reserve 1. The Coldwater Indian Band said that its members have a high level of anxiety because of potential added impacts to its drinking water and the Coldwater River. The Coldwater Indian Band said that Trans Mountain did not consult them about the removal of the various corridor options from consideration. The Coldwater Indian Band said that its preliminary assessment of the corridor options suggested that the West Alternative could be a better option based on the potential effects to its aquifer, its rights and its overall quality of life and sense of well-being.</p>			X	<p>In response to this concern, Trans Mountain has committed to conduct a Coldwater Reserve Hydrology Study.</p> <p>The Coldwater Reserve Hydrology Study will be provided to the NEB to satisfy NEB Condition #39.</p> <p>In addition Trans Mountain committed to incorporating a list of potential drinking water sources for Aboriginal communities into its updated Emergency Management Plan. The list of potential drinking water sources would be used to issue an immediate drinking water advisory in the event of a spill contaminating a watercourse or aquifer used for drinking water purposes. It would also ground-truth the exact sources of drinking water affected by a spill by attempting to meet with Aboriginal communities, landowners, municipalities, etc. and then refining the drinking water advisory with the results of the ground-truthing activities. If a drinking water advisory were to be issued as a result of a spill, Trans Mountain is committed to working with the leadership of the Aboriginal community to identify surplus capacity from other drinking water sources in the area, while suitable replacement alternatives are established and implemented.</p>	

Aboriginal Group	Interest and/or Concern Expressed	Nature of Project Change			Details of Incorporation of Interest	References
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	Coldwater Indian Band requested that Trans Mountain provide the following information for sites where work is proposed in fish-bearing watercourses in Coldwater Indian Band's traditional Nlaka'pamux territory: a detailed explanation of the potential mortality of fish (individual, eggs, embryos, or fry) from the proposed activities as well as a quantitative estimate of fish mortality; and a detailed explanation of the localized effects on fish populations as a result of the anticipated fish mortality.			X	In response to concern for fish mortality and impedance to spawning at select sites Trans Mountain committed to include site-specific measures in its EPPs to deter fish from spawning within the immediate zone-of-influence during construction.	CIB_IR_No._1.3i
Enoch Cree Nation	Enoch Cree Nation expressed concern about the pipeline crossing Enoch Cree Nation Gravesite 1 and requested that Enoch Cree Nation community members be used as Aboriginal monitors at this site during construction.		X		<p>In response to this concern Trans Mountain committed to using construction methods in proximity of the Enoch Cree Gravesite 1 designed to ensure the integrity of the gravesite is maintained.</p> <p>In response to requests from Aboriginal groups, Trans Mountain committed to hiring Aboriginal monitors as part of the onsite Environmental Inspection Teams to provide traditional knowledge to the construction program, to ensure protection of the environment and to ensure the successful protection, mitigation and monitoring requirements set out in the EPPs.</p> <p>As follow up to this commitment the NEB made the hiring of Aboriginal monitors a condition of Project Approval with NEB Condition #98 Plan for Aboriginal group participation in construction monitoring.</p>	Table 5.1.2-6 of Volume 5D
Gunn Métis Local 55	Gunn Métis Local 55 expressed concerns about heritage and cultural sites around Lac Ste. Anne and Wabamun Lake, including burial sites and historical trails along the Edmonton to Hinton segment of the proposed pipeline corridor.			X	<p>In response to this concern Trans Mountain informed Gunn Métis Local 55 that the primary mitigation measure for protecting heritage and paleontological resources is avoidance, and secondarily, site-specific mitigation developed in consultation with appropriate provincial regulatory authorities, and approval by these authorities in fulfilment of permit obligations may also be used. In the unlikely event that an archaeological, historical or palaeontological site is discovered during construction, the Heritage Resources Discovery Contingency Plan will be implemented, and construction activities may resume only with the permission of the provincial regulatory authority upon review and approval of any mitigation to compensate for the disturbance.</p> <p>In addition Trans Mountain committed to not disturbing any known burial sites or cemeteries registered with Service Alberta under the Cemeteries Act or registered with Alberta Culture and Tourism under the Historical Resources Act during the Project.</p>	
	Katzie First Nation expressed concerns about safe drinking water.			X	In response to this concern, Trans Mountain committed to the provision of a safe water supply for affected Aboriginal groups and individuals in the unlikely event that a drinking water advisory is in place as a result of adverse effects of the Project on surface and groundwater supply.	Katzie IR2.2.12
	Katzie First Nation expressed concerns about effects of the Project on Surrey Bend Regional Park	X			Trans Mountain has committed to no land being taken or removed from Surrey Bend Regional Park and will acquire an easement for the pipeline that ensures ownership of the land will remain with the Park authority. No land would be taken or removed from Surrey Bend Regional Park, and acquiring an easement for the pipeline ensures ownership of the land will remain with the Park authority.	Katzie_FN_IR_No_1.02a
	Katzie First Nation expressed concern that both temporary and permanent wetland losses could impact traditional use of lands and resources and requested a requirement for offsets applicable to both			X	<p>Trans Mountain committed to file a pre-construction Wetland Survey and Mitigation Plan prior to commencing construction and a Wetland Reclamation Evaluation Report and Offset Plan on or before January 31 after the fifth complete growing season after completing final clean-up. The pre-construction wetland survey and mitigation will provide a Preliminary Wetland Offset Plan for any wetland that has not achieved reclamation success in terms of overall wetland function after five years of operations, and for any wetland to which no-net-loss under the Federal Policy on Wetland Conservation applies and that has had a temporary or ongoing loss in any individual functional condition.</p> <p>Trans Mountain will provide details of this plan as part of NEB Conditions #41 and #156.</p>	

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		Route	Construction Method	Mitigation		
Lower Nicola Indian Band	Lower Nicola Indian Band requested information about Project effects on grizzly bear and their habitat, including effectiveness of grizzly bear habitat after commencement of construction and cumulative effects of mortality risk.			X	Based on input from Aboriginal groups including Lower Nicola Indian Band, Trans Mountain will implement access management mitigation measures to reduce access along the right-of-way following construction, and counteract the attraction of wildlife to the right-of-way during operations by avoiding the use of attractive forage species in seed mixes used for reclamation . These measures are reflected in the Grizzly Bear Mitigation Plan (NEB Condition #56, Access Management Plans (NEB Condition #47) and the General Reclamation Plan (Volume 6 Environmental Plans).	
Matsqui First Nation	Matsqui First Nation expressed interest in the routing of the pipeline across Matsqui #2.	X			Based on discussions between Trans Mountain and Matsqui First Nation the pipeline route will cross Matsqui Indian Reserve #2 parallel to Line 1.	Matsqui_FN_IR_No .1.04e
Nooaitch Indian Band	Nooaitch Indian Band recommended that further hydrologic analysis in detailed design should include site-specific estimates of peak and seasonal flows and that climate change should be accounted for. It recommended that a re-alignment of the HDD crossing of the Coldwater River at RK 958 should be considered to reduce the risk of pipeline exposure due to erosion and channel avulsion. It also recommended that the HDD crossing of the Thompson River at RK 847 should be reviewed to assess the risk of avulsion and lateral bank erosion on the south bank near the entry point.			X	In response to this concern, Trans Mountain committed to providing updated flood frequency estimates for "notable" (i.e. hydrologically significant) watercourse crossings in accordance with NEB Condition 65. Trans Mountain also committed to carry out additional geotechnical investigations and to reassess feasibility for HDD's of 6 watercourse crossings. Trans Mountain also looking at an HDD or other underground trenchless crossing at the Salmon River based on the outcome of its detailed engineering and design.	
	Nooaitch Indian Band filed a hydrology report that stated it was reasonable for Trans Mountain's hydrologic studies to be at the general or screening level, on the understanding that further work is required in detailed design. According to the Nooaitch Indian Band, this could result in underestimating scour depth and the required depth of cover, which could lead to increased risk of pipeline exposure, damage, or failure. Nooaitch Indian Band recommended that further hydrologic analysis in detailed design should include site-specific estimates of peak and seasonal flows and that climate change should be accounted for. It recommended that a re-alignment of the HDD crossing of the Coldwater River at RK 958 should be considered to reduce the risk of pipeline exposure due to erosion and channel avulsion. It also recommended that the HDD crossing of the Thompson River at RK 847 should be reviewed to assess the risk of avulsion and lateral bank erosion on the south bank near the entry point.		X		In response to the interest expressed for more detailed engineering, Trans Mountain is committed to additional geotechnical investigations being undertaken to reassess the feasibility of HDD or other trenchless crossing methods at several watercourse crossings. In addition, updated flood frequency estimate information is being prepared for "notable " (i.e. hydrologically significant) watercourse crossings. Site-specific geotechnical information acquired will be used to update the risk management plan for addressing threats of existing and potential geohazards during construction of the Project. As follow up to this commitment the NEB added Conditions 65, 66, and 67 as part of Project Approval.	

Aboriginal Group	Interest and/or Concern Expressed	Nature of Project Change			Details of Incorporation of Interest	References
		Route	Construction Method	Mitigation		
Peters Indian Band	Peters Indian Band expressed an interest in the pipeline route crossing Peters Indian Reserve #1 and Peters Indian Reserve #1a.	X			Based on discussions with Peters Indian Band Trans Mountain revised the originally planned route around the Reserves, to route across Peters Indian Reserve #1 and Peters Indian Reserve #1a	Peter's IR No. 1A
Popkum First Nation	Popkum First Nation expressed an interest in the pipeline route crossing Popkum #1 and Popkum #2.	X			Based on discussions between Trans Mountain and Popkum First Nation the pipeline route will cross both Popkum #1 and Popkum #2.	
Shackan Indian Band	Shackan Indian Band expressed concerns that for wildlife species at risk habitat restoration is unproven and therefore these sites should be avoided.			X	Trans Mountain committed to the development of mitigation plans for each identified wildlife species at risk whose draft, candidate, proposed or final critical habitat is directly or indirectly affected by the Project. These plans incorporate Aboriginal input and will be filed with the NEB in fulfillment of NEB Conditions #37, #38, #44, #56, #92, #149, #151. There is a hierarchy of mitigation measures proposed within each of these species at risk mitigation plans and proposed habitat restoration measures are not necessarily unproven. Evaluation reports will be carried out after the PCEM period to assess the efficacy of habitat restoration measures.	
Shxw'ówhámél First Nation	Shxw'ówhámél First Nation expressed concerns with respect to the effects of construction on travel routes and culturally important historic pithouses and other archaeological sites within the PPC.	X			In response to this concern Trans Mountain proposed and implemented a pipeline re-alignment to avoid the pithouses and archaeological sites identified by Shxw'ówhámél First Nation.	Public Land Reply Evidence
	Shxw'ówhámél First Nation expressed interest in the pipeline route crossing Ohamil #1.	X			Discussions between Trans Mountain and Shxw'ówhámél First Nation have resulted in the route crossing Ohamil #1.	SFN IR 2.1.1a
Simpcw First Nation	Simpcw First Nation requested that Trans Mountain confirm that the potentially acid generating (PAG) sites identified are included in the Environmental Alignment Sheets.			X	In response to this concern Trans Mountain committed to providing the locations of potentially acid generating (PAG) sites on the updated Environmental Alignment Sheets.	SIMPCW_F_N_IR_No._1.058c
Squamish First Nation	Squamish First Nation expressed concerns regarding a potential pipeline release affecting drinking water			X	In response to this concern Trans Mountain committed to the following: in the event that a pipeline release somehow adversely impacted drinking water aquifer conditions that supply Squamish Nation Trans Mountain will commit to working with leadership of Squamish Nation to identify surplus capacity from other drinking water sources in the area while suitable replacement alternatives are established and implemented.	SN IR 2.12
	Squamish Nation expressed concerns about the effects of the Project on crabs.			X	In response to this concern, Trans Mountain committed that in the event marine dredging is required at Westridge Marine terminal, a localized crab salvage program would be undertaken prior to commencement of dredging activity.	SN IR 2.05p
Stk'emlupsemc te Secwepemc	Stk'emlupsemc te Secwepemc requested that they be consulted on access control measures within SSN territory. Stk'emlupsemc te Secwepemc Nation said that they were concerned that increased access would threaten wildlife, increase fishing pressure and crowding, establish invasive plants, and increase waste.			X	In response to these concerns, Trans Mountain committed to consult with the Stk'emlupsemc te Secwepemc on access control measures within the Stk'emlupsemc te Secwepemc territory. Trans Mountain is developing an Access Management Plan(s) to be included within the updated Pipeline Environmental Protection Plans and in accordance with NEB Condition 47, that must address both human and predator access during construction and operations. Trans Mountain is also developing pipeline and facilities EPPs that contain mitigation measures that address issues related to soil, vegetation, fish and fish habitat, and wildlife and wildlife habitat. 47, 72, 78, 81 With respect to fishing and hunting pressure concerns, mitigation has been developed to prohibit recreational fishing and hunting by Project personnel during working hours and to exclude the use of the construction footprint to access areas for the purposes of hunting or fishing at anytime.	SSN_IR_No._2.32.1

Aboriginal Group	Interest and/or Concern Expressed	Nature of Project Change			Details of Incorporation of Interest	References
		Route	Construction Method	Mitigation		
	Stk'emlupsemc te Secwepemc identified Jacko Lake as an important site and requested mitigation to protect the area for traditional uses.			X	In response to these concerns, Trans Mountain committed to implement mitigation to ensure that Project personnel are prohibited from fishing in Jacko Lake during construction activities and committed to make efforts to provide continuous access to Jacko Lake for Stk'emlupsemc te Secwepemc community members.	
Stolo Collective	Aitchelitz First Nation, Kwaw-kwaw-apilt First Nation, Shxwha:y Village, Skowkale First Nation, Skwah First Nation, Soowahlie Indian Band, Squiala First Nation, Tzeachten First Nation, and Yakweakwoose First Nation expressed concerns about the pipeline route crossing Grass #15.	X			Based on discussions between Aitchelitz First Nation, Kwaw-kwaw-apilt First Nation, Shxwha:y Village, Skowkale First Nation, Skwah First Nation, Soowahlie Indian Band, Squiala First Nation, Tzeachten First Nation, Yakweakwoose First Nation and Trans Mountain the pipeline route will not cross Grass #15.	
	The Stó:lō Collective raised specific concerns about potential impacts of the Project on the Lightning Rock site. The Stó:lo Collective raised concerns regarding Trans Mountain's plan to place a Project staging area on one of their important spiritual and burial sites called Lightning Rock.	X			In response to this concern Trans Mountain has reviewed routing and workspace requirements near Lightning Rock and made some modifications. Trans Mountain will continue to discuss construction activities in relation to the Lightning Rock site.	
Tzeachten First Nation	Tzeachten First Nation expressed concerns about the pipeline route crossing Tzeachten Indian Reserve #13.	X			Based on discussions between Tzeachten First Nation and Trans Mountain the pipeline route will cross Tzeachten Indian Reserve #13.	
Upper Nicola Band	Upper Nicola Indian Band raised concerns about avian collisions with power lines at the proposed Kingsvale pump station.			X	In response to this concern, Trans Mountain committed to develop avian protection measures using information and best practices outlined by the Avian Power Line Interaction Committee. Mitigation measures regarding avian collisions will be outlined in relevant EPPs.	
	Upper Nicola Band raised concerns regarding metal leaching and acid rock drainage.			X	In response to concerns regarding metal leaching and acid rock drainage, Trans Mountain is committed to the development of an Acid Rock Drainage (ARD) mitigation plan which would describe additional sampling and monitoring programs to assess site-specific geochemical characteristics, develop appropriate management strategies and mitigation measures to be applied during construction, and confirm the effectiveness of in minimizing the long-term potential for acidic and/or metal-rich runoff. The ARD Mitigation Plan will form part of the Pipeline EPP and will be reviewed with potentially affected Aboriginal groups, such as the Upper Nicola Band in EPP workshop(s).	UNB_IR_1.031 UNB_IR_2.15e
	Upper Nicola Band expressed concern about the competency of Trans Mountain's Computational Pipeline Monitoring (CPM) system in leak detection.		X		In response to concerns for leak detection, Trans Mountain is committed to implementing complementary leak detection technologies to enhance its current capabilities and to continually improve its leak detection system. In follow-up to this commitment, Trans Mountain is committed to filing reports to the NEB, describing the final design of the expanded Trans Mountain Pipeline System's SCADA and leak detection systems (NEB Condition 115).	
	Upper Nicola Band expressed concern regarding the current and future condition of the reactivation segments, and the impacts of a rupture or an undetected leak.			X	Trans Mountain is committed to completing a risk assessment once the integrity verification activities and analyses have been completed. As follow up to this concern the NEB requested NEB Conditions 19 and 152 be completed as part of Project Approval.	UNB IR 1.04
	Upper Nicola Band expressed concern about integrity of the pipeline during operations.		X		In response as part of its Integrity Management Program (IMP) Trans Mountain has committed to continuing grade assessments and axial flaw assessments on a maximum interval of 5 years following baseline assessment.	UNB IR 2.09

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		Route	Construction Method	Mitigation		
	Upper Nicola Band requested that Trans Mountain provide justification for recommended contingency pipeline crossing method of isolation or open-cut for Crossing BC-582 (RK 990.0) and BC-559 (RK 970.3), and isolation for BC-570 (RK 980.0).		X		In response to this concern Trans Mountain made the following commitments with respect to Coldwater River 4 crossing: <ul style="list-style-type: none"> • Trans Mountain will prepare a specific assessment of fault zones proximal to where HDD drilling is scheduled at the Coldwater River 4 site and when geotechnical drilling is conducted; • Trans Mountain will collect observations of alteration minerals specific to Coldwater River 4 site when geotechnical drilling is completed at that site; • Trans Mountain will prepare and file with the NEB a summary report of the geotechnical investigation and any reassessment of HDD feasibility associated access to the site for Coldwater River 4 crossing; • Trans Mountain will ensure that all locations where HDDs are planned, detailed field investigations will be carried out to ensure the HDD is located appropriately. 	Upper_Nicola_Band_IR_No._1.15d
	Upper Nicola Band expressed concerns regarding slope movement			X	In response to concerns regarding slope movement, Trans Mountain is committed to monitor locations with risk of slope movement as part of its Natural Hazard Program. Where recommended as a result of engineering assessments Trans Mountain will install instruments to monitor slope movement or to monitor pipeline strain to ensure the pipeline is not being damaged by soil movements. This is not a change in mitigation procedure but it is an expansion of existing programs in consideration of the TMEP and the results of geotechnical hazard assessment.	UNB IR 1.08

PROJECT CHANGES TO INCORPORATE ABORIGINAL INTERESTS - MARINE

Aboriginal Group	Interest and/or Concern Expressed	Nature of Project Change			Details of Incorporation of Interest	References	Commitment #	Notes
		Route	Construction Method	Mitigation				
Multiple groups	<p>Aboriginal groups expressed concerns that existing levels of large ship traffic and industrialization have already reduced the ability to harvest in the certain areas, and reduced the frequency of interactions with mainland nations for cultural, ceremonial and economic reasons.</p> <p>Aboriginal groups also expressed concerns about the effects of existing development on the health of the ecosystems and resources harvested and their cultural and spiritual well-being.</p> <p>Aboriginal groups expressed concerns about the effects of a spill on rights and interests and biophysical resources.</p>			X	In response to concerns raised by Aboriginal groups Trans Mountain committed to, among other measures, provide regular updated information on Project-related marine vessel traffic to Aboriginal communities. It also committed to initiate a public outreach program prior to the Project operations phase to communicate information on Project-related timing and scheduling with Transport Canada, the Canadian Coast Guard, the Chamber of Shipping for British Columbia, commercial and tourism associations, and potentially affected Aboriginal groups.			
	Aboriginal groups expressed concern that increased tanker traffic would threaten marine safety, presenting increased risks of collisions between tankers and smaller traditional resource use vessels. They explained that a collision could result in damage to vessels or gear utilized to exercise harvesting rights.			X	In response to concerns raised by Aboriginal groups Trans Mountain said that Project-related marine vessels would be fully compliant with all applicable navigational, communications and safety regulations, including those of Transport Canada, the Canadian Coast Guard, the PPA and PMV. Trans Mountain said it has identified mitigation to reduce the magnitude and duration of potential effects, where feasible. However, Trans Mountain said that as the shipping industry follows internationally and federally regulated guidelines and rules (such as the use of the international shipping lanes for routing and the use of pilots during transit), the company said there is limited ability for any tanker or vessel to alter route or schedule. Trans Mountain stated that all Aboriginal groups will be invited to attend regional EPP workshops where mitigation measures and monitoring programs will be discussed.			
	Aboriginal groups expressed concerns regarding the impact a spill would have on their economic development interests and commercial harvesting rights.			X	Through its extensive engagement activities, Trans Mountain said that it understands that an oil spill into the marine environment, arising from an incident involving a tanker is a major concern for Aboriginal communities. Trans Mountain said it recognizes that an unmitigated oil spill from a tanker could have immediate to long-term effects on the biophysical and human environment of the Salish Sea. Trans Mountain committed to enhanced navigation and safety measures and to the continued identification of improvements to the existing oil spill response preparedness and response capacity, in consultation with Aboriginal groups. Trans Mountain also committed to invite all Aboriginal groups to attend regional workshops where mitigation measures and monitoring programs will be discussed			
	Aboriginal groups expressed concerns that increased tanker traffic will further impact the recovery of the killer whales a species of cultural importance to multiple Aboriginal groups.			X	In response to concerns raised by Aboriginal groups, Trans Mountain committed to developing a Marine Mammal Protection Program with a purpose of outlining Project-related tanker specific measures and regional collaborative initiatives that would be implemented by Trans Mountain and other operators along the marine shipping lanes to mitigate and manage potential environmental effects on marine mammals.			
Ditidaht First Nation	Ditidaht First Nation expressed concerns about the effects of increased tanker traffic on fishing at Swiftsure Bank, which is currently located within the marine shipping lane.			X	In response to this concern Trans Mountain committed to raise awareness amongst Project tankers about conditions near Swiftsure Bank with in its Port Information and Terminal Operations Manual.	Table 4.2-4 of the August 2015 Supplemental Marine TDR		Commitment made during reply evidence response