

VIA ELECTRONIC SUBMISSION

January 31, 2020

Canada Energy Regulator
Suite 210, 517 Tenth Avenue SW
Calgary, Alberta T2R 0A8

To: Ms. Louise George, Secretary to the Commission

Dear Ms. George:

**Re: Trans Mountain Pipeline ULC (Trans Mountain)
Trans Mountain Expansion Project (TMEP or Project)
OC-065
Condition 91: Plan for marine spill prevention and response commitments
File: OF-Fac-Oil-T260-2013-03 61**

Please find enclosed Trans Mountain's updated compliance filing in fulfillment of Project Condition 91. This condition compliance filing relates to the following legal instruments:

- OC-065 (CPCN)

Phased Filings

On January 16, 2017, Trans Mountain filed a Phased Condition Matrix ([A81323](#)) with the Board wherein it established 39 Project phases. This filing relates to the following phases:

- 1: Westridge Marine Terminal

Summary of Material Filed:

Canada Energy Regulator (CER) Certificate of Public Convenience and Necessity (CPCN) OC-065 Condition 91 requires Trans Mountain to:

"file with the NEB, within 6 months from the issuance of the 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. The plan must be prepared in consultation with Transport Canada, the Canadian Coast Guard, the Pacific Pilotage Authority, Vancouver Fraser Port Authority, British Columbia Coast Pilots, Western Canada Marine Response Corporation, Fisheries and Oceans Canada, the Province of British Columbia, and potentially affected Indigenous groups, and must identify any issues or concerns raised and how Trans Mountain has addressed or responded to them."

Trans Mountain must provide a summary of its consultations for this purpose, including a description and rationale for how Trans Mountain has incorporated the results of its consultation into the strategy.

Trans Mountain must provide the plan to the above-mentioned parties at the time it is filed with the NEB.”

On December 18, 2019, Trans Mountain sought relief from the requirement to file Condition 91 within 6 months of the issuance of CPCN to allow for more time to consider feedback received from Indigenous groups. On December 20, 2019 the CER extended the timeline to submit the Condition 91 update to January 31, 2020.

Trans Mountain confirms that it is providing the updated Plan to the parties listed in Condition 91 concurrent with this submission.

Should you have any questions regarding the attached, please contact the undersigned at regulatory@transmountain.com or (403) 514-6400.

Yours Truly,



Scott Stoness
Vice President, Regulatory & Compliance
Trans Mountain Corporation



**Canada Energy Regulator Condition 91
Plan for Marine Spill Prevention
and Response Commitments**

SUPPLEMENTAL REPORT

January 31, 2020



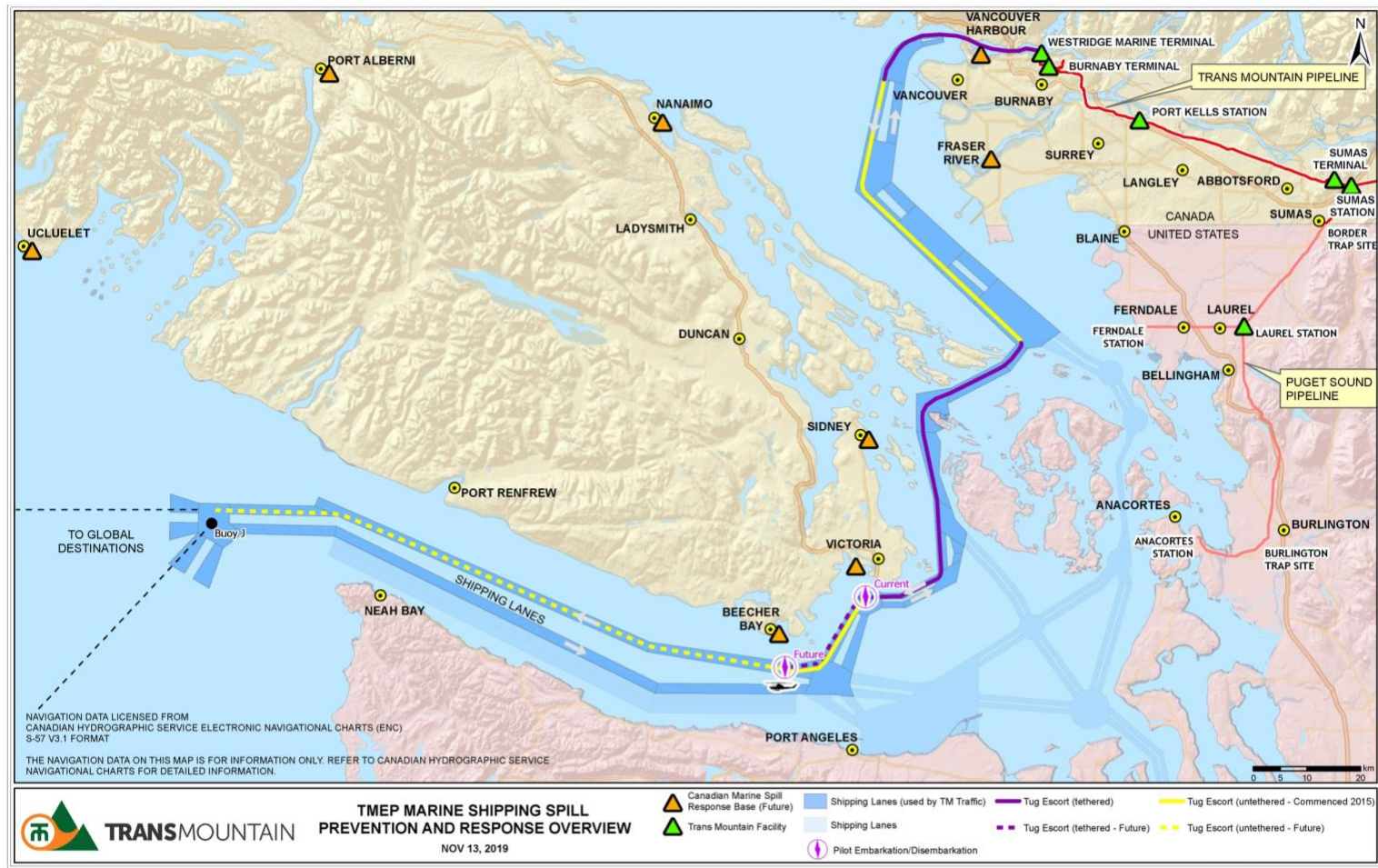


Figure 1: Map Depicting Future Marine Spill Prevention and Response Initiatives

Trans Mountain's proposed oil spill prevention and response enhancements were reviewed by the CER and key commitments were subsequently confirmed in Project conditions, namely CER Condition 133. Condition 91 requires Trans Mountain to describe in a plan how the requirements of Condition 133 will be met. Both conditions are described in Table 1.

Table 1: Legal Instrument Concordance with CER Condition 91

NEB Condition No. 91: Plan for implementing, monitoring and complying with marine shipping-related commitments.	CPCN [OC-064]
<p>Trans Mountain must file with the NEB, at least 2 months prior to commencing construction, a plan describing how it will implement, monitor, and ensure compliance with its marine shipping-related commitments identified in Condition 133.</p> <p>The plan must be prepared in consultation with Transport Canada, the Canadian Coast Guard, the Pacific Pilotage Authority, Port Metro Vancouver, British Columbia Coast Pilots, Western Canada Marine Response Corporation, Fisheries and Oceans Canada and the Province of British Columbia, and must identify any issues or concerns raised and how Trans Mountain has addressed or responded to them.</p> <p>Trans Mountain must provide the plan to the above-mentioned parties at the same time as it is filed with the NEB.</p>	This document
Amended NEB [now CER] Condition No. 91: Plan for marine spill prevention and response commitments	CPCN [OC-065]
<p>Trans Mountain must file with the NEB [now CER], 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.</p> <p>The plan must be prepared in consultation with Transport Canada, the Canadian Coast Guard, the Pacific Pilotage Authority, Vancouver Fraser Port Authority, British Columbia Coast Pilots, Western Canada Marine Response Corporation, Fisheries and Oceans Canada, and the Province of British Columbia, and potentially affected Indigenous groups, and must identify any issues or concerns raised and how Trans Mountain has addressed or responded to them.</p> <p>Trans Mountain must provide a summary of its consultations for this purpose, including a description and rationale for how Trans Mountain has incorporated the results of its consultation into the strategy.</p> <p>Trans Mountain must provide the plan to the above-mentioned parties at the same time as it is filed with the NEB [now CER].</p>	This document
NEB Condition No. 133 - Confirmation of marine spill prevention and response commitments	CPCN [OC-064]
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 it has implemented or caused to be implemented the following commitments related to oil tanker traffic and enhanced oil spill response:	To be filed a minimum of 3 months

<p>a) Enhanced tug escort through developing a tug matrix and including it as part of Trans Mountain's Tanker Acceptance Standard. The tug matrix would prescribe minimum tug capabilities required to escort outbound laden tankers between the Westridge Marine Terminal and Buoy Juliet, as described in Section 5.3.2.1 of Volume 8A of Trans Mountain's Project application (Filing A3S4Y4), Trans Mountain's response to NEB Information Request No. 1.59 (Filing A60392), and Trans Mountain's response to the NEB's Information Request regarding the TERMPOL report (Filing A65273).</p> <p>b) An enhanced marine oil spill response regime capable of delivering 20,000 tonnes of capacity within 36 hours of notification, with dedicated resources staged within the study area, as described in Volume 8A of Trans Mountain's application and Trans Mountain's response to NEB Information Request No. 1.64 (Filing A3W9H8).</p> <p>Trans Mountain must also include and report on the above-noted marine shipping-related commitments in its commitments tracking table (required by Condition 6).</p>	<p>prior to loading the first tanker at Westridge Marine Terminal with oil transported by the Project.</p>
<p>Amended NEB [now CER] Condition No. 133 - Confirmation of marine spill prevention and response commitments</p>	<p>CPCN [OC-065]</p>
<p>Trans Mountain must file with the NEB [now CER], 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:</p> <p>a) Trans Mountain has included in its Vessel Acceptance Standard and Westridge Marine Terminal Regulations and Operations Guide a requirement for tankers <u>nominated to load at the Westridge Marine Terminal to have a suitable arrangement for the proposed enhanced tug escort between the Westridge Marine Terminal and Buoy J prior to departure. The tug escort should be suitable for foreseeable meteorological and ocean conditions and be based on tanker and cargo size;</u> and</p> <p>b) an enhanced marine oil spill response regime is in place that is capable of:</p> <ol style="list-style-type: none"> delivering 20,000 tonnes of capacity within 36 hours of notification, with dedicated resources staged within the study area; and, <u>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.</u> 	<p>To be filed a minimum of 3 months prior to loading the first tanker at Westridge Marine Terminal with oil transported by the Project.</p>

2.0 Project Overview – Update of Information Filed in 2017

On August 30, 2018, the Federal Court of Appeal issued a decision cancelling the Order-in-Council, which had approved the Certificate of Public Convenience and Necessity (CPCN) ([OC-064](#)) on December 1, 2016. Safe shutdown of all construction activities was initiated on August 30, 2018.

On September 26, 2018, the Canada Energy Regulator (formerly known as the National Energy Board) (CER) initiated a public hearing to carry out a reconsideration of certain specific aspects

related to marine shipping for the Project. The CER completed the reconsideration process and issued its recommendation report (CER filing ID [A6S2D8](#)) on February 22, 2019.

On June 18, 2019, via [OIC No. P.C. 2019-0820](#), the Governor in Council (GIC) directed the CER to issue a CPCN for the Project. TMEP received CPCN (OC-065) from the CER on June 21, 2019 (CER filing ID [C00061](#)). The Project is subject to 156 CER conditions, as amended by the GIC (CER Filing ID [A6V4G1](#)).

The CER has subsequently reinstated the record of regulatory filings made to date with the exception of any condition filings affected by updates to Project conditions (CER filing ID [C00593](#)); such as the amendments to Condition 91 and Condition 133 (see Table 2). Trans Mountain will continue to satisfy all Project conditions and commitments made to Indigenous and non-Indigenous communities and agencies.

Further updates, including construction updates and new information for communities will continue to be posted online at transmountain.com/all-communities. Monthly construction schedule updates are filed with the CER in compliance with Condition 62.

3.0 Condition 133 - Confirmation of marine spill prevention and response commitments

The following section of this Condition 91 supplemental filing describes the progress made since June 2017 on the implementation of marine spill prevention and response commitments, namely implementing enhanced tug escort for Project-related oil tanker traffic (Condition 133.a) and enhanced oil spill response regime (ERR) (Condition 133.b).

3.1 Enhanced Tug Escort (Condition 133.a)

Under Condition 133.a, Trans Mountain must include in its Vessel Acceptance Standard (VAS) and Westridge Marine Terminal Regulations and Operations Guide (WMTROG) a requirement for tankers nominated to load at the Westridge Marine Terminal to have, prior to departure from the Westridge Marine Terminal, a suitable arrangement for the proposed enhanced tug escort during the tanker's laden passage between the Westridge Marine Terminal and Buoy J. Amendments to Condition 133.a explicitly require the tug/s used for escort of laden tankers between Westridge Marine Terminal and Buoy J to be "suitable for foreseeable meteorological and ocean conditions and be based on tanker and cargo size."

The expanded escort route and high level escort practices are shown in Figure 2, which illustrate the significant enhancements that were proposed by Trans Mountain.

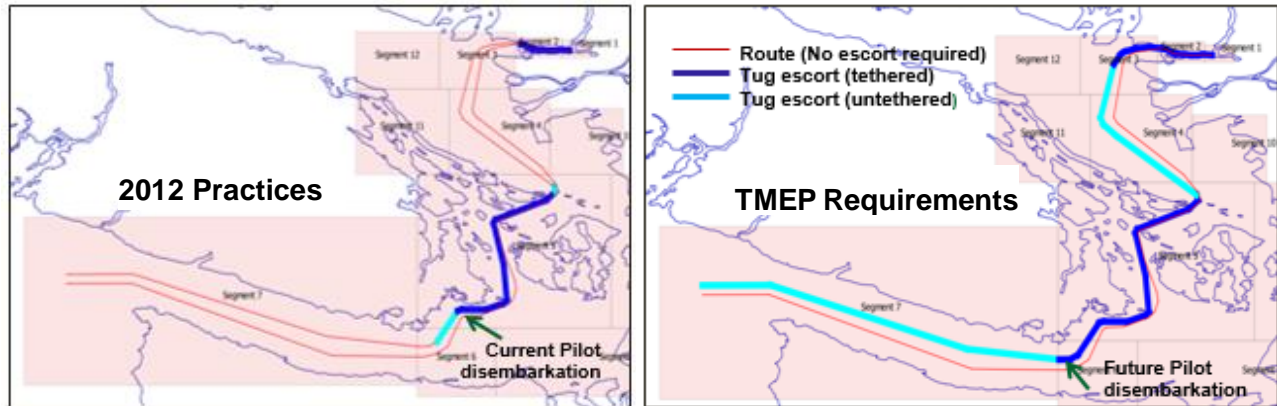


Figure 2: Extended Tug Escort for Project Tankers

3.1.1 Trans Mountain's Role

Standards for tug escorts for large commercial vessels calling at the Port of Vancouver and within the jurisdiction of Pacific Pilotage Authority (PPA) extends to Race Rocks and these are already managed consistently by the Vancouver Fraser Port Authority (VFPA) and the PPA. Details can be found in the Port of Vancouver, Port Information Guide published by the VFPA (<https://www.portvancouver.com/marine-operations/port-information-guide/>) and the Escort tug rules for ships carrying liquids in bulk published by the PPA through Notice to Industry (ppa.gc.ca). The published standards detail specific requirements for those tugs that are used for escort duties depending on the vessel type, including laden tankers, and take in to account the environmental conditions likely to be encountered between Westridge Marine Terminal and Race Rocks. Trans Mountain has confirmed with both the VFPA and PPA that those authorities shall continue to mandate the specific criteria that tugs have to meet in order to be assigned to escort duties under each authority's area of responsibility. As such, to fulfill the CER condition requirements Trans Mountain's focus shall remain on the tugs that will in future escort loaded tankers between Race Rocks and Buoy J, i.e. tug escort in the Juan de Fuca Strait beyond the compulsory pilotage area, as illustrated in Figure 1.

As noted in Trans Mountain's initial Condition 91 filing [A84433], Trans Mountain had engaged Robert Allan Limited to develop a Tug Matrix with specific requirements of tug capabilities under different meteorological and ocean conditions for loaded tankers of different sizes, namely Panamax and Aframax size tankers. To comply with revised Condition 133.a requirement, Trans Mountain will include the Tug Matrix (Figure 2) in the future Vessel Acceptance Standard to provide clear guidance to tug escort providers of what level of tug capacity would be required for escorting a laden tanker to Buoy J. Buoy J is at the very western extent of the Juan de Fuca Strait, and the location most exposed to offshore conditions of the Pacific Ocean within the study area.

Setting the tug capability commensurate to the conditions likely to be encountered is considered by Trans Mountain to be a very conservative approach. Should a suitable tug not be available, or there is potential of meteorological and ocean conditions at Buoy J exceeding the capability of the available tug, the tanker's transit would be delayed until conditions have returned to within the capacity of the assigned tug and the requirements of the Tug Matrix are met. Trans Mountain plans to liaise with relevant regulatory agencies to establish appropriate decision-making protocols in this regard.

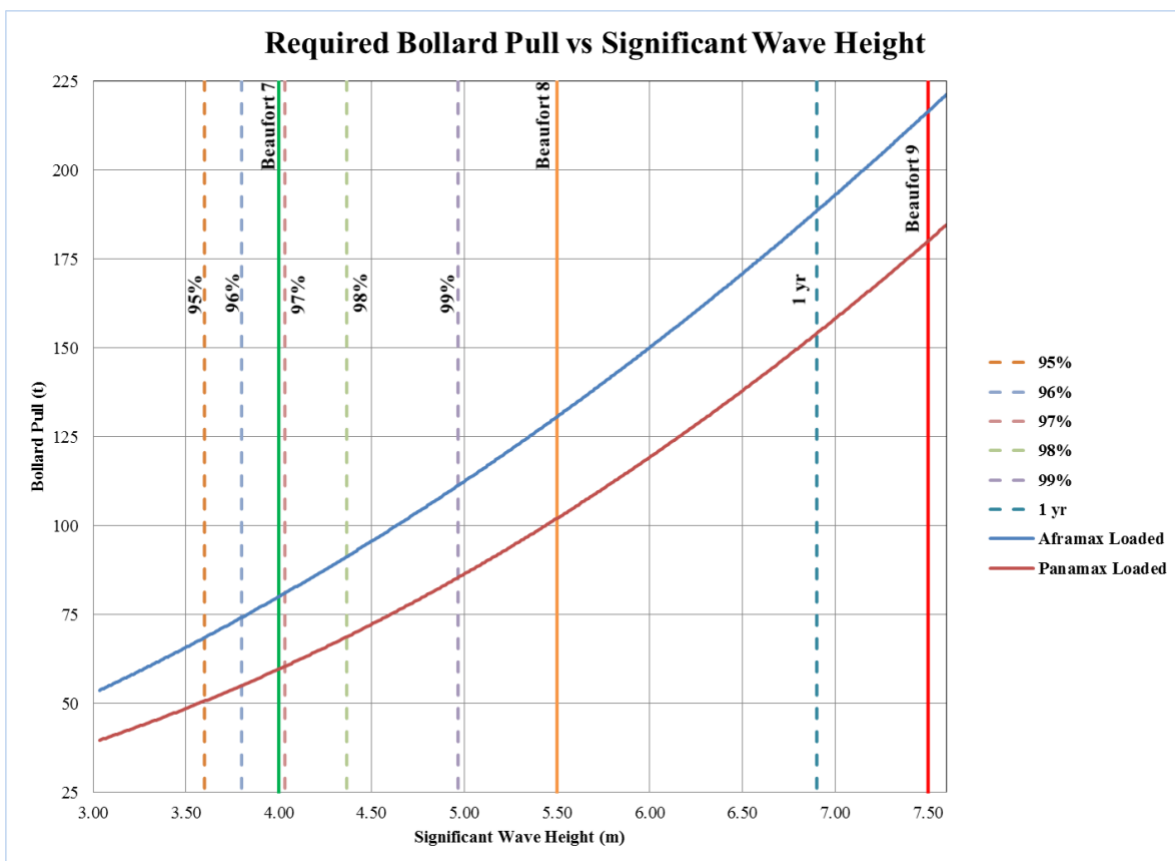


Figure 3: TMEP Tug Matrix for Future Vessel Acceptance Standard

In order to ensure the availability of suitable tugs in sufficient numbers for this purpose, as described in direct evidence [A95280] for the Reconsideration Hearing (MH-052-2018), Trans Mountain shippers formed a Shippers Marine Sub-Committee (sub-committee) and invited Trans Mountain to act as the chair and facilitating member. WCMRC has also been invited to participate as a sub-committee member. The sub-committee was active on this matter until work was ceased after the FCA Decision in late August of 2018, but resumed in the spring of 2019. Trans Mountain,

on behalf of the sub-committee, has issued a Request for Proposal (RFP) for tugs that will meet suitability criteria, including compliance with the Tug Matrix. The sub-committee intends to make a decision and select an escort tug provider for the Juan de Fuca Strait before the end of 2020. The selected tug provider shall be allocated the privilege to provide tug escort services for all Project-related laden tankers transiting between Race Rocks and Buoy J.

Trans Mountain previously filed updated versions of the Vessel Acceptance Standard (VAS) [A6L2A3], the Vessel Acceptance Procedure (A6L2A4), the Vessel Acceptance Checklist [A6L2A5] and the Westridge Marine Terminal and Operations Guide (WMTROG) [A6J6H7] in October 2018 as part of the Reconsideration Hearing. This documentation will be updated accordingly and will require arriving tankers to commit to using the pre-selected tug/s to ensure requirements of Condition 133.a will be met. As required by the CER as per Condition 134, Trans Mountain will file updated versions of the Vessel Acceptance Standard and Westridge Marine Terminal Regulations and Operations Guide including a summary of the revisions made to each.

Apart from the sub-committee's efforts described above, since 2017, the availability of tugs in the region has continued to grow based on commercial opportunities in the region, whether in the towage industry or ship-assist. Trans Mountain is aware of local private operators having procured seven highly rated escort and harbour-assist tugs as well as two capable and well-appointed ocean-going medium bollard pull tugs with tow capacity. The number of such capable tugs is likely to continue to increase to efficiently service the needs of west coast shipping interests. At the same time, the CCG has leased two high powered tugs for service on the west coast as part of the CCG's Emergency Towage Vessel Program.¹ The CCG is continuing to engage with Canadians in reviewing homeport and station options for these two vessels. Trans Mountain believes the introduction of these modern vessels now, together with the Tug Matrix compliant tugs associated with Project-related vessels in the future, will further contribute to improving the strength of the region's marine network.

3.2 Enhanced Marine Oil Spill Response (ERR) (Condition 133.b)

Trans Mountain first described the proposed Enhanced Marine Oil Spill Response Regime (ERR) in Volume 8A of Trans Mountain's application and subsequently in Trans Mountain's response to CER Information Request No. 1.64 [A3W9H8]. With funding from Trans Mountain, the ERR will be implemented by WCMRC in an Increased Response Area (IRA) and be capable of:

¹ Government of Canada News Release, August 9, 2018: <https://www.canada.ca/en/public-services-procurement/news/2018/08/government-of-canada-awards-contract-under-the-oceans-protection-plan-to-increase-emergency-offshore-towing-capability-off-british-columbia-coast.html> (Accessed September 26, 2019).

- i) delivering 20,000 tonnes of capacity within 36 hours of notification, with dedicated resources staged within the study area; and,
- ii) 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 associated elements comprising the ERR can be found in Table 5.5.3 of Volume 8A of the Application [[A3S4Y6](#), PDF p.34] and work towards meeting these requirements is well underway in WCMRC. The significant commitment of the ERR can be appreciated from the following:

- 43 new response vessels will be added, doubling the WCMRC fleet (2018) to 88 vessels.
- Eight new spill response onwater bases will be constructed in the Salish Sea. Certain bases would operate 24/7, such as bases in Vancouver Harbour and North Saanich, BC.
- Approximately 120 new employees will join WCMRC, the majority of whom will be employed full-time and will be assigned to new bases on Vancouver Island.
- Enhancements to WCMRC's operating infrastructure are progressing in a manner that will integrate the equipment and resource enhancements with WCMRC's existing operations into a more highly capable functional system.

Although the specific response standards within Condition 133.b are applicable to future Project-related shipping, the additional response capacity would be available to all users of the marine network in British Columbia (BC) in response to any marine oil spill, further improving safety for all West Coast waterway users.

Since 2016, the Government of Canada, through various agencies, has been actively working on the Ocean Protection Plan (OPP), which is separate and distinct from the ERR. However, given WCMRC's role as the sole certified Response Organization on the West Coast, WCMRC has also been coordinating with federal agencies in certain areas of the OPP and involved with training and exercises in coastal Indigenous and non-Indigenous communities, with government departments and other stakeholders. More information about WCMRC's efforts is provided in WCMRC direct evidence [[A6L5G5](#)] filed for the Reconsideration Hearing (MH-052-2018).

3.2.1 *Trans Mountain's Role*

Canada's Oil Spill Response Regime establishes criteria for readiness and oil spill response, including Response Organization (RO) Standards that specify technical and operational requirements. Given that Trans Mountain is not responsible for marine oil spill response, and WCMRC is the only Transport Canada certified Response Organization on the West Coast of Canada for the existing regime for all vessels, Trans Mountain has engaged WCMRC through contract to implement the ERR. As described in direct evidence [[A95280](#)] filed by Trans Mountain

for the Reconsideration Hearing (MH-052-2018), implementing the ERR is now expected to require the following:

- investment by Trans Mountain of \$150 million in WCMRC (estimated in 2013 as \$100 million);
- addition of 120 new full-time employment positions (estimated in 2013 as 100);
- construction of 43 new response vessels;
- placement of eight response bases (estimated in 2013 to be five new bases); and
- associated infrastructure to integrate the enhancements into a functional system.

As a requirement of the agreement signed between Trans Mountain and WCMRC (April 2017), WCMRC has developed a Project Execution Plan (PEP) which identifies all of the tasks and activities being undertaken by WCMRC to meet the various elements of the ERR. Trans Mountain has approved the PEP and associated budget for implementing the ERR.

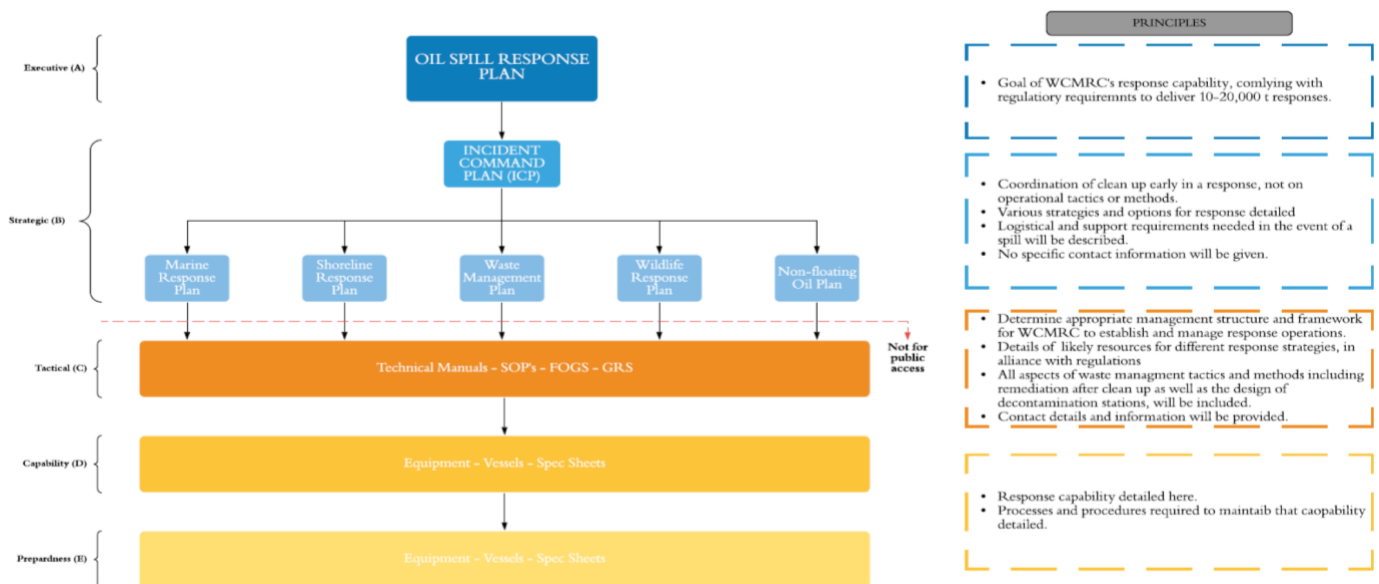


Figure 4: WCMRC Enhanced Response Regime Project Execution Plan Schematic

Trans Mountain receives regular updates from WCMRC on the progress of the PEP towards meeting the requirements of Table 5.5.3 of Volume 8A and reviewing timelines and budgets. Trans Mountain ensures that funding needs are always met in keeping with the approved timeline and requirements of the ERR implementation.

3.2.2 ERR Progress

In accordance with the PEP, WCMRC established a dedicated project team, and in 2017 began actively developing plans and base and equipment designs, preparing plans for future human resource development and training, establishing procurement planning standards and processes

to evaluate different equipment, suppliers and proposals. Development of the ERR was suspended on August 31, 2018 because of the FCA decision, but has since resumed.

Besides having already added a number of new vessels to the WCMRC fleet, WCMRC has focused on building its management systems to increase response readiness to protect wildlife, economic, and environmental sensitivities, as well as the health and safety of responders and the public. This includes development of a number of new plans with detailed, operational-level information and redefined strategies. Many of these plans and strategies (for example, Geographic Response Strategies) are being developed in consultation with coastal Indigenous groups, governments, and other local stakeholders and are being tested in emergency management exercises and drills.

As stated in WCMRC direct evidence [[A6L5G5](#)], work on a number of subordinate plans for implementing the ERR has progressed to an almost complete stage. These plans are owned by WCMRC and WCMRC shall engage as necessary with different marine stakeholders including authorities, communities and Indigenous groups when developing such plans or as part of tasks and activities under these plans.

The plans include:

- Ancillary Equipment Integration: This plan is meant to assist in bringing all vessels, response equipment, response bases, trailers and community packages to an operationally ready state as per the requirement of ERR.
- Coastal Mapping and development of Geographic Response Strategies (GRS): This initiative falls within the Coastal Response Program (CRP), which is also mentioned later in this report. Developed from an initial demonstration project sponsored by Trans Mountain, WCMRC has expanded a working geographic planning system for the areas along the shipping lanes into the CRP, which encompasses coastal maps linked to site specific response planning. That includes producing predefined GRS and On Water Tactics (OWT) made up of pre-identified strategies for specific areas at risk from oil spills. The strategies are designed to minimize impacts to sensitive environmental, cultural, and economic resources and are prepared after careful assessment of the various sensitivities of the area and engagement with local Indigenous groups and communities.

To date, WCMRC has conducted sensitivity assessments of about 2820 km of the total estimated 3100 km of shoreline within the IRA, and identified sites with higher sensitivity where risk could be mitigated by having pre-planned site-specific response strategies. This effort has produced 443 GRS and 19 OWT, all of which are location specific. As part of WCMRC's focus on continuous improvement, the GRS/OWTs are tested through further field verification exercises and deployment and adjusted if/as necessary. As shown on the map, the assessed shoreline covers almost the entire tanker shipping route within WCMRC's area of responsibility. These GRS and OWTs are meant to guide early actions

when oil spills happen and are already an integral part of WCMRC's overall response planning and preparation. The remaining approximately 280 km of shoreline (which includes the Fraser River) shall be assessed and additional GRS/OWTs will be prepared by WCMRC for any additional sites that are identified. All [GRSs are publicly available](#) on the CRP website (www.coastalresponse.ca) and, except for culturally confidential information, may be accessed and used by responders even if the response is not by WCMRC, thus significantly improving the response readiness of this region. In time WCMRC has confirmed it intends to extend coastal mapping to other parts of the West Coast as well, to regions outside of the IRA.

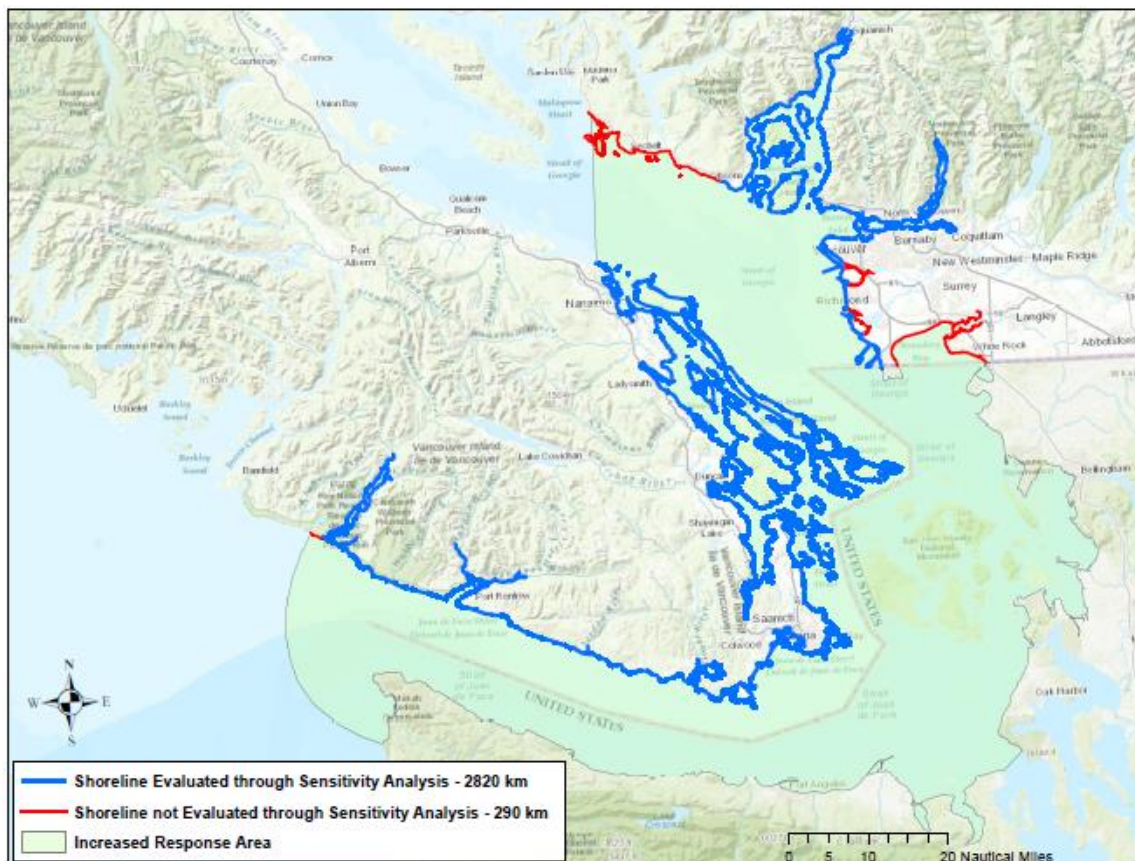


Figure 5: Progress with Coastal Mapping of the IRA

Trans Mountain is aware that there are similar pre-identified strategies available in the United States of America where the State of Washington Department of Ecology (WSDOE) is responsible for Geographic Response Plan (GRP) development in collaboration with all the states, local and federal agencies, and tribes. The WSDOE has developed a [website](#) that is used to maintain the GRPs and provide information for oil spill information and education.

- **Vessels of Opportunity (VOO):** A VOO is a vessel with a crew that is trained by WCMRC to respond to marine oil spills. It can be a fishing vessel, tugboat, crew boat, water taxi or workboat with towing capacity, lifting ability and/or available deck space. Vessels are aluminum or steel hulled and at least 18 feet in length. The VOO program is a critical component of WCMRC's response readiness preparations. VOO participants support spill responders by performing response operations, supporting logistical arrangements (with transport, power, storage, maintenance, and accommodations), deploying coastal protection strategies, and providing invaluable marine expertise during a spill.
- **Shoreline Cleanup:** WCMRC is to increase its daily capacity to treat contaminated shorelines from 500 metres (the statutory threshold) to 3,000 metres (as committed to in the Application [[A3S4Y6](#), PDF p.34]).
- **Wildlife Management (including birds and marine mammals):** By regulation, during a spill WCMRC can only engage in the preventative hazing of wildlife under the direction of Department of Fisheries and Ocean (DFO) for marine mammals, and Environment and Climate Change Canada for marine birds. The execution of wildlife and marine mammal rehabilitation will therefore be assigned to a certified third-party expert, such as Focus Wildlife.² The RO has developed specific plans as tools for the use of the response community as a whole, which pre-identify critical information that can be used during a response. These plans present a holistic approach for the protection and treatment of marine mammals, terrestrial animals, and birds in the event of an oil spill. The *Marine Mammal Oil Spill Response Protocol*, developed by Sea View Marine Sciences, is an example of one such arrangement.³
- **The Waste Management Plan** accommodates increased volumes associated with a spill of 20,000 tonnes (Tier-V), as the physical recovery of oil and oiled debris from the environment commonly produces quantities of waste much larger than the volume of the initial spill.
- **Sunken and Submerged Oils:** The Sunken and Submerged Oil Plan is meant to provide high-level guidance on the management of spilled oil that may be at risk of sinking or submerging. The plan recognizes that some weathered hydrocarbons could potentially submerge or sink under certain conditions. Early awareness of this contingent situation will pre-emptively improve the response performance should sinking or submergence become a reality.

² Focus Wildlife <https://www.focuswildlife.org/>

³ Sea View Marine Sciences <http://seaviewmarinesciences.com/>

- Convergent Volunteers: During an environmental incident, volunteer management will be one of the key objectives to be addressed by Unified Command. Based on Incident Command System (ICS) principles, the Convergent Volunteer plan provides a framework within which WCMRC can operate when convergent volunteers emerge.

In addition, although not a regulatory requirement for operating vessels of the size in the WCMRC fleet, WCMRC, on recommendation of Trans Mountain, is voluntarily adopting many of the key aspects of the International Safety Management (“ISM”) into their vessel operating procedures. The ISM code is an international standard for the safe operation of ships and for pollution prevention with one of its focus areas being continuous improvement of skills to deal with emergencies related both to safety and environmental protection. More information about ISM is available on the International Maritime Organization (IMO) website.⁴ These measures are all aimed at improving the current regime and preparing for possible further improvements.

3.2.3 Additional ERR enhancements

- Cooperative efforts and engagement have also helped in the development of the CRP. The CRP is founded on a partnership with coastal communities whereby coastal Indigenous and non-Indigenous communities can get involved in spill response in a variety of avenues such as coastal mapping and GRSs, VOO, contractor services and supply, coastal response packages, and community education and engagement. The Coastal Response Program can be viewed at: <http://coastalresponse.ca/>.

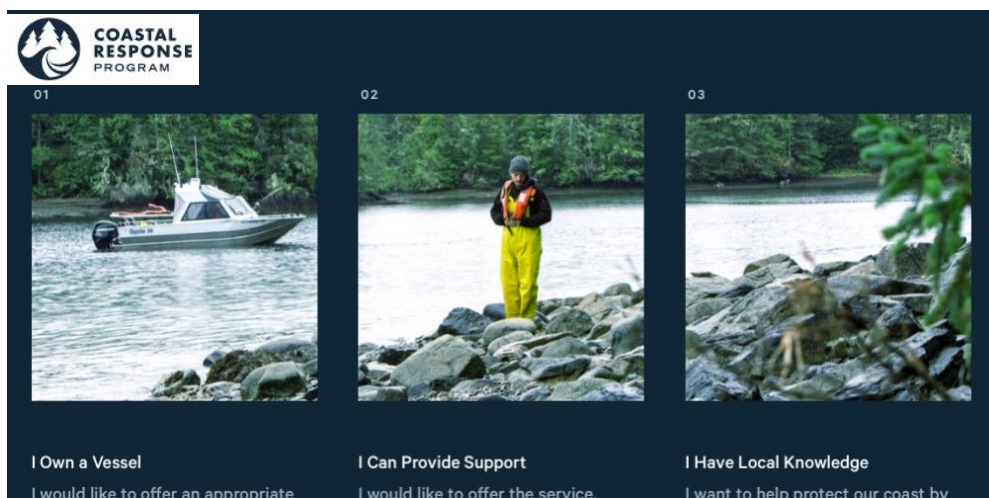


Figure 6: WCMRC Coastal Response Program website

⁴ International Maritime Organization (IMO) website:
<http://www.imo.org/en/OurWork/humanelement/safetymanagement/pages/ismcode.aspx>

WCMRC has custodial agreements with a number of Indigenous and non-Indigenous communities to store spill-response packages at sites spread throughout the area of response. WCMRC owns the equipment in these packages and trains local VOO members to properly deploy, store, and maintain the equipment. WCMRC has tailored this program to include specific dedicated coastal response packages containing boom that will support the deployment of the GRSs. Ultimately, this would lead to such packages being strategically located along the south coast for quick access during a spill response.

3.2.4 Training to support implementation of ERR

WCMRC continues to maintain its Tier IV RO certification with Transport Canada by undertaking mandatory certification exercises and member specific exercises on a Geographic Area of Response (GAR) basis. These exercises are meant to ensure that personnel understand procedures, plans, and demonstrate the performance of their responsibilities in the course of various operational issues. Equipment deployments and tabletop exercises often involve those entities that participate directly in the response and public safety activities such as municipal first responders, local authorities, Indigenous groups, provincial ministries, regulators and federal department representatives; in addition to WCMRC member personnel. The mandatory Transport Canada exercises follow a rotation of:

- 150 tonne on-water deployment (annual);
- 1,000 tonne tabletop (annual);
- 2,500 tonne on-water deployment (every 2 years); and
- 10,000 tonne tabletop (every 3 years).

As a requirement of the ERR (found in Table 5.5.3 of Volume 8A of the Application [[A3S4Y6](#), PDF p.34]), a 20,000 tonne exercise will be required every 3 years.

In May of 2019, WCMRC participated in the trans boundary CANUSPAC exercise that took place on the water off southern Vancouver Island.⁵ The purpose of the drill was to test the activation process for the Canada-United States Joint Marine Pollution Contingency Plan, Pacific Annex (CANUSPAC Annex) and to test moving response assets and personnel across the US/Canadian border. The CANUSPAC Annex is a proactive response plan designed in preparation for the possibility of incidents requiring international response. Pollution response crews with cleanup equipment from both nations took part in the drill, along with cooperating oil spill response organizations – WCMRC, Marine Spill Response Corporation (MSRC) and National Response Corporation (NRC) – as well as federal and state agencies, including Transport Canada, Fisheries and Oceans Canada and the Washington Department of Ecology. More than 160 response

⁵ Trans Mountain: International Oil Spill Response Exercise Takes Place in Strait of Juan de Fuca, June 6, 2019: <https://www.transmountain.com/news/2019/international-oil-spill-exercise-takes-place-in-strait-of-juan-de-fuca> (Accessed October 14, 2019)

personnel were involved in the exercise, along with close to 20 vessels, and air support from Transport Canada and the Coast Guard.

Although WCMRC's existing structure comprises of a series of mature support programs, several plans are under development, including role specific training, to enable a comprehensive integration of all the future capital equipment and human resources.

3.2.5 Status of ERR: Base Locations, Equipment and Human Resources

Procurement of capital equipment, entering into lease arrangements for base locations and further onboarding of staff also resumed in August 2019. The status of several key components of the ERR summarized in Table 2 below, as an update of what was provided in WCMRC direct evidence [A6L5G5] filed in December 2018 for the Reconsideration Hearing (MH-052-2018):

Table 2: Updated Status of High Profile ERR Components

October 2018 WCMRC Capacity	Additions to WCMRC per ERR Plan*					
WCMRC Vessels	New Vessels					
	Additional vessel per ERR Plan	Delivered	Procured	Being built	To order	Design Only
45	43	9: CRV (3) Skimming Vessels (2), Workboats (4)	9: Skimming Vessel (1), Landing Craft (8)	10: Boom skiffs (10)	14: Mini barges (12) Response Barges (2)	1: OSV (1)
WCMRC Staff	Full-time Employment Opportunities					
	Planned Full Time Positions (Total of existing + new for ERR)		Hired		Remaining to recruit	
100	225		143		82	
WCMRC Bases	New South-coast Response Bases					
	Total bases planned		Upland Leases (of 6 applicable)		Waterlot Lease / Moorage (of 8 applicable)	
3	8		4		5	

* Information subject to change

A summary of all new equipment, status of base construction, and staff recruitment and training was provided in pages 11-28 of WCMRC direct evidence [A6L5G5] filed for the Reconsideration Hearing (MH-052-2018).

3.2.6 ERR Key Milestones

The information in Table 3 is an update to milestones on implementing the ERR as provided by WCMRC. These milestones are subject to change and will be adjusted as necessary to align with the TMEP in-service timelines and in keeping with the filing requirements of Condition 133.

Table 3: Enhanced Response Regime Key Milestones

Results	Milestones All dates based on Q1 2022 in service date and subject to change
Project Governance	
Summary Project Execution Plan Completed	Q4 2015
Resolution of Board of Directors relating to TMEP	Q2 2015
- Resolution of Board of Directors relating to TMEP resumption after Shutdown and Reconsideration Process	Q3 2019
WCMRC-TMEP Project Agreement Signed	Q1 2017
WCMRC Board Budget approval	Q1 2017 / Q1 2018 / Q1 2019 / Q1 2020
Project Execution Plan submitted to Third Party	Q1 2017
Define Third Party Review Process	Q3 2020
Response Bases	See schedule in Figure 5
Equipment Planning & Procurement	See schedule in Figure 6
Personnel Expansion	
Recruitment strategy and plan updated	Q4 2019
Recruitment personnel in place; recruitment activities restarted	Q4 2019
Personnel expansion plan execution completed	Q2 2021
Training & Exercising	
Training & Exercising strategy and plan updated	Q1 2020
Training and onboarding of all staff completed	Q2 2021
Tier 5 exercise completed	Q2 2021

* Information subject to change

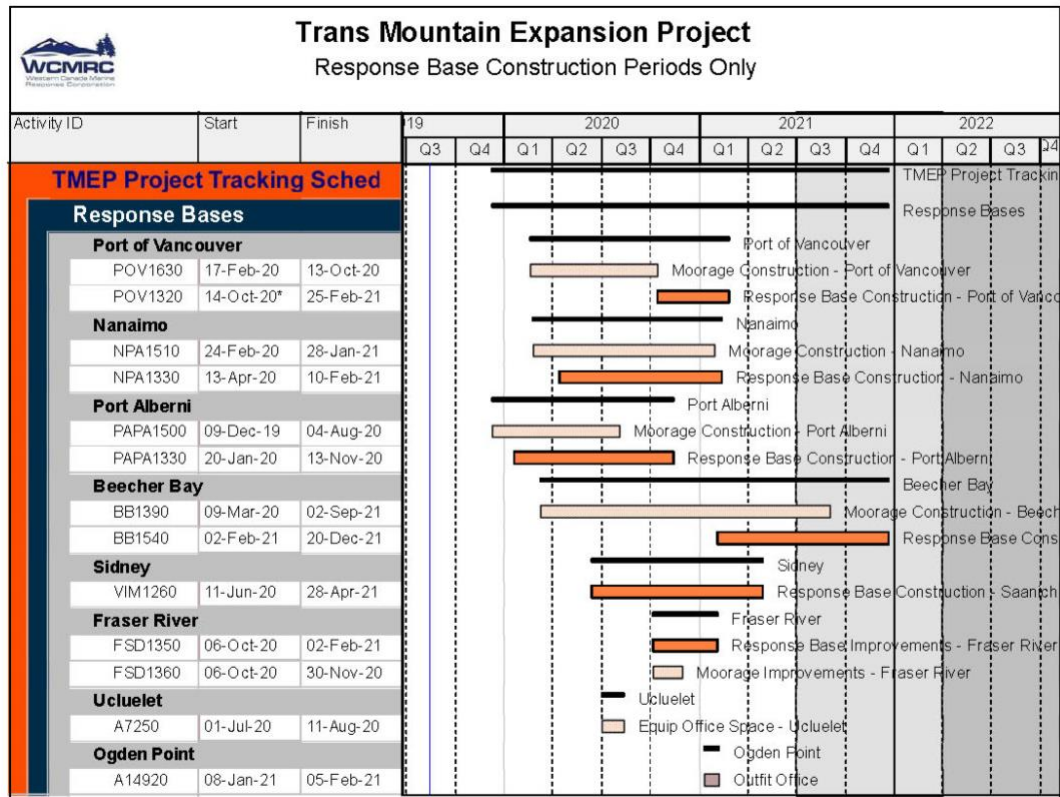


Figure 7: Response Base Construction Periods (subject to change)

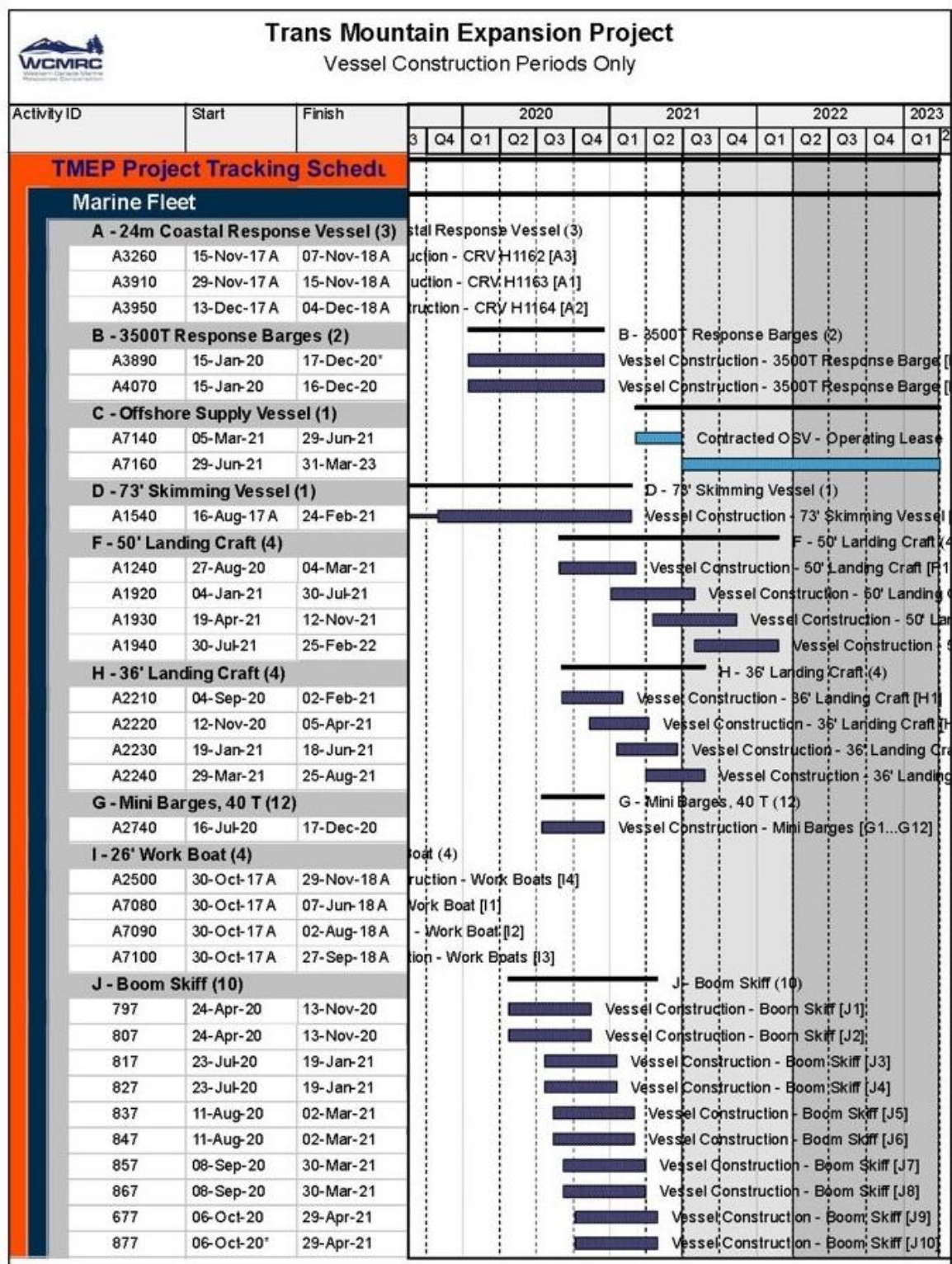


Figure 8: Vessel Construction Periods (subject to change)

4.0 Engagement & Communications to Inform This Plan

4.1 Targeted Engagement

4.1.1 *Target Audiences*

Engagement on the Condition 91 plan to fulfill marine spill prevention and response commitments was targeted to the following groups, as defined by the amended condition:

- Transport Canada
- Canadian Coast Guard (CCG)
- Pacific Pilotage Authority (PPA)
- Vancouver Fraser Port Authority (VFPA)
- British Columbia Coast Pilots (BCCP)
- Western Canada Marine Response Corporation (WCMRC)
- Fisheries and Oceans Canada (DFO)
- Province of British Columbia (Province of BC)
- Potentially affected Indigenous groups (defined in Appendix C)

4.1.2 *Engagement Methods*

Trans Mountain's engagement to inform the various parties of Condition 91 supplemental filing was accomplished through emails, telephone calls, workshops and small group meetings. A draft of the filing was circulated in advance to target audiences on October 24 and 25, 2019 for review and comment.

The Condition 91 Supplemental Report was featured as part of Trans Mountain Indigenous marine workshops in Nanaimo on November 20-21, 2019. This workshop included approximately 16 Indigenous representatives and over 20 marine regime stakeholders in attendance over a 2-day period. During the workshop, Canada's marine spill prevention and response regime was explained by responsible marine authorities who shared insights about the regulations and oversight of commercial shipping activity. Trans Mountain and WCMRC also provided information related to the TMEP marine development program including spill prevention and response measures featured in this Condition 91 plan.

Trans Mountain had initially proposed a second Indigenous marine workshop in Victoria on November 5-6, 2019, but the workshop was postponed to February 2020 due to lack of registration. The February 2020 workshop will focus on Condition 133.

4.1.3 Materials

A sample of engagement materials produced by Trans Mountain and associated organizations for the implementation of Condition 91, such as WCMRC, are available in Appendix D. Materials include:

- 1) Condition 91 Draft Supplemental Report (this plan)
- 2) Condition 91 PowerPoint presentation
- 3) Trans Mountain Fact Sheets:
 - a. Enhanced Tug Escort
 - b. Marine Safety Enhancements
- 4) Trans Mountain website (transmountain.com/marine-safety) (Accessed January 22, 2020)
- 5) Enhanced Response Regime (ERR) materials produced by WCMRC available online at <http://wcmrc.com/preparedness/strategies/> and www.coastalresponse.ca

Together with the above, previously received feedback was compiled into key themes of planning, prevention and response and included in the first draft of Section 4.2 to help prompt review and feedback by commentators. The information originally included in the draft supplemental report that was circulated is provided in Appendix E. Engagement outcomes currently described in Section 4.2 includes new comments received as a result of the comment period on the previous draft Condition 91 Supplemental Report.

4.2 Engagement Outcomes

Additional engagement activities have been undertaken regarding marine spill prevention and response measures since the original Condition 91 plan was filed in June 2017. Information was shared and meetings were held with target audiences to inform CER condition compliance (e.g. Conditions 91 / 133) as well as to maintain relationships with stakeholders and Indigenous groups, to share information on Project progress and keep track of new developments in shipping safety and best practices in marine spill response.

For this reporting period (October 24, 2019 – January 15, 2020), a total of 70 engagement events were recorded with target audiences. Seven were meetings (in person and by phone), one workshop and the report was distributed to 43 Indigenous groups or marine regime stakeholders. Trans Mountain also engaged with target audiences informally by attending or participating in multi-stakeholder or Indigenous events related to the topics of marine spill prevention and/or response. Input received anecdotally from these types of informal engagement opportunities was considered in the plan where practical but not counted among engagement events summarized in Table 6 below.

Table 4: Engagement Events (October 24, 2018 – January 15, 2020)

Engagement Event Type	Number of Events
Meeting: By Phone	2
Meeting: In-Person	5
Workshop	1
Comment Period	
No. of draft C91 plans distributed for comment	43 copies (8 to marine regime stakeholders; 35 to Indigenous groups)
Number of email submissions of comments received	19 emails (Five emails from five of the marine regime stakeholders; 12 emails from nine Indigenous groups and one US Tribe)
TOTAL	70

A detailed summary of issues and concerns raised during engagement activities is provided in Appendix A (Indigenous groups) and Appendix B (marine regime stakeholders) of this report.

Comments were received from all eight marine regime stakeholders either in person, by phone and/or email.

35 Indigenous groups were provided copies of the draft Condition 91 Supplemental Report. Nine Indigenous groups and one US Tribe responded in writing (12 emails) over the course of the comment period (October 25 – November 22, 2019) and two subsequent comment period extensions (first extension granted to December 6, 2019; second extension granted to January 15, 2020).

Comments found to be within the scope of Condition 91 are summarized in the sections that follow, and are outlined in detail in Appendix A and B.

To account for all feedback received, even if any of the feedback was deemed as outside the scope of Condition 91, Trans Mountain will respond to each Indigenous group who provided comments with a letter responding to all issues or concerns raised. This follow up engagement, including items out of scope for Condition 91, will be reported as part of Condition 96 Indigenous Engagement reporting to the CER.

4.2.1 Indigenous Interests and Concerns - Enhanced Tug Escort and the ERR

A detailed summary of key issues and concerns raised by Indigenous groups, and Trans Mountain's responses, is provided in Appendix A. The feedback received during the comment period was added to previous feedback provided to Trans Mountain, which was included in the

draft Condition 91 Supplemental Report. The feedback can be broadly divided into several issue categories as follows in Table 5.

Table 5: Summary of Indigenous Issues Identified in Overall Feedback

Issues Identified from Collective Feedback	Frequency of Issues
1) Accountability and Regulatory Oversight	7
2) Adequacy of ERR program	11
3) Adequacy of ERR program [specifically] for Fraser River	3
4) Environmental effects of the [escort] tugs	3
5) Indigenous participation in spill prevention and response	17
6) Product – handling of heavy /sunken oil	10
7) Protection of environmental, cultural and economic assets	10

There were also other comments shared regarding some editorial aspects of the report, concern for timelines and capacity funding for Indigenous engagement. Responses to all comments and issues identified are provided in the detailed summary of Appendix A.

Trans Mountain received specific comments questioning the inclusion of the Indigenous Advisory and Monitoring Committee (IAMC) in Appendix A of the draft supplemental report. It was emphasized to Trans Mountain that the role of Indigenous participation in spill response lies primarily with Indigenous groups as Rights Holders. Subsequently Trans Mountain received correspondence from the IAMC confirming they were not a consultative body. As such, Trans Mountain has removed the IAMC from the issue summary in Appendix A and will reply to the IAMC's letter to respond to their comments accordingly.

4.2.2 Key outcomes and addressing Indigenous concerns

Indigenous groups engaged thoroughly in the CER Trans Mountain reconsideration process, as well as the Crown Consultation and Accommodation discussions hosted by the Government of Canada.

Interests and concerns identified from those processes were initially summarized for the draft of this Supplemental Report in order to help prompt thoughtful discussion and input (see Appendix E). The initial summary of issues identified concerns about potential impacts of large scale marine development and increased oil trade on the coastal Indigenous way of life. Indigenous groups often expressed interest in meaningful participation in the stewardship and protection of coastal Indigenous communities.

Trans Mountain acknowledged throughout the hearing record, as well as in consultation meetings with Indigenous groups, the intention to continue to engage with different Indigenous groups to (where possible) find a balance of interests; whereby risks from increased offshore oil trade can be mitigated through careful planning and collaboration between industry, government and Indigenous communities so that the benefits of Project development and future operations, including Project shipping, can be shared among all Indigenous and non-Indigenous Canadians.

After circulating the draft Condition 91 Supplemental Report and receiving input from some Indigenous groups, certain issues were highlighted more often than others. As shown in Table 5, Indigenous engagement in the spill prevention and response regime received the most interest. Trans Mountain and WCMRC have ongoing separate Indigenous engagement programs to encourage information sharing and Indigenous participation in Trans Mountain and WCMRC programs. WCMRC is also invited by Trans Mountain to participate jointly at workshops and conferences to further enhance the level of awareness and knowledge on spill response and the ERR amongst Indigenous groups and community stakeholders. The Government of Canada, through programs such as the TMEP Accommodation Measures, the Ocean Protection Plan and other initiatives, has also demonstrated a strong commitment to engage with Indigenous communities and encourage their participation in protecting and enhancing the coastal environment.

Substantial portions of feedback of certain Indigenous groups covered interests and concerns that had already been heavily debated and discussed through IRs during the two previous TMEP Hearings, and on which matters the NEB (now CER) has already provided its determination publicly.

The adequacy of the ERR was questioned in various forms in many of the comments received. However, the adequacy of the ERR and the spill prevention measures such as the enhanced escort tug program for Project vessels was thoroughly reviewed and accepted by the NEB (now CER). The adequacy of the program is not in question as part of this Condition review; however, comments with respect to accountability and oversight of the program implementation are acknowledged. It should be noted that it is beyond Trans Mountain's control or ability to fully address some of the concerns. Similar concerns were also raised during the CER Hearings and the 16 CER Recommendations to Federal agencies and the Crown Consultation and Accommodation Report (CCAR) provides for comprehensive consideration of Indigenous issues through proposed Government of Canada initiatives.

Transport Canada is the regulator who oversees Response Organizations in Canada and verifies that WCMRC meets regulatory requirements. Trans Mountain, as a shareholder and member of the Board of Directors of WCMRC, provides regular feedback to WCMRC about continued development of management best practices and how their measurement and internal assessment programs could be applied to execute organizational accountability.

Trans Mountain intends to continue to engage and share progress information with affected Indigenous groups and marine regime stakeholders. There is a considerable amount of change happening to Canada's marine safety and spill response regime under programs like the OPP and Trans Mountain shall continue to engage in those forums as a participant, and where appropriate a contributor, to help facilitate local familiarity and understanding of new or improved regime elements.

4.3 Interests and Concerns expressed by Marine Regime Stakeholders

Table 6 is a cumulative summary of key issues and concerns received as new input from marine regime stakeholders during the comment period in 2017 as well as the most recent comment period (October 24 to November 22 with one extension period to December 6, 2019). A detailed summary of key issues and concerns along with Trans Mountain Responses is provided in Appendix B.

Table 6: Summary of Marine Regime Stakeholder Interests and Concerns Identified

Theme	Issue identified to date	Comment
Planning	Verification and/or certification of ERR	WCMRC routinely provides Trans Mountain with suitable updates on verification of the progress made toward developing the ERR. Lloyds Register Consulting, an independent third party, has been engaged to verify final implementation of the enhancements, including fulfillment of Table 5.5.3 requirements and compliance with CER Condition 133 [WCMRC Direct Evidence, Reconsideration Hearing MH 052-2018 [A6L5G5] . WCMRC will invite marine regime stakeholders to participate (in active or observer roles) during ERR exercises.
Planning	Indigenous Participation in training, jobs and procurement related to spill response	WCMRC is engaging directly with Indigenous groups to understand capacity, interests and concerns. Interested parties may also contact WCMRC directly.
Prevention	Indigenous Participation in training, jobs and procurement related to escort tugs for Strait of Juan de Fuca	Trans Mountain is facilitating a sub-committee for escort tug procurement on behalf of Project shippers. The issued Tug RFP encourages tug service proponents to develop and share plans for Indigenous participation in their work.
Planning	Access to spill response training for other members of the marine regime	Trans Mountain will connect all interested parties with WCMRC representatives. Interested parties may also contact WCMRC directly.
Prevention	Interest in review of tug escort package	Escort to laden tankers travelling in the Juan de Fuca Strait between Race Rocks and Buoy "J" shall be provided in accordance with C133.b requirement. To note that the current Canadian flagged tug fleet in the region is able to provide service for up to 97% of weather conditions at Buoy J; however, seasonal weather patterns, especially in fall and winter (between October and April) requires use of a larger tug (110 tonnes BP x 40 m LOA). Tugs used to escort laden tankers through the Juan de Fuca Strait would have to comply with the Tug Matrix.

		The entire contents of the RFP is a confidential document. However, it is a requirement of the RFP that tug providers utilise Canadian flagged vessels that are Classed with a Transport Canada Recognized Organization (TCRO) under the Delegated Statutory Inspection Program (DSIP). Vessels shall comply with all statutory requirements under Flag or Class requirements and must be applicably insured with a member of the International Group of P & I Clubs.
Prevention	Storage location of enhanced escort tugs	Escort tug proponents will be required to store/position their tugs at locations best suited to providing most effective support to operational needs of laden Trans Mountain project-related tankers, potentially at a location close to the eastern entrance of the Juan de Fuca Strait.
Planning	Marine regime alignment with anticipated Project In-Service	Trans Mountain publishes monthly updates on all marine shipping-related commitments as part of monthly CER Condition 6 filings.
Response	Clarification sought on the definition of response time	Response time defined within 2 hours or 6 hours of WCMRC notification (depending on location of spill inside or outside Vancouver Harbour) for resources to be mobilized and activated at the site. This means WCMRC will have begun deployment (including travel time) and resources would be cascaded in to meet required level of response (Tier 5 as described in Table 5.5.3) within 36 hours.

4.4 Marine Spill Prevention and Response Information for General Audiences

4.4.1 Editorial content – Marine Spill Prevention and Response

In addition to targeted engagement with key audiences as described in this plan, Trans Mountain also ensures marine spill prevention and response information is shared more broadly with stakeholders and Indigenous groups along the Project corridor and marine shipping route. Project contact information was provided on all materials for the ability of public audiences to ask questions and share their comments directly with the Project about marine safety issues including those covered by Condition 133.

Information related to marine spill prevention and response is featured on a regular basis in many digital communication channels. This includes the following web stories published since September 2018 on topics such as WCMRC ERR, marine emergency exercises, enhanced situational awareness, and updates on related programs such as the OPP.

- Trans Mountain: Project has Broad Range of Positive Impacts on the Marine Sector, June 8, 2017: <https://www.transmountain.com/news/2017/project-has-broad-range-of-positive-impacts-on-the-marine-sector> (Accessed August 25, 2019)
- Spill risks plummeting in well-regulated marine transport sector, new report finds, April 19, 2018: <https://www.transmountain.com/news/2018/spill-risks-plummeting-in-well-regulated-marine-transport-sector-new-report-finds> (Accessed August 25, 2019)

- Western Canada Marine Response Corporation Expanding to New Response Base on Lower Fraser River, August 23, 2018: <https://www.transmountain.com/news/2018/western-canada-marine-response-corporation-expanding-to-new-response-base-on-lower-fraser-river> (Accessed August 25, 2019)
- Trans Mountain Conducts Full-Scale Emergency Exercise in Burrard Inlet, September 19, 2018: <https://www.transmountain.com/news/2018/trans-mountain-conducts-full-scale-emergency-exercise-in-burrard-inlet> (Accessed August 25, 2019)
- Preparations for Increased Oil Tanker Traffic are Extensive and Detailed, September 27, 2018: <https://www.transmountain.com/news/2018/trans-mountains-preparations-for-increased-oil-tanker-traffic-are-extensive-and-detailed> (Accessed August 25, 2019)
- Video: Emergency Response Exercise at Westridge Marine Terminal, October 4, 2018: <https://www.transmountain.com/news/2018/video-emergency-response-exercise-at-westridge-marine-terminal> (Accessed August 25, 2019)
- Marine Shipping: What's on the Record?, October 25, 2018: <https://www.transmountain.com/news/2018/marine-shipping-whats-on-the-record> (Accessed August 25, 2019)
- Federal Authorities File Direct Evidence for CER Recommendation Hearing, November 1, 2018: <https://www.transmountain.com/news/2018/federal-authorities-file-direct-evidence-for-CER-reconsideration-hearing> (August 25, 2019)
- Have Your Say on Project-Related Marine Shipping, November 7, 2018: <https://www.transmountain.com/news/2018/have-your-say-on-project-related-marine-shipping> (Accessed August 25, 2019)
- Western Canada Marine Response Corporation Files Evidence for CER Reconsideration Hearing, December 6, 2018: <https://www.transmountain.com/news/2018/western-canada-marine-response-corporation-files-evidence-for-CER-reconsideration-hearing> (Accessed August 25, 2019)
- 18 in 2018: Emergency Response Exercises by the Numbers, December 27, 2018: <https://www.transmountain.com/news/2018/18-in-2018-emergency-response-exercises-by-the-numbers> (Accessed August 25, 2019)
- Trans Mountain Files Argument-in-Chief, January 24, 2019: <https://www.transmountain.com/news/2019/trans-mountain-files-argument-in-chief> (accessed August 25, 2019)
- Knowledge Base Continues to Grow Around Fate and Behaviour of Oil in Marine Environment, February 16, 2019: <https://www.transmountain.com/news/2019/knowledge-base-continues-to-grow-around-fate-and-behaviour-of-oil-in-marine-environment> (Accessed August 25, 2019)
- Tankers are a Small Portion of Overall Vessel Traffic in the Salish Sea, March 7, 2019: <https://www.transmountain.com/news/2019/tankers-are-a-small-portion-of-overall-vessel-traffic-in-the-salish-sea> (Accessed August 25, 2019)

- Focus on Conditions: Reconsideration Report, March 14, 2019: <https://www.transmountain.com/news/2019/focus-on-conditions-reconsideration-report> (Accessed August 25, 2019)
- Tanker Safety Improvements Further Mitigate Risk and Protect Marine Environment, March 20, 2019: <https://www.transmountain.com/news/2019/tanker-safety-improvements-further-mitigate-risk-and-protect-marine-environment> (Accessed August 25, 2019)
- Fewer Tanker Spills Occur Despite Doubling of Vessel Traffic Since 1970, March 21, 2019: <https://www.transmountain.com/news/2019/fewer-tanker-spills-occur-despite-doubling-of-vessel-traffic-since-1970> (Accessed August 25, 2019)
- Awareness is the Key to Safe Recreational Boating in the Port of Vancouver, May 17, 2019: <https://www.transmountain.com/news/2019/awareness-is-the-key-to-safe-recreational-boating-in-port-of-vancouver> (August 25, 2019)
- Marine Enhancements – www.transmountain.com/marine-safety (Accessed October 14, 2019)

4.4.2 Social Media

Links to stories featured online are re-circulated via social media (@TransMtn on Twitter and Facebook) and the TMEP weekly e-newsletter: *Trans Mountain Today*.




- Facebook: <https://www.facebook.com/TransMtn/>
- Twitter: <https://twitter.com/TransMtn>
- Trans Mountain Today: <https://www.transmountain.com/newsletters>

4.4.3 Advertising

The general approach for advertising was to raise awareness of Trans Mountain's website as a source of information for all Project-related issues and concerns. Marine Safety is featured in advertising to be able to connect interested audiences with key facts and access to the Project website where external links are available to learn more about Canada's marine shipping regime.

Trans Mountain undertook television advertising to share more information about the company, its values and safety information related to its activities. In 2015 and 2016, three TV ads were created and distributed related to marine transportation that continue to be featured online, in social media today.

Table 7: Television Advertising - Marine Safety

TV Ad	Screenshot
<p>Trans Mountain People Behind the Pipeline: Marine Safety</p> <p>June 23, 2016</p> <p>Featuring: Michael Davies, Trans Mountain Vice President of Operations and Bikramjit Kanjilal, Master Mariner and Trans Mountain Director of Marine Development⁶</p>	
<p>Trans Mountain People Behind the Pipeline: Keeping our Waters Safe</p> <p>September 8, 2016</p> <p>Featuring: Captain Rob Scott, Loading Master, Westridge Marine Terminal – Tanker Acceptance Standard⁷</p>	
<p>Trans Mountain People Behind the Pipeline: Spill Response on the West Coast</p> <p>July 27, 2015</p> <p>Featuring: Chris Badger, Master Mariner and Retired Harbour Master / Stephen Brown, President Chamber of Shipping of BC⁸</p>	

⁶ Trans Mountain Television Advertisement: People Behind the Pipeline, Marine Safety, June 23, 2016:

<https://www.youtube.com/watch?v=20eCERKnGig> (Accessed October 28, 2018)

⁷ Trans Mountain Television Advertisement: People Behind the Pipeline, Keeping our Waters Safe, September 8, 2016:

<https://www.youtube.com/watch?v=sqST8-ruGJI> (Accessed October 28, 2018)

⁸ Trans Mountain Television Advertisement: People Behind the Pipeline, Spill Response on the West Coast, July 27, 2015:

https://www.youtube.com/watch?v=xjlk5XMDXOY&index=13&list=PLHefVR9Rn_Kkr0vwhDn6_IgoHWrxR4G (Accessed October 23, 2015)

4.4.4 Media Relations

Trans Mountain manages a high volume of media requests each month on a variety of topics. There were many opportunities to respond to questions about marine spill prevention and response in local, national and international media. Trans Mountain posts some news coverage on the Project website and through the *Trans Mountain Today* weekly e-newsletter www.transmountain.com/newsletters (Accessed August 5, 2019).

5.0 Next Steps

Trans Mountain will continue to respond to feedback received from Indigenous and non-Indigenous audiences; and provide regular updates to target audiences as named in CER Condition 133.

Trans Mountain will continue to communicate to broader public audiences about upcoming and ongoing work on spill prevention and response measures to increase regional awareness and understanding of the regime in place today and how enhancements will improve safety and mitigate risk in the future.

APPENDIX A: Indigenous Interests and Concerns

Theme	Issues and / or Concerns raised	Issue topics raised by Indigenous Group(s) during the reporting period (July 2017 - October 2019)	Indigenous Groups Linked to Issues Raised	Response & Outcomes	Reference
Planning	Adequacy of ERR Program	Concern for rigour of spill response modelling in Salish Sea . In particular, in the Strait of Juan de Fuca (SJDF) with heavy dilbit; \\ and for spill in Fraser River	Adam Olsen Squamish T-Sou'ke Tseil-Waututh Kwautlen Cowichan Tribes Lyackson Seabird Island	The ERR has been developed by WCMRC based on marine risk assessments carried out by Det Norske Veritas (DNV). WCMRC's response plans include response for spill of heavy crude oils (including Dilbit) in the Salish Sea and Fraser River, which are already transported by marine shipping. The ERR exceed the requirements of Canada's current response regime and plans to significantly reduce response time as well as increase response capacity for the region.	Section 8.1.3.2 of CER Reconsideration Report p. 177-180 (p. 186-189 of pdf) [A6L2D8]
Planning	Adequacy of ERR Program	Concern for lack of plans to hold regular and large-scale response exercises in different areas of the shipping route, including Strait of Juan de Fuca (SJDF) (e.g. no tabletop or in-water exercise for a 16,500 tonne spill, the "credible worst case scenario" identified in the CER's 2016 Project Report). i. Annual 150 tonne on-water deployment exercise ii. Annual 1,000 tonne tabletop exercise iii. 2,500 tonne on-water deployment exercise every two years iv. 10,000 tonne tabletop exercise every three years v. 16,500 tonne on-water deployment exercise every four years	T-Sou'ke Lyackson	WCMRC currently undertakes a number of response exercises as part of WCMRC's Response Organization (RO) certification process by Transport Canada. Additional exercises related to the ERR are included as part of ERR implementation. To meet requirements of the ERR as described in Table 5.5.3 of Volume 8A of the Application [A3S4Y6, PDF p.34]) WCMRC plans to hold a 20,000 tonne table-top before in-service every 3 years.	WCMRC Direct Evidence, Reconsideration Hearing MH 052-2018 [A6L5G5] Table 5.5.3 of Volume 8A of the Application [A3S4Y6, PDF p.34]
Planning	Adequacy of ERR Program	Response "gap analysis" identified deficiencies in the ability for response to bitumen based crude oils in the Salish Sea	Cowichan Tribes Snuneymuxw Tseil-Waututh Kwikwetlem Lyackson Malahat Stz'uminus	Environmental behaviour of Diluted bitumen in a marine environment and spill response has been fully reviewed by the CER in Chapter 8 of the CER (NEB) Reconsideration Report. The Board opined that response challenges are not unique to diluted bitumen spills but can be associated with heavier oil products in general. WCMRC response plans already cover response in case of spills of heavy oil, including bitumen based crude oils. WCMRC response equipment is capable of responding to spills of this nature.	WCMRC Direct Evidence, Reconsideration Hearing MH 052-2018 [A6L5G5] Section 8.1.3.2 of CER Reconsideration Report p. 179 (p. 188 of pdf) [A6L2D8]
Planning	Product & handling of heavy / sunken oil	Ability to respond to sunken oil	Cowichan Tribes Squamish T-Sou'ke Tseil-Waututh Kwautlen Lyackson Malahat Musqueam Stz'uminus Tsartlip	Response to submerged and sunken oils form part of WCMRC's response planning. WCMRC's Submerged and Sunken Oil plan will be posted to the Coastal Response Website www.coastalresponse.ca Environmental behaviour of diluted bitumen in a marine environment and spill response has been fully reviewed by the CER in Chapter 8 of the CER (NEB) Reconsideration Report. The Board opined that response challenges are not unique to diluted bitumen spills but can be associated with heavier oil products in general. WCMRC equipment is capable of responding to spills of heavy oil products.	See Section 3.2.2 of this Condition 91 Supplemental report. Section 8.1.3.2 of CER Reconsideration Report p. 179 (p. 188 of pdf) [A6L2D8] WCMRC Coastal Response website: www.coastalresponse.ca
Planning	Product & handling of heavy / sunken oil	Even under the best of circumstances, less than half the volume of spilled oil can be recovered in a cleanup response in Burrard Inlet	Tseil Waututh	The credible worst case oil spill in Burrard Inlet is 160 m3. The response analysis from the Trans Mountain Expansion Project Oil Spill Response Simulation Study) shows that a majority of spilled oil can be recovered if this worst-case scenario occurs. This is further corroborated by WCMRC's experience during the 2007 Westridge spill.	See Section 3.2.2 of this Condition 91 Supplemental report. Section 8.1.3.2 of CER Reconsideration Report p. 179 (p. 188 of pdf) [A6L2D8] More information about the Westridge 2007 spill is described on Trans Mountain's website: https://www.transmountain.com/westridge-2007-spill
Planning	Product & handling of heavy / sunken oil	Lack of "clear science on fate of spilled bitumen."	Halalt Squamish T'Sou-ke Tsawout Kwautlen Kwikwetlem Cowichan Tribes Musqueam	Government and industry research, as well as experience and findings from actual spills, confirm that diluted bitumen spills in water (fresh and particularly marine) will float for days to weeks. As noted by the Canadian Science Advisory Secretariat in its '2018 Status Report on the Knowledge of the Fate and Behaviour of Diluted Bitumen in the Aquatic Ecosystems', diluted bitumen exists within the broader continuum of petroleum mixtures and, like conventional oil products, has a range of potential fates within specific combinations of environmental conditions .	See views of the Board in NEB Report Trans Mountain OH-001-2014 [A77045-1, PDF p. 136]. Attachment to evidence submitted by Elizabeth May [A6L4X5] CSAS 2018: Status Report on the Knowledge of the Fate and Behaviour of Diluted Bitumen in Aquatic Ecosystems https://apps.neb-one.gc.ca/REGDOCS/File/Download/3718302
Planning	Product & handling of heavy / sunken oil	Request for data to be shared with coastal Indigenous groups.	Pacheedaht	All of Trans Mountain's research into oil fate and behaviour have been filed with the CER and made available to the public as part of the hearing records for the Project (MH 052-2018) ECCC investigates and measures oil properties and publishes this data in a publicly accessible database.	See www.transmountain.com/diluted-bitumen-information p.128-129 TMX Crown Consultation and Accommodation Report: https://www.canada.ca/content/dam/nrcan-mcan/site/tmx/TMX-CCAR_June2019-e-accessible.pdf Open Government: Physiochemical properties of petroleum products: https://open.canada.ca/data/en/dataset/53c38f91-35c8-49a6-a437-b311703db8c5 (Accessed January 30, 2020)

Theme	Issues and / or Concerns raised	Issue topics raised by Indigenous Group(s) during the reporting period (July 2017 - October 2019)	Indigenous Groups Linked to Issues Raised	Response & Outcomes	Reference
Planning	Product & handling of heavy / sunken oil	Waste Management from bitumen-based oil spills [storage, handling].	Cowichan Tribes	A waste management plan is a requirement of the ERR and being developed by WCMRC. WCMRC will work closely with the Province of BC on this matter since waste management is part of Provincial jurisdiction.	See Section 3.2.2 of this Condition 91 Supplemental report.
Planning	Product & handling of heavy / sunken oil	Performance of standard response equipment to recover heavy oil / dilbit	Cowichan Tribes Squamish Tsawout Kwantlen Semiahmoo Lyackson Malahat Musqueam Stz'uminus Tsartlip Ditidaht	WCMRC has plans and experience in recovering heavy oil/dilbit and those plans are refined based on additional information and experience shared within the response community. WCMRC equipment was tested at Gainford and is capable of efficiently responding to spills of heavier oils, including dilbit.	See Section 3.2.2 of this Condition 91 Supplemental report. WCMRC: http://wcmrc.com/news/can-spill-response-organizations-clean-diluted-bitumen/
Planning	Product & handling of heavy / sunken oil	Concern for the use of dispersants (Corexit).	Tsartlip	Spill treating agents are not part of the response plans. The use of Spill Treating Agents in Canadian waters is prohibited for use during oil spill response for oil tankers under various federal environmental statutes, including the Migratory Birds Convention Act, 1994, the Fisheries Act and the ocean disposal provisions of the Canadian Environmental Protection Act, 1999.	Section 5.3 of Trans Mountain Reply Evidence - Reconsideration Hearing A6L9U8
Planning	Protection of environmental, cultural, economic assets	Requests to see WCMRC subordinate plans for the PEP (GRSs and other plans like submerged and sunken oil plan).	Cowichan Tribes Malahat Stz'uminus	WCMRC Geographic Response Strategies are site specific; informed through engagement with indigenous groups. All GRS documents are available on the CRP mapping portal at: http://coastalresponse.ca/coastal-mapping/ Subordinate plans will also be posted to the Coastal Response website (www.coastalresponse.ca) for information, ongoing feedback and continuous improvement.	See Section 3.2.2 of this Condition 91 Supplemental report. WCMRC Coastal Response website: www.coastalresponse.ca
Planning	Adequacy of ERR Program	Faster response times	T'Sou-ke Lyackson	The response times in the ERR are significantly more stringent than requirements of Canada's current response regime, which are presently under review by the Government of Canada.	Appendix A - WCMRC Direct Evidence, Reconsideration Hearing MH 052-2018 [A6L5G5]
Planning	Protection of environmental, cultural, economic assets	Importance of faster response times for the protection of areas "especially problematic" (environmental, cultural) and those areas close to spill response bases	T'Sou-ke	WCMRC Geographic Response Strategies are site specific and informed through engagement with Indigenous groups. All GRS documents are available on the CRP mapping portal (http://coastalresponse.ca/coastal-mapping/). Individual Indigenous groups are encouraged to contact WCMRC for more detail or to provide additional feedback on new or existing GRS requirements within their territories.	See Section 3.2.2 of this Condition 91 Supplemental report www.coastalresponse.ca/coastal-mapping
Response	Indigenous Participation in Spill Prevention and Response	"Authentic" Indigenous participation in marine incident response planning and capacity building	Cowichan Tribes Halalt-A Pauquachin Beecher Bay Snuneymuxw Tsawwassen Kwikwetlem Malahat Musqueam Tsartlip Seabird Island Malahat Kwantlen Lyackson Hwlitsum	Trans Mountain includes Indigenous communities in spill response planning and exercises along the pipeline corridor. For marine communities, Trans Mountain is and WCMRC are supportive of the Government of Canada's commitment towards Indigenous participation in marine incident response planning and capacity building.	pg. 161 TMX Crown Consultation and Accommodation Report: https://www.canada.ca/content/dam/nrcan-mcan/site/tmx/TMX-CCAR_June2019-e-accessible.pdf

Theme	Issues and / or Concerns raised	Issue topics raised by Indigenous Group(s) during the reporting period (July 2017 - October 2019)	Indigenous Groups Linked to Issues Raised	Response & Outcomes	Reference
Response	Indigenous Participation in Spill Prevention and Response	Provision of funds / response equipment to Indigenous communities	Pauquachin Maa-nulth Tsawwassen Kwikwetlem Hwlitsum Esquimalt Malahat Musqueam Pacheedaht Ditidaht Seabird Island Sto:lo Tribal Council T'Sou-ke Malahat	Trans Mountain and WCMRC are pursuing opportunities with Indigenous groups through engagement. Trans Mountain considered potential measures and entered into various commercial contractual benefit arrangements, which took the form of relationship agreements, mutual benefits agreements and other relationships. WCMRC has provisions within the Coastal Response Program to provide equipment cache and training to Indigenous and other communities in support of WCMRC's response plans and the ERR. Interested Indigenous communities are requested to contact WCMRC for this purpose. Trans Mountain and WCMRC are supportive of the Government of Canada's commitment towards Indigenous participation in marine incident response planning and capacity building. For example, as part of the TMEP measures, the Government of Canada is working with Indigenous groups on mitigation measures such as the co-development of community response (CDCR) capacity at the community level to support a meaningful role for Indigenous communities in the broader marine response system	p. 16 (19 of pdf) and p. 194 (197 of pdf) TMX Crown Consultation and Accommodation Report: https://www.canada.ca/content/dam/nrcan-mcan/site/tmx/TMX-CCAR_June2019-e-accessible.pdf
Response	Indigenous Participation in Spill Prevention and Response	Training in Incident Command for Indigenous Groups	Pauquachin Beecher Bay T'Sou-ke Maa-nulth Tsawwassen Kwikwetlem Semiahmoo Hwlitsum Esquimalt Malahat Musqueam Tsartlip Ditidaht Seabird Island Sto:lo Tribal Council Malahat	Trans Mountain and WCMRC are pursuing opportunities with Indigenous groups through continued engagement. WCMRC offers training in ICS and interested groups are encouraged to contact WCMRC. Trans Mountain and WCMRC are supportive of the Government of Canada's commitment towards Indigenous participation in marine incident response planning and capacity building. For example, the CDCR initiative aims to empower Indigenous communities along the marine route with training knowledge, personnel and equipment to protect culturally important and sacred sites on their traditional territories and provide technology and tools to improve alerting, notifications and enhance communications during a marine incident	p. 194 (197 of pdf) TMX Crown Consultation and Accommodation Report: https://www.canada.ca/content/dam/nrcan-mcan/site/tmx/TMX-CCAR_June2019-e-accessible.pdf
Response	Indigenous Participation in Spill Prevention and Response	Employment opportunities for the Project.	Beecher Bay Snuneymuxw T'Sou-ke Kwikwetlem Hwlitsum Malahat Musqueam Ditidaht	Trans Mountain and WCMRC are separately pursuing employment opportunities with Indigenous groups through continued direct engagement with interested communities. Trans Mountain considered potential measures to provide for employment opportunities and entered into various contractual benefit arrangements, which took the form of relationship agreements, mutual benefit agreements and other relationships with Indigenous communities and companies.	p. 16 (19 of pdf) TMX Crown Consultation and Accommodation Report: https://www.canada.ca/content/dam/nrcan-mcan/site/tmx/TMX-CCAR_June2019-e-accessible.pdf
Response	Indigenous Participation in Spill Prevention and Response	Looking for formal relationship with WCMRC.	Ditidaht Musqueam	Trans Mountain and WCMRC are pursuing opportunities with Indigenous groups through engagement. Any Indigenous group interested in a formal relationship with WCMRC are encouraged to contact them directly.	
Planning	Adequacy of ERR Program	Concern for ability to source enough human resources to respond to a large spill.	Cowichan Tribes	WCMRC has a Shoreline Supervisor Training Program established to train WCMRC contractors throughout its operating areas. WCMRC has also developed, in conjunction with the other Transport Canada Response Organizations, a training program for shoreline workers that could be delivered by mutual aid agreement partners. WCMRC also trains Indigenous groups in SCAT and as Shoreline Workers to support a response.	WCMRC Direct Evidence, Reconsideration Hearing MH 052-2018 [A6L5G5]
Planning	Accountability and Regulatory Oversight	Proceed with spill response bases regardless of Project timeline or completion.	Becher Bay Pacheedaht	Canada's response regime requires industry to establish private-sector response organizations, providing a suitable level of response capability in keeping with risk and the principles of polluter-pays. Since the new spill response bases are part of the overall response and risk mitigation measures stemming from the TMEP, their implementation is linked to Project timeline and will be made in accordance with the CER's Condition 133 requirements.	Section 1.4 of Volume 8A of the Application (QH 001-2014). [A3S4X3]

Theme	Issues and / or Concerns raised	Issue topics raised by Indigenous Group(s) during the reporting period (July 2017 - October 2019)	Indigenous Groups Linked to Issues Raised	Response & Outcomes	Reference
Planning	Protection of environmental, cultural, economic assets	Concern project effects mitigated in too general of a form, and not specifically to individual nation's interests.	Squamish Tsawout Lyackson Malahat Ditidaht	The ERR is applicable to the entire tanker shipping route within the study area. WCMRC Geographic Response Strategies are site specific and are informed through engagement with indigenous groups. All GRS documents are available on the CRP mapping portal at: http://coastalresponse.ca/coastal-mapping/ . Individual nations are encouraged to contact WCMRC for more detail or to provide additional feedback on new or existing GRS requirements within their territories.	See Section 3.2.2 of this Condition 91 Supplemental report. WCMRC Direct Evidence, Reconsideration Hearing MH 052-2018 [A6L5G5] www.coastalresponse.ca
Prevention	Accountability and Regulatory Oversight	Support the evaluation of using escort tugs to support oil spill response.	T'Sou-ke Tsawwassen	During Hearing MH 052-2018 Trans Mountain committed to consider possibility of the escort tugs being provided the capability to participate in oil spill response. The Marine Shipper Subcommittee has considered this and a decision has been made to equip tugs offered by proponents for escort of loaded tankers in the Juan de Fuca Strait with some amount of spill response equipment and for the tug crew to be provided training by WCMRC on spill response. Response by an escort tug will be considered as part of the spill response and implemented depending on the prevailing circumstances of the situation. e.g. prevailing environmental conditions, the priorities of the circumstances of the incident, etc.	Commitment ID 1873 - as stated in Trans Mountain Direct Evidence as Measure 2. [Filing ID A95280]
Prevention	Environmental effects of tugs	Concern for escort and rescue tug effects on SRKW (underwater noise)	Tsleil-Waututh Kwantlen Tsawwassen Halalt	The Tug Request for Proposals (RFP) identifies environmental considerations such as low emission and low noise features that proponents of tug service are required to consider in their equipment and working practices, including measures and practices that will apply to underwater noise radiation.	
Prevention	Environmental effects of tugs	Concern for vessel wake impacts on shoreline – related to tugs.	Tsleil-Waututh	Vessel wake from Project-related marine vessels (including tugs) was studied and found to have negligible effect. Board found Trans Mountain's predicted wake wave height modelling to be adequate and concurs with Trans Mountain's conclusion that Project-related marine vessel wake wave heights at the shoreline would be within the range of natural conditions.	NEB Reconsideration Report [A6S2D8] p. 435 (p. 444 of pdf) Section 4.3.6.6 of Volume 8A of the Application [A3S4Y3].
Prevention	Environmental effects of tugs	Concern for impacts of increased escort traffic as mitigation measures – can result in more ship strikes, oil spills and GHGs.	US tribes	Trans Mountain's navigation risk assessment (conducted by DNV) clearly indicates the beneficial effect of tug escort towards further reduction in likelihood of incidents associated with Project-related marine shipping. Energy efficiency will be a consideration in the procurement of escort tugs to help address GHG impact. Trans Mountain plans to work with tug service providers as part of implementing marine mammal protection program (Condition 132) to help mitigate impacts of vessel transits on marine mammals.	Commitment ID 1873 - as stated in Trans Mountain Direct Evidence as Measure 2. [Filing ID A95280]
Prevention	Indigenous Participation in Spill Prevention and Response	Consultation with Indigenous groups in advance of C91 filing	T'Sou-ke Tsawwassen Malahat Pacheedaht Ditidaht Sto:lo Tribal Council Emineskin Cree Nation	Engagement ongoing since fall 2019. Outcomes of engagement on C91 report are described in Section 4 of the C91 Supplemental Report.	See Section 4 of this C91 Supplemental Report.
Planning	Product & handling of heavy / sunken oil	Chemical signatures of cargo oils on outbound laden vessels (related to oil spill response planning), i.e. how to respond to different oils in case of an oil spill.	Makah	WCMRC response plans account for the different oils that are likely to be spilled in the marine environment of the region.	
Planning	Adequacy of ERR for Fraser River	Concern for marine response on the Fraser River, effects of Fraser River Salt Wedge and potential to carry oil upstream.	Kwantlen Kwikwetlem Seabird Island	The effects of marine oil spills on the Fraser River are mitigated through the joint prevention and response strategies that have been described in the TMEP Application (Volume 8C). WCMRC is establishing a response base in the Fraser River.	General Risk Analysis and Intended Methods of Reducing Risks - Technical Report 8C-12 TERMPOL 3.15 of Volume 8C of the Application - see B-21-1, 21-2, 21-3 [Filing ID A56029]

Theme	Issues and / or Concerns raised	Issue topics raised by Indigenous Group(s) during the reporting period (July 2017 - October 2019)	Indigenous Groups Linked to Issues Raised	Response & Outcomes	Reference
Planning	Adequacy of ERR for Fraser River	Potential lack of Geographic Response Strategies (GRSs) for the Fraser vs. Salish Sea.	Seabird Island	<p>The allocation of resources to various locations along the marine shipping route is based on risk, as determined through the DNV risk assessment, oil spill modelling, etc. The location of the new response bases have been selected as the best fit to the requirements of the ERR; preliminary details can be found in WCMRC Direct Evidence. The possible location of bases within Indigenous communities have been considered.</p> <p>Site specific mitigation measures have been developed by WCMRC as part of GRSs. GRSs have been and will continue to be developed by WCMRC through engagement with Indigenous groups. GRSs are available on the Coastal Response website (www.coastalresponse.ca/coastal-mapping).</p> <p>Majority of the ERR shoreline has been assessed for GRS and site-specific GRS and On-water tactics (OWT) have been prepared. GRS/OWT for the Fraser River will be prepared prior to the pipeline in-service. WCMRC will be establishing a base in the Fraser River and GRS work is ongoing there.</p> <p>Indigenous groups are requested to contact WCMRC to participate in developing GRS for any specific areas of concerns.</p>	<p>WCMRC Direct Evidence, Reconsideration Hearing MH 052-2018 filing ID [A6L5G5]</p> <p>WCMRC Coastal Response: www.coastalresponse.ca/coastal-mapping</p>
Planning	Adequacy of ERR for Fraser River	Inland indigenous communities looking for mitigation of marine spill impacts inland.	Driftpile Cree Nation	<p>The mitigation of potential impacts of marine oil spills on the Fraser River on inland Indigenous communities are mitigated through the joint prevention and response strategies that have been described in the TMEP Application (Volume 8C), also supported by WCMRC establishing a response base in the Fraser River.</p>	<p><i>General Risk Analysis and Intended Methods of Reducing Risks</i> -Technical Report 8C-12 TERPOL 3.15 of Volume 8C of the Application - see B-21-1, 21-2, 21-3 [Filing ID A56029]</p> <p>Review of Trans Mountain Expansion Project Future Oil Spill Response Approach Plan Recommendations on Bases and Equipment [Filing ID A35519]</p>
Planning	Adequacy of ERR Program	<p>Concern with WCMRC's decision to locate its primary spill response base on the West Coast of Vancouver Island in Port Alberni as opposed to Ucluelet. The time it will take spill response vessels to travel down Alberni Inlet to the Coast will inevitably add to spill response times.</p> <p>Concern that WCMRC has no current plan to locate a spill response base on the North-West Coast of Vancouver Island.</p> <p>Concerns regarding the proposed locations of WCMRC's spill response bases is not reflected in the Plan, and ask that it be updated to reflect those concerns.</p> <p>Ensure the spill response base in Ucluelet, or another location on the Coast near there, is fully equipped and staffed to respond to a spill, and that WCMRC establishes a spill response base on the North-West Coast of Vancouver Island.</p>	Maa Nulth Treaty Society	<p>The allocation of resources to various locations along the marine shipping route is based on risk, as determined through the DNV risk assessment, oil spill modelling, etc. The location of the new response bases has been selected as the best fit to the requirements of the ERR; preliminary details can be found in WCMRC Direct Evidence. The possible location of bases within Indigenous communities have been considered along the shipping route..</p> <p>Site specific mitigation measures have been developed by WCMRC as part of GRSs. GRSs have been and will continue to be developed by WCMRC through engagement with Indigenous groups. GRSs are available on the Coastal Response website (www.coastalresponse.ca/coastal-mapping).</p> <p>Individual nations are encouraged to contact WCMRC for more detail or to provide additional feedback on new or existing GRS requirements within their territories.</p>	<p>WCMRC Direct Evidence, Reconsideration Hearing MH 052-2018 filing ID [A6L5G5]</p>
Planning	Indigenous Participation in Spill Prevention and Response	<p>All supporting plans and sub-plans referred to in the Condition 91 filing, including but not limited to the Wildlife Protection plans and the Sunken and Submerged Oil Plan, are considered to be intrinsic to and not removable from the overall enhanced marine oil spill response regime described in CER Condition 133.</p> <p>A fulsome enhanced regime with the listed capacity in the Condition requires these components.</p> <p>Consultation on these components is requested with a minimum of 90 days turnaround.</p>	Halalt	<p>WCMRC is responsible for implementing all components of the enhanced response regime (Table 5.5.3.) for which purpose WCMRC has engaged (and will continue to engage) with Authorities, stakeholders and Indigenous communities.</p> <p>WCMRC Geographic Response Strategies are site specific; informed through engagement with local communities and Indigenous groups.</p> <p>Indigenous groups are requested to contact WCMRC to participate in developing GRS for any specific areas of concerns.</p> <p>All GRS documents are available on the CRP mapping portal at: http://coastalresponse.ca/coastal-mapping/. Subordinate plans will also be posted to the Coastal Response website for review and ongoing feedback.</p>	<p>Associated elements comprising the ERR can be found in Table 5.5.3 of Volume 8A of the Application [A3S4Y6, PDF p.34]</p> <p>www.coastalresponse.ca</p> <p>WCMRC Direct Evidence, Reconsideration Hearing MH 052-2018 [A6L5G5]</p>

Theme	Issues and / or Concerns raised	Issue topics raised by Indigenous Group(s) during the reporting period (July 2017 - October 2019)	Indigenous Groups Linked to Issues Raised	Response & Outcomes	Reference
Response	Indigenous Participation in Spill Prevention and Response	[The equipment and resources of the enhancement regime will be integrated to WCMRC's existing operations and be available to all users of the marine network in British Columbia.] 3.2 Does this mean WCMRC assets will be available for small spill incidents where the polluter is either not identified or unwilling to address the issue?	Halalt	The Canadian Coast Guard (CCG) is the Lead Agency responsible for all oil spill response, including small spill incidents where the polluter is either not identified or unwilling to address the issue. WCMRC provides oil spill response to its members but will respond to other spills if directed by the CCG to do so.	
Planning	Adequacy of ERR Program	3.2 What happens to spills in the area beyond the 12 nautical mile but within the 200 nautical mile, which is still Canada's jurisdiction and responsibility?	Halalt	WCMRC's GAR (Geographic Area of Response) extends to the 200 NM limit of Canada's EEZ. The requirements of the ERR, including the more stringent response times, must be met within the proposed IAR (Increased Response Area) described in WCMRC's Direct Evidence to the CER. Post-ERR, WCMRC shall have significantly more equipment and resources to deploy in case of an oil spill within the GAR under direction of the Lead Agency.	WCMRC Direct Evidence, Reconsideration Hearing MH 052-2018 filing ID [A6L5G5]
Planning	Protection of environmental, cultural, economic assets	[WCMRC has expanded a working GRP system for the areas along the shipping lanes into the CRP.] Section 3.2.2 - Will the GRP system and data be available to CCG is WCMRC is not activated?	Halalt	WCMRC GRS documents are available on the CRP mapping portal at: http://coastalresponse.ca/coastal-mapping/ with all relevant information, except confidential information.	www.coastalresponse.ca WCMRC Direct Evidence, Reconsideration Hearing MH 052-2018 [A6L5G5]
Response	Indigenous Participation in Spill Prevention and Response	[WCMRC is to increase its daily capacity to treat contaminated shorelines.] Section 3.2.2 - Shoreline Cleanup: Will this include a mandate to train and contract Indigenous communities to participate in shoreline assessment and clean up? Further, what has been done to do pre-spill assessment of shoreline resources and clean-up requirements in advance of any incident?	Halalt	WCMRC is engaging with First Nations on training and employment. Geographic Response Strategies and the protection of vulnerable shorelines is part of WCMRC's response plans and described in WCMRC direct evidence filed with the CER in 2018.	WCMRC Direct Evidence, Reconsideration Hearing MH 052-2018 filing ID [A6L5G5]
Planning	Protection of environmental, cultural, economic assets	[Marine Mammal Oil Spill Response Protocol] Section 3.2.2 - Are there also specific plans for salmon and/or shellfish protection, and protection cultural/heritage sites? If yes, we would like to review these plans.	Halalt	Protection of fisheries and other sites of importance including cultural sites can be accomplished through Geographic Response Strategies. WCMRC Geographic Response Strategies and address site-specific sensitivities, which in some case could be salmon and/or shellfish related. The site specific aspects of the GRS are informed through engagement with Indigenous groups. All GRS documents are available on the CRP mapping portal at: http://coastalresponse.ca/coastal-mapping/	www.coastalresponse.ca WCMRC Direct Evidence, Reconsideration Hearing MH 052-2018 [A6L5G5]
Planning	Product & handling of heavy / sunken oil	[The Sunken and Submerged Oil Plan] Section 3.2.2 - How does this plan address the knowledge gaps in the science on recovering sunken diluted bitumen?	Halalt	Response to submerged and sunken oils form part of WCMRC's response planning. Environmental behaviour of diluted bitumen in a marine environment and spill response has been fully reviewed by the CER in Chapter 8 of the CER (NEB) Reconsideration Report. The Board opined that response challenges are not unique to diluted bitumen spills but can be associated with heavier oil products in general. WCMRC equipment is capable of responding to spills of heavy oil products. All WCMRC plans are subject to continuous improvement. WCMRC is an active member of the response community and plans are updated based on further knowledge and experience within the response community.	See Section 3.2.2 of this Condition 91 Supplemental report. Section 8.1.3.2 of NEB Reconsideration Report p. 179 (p. 188 of pdf) [A6S2D8] Trans Mountain response to Province of BC Reconsideration IR No. 1.5 [A6Q6C2]
Planning	Adequacy of ERR Program	[Questions and concerns regarding WCMRC agreements to store spill-response packages throughout the area of response.] Section 3.2.3: Is there a generalized map available for where these are located or intended to be situated? If no, are there any measurements or indicators of how many communities have these arrangements?	Halalt	The allocation of response equipment amongst communities is described in the Coastal Response website (www.coastalresponse.ca). Individual nations are encouraged to contact WCMRC for more detail regarding potential packages within their territories. Communities wishing to participate should refer to information available on the Coastal Response website (www.coastalresponse.ca).	www.coastalresponse.ca WCMRC Direct Evidence, Reconsideration Hearing MH 052-2018 [A6L5G5]
Planning	Indigenous Participation in Spill Prevention and Response	Section 4.2.2 [Key Outcomes and Addressing Indigenous Concerns] - This section is inadequate. There are no key outcomes, objectives, or any measures of effectiveness. Stating that "TMX will continue to engage" is meaningless and more content is needed on how we will achieve mutually agreed upon objective via regulator or proponent.	Halalt	Responding to marine oil spills is the responsibility of the Canadian Coast Guard and WCMRC. Discussions of mutual objectives should be directly with these organizations. As stated in the revisions to Section 4.2.2 of the Condition 91 Supplemental Report: Trans Mountain and WCMRC have ongoing separate Indigenous engagement programs to encourage information sharing and Indigenous participation in Trans Mountain and WCMRC programs. WCMRC is also invited by Trans Mountain to participate jointly at workshops and conferences to further enhance the level of awareness and knowledge on spill response and the ERR amongst Indigenous groups and community stakeholders. The Government of Canada, through programs such as the TMEP Accommodation Measures, the Ocean Protection Plan and other initiatives, has also demonstrated a strong commitment to engage with Indigenous communities and encourage their participation in protecting and enhancing the coastal environment.	See Section 4.2.2 of this Condition 91 Supplemental Report.

Theme	Issues and / or Concerns raised	Issue topics raised by Indigenous Group(s) during the reporting period (July 2017 - October 2019)	Indigenous Groups Linked to Issues Raised	Response & Outcomes	Reference
Response	Indigenous Participation in Spill Prevention and Response	Appendix A p. 28: Thirteen individual First Nations are listed as having concerns in this theme, however, the proponent only gives specific description of activities with the IAMC. This is unacceptable. How many First Nations were involved in similar activities? The role of participation in Spill response lies primarily with the Rights Holders, and secondarily with any groups who provide additional oversight.	Halalt	Trans Mountain acknowledges Halalt First Nation's feedback and agrees, far more than just IAMC have expressed interest in participation in spill response. The supplemental report draft will be adjusted to reflect that TMEP's approach to Indigenous involvement all along has been through direct engagement with Indigenous groups, including the inclusion of Indigenous groups in major exercises, site tours, procurement capacity assessments and employment and training.	
Planning	Adequacy of ERR Program	Contrary to Hwiltsum raising this issue several times at our meetings, according to the most recent update to CER Condition 91: Plan for Marine Spill Prevention and Response Commitments (Draft for input-to be filed December 2019) the Hwiltsum is still listed as part of the "Marine Groups". - TMX is aware that Hwiltsum is from Canoe Pass. Canoe Pass is located directly between two of your "Terrestrial Groups" namely Musqueam and Tsawwassen. - For this reason Hwiltsum questions the integrity of the consultations to date.	Hwiltsum	Trans Mountain acknowledges Hwiltsum feedback and will see that this feedback is reflected in updates to the draft report.	
Planning	Protection of environmental, cultural, economic assets	Habitat "Restoration " indicates a reactive role. Hwiltsum believes the habitat is already in need of restoration , to make up for the industrialization of the Fraser Estuary to date. There needs to be protective measures in place to preserve what we have left. We need to enhance and build on what is left, not wait to try and restore it after the fact.	Hwiltsum	Trans Mountain agrees with Hwiltsum that prevention of harm to the environment, including habitat, should be a key focus area and the TMEP has determined to take such an approach from the very outset, including in the case of Project-related marine shipping. The allocation of resources to various locations along the marine shipping route is based on risk, as determined through the DNV risk assessment, oil spill modelling, etc. The location of the new response bases have been selected as the best fit to the requirements of the ERR. Sites within the Fraser River are protected through the joint prevention and response measures proposed (and described) in the TMEP Application. Site specific mitigation measures have been developed by WCMRC as part of GRS. The effects of marine oil spills on the Fraser River are mitigated through the joint prevent and response strategies that have been described in the TMEP Application (Volume 8C). Additional site specific measures are addressed by WCMRC as part of GRS. Hwiltsum is requested to contact WCMRC to participate in developing GRS for any specific areas of concerns.	<i>General Risk Analysis and Intended Methods of Reducing Risks</i> -Technical Report 8C-12 TERPOL 3.15 of Volume 8C of the Application - see B-21-1, 21-2, 21-3 [Filing ID A56029] Review of Trans Mountain Expansion Project Future Oil Spill Response Approach Plan Recommendations on Bases and Equipment [Filing ID A35519] WCMRC Direct Evidence, Reconsideration Hearing MH 052-2018 filing ID [A6L5G5]
Planning	Adequacy of ERR Program	Concerns and questions regarding accountability and responsibility of Trans Mountain and other members in the maritime community to promote best practices and facilitate improvements to ensure the safety and efficiency of tanker traffic in the Salish Sea.	T'Sou-ke	While Trans Mountain does not own or operate the vessels calling at the Westridge Marine Terminal, it is responsible for ensuring the safety of the terminal operations. In addition to Trans Mountain's own screening process and terminal procedures, all vessels calling at Westridge must operate according to rules established by the International Maritime Organization (IMO), Transport Canada, the Pacific Pilotage Authority (PPA), and the Vancouver Fraser Port Authority (VFPA). Trans Mountain is an active member in the Canadian maritime community and works with BC maritime agencies in the Western Marine Community Coalition to promote best practices and facilitate improvements to ensure the safety and efficiency of tanker traffic in the Salish Sea. There are a number of examples of marine community members' promoting best practices, including the support given to the ECHO Program and establishment of a Marine Conservancy Agreement by various marine community leadership groups.	Section 1.4 of Volume 8A of the Application Filing ID A3S4X4 Enhancing Cetacean Habitat and Observation (ECHO) Program: https://www.portvancouver.com/environment/water-land-wildlife/echo-program/ (Accessed January 29, 2020) Chamber of Shipping of BC, May 2019: BC "Big Ships" Support Protection of Killer Whales: http://www.cosbc.ca/index.php?option=com_k2&view=item&id=5113-bc-big-ships-support-protection-of-endangered-killer-whales&Itemid=1128 (Accessed January 29, 2020)

Theme	Issues and / or Concerns raised	Issue topics raised by Indigenous Group(s) during the reporting period (July 2017 - October 2019)	Indigenous Groups Linked to Issues Raised	Response & Outcomes	Reference
Planning	Accountability and Regulatory Oversight	What oversight body and governance structure is in place to provide oversight of TMC and its role within the ERR to ensure that all organizations involved in the ERR are well managed and held accountable for results? How will T'Sou-ke contribute to this accountability framework?	T'Sou-ke	Trans Mountain will provide annual updates to the CER on the implementation of the ERR and enhanced escort tug programs (Condition 144). Transport Canada is the regulator providing oversight of the Response Regime As a Transport Canada-certified Response Organization, WCMRC must adhere to Transport Canada Regulations. WCMRC is also accountable to its board. WCMRC provides regular updates to Trans Mountain on the implementation of the ERR and updates to its membership on organizational development activities.	Transport Canada Response Organization Standards: https://www.tc.gc.ca/media/documents/marinesafety/tp12401e.pdf (Accessed January 4, 2020) Discussion on the Review of Oil Spill Response Organizations https://www.tc.gc.ca/eng/discussion-review-oil-spill-response-organizations.html (Accessed January 4, 2020)
Response	Accountability and Regulatory Oversight	Clarification regarding the statement that ERR requirements "will be met by WCMRC when implementing an enhanced oil spill response regime that is capable of delivering 20,000 tonnes of capacity within 36 hours of notification, with dedicated resources staged within the study area" 1.Does it mean to deliver required capacity to deal with up to 20,000 tonnes of spilled oil or the delivery of 20,000 tonnes of response capacity? 2.What is the actual composition of the 20,000 tonnes of response capacity and how are the capacity needs determined? For example, is the capacity used to: • To isolate/control the spill hazard at source (i.e. cargo?) • To stabilize the incident site? • To maximize protection of environmentally sensitive areas (i.e. shoreline?) • To contain and recover spilled product? • To recover and rehabilitate injured wildlife? • To remove oil/HAZMAT/debris from impacted areas through skimming, lightering, in situ burning or other strategies? 3.Does this include the capability/capacity to support salvage, firefighting, flood control or other related services to enable or support spill response and prevent a hazardous situation from getting worse? 4.What does "delivery" actually mean? Does it include: notification, mobilization, deployment, pre-positioning, operational deployment, integration and sustainment to meet the Incident Commander's priorities and objectives at the incident site within 36 hours of notification? 5.What is the impact on delivering 20K tonnes of capacity within 36 hours if there are conflicting priorities and how will these be adjudicated in the 36 hours between notification and delivery? For example, addressing conflicts between: • Ensuring the safety of citizens, vessel crew and response personnel • Controlling the source of the spill, fire/flood/HAZMAT release etc. • Maximizing protection of environmentally sensitive areas • Containing and recovering spilled product • Recovering and rehabilitating injured wildlife • Removing oil/HAZMAT/debris from impacted areas • Minimizing damage to economically sensitive areas • Favoring the protection of port and/or critical infrastructure over the fate of the actual ship and its cargo.	T'Sou-ke	See table 5.5.3, and subordinate plans described by WCMRC in evidence where these details have been provided. The amount of resources to enable 20,000 tonnes capacity have been calculated by WCMRC based on Transport Canada's Response Organization Standards. The Lead Agency (CCG) will determine the priorities during an oil spill response. WCMRC does not conduct salvage, firefighting, flood control or similar services. Such services are not included in the ERR. Response to similar questions have been provided through IR responses during the NEB's Hearings on the TMEP.	WCMRC Direct Evidence, Reconsideration Hearing MH 052-2018 filing ID [A6L5G5] Trans Mountain Response to City of Port Moody IR No. 2.3.02 [Filing ID A4H8G7]
Response	Accountability and Regulatory Oversight	With regard to: "...requirements of each element will be met by WCMRC when implementing an enhanced oil spill response regime that is capable of: i)delivering 20,000 tonnes of capacity within 36 hours of notification, with dedicated resources staged within the study area; and,... 1. What are these dedicated resources? Do they include a combination of human capital, equipment and spares as well as conveyances (ships, aircraft, vehicles) to transport people and equipment to the incident site? 2.What is a "study area"? Is the study the incident site or incident staging area? 3.What measures, metrics, and data sources are used to measure, monitor, assess and report on TMC and WCMRC compliance with achieving these performance standards and are available for public scrutiny? 4.What type of planned and no-notice drills as well as inspections and internal/external audits will be implemented to measure/enforce compliance by TMC and WCMRC with these standards?	T'Sou-ke	See table 5.5.3, subordinate plans described by WCMRC in evidence where these details have been provided. The amount of resources to enable 20,000 tonnes capacity have been calculated by WCMRC based on Transport Canada's Response Organization Standards. The "study area" referred to is the Marine Regional Study Area described in Volume 8A of the TMEP Application. Transport Canada regulates Response Organizations (ROs) to determine compliance. Canada's RO Standards are currently under a national review.	Transport Canada Response Organization Standards: https://www.tc.gc.ca/media/documents/marinesafety/tp12401e.pdf (Accessed January 4, 2020) Discussion on the Review of Oil Spill Response Organizations https://www.tc.gc.ca/eng/discussion-review-oil-spill-response-organizations.html (Accessed January 4, 2020) WCMRC Direct Evidence, Reconsideration Hearing MH 052-2018 filing ID [A6L5G5] Regional Study Area is defined on p. 14 of Trans Mountain Evidence filed with Reconsideration Hearing MH 052-2018 [A6J6F4]

Theme	Issues and / or Concerns raised	Issue topics raised by Indigenous Group(s) during the reporting period (July 2017 - October 2019)	Indigenous Groups Linked to Issues Raised	Response & Outcomes	Reference
Response	Accountability and Regulatory Oversight	<p>"The equipment and resources of the enhancement regime will be seamlessly integrated to WCMRC's existing operations and operated on a regular basis." p. 6</p> <p>1. What does "seamlessly integrated" mean?</p> <p>2. How will the capabilities and capacities, priorities and interests of T'Sou-ke (including traditional knowledge) be seamlessly integrated?</p> <p>3. What measures, metrics, and data sources are used to measure, monitor, assess and report on the ability of WCMRC to "seamlessly integrate" equipment and resources? .</p>	T'Sou-ke	<p>In alignment with TMEP marine development program principles, the ERR is an enhancement of spill response capacity and capabilities within an existing marine spill prevention and response regime. Seamless integration means that the ERR equipment and resources will be applied to the existing system without any negative impact or detrimental effect resulting from the integration. T'Sou-ke is requested to contact WCMRC on how traditional knowledge may be seamlessly integrated as well in the regime, in keeping with the intent of Canada's Accommodation Measures.</p> <p>Ancillary Equipment Integration is one of the subordinate plans described in WCMRC Direct Evidence. This plan is meant to assist in bringing all vessels, response equipment, response bases, trailers and community packages to an operationally ready state as per the requirement of ERR.</p> <p>WCMRC Geographic Response Strategies are site specific and informed through engagement with Indigenous groups. Indigenous communities wishing to participate should contact WCMRC: www.coastalresponse.ca.</p> <p>As per Condition 133, WCMRC must implement the ERR so that all items in table 5.5.3 are met, including; i) delivering 20,000 tonnes of capacity within 36 hours of notification, with dedicated resources staged within the study area; and, ii) 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 amount of resources to enable 20,000 tonnes capacity have been calculated by WCMRC based on Transport Canada's Response Organization Standards.</p> <p>As a Transport-Canada certified Response Organization, WCMRC must adhere to Transport Canada Regulations. WCMRC is also accountable to its board. WCMRC provides regular updates to Trans Mountain on the implementation of the ERR and updates to its membership on organizational development activities.</p>	<p>WCMRC Direct Evidence, Reconsideration Hearing MH 052-2018 filing ID [A6L5G5]</p> <p>WCMRC Coastal Response Program www.coastalresponse.ca</p>
Planning	Accountability and Regulatory Oversight	<p>Concerns and questions regarding WCMRC assessment - the development of new plans with detailed, operational-level information and redefined strategies, the testing of plans through exercises and drills,</p> <p>1. What are these new plans and what is the priority for development, testing and validation of these plans?</p> <p>2. What specific steps have been taken to capture T'Sou-ke equities/interests and planning priorities which include, but are not limited to: anticipating need, warning, mobilization, training, deployment, integration, employment, sustainment, demobilization, and post-incident reconstitution and reintegration?</p> <p>3. What measures, metrics, and data sources are used to measure, monitor, assess and report on WCMRC compliance with achieving planned milestones for these new plans and redefined strategies and are these available for scrutiny by T'Sou-ke and the public?</p>	T'Sou-ke	<p>WCMRC subordinate plans are outlined at pg. 8-10 in the supplemental report and more information is available in WCMRC evidence filed in the Reconsideration Hearing. All subordinate plans will be posted to the Coastal Response website (www.coastalresponse.ca/).</p> <p>WCMRC has an Indigenous liaison engaging with Indigenous Groups in BC, including T'Sou-ke, who is available to respond to questions or concerns regarding specific steps to capture the equities/interests of different Indigenous groups. Indigenous groups are encouraged to contact WCMRC directly to establish communications protocols on such matters.</p> <p>Post-incident aspects are out of scope for C91 and should form part of the engagement and dialogue with the Government of Canada. Trans Mountain will provide these comments regarding post-incident steps to Transport Canada.</p>	<p>WCMRC Direct Evidence, Reconsideration Hearing MH 052-2018 filing ID [A6L5G5]</p> <p>WCMRC Coastal Response Program www.coastalresponse.ca</p>
Planning	Protection of environmental, cultural, economic assets	<p>[The increase in marine-shipping related safety and environmental risks posed by these vessels would not exist but for the Trans Mountain Expansion (TMX) Project]</p> <p>As stated in the Report, that "Trans Mountain is neither an owner nor operator of petroleum tankers and that Trans Mountain has only limited involvement in vessel navigation safety and the response to ship-source spills from Trans Mountain-related vessel."</p> <p>Trans Mountain has an increased maritime safety and marine environmental stewardship responsibility to address these increased risks.</p>	Pacheedaht Makah	<p>Trans Mountain has acknowledged the likelihood of increased risk from Project-related marine shipping and proposed measures to address that through implementation of additional prevention and response measures. Condition 91 is meant to explain how the key mitigation measures required under Condition 133 are to be implemented.</p>	

Theme	Issues and / or Concerns raised	Issue topics raised by Indigenous Group(s) during the reporting period (July 2017 - October 2019)	Indigenous Groups Linked to Issues Raised	Response & Outcomes	Reference
Planning	Protection of environmental, cultural, economic assets	Project conditions, commitments and/or accommodation measures need to ensure that there are adequate marine safety measures and emergency response capacity within Pacheedaht Traditional Territory and throughout the TMX Project Area of Response.	Pacheedaht	<p>Trans Mountain has proposed measures to address the increase in risk through implementation of additional prevention and response measures. WCMRC is implementing the ERR which includes engagement with Indigenous Groups in developing Geographic Response Strategies in their territories. Individual nations are encouraged to contact WCMRC for more detail or to provide additional feedback on new or existing GRS requirements within their territories. All GRSs will be posted to the Coastal Response website (www.coastalresponse.ca/coastal-mapping).</p> <p>It is between the Crown and each Indigenous community how to work together; many of the TMEP Measures committed to by the Government of Canada are seeking more involvement with Indigenous communities on response planning.</p> <p>For example, the CDCR initiative aims to empower Indigenous communities along the marine route with knowledge, personnel, training and equipment to protect culturally important and sacred sites on their traditional territories and provide technology and tools to improve alerting, notifications and enhance communications during a marine incident.</p>	<p>Transport Canada Response Organization Standards: https://www.tc.gc.ca/media/documents/marinesafety/tp12401e.pdf (Accessed January 4, 2020)</p> <p>Discussion on the Review of Oil Spill Response Organizations https://www.tc.gc.ca/eng/discussion-review-oil-spill-response-organizations.html (Accessed January 4, 2020)</p> <p>p. 194 (197 of pdf) TMX Crown Consultation and Accommodation Report: https://www.canada.ca/content/dam/nrcan-mcan/site/tmx/TMX-CCAR_June2019-e-accessible.pdf</p>
Planning	Indigenous Participation in Spill Prevention and Response	Pacheedaht reiterates its position that it must be a full participant, in a governance role, in any management initiatives or accommodation efforts being contemplated or undertaken in Pacheedaht Territory by other levels of government.	Pacheedaht	<p>Trans Mountain acknowledges Pacheedaht's position and is aware that discussions might be undertaken by different levels of government with Pacheedaht on initiatives and accommodation, including some that might be OPP related. That said, the Trans Mountain measures to address the increase in risk through implementation of additional prevention and response measures are based on a principle of expanding (and improvements to) the existing network and regime. WCMRC is implementing the ERR which includes engagement with Indigenous Groups in developing Geographic Response Strategies in their territories. Individual nations are encouraged to contact WCMRC for more detail or to provide additional feedback on new or existing GRS requirements within their territories. GRS are posted to the Coastal Response website (www.coastalresponse.ca/coastal-mapping).</p> <p>It is between the Crown and each Indigenous community how to work together; many of the TMEP Accommodation Measures committed to by the Government of Canada are seeking more involvement with Indigenous communities on response planning. The Government of Canada is currently reviewing Response Organization standards.</p>	<p>Transport Canada Response Organization Standards: https://www.tc.gc.ca/media/documents/marinesafety/tp12401e.pdf (Accessed January 4, 2020)</p> <p>Discussion on the Review of Oil Spill Response Organizations https://www.tc.gc.ca/eng/discussion-review-oil-spill-response-organizations.html (Accessed January 4, 2020)</p> <p>p. 194 (197 of pdf) TMX Crown Consultation and Accommodation Report: https://www.canada.ca/content/dam/nrcan-mcan/site/tmx/TMX-CCAR_June2019-e-accessible.pdf</p>
Response	Indigenous Participation in Spill Prevention and Response	<p>While Pacheedaht acknowledges outreach efforts by WCMRC, that engagement has been very limited, has not been well-coordinated, and has not resulted in plans and strategies that meet Pacheedaht expectations for the protection of environmental, cultural or economic sensitivities, or the health and safety of the Pacheedaht community.</p> <p>Pacheedaht is committed to continued consultation with both Trans Mountain and WCMRC and is encouraged by recent conversations with WCMRC wherein our comments regarding the quantity and quality of prior consultations were recognized and acknowledged. We look forward to more robust engagement in the future.</p>	Pacheedaht	<p>Trans Mountain thanks Pacheedaht on their feedback to WCMRC's engagement efforts and has confirmed that WCMRC plans to continue to engage with Indigenous Groups in developing GRS in their territories.</p> <p>GRS are posted to the Coastal Response website (www.coastalresponse.ca/coastal-mapping).</p> <p>Individual nations are encouraged to contact WCMRC for more detail or to provide additional feedback on new or existing GRS requirements within their territories.</p>	<p>WCMRC Coastal Response website: www.coastalresponse.ca/coastal-mapping</p>

Theme	Issues and / or Concerns raised	Issue topics raised by Indigenous Group(s) during the reporting period (July 2017 - October 2019)	Indigenous Groups Linked to Issues Raised	Response & Outcomes	Reference
Response	Indigenous Participation in Spill Prevention and Response	No GRS have been fully developed in the Western Juan de Fuca Strait, no ground truthing of these GRS has been undertaken, and only minimal and ineffective engagement has been conducted with Pacheedaht on the development of GRS within our Traditional Territory.	Pacheedaht	Trans Mountain thanks Pacheedaht on their feedback and has confirmed that WCMRC plans to continue to engage with Indigenous Groups in developing GRS and On-water tactics and then ground truthing those in their territories based on shoreline assessments being conducted by WCMRC. Individual nations are encouraged to contact WCMRC for more detail or to provide additional feedback on new or existing GRS requirements within their territories.	WCMRC Coastal Response website: www.coastalresponse.ca/coastal-mapping
Planning	Indigenous Participation in Spill Prevention and Response	While information is provided in Table 3 reflecting updated milestone completion toward ERR implementation, the majority of items presented in the table contain incomplete information. Though it was noted that the milestones "will be completed based on latest update from WCMRC prior to submission," it is impossible for Pacheedaht (or others) to provide comment on information that is excluded from the document under review. We encourage Trans Mountain to provide complete documents when asking for First Nations review and comment in the future. - Similar to comments presented in #3 above, the incomplete information presented in Section 4.2 regarding the number of engagement events during the reporting period makes comment on this aspect of the Report difficult.	Pacheedaht	Details of the ERR can be found in WCMRC Direct Evidence. Updated milestones have been included in the report filed with the CER of which copies will be provided to Indigenous groups for their information - these are dates driven by WCMRC execution timelines and are subject to change. Additional updates shall be provided as available, but in any case, WCMRC is committed to full implementation of the ERR in a timely fashion in keeping with Condition 133 requirements.	WCMRC Direct Evidence, Reconsideration Hearing MH 052-2018, filing ID [A61.5G5]
Planning	Feedback timelines	The timeline for Indigenous Groups to submit comments regarding the Report has been wholly inadequate given the timing of the Indigenous Marine Workshop. Likewise, no capacity funding was provided by Trans Mountain, outside of travel reimbursement for attendance at the workshop, for review and comment on the Report.	Pacheedaht	A one-month comment period was initiated on October 25, 2019. The first Indigenous workshop was scheduled in Victoria on November 5 & 6, 2019 but was later deferred due to lack of registration. A Nanaimo workshop occurred on November 21 to 22, 2019 at which time a 2-week extension was provided to the comment period, to December 6, 2019. Subsequently, the CER extended the filing deadline for the C91 report, and another extension for comments was given until January 15, 2019. Trans Mountain prepared a document to help explain Condition 91 supplemental report that was distributed with the draft and offered to meet individually with Indigenous groups to help with their review. No meetings were requested of Trans Mountain. Trans Mountain and WCMRC remain willing and able to meet and engage with Indigenous groups on the topics of marine spill prevention and response, throughout the project development and implementation.	
Planning	Protection of environmental, cultural, economic assets	Recent interactions regarding GRS development within Pacheedaht Traditional Territory has resulted from outreach by Pacheedaht, rather than from WCMRC or Trans Mountain. Additionally, Pacheedaht's efforts in this area have been wholly internally funded. As a result, progress in this area has been driven by Pacheedaht's efforts, not Trans Mountain's. This is inappropriate within the context and spirit of Trans Mountain's Condition 91 Commitment efforts and inaccurately reflected in the Report.	Pacheedaht	Trans Mountain and WCMRC remain willing and able to meet and engage with Indigenous groups on the topics of marine spill prevention and response, throughout the project development and implementation. WCMRC has an Indigenous advisor who has met and will continue to meet with Pacheedaht. WCMRC continues to engage with Indigenous groups in developing GRS in their territories. Individual Indigenous groups are encouraged to contact WCMRC for more detail or to provide additional feedback on new or existing GRS requirements within their territories. Trans Mountain and WCMRC are supportive of the Government of Canada's commitment towards Indigenous participation in marine incident response planning and capacity building. For example, as part of the TMEP measures, the Government of Canada is working with Indigenous groups on the co-development of community response (CDCR) capacity at the community level to support a meaningful role for Indigenous communities in the broader marine response system.	p. 194 (197 of pdf) TMX Crown Consultation and Accommodation Report: https://www.canada.ca/content/dam/nrcan-rncan/site/tmx/TMX-CCAR_June2019-e-accessible.pdf WCMRC Coastal Response Program www.coastalresponse.ca

Theme	Issues and / or Concerns raised	Issue topics raised by Indigenous Group(s) during the reporting period (July 2017 - October 2019)	Indigenous Groups Linked to Issues Raised	Response & Outcomes	Reference
Planning	Indigenous Participation in Spill Prevention and Response	Pacheedaht would not agree that we have been thoroughly engaged and encourages Trans Mountain to increase both the quantity and quality of its engagement efforts - both those internal to Trans Mountain and those conducted by WCMRC in support of the TMX Project.	Pacheedaht	<p>Trans Mountain and WCMRC remain willing and able to meet and engage with Indigenous groups on the topics of marine spill prevention and response, throughout the project development and implementation.</p> <p>WCMRC has an indigenous advisor who has met and will continue to meet with Pacheedaht.</p> <p>WCMRC continues to engage with Indigenous Groups in developing GRS in their territories. Individual nations are encouraged to contact WCMRC for more detail or to provide additional feedback on new or existing GRS requirements within their territories.</p> <p>Trans Mountain and WCMRC are supportive of the Government of Canada's commitment towards Indigenous participation in marine incident response planning and capacity building.</p> <p>For example, as part of the TMEP measures, the Government of Canada is working with Indigenous groups on the co-development of community response (CDCR) capacity at the community level to support a meaningful role for Indigenous communities in the broader marine response system</p>	<p>p. 194 (197 of pdf) TMX Crown Consultation and Accommodation Report: https://www.canada.ca/content/dam/nrcan-mcan/site/tmx/TMX-CCAR_June2019-e-accessible.pdf</p> <p>WCMRC Coastal Response Program www.coastalresponse.ca</p>
Prevention	Protection of environmental, cultural, economic assets	pg. 17 (Table 5, row 5) - Specific reference to sensitivity of SRKW and salmonid species is needed. These must be a high priority to TMC.	Cowichan Tribes	<p>Trans Mountain acknowledges this feedback from Cowichan Tribes and will address this in revisions to the draft supplemental report (Appendix E). The oil spill prevention and response measures being implemented to satisfy Condition 133 will contribute to the overall protection of the waterway environment, including species of fish and mammals, and remain a high priority for Trans Mountain.</p> <p>WCMRC Geographic Response Strategies are site specific and are informed through engagement with indigenous groups. All GRS documents are available on the CRP mapping portal at: http://coastalresponse.ca/coastal-mapping/</p> <p>WCMRC has developed a Marine Mammal Oil Spill Response Protocol as a subordinate plan. Subordinate plans will also be posted to the Coastal Response website.</p>	WCMRC Direct Evidence, Reconsideration Hearing MH 052-2018 [Filing ID A6L5G5, PDF p. 23]
Planning	Product & handling of heavy / sunken oil	pg. 17 (Table 5, row 6) - Request for clarity on status of diluted bitumen (dilbit) science specifically.	Cowichan Tribes	<p>Response to submerged and sunken oils form part of WCMRC's response planning. Environmental behaviour of diluted bitumen in a marine environment and spill response has been fully reviewed by the CER in Chapter 8 of the CER (NEB) Reconsideration Report.</p> <p>The Board opined that response challenges are not unique to diluted bitumen spills but can be associated with heavier oil products in general. WCMRC equipment is capable of responding to spills of heavy oil products.</p> <p>Trans Mountain has posted information about diluted bitumen to its website (https://www.transmountain.com/diluted-bitumen-information).</p>	<p>See Section 3.2.2 of this Condition 91 Supplemental report.</p> <p>Section 8.1.3.2 of CER Reconsideration Report p. 179 (p. 188 of pdf) [A6L2D8]</p> <p>Diluted Bitumen Information: https://www.transmountain.com/diluted-bitumen-information</p>

Theme	Issues and / or Concerns raised	Issue topics raised by Indigenous Group(s) during the reporting period (July 2017 - October 2019)	Indigenous Groups Linked to Issues Raised	Response & Outcomes	Reference
Planning	Indigenous Participation in Spill Prevention and Response	pg. 17 (Table 5, row 7) - Request for clarity on the type of indigenous participation envisioned for this issue. [protection of Fraser River from the effects of oil spills]	Cowichan Tribes	GRSs have been and will continue to be developed by WCMRC through engagement with Indigenous groups. WCMRC will be establishing a base in the Fraser River and GRS work is ongoing there. Indigenous groups are requested to contact WCMRC to participate in developing GRS for any specific areas of concerns. GRSs are available on the Coastal Response website (www.coastalresponse.ca/coastal-mapping).	WCMRC Direct Evidence, Reconsideration Hearing MH 052-2018 filing ID [A6L5G5] WCMRC Coastal Response: www.coastalresponse.ca/coastal-mapping
Planning	Editorial Feedback	pg. 25 - 32 - Please note that when referring to a comment made by Cowichan Tribes, it MUST read as "Cowichan Tribes" and not just "Cowichan". This is inaccurate, as there is a Cowichan Nation comprised of other Indian Act Bands and our comments cannot be assumed to apply to those other bands.	Cowichan Tribes	Trans Mountain acknowledges this feedback from Cowichan Tribes and will address in revisions to the draft supplemental report.	
Prevention	Adequacy of ERR Program	pg. 29 [Concern for ability to source enough human resources to respond to a large spill] - The concern isn't just about shoreline response, but on-water response as well. As evidenced through incidents such as the HMCS Calgary spill, considerations for on-water impacts to Indigenous harvesters were not accounted for and it was determined to be a huge oversight in the spill response process.	Cowichan Tribes	Resource planning is an important part of ERR. WCMRC is hiring a number of new full-time staff and engaging with Indigenous and non-Indigenous communities to participate in the response regime via the Coastal Response Program. Parties are requested to contact WCMRC for training opportunities. A summary of all new equipment, status of base construction, and staff recruitment and training is available in WCMRC direct evidence.	p. 11-28; WCMRC Direct Evidence, Reconsideration Hearing MH 052-2018 filing ID [A6L5G5] WCMRC Coastal Response: www.coastalresponse.ca/coastal-mapping
	Editorial Feedback	pg. 39 - The proper name is Penelakut Tribe, not Penelakut First Nation.	Cowichan Tribes	Trans Mountain acknowledges this feedback from Cowichan Tribes and will address it through revision to the draft Condition 91 supplemental report	
	Engagement	The IAMC should not be listed as a party with concerns; they are not a consultative body.	Cowichan Tribes	Trans Mountain acknowledges this feedback regarding the IAMC. This report will not refer to IAMC feedback.	

APPENDIX B: Marine Regime Stakeholders Interests and Concerns

Appendix B

Table 8: Summary of Interests and Concerns Expressed by Marine Regime Stakeholders related to Condition 91 (Updated May 2019)

Stakeholder Group/Agency Name	Issues/Concerns	Trans Mountain Response	Where (To Be) Addressed
Transport Canada (TC)	<p>TC interested to see how the three SRKW implementation measures highlighted in evidence will be tracked as part of commitments.</p> <p>TC has interest in whether the escort tugs will have spill response capacity.</p> <p>Legislative amendments will be proposed for Response Organization standards which are being reviewed now.</p> <p>TC Interest in how WCMRC arrived at 20,000 tonne capacity for ERR, and how ERR will be evaluated for 133.</p>	<p>Trans Mountain will send TC commitment ID numbers that account for three measures and information to access Condition 6 filings.</p> <p>TM is facilitating a process on behalf of shippers to investigate this opportunity as part of tug procurement. TM will keep TC informed.</p> <p>TM / WCMRC to track progress of RO Standard Review for any implications in spill response planning, training and certification</p> <p>The ERR is designed to respond to a Credible Worst -Case oil spill from a fully laden Aframax tanker. The process used to determine the CWC spill volume is described in the Termpol 3.15 document. WCMRC recommended items in Table 5.5.3 to address spill response capacity</p>	<p>Three Measures will appear as part of Condition 6 monthly filings on the CER website beginning February 2020: Measure 1 – Commitment ID 1,769 Measure 2 – Commitment ID 1,873 Measure 3 – Commitment ID 1,770</p> <p>WCMRC Direct Evidence, Reconsideration Hearing MH 052-2018 [A6L5G5]</p> <p>Table 5.5.3 of Volume 8A of the Application [A3S4Y6], PDF p.34]</p>

Stakeholder Group/Agency Name	Issues/Concerns	Trans Mountain Response	Where (To Be) Addressed
	<p>Clarification needed on definition of response time.</p> <p>TC expressed interest in co-locating equipment in communities; potential synergies with WCMRC community packages.</p>	<p>needs for CWC spill volume. As noted in Table 5.5.3, a third party verification of all items in Table 5.5.3 being in place will be carried out. WCMRC has contracted with Lloyds for this purpose.</p> <p>Response time is defined as the time taken from being notified to arrive on-scene and commence initial response activities, including activation and any travel time.</p> <p>WCMRC is working with CCG and willing to participate with TC on Co-Developing Community Response (CDCR) program as part of the accommodation measures led by TC.</p>	
Pacific Pilotage Authority (PPA)	<p>Timing of berth commissioning and transition from current operations to new operations post-construction.</p> <p>Improved response time and capacity to address concerns from stakeholders in the United States.</p>	<p>Berths no. 1 and 2 will be commissioned first. At that time present berth operations will shift to those berths. This is anticipated to take place in 2022 after which the existing dock (no. 61) will be decommissioned so construction of Berth 3 can be completed. Berth 3 will be commissioned last; timing still to be confirmed.</p> <p>Response time will be reduced significantly. WCMRC can respond to oil spills across the border at the invitation of</p>	<p>The commissioning of the berths is defined in the Project construction schedule filed with the CER. Any changes will be communicated to marine stakeholders accordingly.</p> <p>Trans Mountain has regular meetings to share Project information with CCG, USCG, WSDOE and other US</p>

Stakeholder Group/Agency Name	Issues/Concerns	Trans Mountain Response	Where (To Be) Addressed
	<p>The PPA will be commencing construction of a new high speed launch that will be used for pilot disembarkations from the outgoing loaded crude oil carriers off Sooke; however, the long-term intent is to reintroduce the helicopter program as the primary platform for the disembarkation of the pilots, construction of a launch will be completed by March 2021.</p> <p>As the new docks are finalized, we would like to conduct simulations and run all the pilots through berthing and unberthing at the new docks.</p>	<p>US authorities. A cross-border response would be a joint operation between the two coast guards.</p> <p>A new WCMRC base proposed at the Saanich Peninsula will have the ability to cover San Juan Islands better, but it would require a coordinated invitation between USCG and CCG</p> <p>Trans Mountain will review plans to account for PPA feedback going forward.</p> <p>Trans Mountain has conducted real time simulation maneuvers with pilots and tug captains to which the VFPA and PPA have attended as observers. Trans Mountain remains committed to support the PPA's pilot training and orientation efforts.</p>	<p>organizations such as the Puget Sound Harbour Safety Committee. Also participates at forums of common interest.</p>
Canadian Coast Guard (CCG)	Access for ships to service WMT existing operations during construction.	Trans Mountain consulted with CCG on matters related to installation of the marine construction safety boom, including lighting for safe navigation as well as providing Navigation Warnings for passing vessels.	Existing WMT operations have proceeded smoothly since installation of the construction safety boom. Written documentation from CCG was shared and is part of the consultation record.

Stakeholder Group/Agency Name	Issues/Concerns	Trans Mountain Response	Where (To Be) Addressed
	<p>Clarification sought on the definition of response time.</p> <p>CCG looking for more information about applicability of response times in adverse conditions.</p> <p>CCG clarified that CCG has been involved in improving response plans for the region; however, these plans are not site-specific response plans or GRSs used to satisfy conditions, but rather guidance CCG has for incidents in the region with a focus on incident management.</p>	<p>Response time is defined as the time taken from being notified to arrive on-scene and commence initial response activities, including activation and any travel time</p> <p>TMEP provided this information during the NEB hearings, and Trans Mountain will provide to CCG. Response is dependent on safe conditions for responders, and the planning standard is based on Beaufort 4 conditions.</p> <p>Trans Mountain has noted. WCMRC focused on GRSs and has developed over 600 to date for BC Coast.</p>	<p>All GRSs available at WCMRC Coastal Response portal: http://www.coastalresponse.ca/coastal-mapping</p>
BC Coast Pilots (BCCP)	<p>Timing of increase in vessel transits that will require tug escort through TCZ2 (Traffic Control Zone 2, i.e. Second Narrows). BCCP is looking at resourcing as part of long term planning.</p> <p>Interest in the selection of tug for enhanced escort.</p>	<p>TMEP would be capable of handling the forecasted volume of traffic from date of the Project coming in-service and demand at the dock could be high.</p> <p>Tug escort for the Juan de Fuca will be coordinated with existing tanker escort requirements and include enhanced situational awareness initiatives. Trans Mountain will seek input and advice from PPA and BCCP to inform the development of operating practices and procedures.</p>	<p>Trans Mountain will continue to engage BCCP and the PPA to prepare for operations post in-service.</p> <p>Trans Mountain shall facilitate discussions between TC, CCG, PPA, BCCP and the tug service provider once a tug service provider has been selected, likely to be mid-2020.</p>

Stakeholder Group/Agency Name	Issues/Concerns	Trans Mountain Response	Where (To Be) Addressed
	<p>Interest to connect with Western Canada Marine Response Corporation (WCMRC) to determine how pilots could be involved in spill response planning.</p> <p>BCCP interested in tracking in-service date for TMEP so that all of pilots' plans and responsibilities are met on time. This includes potential for helicopter disembarkation for extended pilotage area.</p>	<p>Trans Mountain recognizes BCCP interest to learn how pilots could be part of the spill response regime. Opportunities to participate in and learn about planning and training with WCMRC are upcoming.</p> <p>Trans Mountain will continue to liaise with PPA/BCCP on Project progress and schedule.</p>	<p>Trans Mountain will connect BCCP with WCMRC representatives. Interested parties may also contact WCMRC directly.</p>
Fisheries and Oceans Canada (DFO)	<p>The last bullet on page 9 appears to suggest that DFO would direct preventative hazing of wildlife (birds and marine mammals) following a spill. While DFO could provide advice on preventative hazing vs. pre-emptive capture of fish (including marine mammals), ECCC would be the appropriate agency to provide similar advice for marine birds.</p>	<p>Trans Mountain has made the correction in this Supplemental Report and also advised WCMRC.</p>	
Vancouver Fraser Port Authority (VFPA)	<p>Interest in potential for tug escort package impacts to availability of local tugs within VFPA jurisdiction</p> <p>Interest in location of storage for new escort tugs</p>	<p>VFPA comments will be considered in Trans Mountain's work with the Shippers marine sub-committee and applicable regulators to define tug escort package. The VFPA is also requested to contact the existing tug providers to explore this matter further. Trans Mountain is also aware of a significant number of new harbour tugs being inducted to operations in the Port of Vancouver.</p>	<p>The enhancements to tug escort of laden tankers are focused on escort to laden tankers travelling in the Juan de Fuca Straits between Race Rocks and Buoy "J" which is outside the VFPA jurisdiction and also outside the compulsory pilotage area. Trans Mountain shall advise the VFPA along with other Federal agencies once selection of a tug service provider has been completed.</p>

Stakeholder Group/Agency Name	Issues/Concerns	Trans Mountain Response	Where (To Be) Addressed
	<p>Interest to see final tug package when it is ready. VFPA expressed interest in model for enhanced tug escort; potential for multiple tug providers along the route.</p> <p>Location for bollard pull test that could be required</p> <p>Interest by VFPA whether tugs could be based at Westridge Marine Terminal (tug basin).</p>	<p>Escort tug proponents will be required to store/position their tugs at locations best suited to providing most effective support to laden Trans Mountain tankers.</p> <p>Trans Mountain explained the principles of expansion are to operate within the current regime, which is risk based and provide benefits. Enhanced escort will operate in context of business established here. The market will respond to the details requested in the RFP</p> <p>Trans Mountain will advise the VFPA once this matter has been finalized with the successful tug service proponent.</p> <p>Trans Mountain advised VFPA that Westridge Marine Terminal will only be able to keep one tug at the terminal.</p>	
Province of BC <ul style="list-style-type: none"> Ministry of Transportation and Infrastructure (MOTI) 	Interest in TCZ2 procedures for Second Narrows and potential for new rules for First Narrows.	<p>Trans Mountain shared MOTI contacts with VFPA so they can be informed of progress with TCZ2 as part of Province of BC review of ship collisions.</p> <p>BC Ministry of Transportation and Infrastructure (MOTI) published a report</p>	Trans Mountain shared <ul style="list-style-type: none"> Termopol 3.15 General Risk Analysis and Intended Methods of Reducing Risks which is the TMEP navigation risk assessment carried out by DNV and submitted to the NEB as

Stakeholder Group/Agency Name	Issues/Concerns	Trans Mountain Response	Where (To Be) Addressed
	MOTI has completed its risk study and will be proceeding with retrofit designs for each bridge that would satisfy the Class 1 criteria to further strengthen their resilience in the unlikely event of a vessel impact. These retrofits are consistent with the Ministry's ongoing program of updating these critical bridges.	<p>entitled, <i>Vessel Collision Risk Assessment and Mitigation Final Report</i> (01459) for the Ironworkers Memorial Bridge, in March 2018. The report can be found on the Province of BC website.</p> <p>Trans Mountain has noted MOTI planned structural improvements pending for Second Narrows.</p>	<p>part of the TMEP Facilities Application.</p> <ul style="list-style-type: none"> Strait of Georgia tug escort simulation also filed as part of the TMEP application to the NEB.
Western Canada Marine Response Corporation (WCMRC)	<p>The In-Service date is of importance to WCMRC to ensure Project Execution Plan (PEP) is aligned.</p> <p>Need for exercise evaluations once new system is in place</p> <p>Potential synergies with extended tug escort and WCMRC Offshore Vessel program (OSV) work.</p>	<p>Trans Mountain will notify WCMRC through regular meetings of any potential changes as per the PEP protocol.</p> <p>As part of developing exercises for the ERR WCMRC will be consulting with TC/CCG on exercises. Lloyds Register is verifier as per PEP and that will meet condition requirement. It is also expected that WCMRC will continue to participate in Trans Mountain emergency exercises.</p> <p>WCMRC is participating as an equal partner with shippers in a common vessel procurement process that covers both escort tug services and procurement of an OSRV according to WCMRC specifications.</p>	<p>WCMRC PEP</p> <p>Escort tug procurement RFP process is planned for the fall of 2019; including exploration of potential for enhanced tug escort to incorporate spill response</p>

Stakeholder Group/Agency Name	Issues/Concerns	Trans Mountain Response	Where (To Be) Addressed
	WCMRC interested in potential synergies with Transport Canada on 20,000 exercises	Dialogue is ongoing between WCMRC and Transport Canada.	

APPENDIX C: Indigenous Groups

Marine Groups

- Adam Olsen (MLA - Green Party)
(Tsartlip Member)
- Cowichan Tribes
- Ditidaht First Nation
- Esquimalt
- Halalt First Nation
- Lake Cowichan First Nation
- Lyackson First Nation
- Malahat First Nation
- Nuu-Chah-Nulth Tribal Council
- Pacheedaht First Nation
- Pauquachin First Nation
- Penelakut Tribe
- Semiahmoo
- Scia'new First Nation (Beecher Bay)
- Shishalh Nation (Sechelt)
- Snaw-Naw-As (Nanoose First Nation)
- Snuneymuxw First Nation
- Stz'uminus First Nation (Chemainus)
- T'Sou-ke First Nation
- Toquaht Nation
- Tsartlip First Nation
- Tsawout First Nation
- Tseycum First Nation

Terrestrial Groups

- Driftpile Cree Nation
- Ermineskin Cree Nation
- Hwilitsum First Nation
- Katzie
- Kwantlen
- Kwikwetlem
- Musqueam
- Sto:lo tribal council
- Makah
- Seabird Island
- Squamish
- Tsawwassen
- Tsleil-Waututh

APPENDIX D: Engagement Materials



Trans Mountain Expansion Project

Condition 91: Plan for Marine Spill Prevention and Response Commitments

Supplemental Report - Overview

October 23, 2019

- Trans Mountain Expansion Project (TMEP)
- TMEP Update on Marine Spill Prevention & Response Commitments
 - Condition 91 - Plan
 - Condition 133 a) Enhanced Tug Escort
 - Condition 133 b) Enhanced Response Regime
- Other marine commitments
 - Condition 6

Trans Mountain Pipeline



Current Operations (TMPL)

- Operating since 1953
- Capacity: 300,000 bpd
- 1,150 km between Edmonton and Burnaby

- TMPL also services Ferndale and Anacortes
- Transports refined products, heavy and light crude oils including dilbit

Proposed Expansion

- Construction and operation of an expanded pipeline system
- Expand system capacity to 890,000 bpd
- Twin remaining 980 km of pipeline
- 193 km of reactivated pipeline
- 12 new pump stations
- 19 new storage tanks
- Three new tanker berths
- Increase in tanker traffic – not tanker size
- The Project must meet all regulatory and permitting requirements, including:
 - 156 NEB Conditions
 - 37 BCEAO Conditions
 - 64 VFPA Conditions

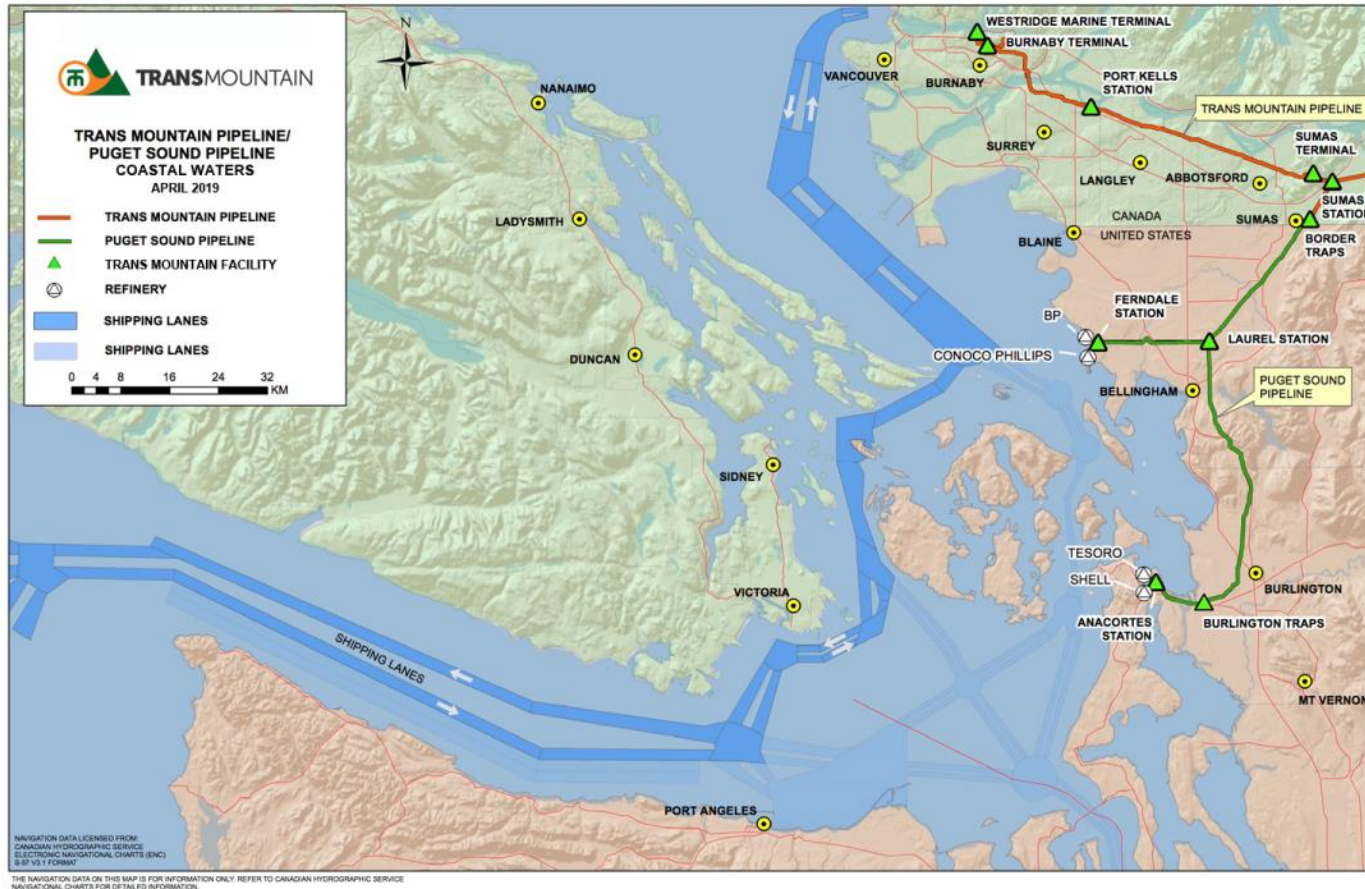


TRANSMOUNTAIN



TMEP Marine Development

Marine Transportation Route

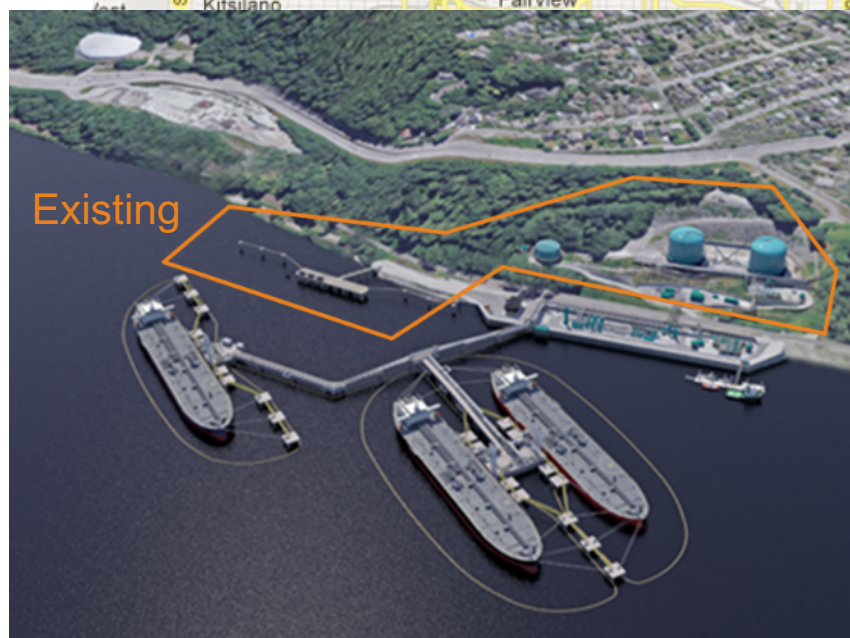


Juan de Fuca Strait Traffic Forecast	2012	With TMEP
All Large Vessels	~5,500	~6,200
All Tankers	~600	~1,000
TM Tankers	60	408
TM Tankers as % of all Large Vessels	1.1%	6.6%

Westridge Marine Terminal



TRANSMOUNTAIN



Existing

	Existing	TMEP
Berths	1	3
Max Vessel Size	Partially Laden Aframax	
- Tankers/month	5	34
- Crude barges/month	2	
- Jet fuel barges month	1	
Vancouver Port Traffic	3%	16%
Salish Sea Traffic	1%	6%

- Vessel size and product type remains unchanged
- Increased traffic has impact on risk

Westridge Marine Terminal Operations



- **Marine Terminal Operations**
 - Operated to internationally recommended practices
 - Oil spill boom deployed for every vessel
 - Loading Master (for entire cargo transfer)
- **Vessel Acceptance Standard**
 - Accepted vessels must meet established criteria (*Vessel Acceptance Standard*), e.g., vessel age, double-hull tankers only, tanker size (up to Aframax), staffing, etc.
 - Authority to deny vessels
- **Training of Terminal Staff**
 - Staff training including leadership training
- **Navigation Safety**
 - Two pilots, tugs during berthing and unberthing
 - Communications between terminal, pilots, tugs
- **Emergency Response**
 - Emergency Response Plan
 - **Marine Spill Response – WCMRC**
- **Security**
 - Approved terminal security plan
 - Construction safety boom
 - Visitor access management
- **Continuous Improvement**
 - Safety and efficiency



NEB Conditions (Marine)

- **91 – Plan for marine spill prevention and response commitments**
 - **Within 6 months from issuance of CPCN**, a plan describing how it will implement, monitor, and ensure compliance with its marine shipping-related commitments identified in Condition 133.

- **132 – Marine Mammal Protection Program**
 - **at least 3 months prior to commencing operations**, a Marine Mammal Protection Program that focuses on effects from the operations of Project- related marine vessels.

- **133 – Confirmation of marine spill prevention and response commitments**
 - **3 months prior to loading the first tanker** confirmation that it has implemented:
 - a) **Enhanced tug escort:** tankers from the Westridge Marine Terminal to have a tug escort suitable for foreseeable meteorological and ocean conditions and be based on tanker and cargo
 - b) **Enhanced marine oil spill response regime** with dedicated resources staged within the study area capable of delivering 20,000 tonnes of capacity within 36 hours of notification, and initiating a response within
 - i. 2 hours for spills in Vancouver Harbour, and
 - ii. 6 hours for the remainder of the Salish Sea,

- **134 – Updated Vessel Acceptance Standard**
 - **at least 3 months prior to loading the first tanker**, and thereafter on or before 31 January of each of the first five years after commencing operations, an updated Vessel Acceptance Standard and a summary of any revisions.

- **144 – Ongoing implementation of marine shipping-related commitments**
 - **on or before 31 January of each year after commencing operations**, a report, signed by an officer of the company, documenting the continued implementation of Trans Mountain's marine shipping-related commitments

Condition 91 – Plan for Marine Spill Prevention and Response Commitments

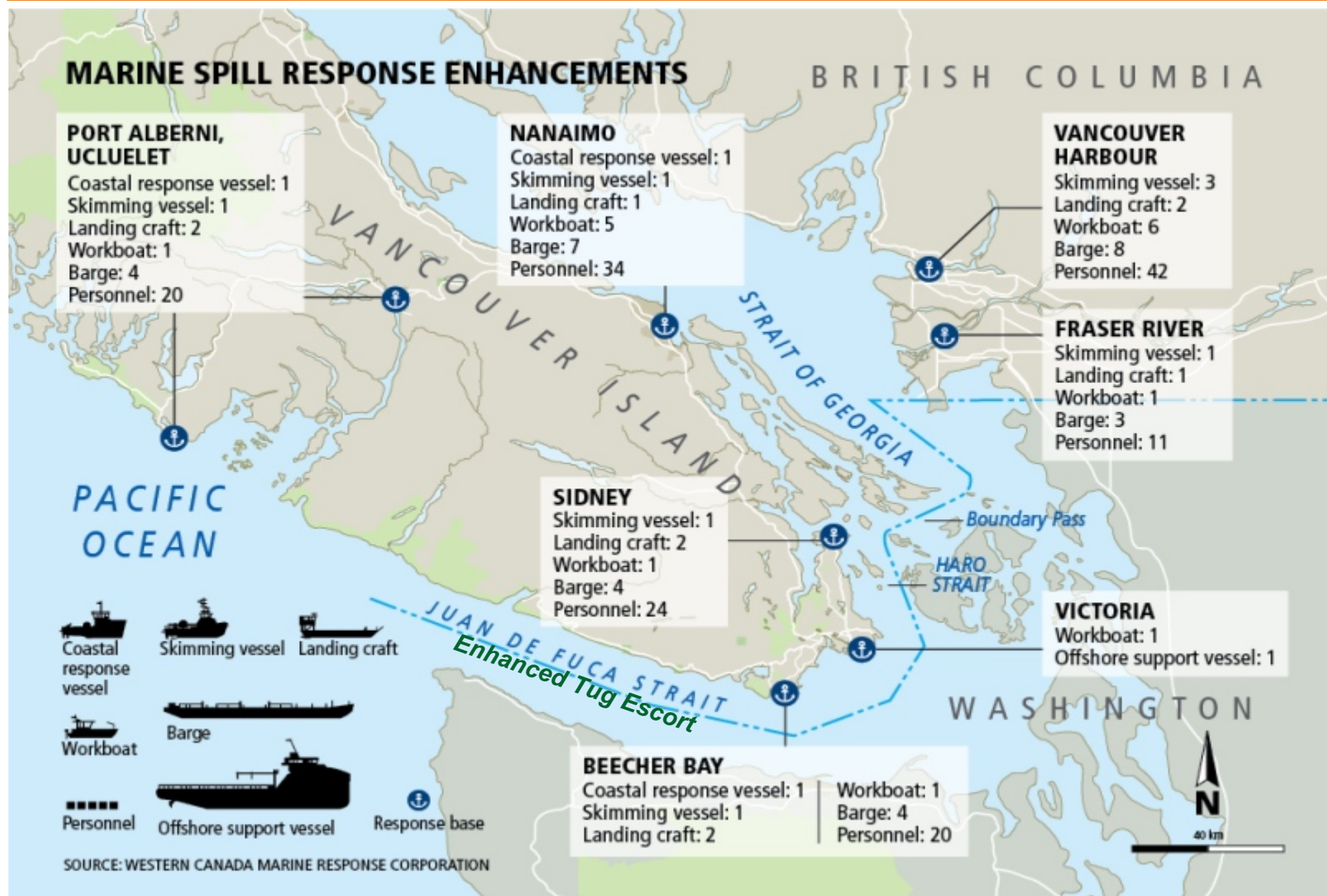
- Condition 91 (C91) requires a plan (description) of how Condition 133 (C133) will be satisfied
- C91 report first filed in June 2017; accepted by National Energy Board (NEB), now Canada Energy Regulator (CER)
- Trans Mountain continues to facilitate with shippers and Western Canada Marine Response Corporation (WCMRC):
 - Escort tug procurement; and
 - Implementation of the Enhanced Spill Response Regime (ERR)
- As a requirement of the new CPCN (OC-065 issued in June 2019), Trans Mountain must refile an updated C91 within six months of CPCN (Dec, 2019)
 - Includes requirement to consult with marine agencies and Indigenous groups on the approach to meeting C133: Marine Spill Prevention and Response Commitments
 - Trans Mountain has prepared a draft “Condition 91 Supplemental Update” for review and comment, focusing on:
 - Progress on implementing C133 since June 2017
 - Any changes to implementation path
- Indigenous workshops planned for November 2019 - will provide further opportunity to engage in dialogue with Indigenous groups

Summary of Indigenous Interests and Concerns: C91

Theme	Issue Raised	Trans Mountain Comment
Planning	Spill response regime is industry led vs. being Government sponsored	The Canada Shipping Act assigns separate responsibilities to Government and industry
Planning	Adequacy of oil spill risk assessment and response times	The ERR is risk based and is above requirements of Canada's current regime. ERR will double capacity and significantly reduce response times
Planning	Lack of Indigenous participation in spill response	Trans Mountain and WCMRC are pursuing opportunities for Indigenous participation
Planning	Protection of environmental, cultural, economic assets specific to each indigenous community	WCMRC Geographic Response Strategies (GRS) are site specific; informed through engagement with Indigenous groups. This is of great concern to both Trans Mountain and WCMRC and mitigation measures will be in place
Planning	Handling of heavy / sunken oil	Strong preventative measures will be in place, including escort tugs. WCMRC also has Submerged and Sunken Oil Plan applicable to marine spill response
Prevention	Protection of Fraser River from effects of oil spills	Pilots and tug escort are part of enhanced maritime situational awareness and spill prevention measures. GRS are developed with input from Indigenous Groups. A spill response base is planned for the Fraser River.
Prevention	Indigenous participation in tug program	Tug RFP shall encourage proponents to have Indigenous participation
Prevention	Environmental effects of tugs	The issue will be addressed in tug RFP such as low emission and low noise features
Response	Tugs for Oil Spill Response in addition to Spill Prevention	Depending on the situation, escort tugs will be included in spill response planning

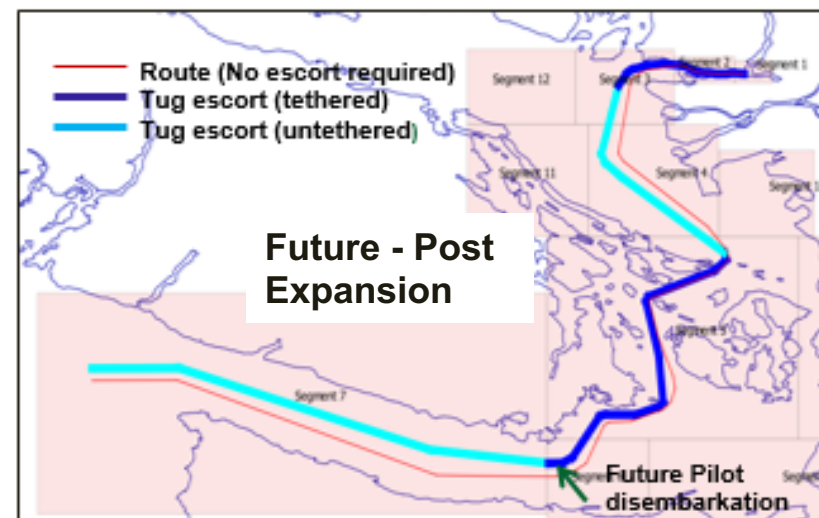
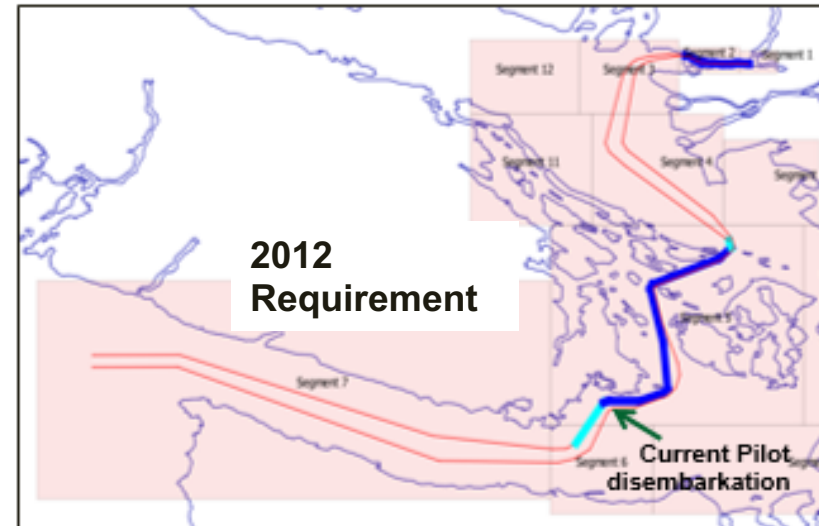
- *In some cases it is beyond Trans Mountain control or ability to address the concerns raised*
- *Refer to CER Recommendations and the CCAR report provide for comprehensive consideration of indigenous issues*

Enhanced Escort and Spill Response



Progress on Enhanced Escort Tugs and ERR

- Trans Mountain will not own or operate the escort tugs, nor elements of the WCMRC ERR program; however, it will facilitate implementation to satisfy C133
- A Shippers Marine Subcommittee facilitated by Trans Mountain (with TMEP Shippers and WCMRC) will procure the escort tug service
 - Current tug fleet is able to provide service for 97% of the the laden vessel transits
 - However, seasonal weather patterns, especially in fall and winter (October and April) requires use of a larger tug (110 tonnes BP x 40 m LOA)
 - Trans Mountain will require this as a condition of vessel acceptance
- ERR Project Agreement between WCMRC and Trans Mountain, whereby WCMRC will procure and implement the ERR, Trans Mountain will fund and monitor
- The ERR shall be integrated to WCMRC's response plans for the South coast

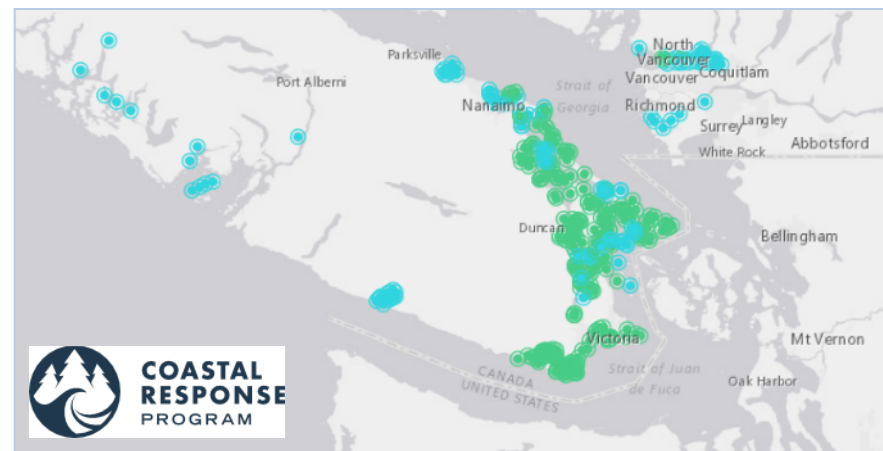
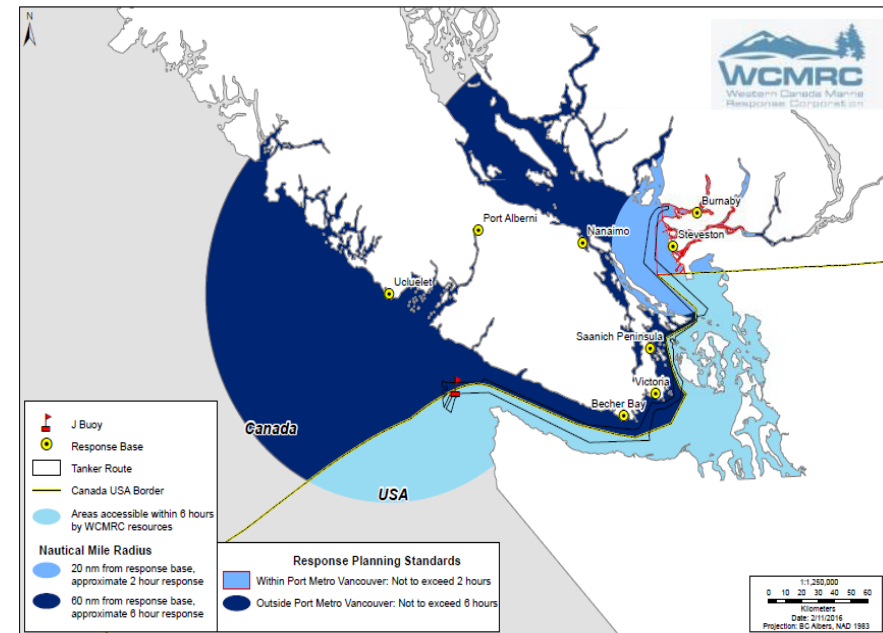


Enhanced Spill Response Regime (ERR)

- ERR requirements are described in Table 5.5.3 of Volume 8A of the Trans Mountain Expansion Project Application*

Salient features:

- \$150+ million investment in WCMRC to enhance response along the tanker route
- Doubles the mandated capacity to 20,000 MT
- Significantly reduces the mandated response time. Response initiated in:
 - 2 hours inside the port
 - 6 hours at any location on the tanker route
- Accelerates development of Geographic Response Plans (GRP)
- Enhancements will be verified by Lloyds Register Shipping
- In keeping with the current regime, the enhancement costs will be recovered from shippers.



CER Condition 6 – Commitment Tracking

- In addition to CER Marine Conditions, Trans Mountain will track and report on all commitments (including marine-shipping related commitments) as per the requirements of Condition 6
 - Condition 6 is filed with the CER as part of public reporting at the start of every month



Westridge Marine Terminal

Did You Know?

Each tanker calling at Westridge Marine Terminal is assessed against Trans Mountain's Tanker Acceptance Standard. Prior to arrival, Trans Mountain evaluates vessel information submitted by pipeline shippers and vessel inspection history maintained on an international database.

In addition to tug escorts, further precautionary risk control measures include extended pilots disembarkation near Race Rocks, instead of Victoria, and the Pacific Pilotage Authority is leading an effort to increase education of waterways users about small boat safety.

Trans Mountain has the right to reject any vessel proposed by the pipeline shipper that does not meet the standards and criteria set by the harbour master for the Port of Vancouver and/or by Trans Mountain. Adoption of enhanced tug escort will be incorporated into the Tanker Acceptance Standard when it becomes available, prior to the Project going into service.



The expansion at Westridge Marine Terminal is based on the loading of Aframax tankers, the same-sized tankers, shipping the same products they do today.

There will be an investment of more than \$150 million in Western Canada Marine Response Corporation that will further improve safety for the entire marine shipping industry. The investment will fund five new response bases, more than 100 new employees and new vessels at strategic locations along BC's southern shipping lane.



Tug Escort

Enhancements

Trans Mountain is expanding its current 1,150-kilometre pipeline between Strathcona County, Alberta and Burnaby, BC. The expansion will create a twinned pipeline that will increase the nominal capacity of the system from 300,000 barrels per day to 890,000 barrels per day.

On June 18, 2019, the Government of Canada approved the Trans Mountain Expansion Project, subject to 156 conditions enforced by the Canada Energy Regulator. The expansion will add approximately 980 km of new pipeline and reactivate 193 km of existing pipeline. To support the expanded pipeline, there will be 12 new pump stations, 19 new tanks at existing storage terminals and three new berths at the Westridge Marine Terminal.

Routing of the expansion will remain along the existing Trans Mountain Pipeline route where practical – 89 per cent of the new pipeline would parallel the existing pipeline system or linear infrastructure, minimizing environmental and community impacts.

MARINE TRAFFIC – BY THE NUMBERS

With the Expansion Project, tanker traffic to Westridge Marine Terminal is expected to grow from approximately five tankers per month (60 tankers per year) up to 34 partly-laden Aframax tankers per month (408 tankers per year). In round numbers, based on a 2012 traffic assessment, each year approximately 6,000 large vessels enter the Strait of Juan de Fuca destined to ports in Canada and the US. Of these, approximately 600 vessels (10 per cent) are tankers. Subject to anticipated increase in marine trade, Table 1 shows the 408 Trans Mountain-related vessels will continue to remain only a small percentage of large vessels in the region, and number less than half the 1,000 tankers that will trade in the Salish Sea.

Table 1

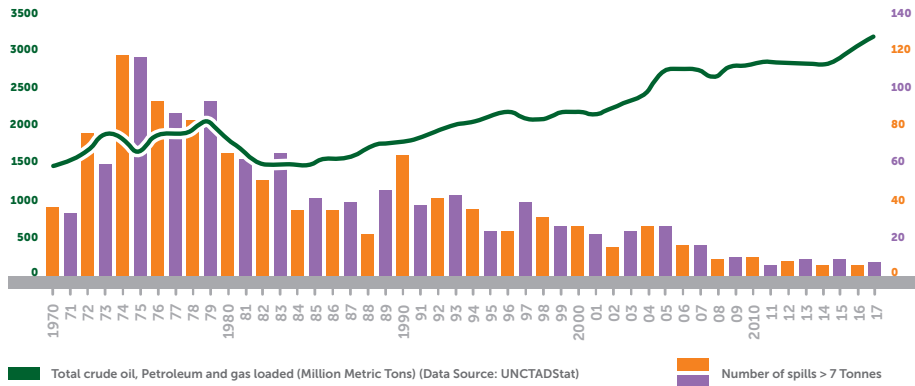
Juan de Fuca Strait Traffic Forecast	2012	With TMEP
All Large Vessels	~5,500	~6,200
All Tankers	~600	~1,000
TM Tankers	60	408
TM Tankers as % of all Large Vessels	1.1%	6.6%

According to the International Tanker Owners Pollution Federation Ltd (ITOPF), (Table 2) oil transportation by sea has become significantly safer since the 1970s, to the point where an increase in seaborne oil trade activity has coincided with significant year-over-year decreases in tanker-related oil spill incidents.¹ Strengthened industry advancements in tanker safety globally are further supported by locally-developed best practices to ensure safe transit of vessels in and out of the Port of Vancouver.

Table 2

Oil Tanker Spill Statistics 2018

Decline in number of tanker spills vs growth in crude, petroleum and gas loaded



Source: ITOPF Oil Tanker Spill Statistics 2018

¹ ITOPF Ltd. Oil Tanker Spill Statistics 2018. London, UK. <https://www.itopf.org/knowledge-resources/data-statistics/statistics/> (accessed November 1, 2019).

CONTACT US:

Trans Mountain
info@transmountain.com
 1.866.514.6700
transmountain.com

[@TransMtn](https://twitter.com/TransMtn)
[youtube.com/transmtn](https://www.youtube.com/transmtn)
 6025 Sussex Street
 PO Box 81018, South Burnaby
 Burnaby, BC, V5H 3B0 CANADA





Given all the progress in tanker safety and the already strong marine regime, a spill from a Westridge-related tanker

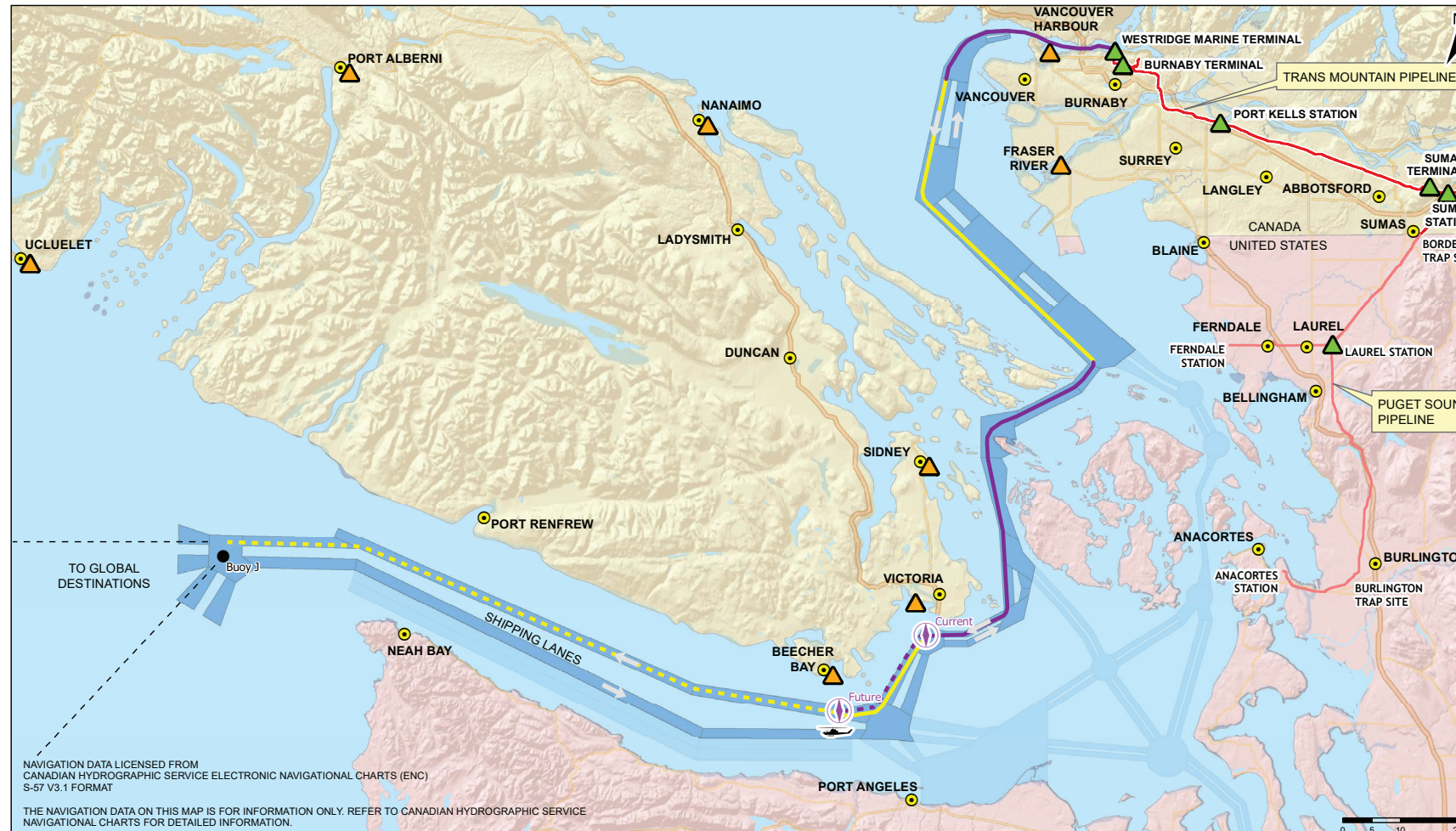
would be an unlikely event. Guided by experienced local pilots, tankers are escorted by tugs through the Port of

Vancouver and other portions of the outbound shipping route where the vessel travels near to shore.



SALISH SEA TUG ESCORT ENHANCEMENTS

To increase shipping safety of tankers calling at Westridge Marine Terminal (Westridge), Trans Mountain has committed to, as part of its Trans Mountain Expansion Project, several enhancements to marine risk controls for laden Project tankers, including additional pilotage along the shipping route, extended tug escort and working with marine pilots and bridge crew to enhance situational awareness of tankers.



Progress to Date

Canada Energy Regulator (CER) Condition 133 is part of Trans Mountain's conditions of approval. This condition requires the enhanced tug escort with minimum tug capabilities be in place by the time the Project comes into service. Once the new tug package is in place, Trans Mountain will incorporate it as part of the requirements of its vessel acceptance criteria, ensuring all vessels that call at Westridge Marine Terminal adhere to it.



Important Mitigation Measures

Notwithstanding the excellent marine safety record in the region, based on public feedback and supported by a comprehensive risk assessment, Trans Mountain will extend tug escort of laden Project tankers for the entire outbound shipping route, i.e., from Westridge to Buoy J (the western entrance to the Strait of Juan de Fuca, near the 12-nautical mile limit of Canada's territorial sea).

Tugs used for escorting tankers are already highly capable, however the tugs escorting tankers through the Strait of Juan de Fuca will be bigger and more capable than any available in the region at this time. These tugs will ensure on-time and on-site support for a laden tanker should it become disabled for any reason.

Given Trans Mountain's strong tanker acceptance process, which ensures calling tankers are of high global standards, the likelihood of a tanker becoming disabled is unlikely. Trans Mountain's processes are in addition to the international standards already in place.

To date, Trans Mountain has been advised by a highly reputable local tug expert, Robert Allan Limited, and is engaged with British Columbia Coast Pilots, tug operators and maritime regulators such as Transport Canada and the Pacific Pilotage Authority, in developing a "tug matrix." The tug matrix determines escort tug criteria based upon the range in tanker sizes (up to Aframax class vessels) and variability in environmental conditions along the shipping route throughout the course of a year. Tankers will be required to engage such tugs for their outbound transit as a pre-condition of loading.

Trans Mountain is currently working with its shippers and tug operators to ensure timely availability of tugs of appropriate capacity for the expanded escort duty. Trans Mountain continues to consult and engage with the appropriate stakeholders to ensure this additional escort can be implemented effectively.

Legend

- Canadian Marine Spill Response Base (Future)
- Trans Mountain Facility
- Shipping Lanes (used by TM Traffic)
- Shipping Lanes
- Tug Escort (tethered)
- Tug Escort (tethered - Future)
- Tug Escort (untethered - Commenced 2015)
- Tug Escort (untethered - Future)





Proposed response enhancements are based on the results of risk assessment, product testing, oil spill modelling and engagement, and would create an increased response area for the Salish Sea and the Strait of Juan de Fuca. Enhancements will be implemented by Western Canada Marine Response Corporation (WCMRC) and will double WCMRC's response capacity while cutting in half the delivery time of existing planning standards. Establishing the enhanced regime entails:

- More than \$150 million investment in WCMRC.
- Creation of more than 100 new jobs.
- Establishing eight new response bases and adding new vessels at strategic locations along BC's southern shipping lane. Two of the bases call for 24/7 operations, including a new Vancouver Harbour base.



For more information, visit wcmrc.com.

The benefits that would result from these proposed marine safety enhancements along with new information about risk and mitigation of oil behaviour would benefit not only Trans Mountain, but all marine waterway users.

CONTACT US:
Trans Mountain

✉ info@transmountain.com
☎ 1.866.514.6700
🌐 transmountain.com

🐦 📘 @TransMtn

📺 youtube.com/transmtn

🌐

📍 PO Box 81018
Burnaby, BC V5H 3B0



Marine Safety

November 2019

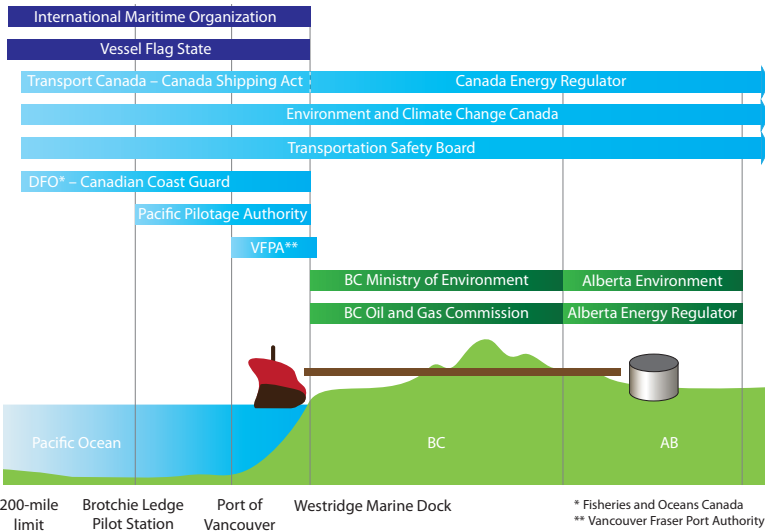
Enhancements

Trans Mountain has safely loaded marine vessels with petroleum products since 1956.

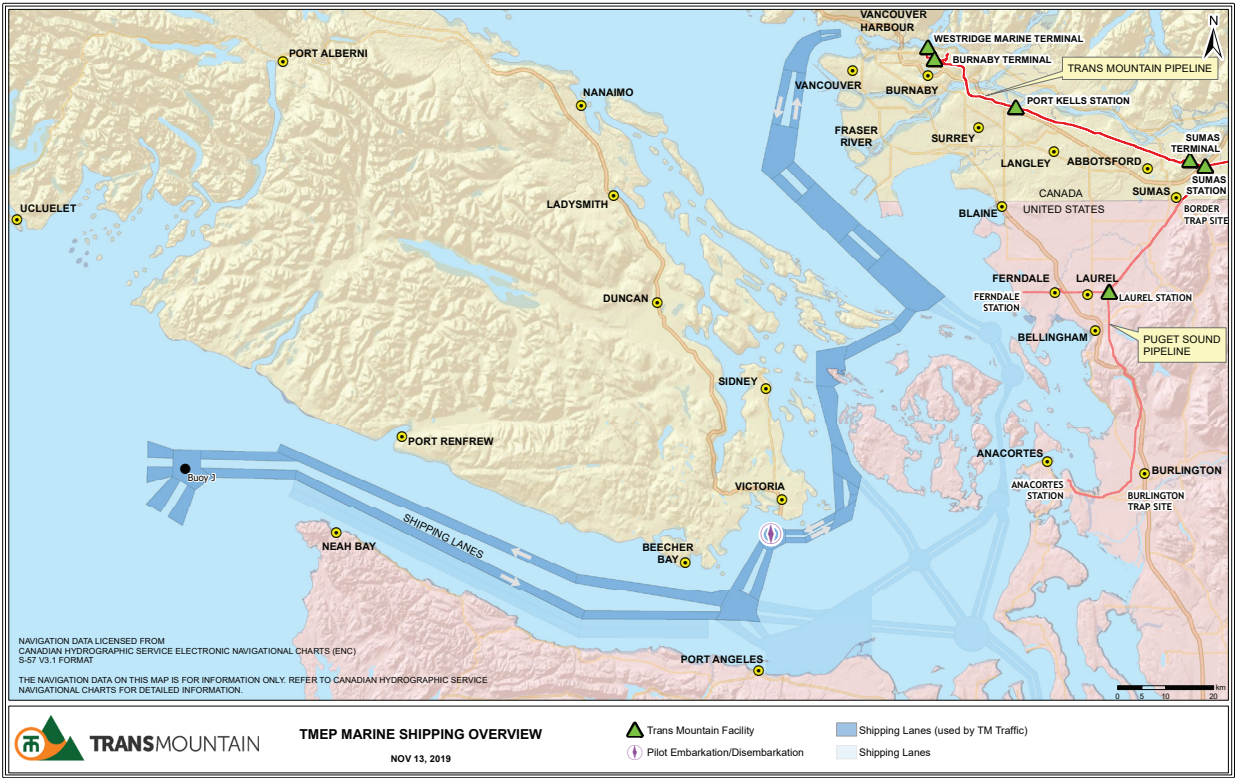
The region's already robust marine safety regime is well managed, with important risk controls for all traffic and for oil tankers in particular. Regulations and practices are established, implemented and monitored by Transport Canada, the Canadian Coast Guard, Pacific Pilotage Authority and Vancouver Fraser Port Authority (VFPA).

Highly-trained and qualified pilots ensure tankers navigate our local waters safely. Trans Mountain has proposed additional risk controls and enhancements that will build on the current marine safety regime.

Regulatory Oversight of Crude Oil Transport Operations



Tanker Traffic



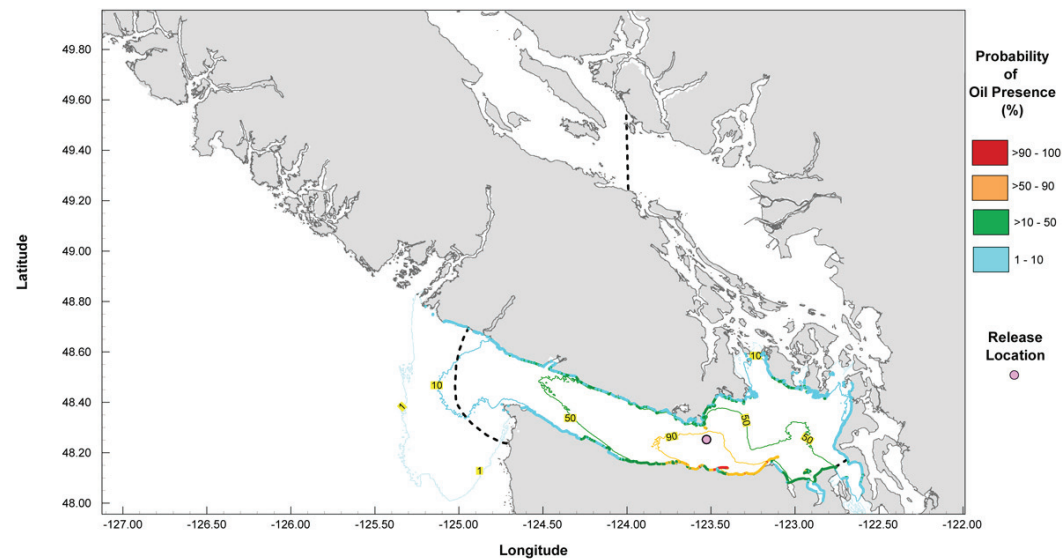
Tanker traffic to Westridge Marine Terminal is expected to grow from approximately five tankers per month to 34. The size of tankers calling at Westridge in future will not change and the largest tankers will remain Aframax-size vessels. These vessels will continue to use the well-established commercial shipping route between Vancouver Harbour and the Pacific Ocean through the Salish Sea.

Risk Assessment

A risk assessment was undertaken to determine the potential impact of the increase in Project-related vessels on navigable waterways. Carried out by international experts in risk, the assessment was based upon:

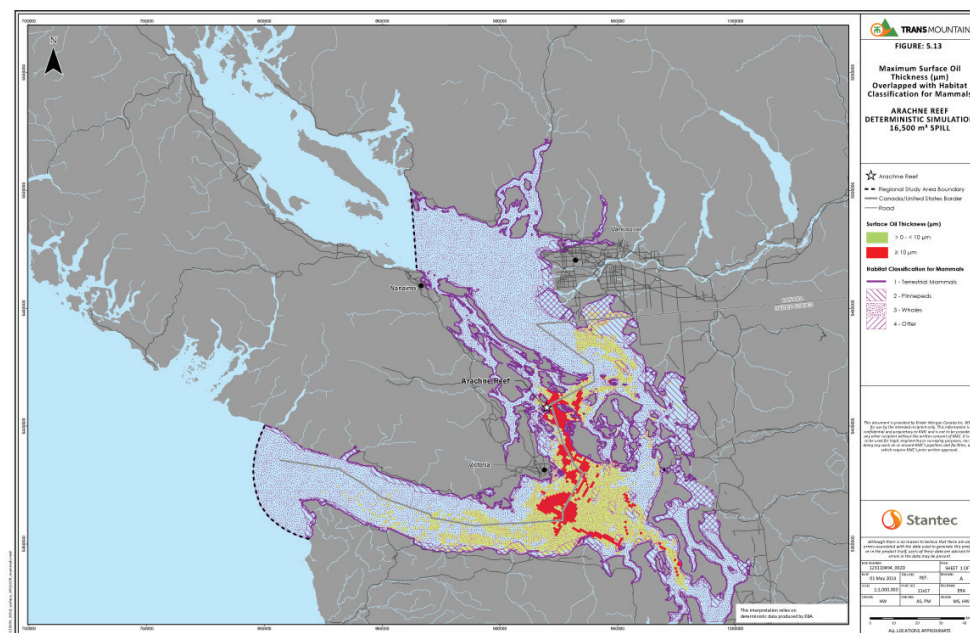
- Analysis of current and future marine traffic.
- Research and engagement with the local maritime community to identify hazards and review existing safety measures.
- Product fate and behaviour testing to better understand the properties of heavy crude oils like diluted bitumen.
- Spill modelling (2-D and 3-D modelling to understand where oil travels and how it interacts with the marine environment in the event it is spilled).
- Analysis of current and future marine traffic.

Stochastic modelling



2-D modelling to understand where the oil might go in the event of a spill

Deterministic modelling



3-D modelling to understand interactions of the oil after a specific release – fate of the oil in the marine environment



Proposed Measures to Mitigate Risk

The VFPA regularly undertakes evaluations of overall port traffic to ensure the safety and efficiency of navigation within its jurisdictional waters. Trans Mountain has identified additional precautionary risk control measures that will further mitigate risk due to increased tanker traffic. These measures, some of which are already implemented and do not depend on the Project, include:

- Tug escort of outbound laden tankers will be expanded to cover the entire tanker shipping route through the Strait of Georgia and between Race Rocks and the Juliet Buoy at the western entrance to Juan de Fuca Strait.
- Pilot disembarkation will be extended to take place near Race Rocks instead of Victoria (pilots have been trained to disembark by helicopter).
- Enhanced Situational Awareness techniques will be applied that will require:
 - o Safety calls by pilots and masters of laden tankers.
 - o Notices to industry issued by Pacific Pilotage Authority.
 - o Tactical use of escort tug along shipping route.
- Boating safety engagement and awareness program led by Pacific Pilotage Authority and Transport Canada.

APPENDIX E: Previous Summary of Indigenous Interests and Concerns included in Report Draft

Table 9 summarizes key issue themes that were previously identified as common interests and concerns expressed by Indigenous groups. This table was presented in the draft Condition 91 Supplemental Report which was circulated to Indigenous groups and marine regime stakeholders for comment. The following summary includes Trans Mountain comments to each issue and was provided as a means to initiate further feedback which was obtained during the October to January Comment Periods; as summarized in Section 4.2 and included in detail in Appendix A:

Table 9: Former Summary of Indigenous Interests and Concerns Identified in 2018-2019
[not exhaustive]

Theme	Issue	Trans Mountain Comments
Planning	Government sponsorship of ERR vs. industry-led	Canada's response regime requires industry to establish private-sector response organizations, providing a suitable level of response capability in keeping with the principles of polluter-pays. The Federal authority monitors and supervises the effective deployment and use of spill response measures and participates in the Command Team as part of ICS (Incident Command System).
Planning	Adequacy of oil spill risk assessment	The ERR has been developed by WCMRC based on risk assessments carried out by Det Norske Veritas (DNV). The ERR is above requirements of Canada's current response regime and plans to significantly reduce response time as well as increase response capacity for the region.
Planning	Lack of Indigenous participation in spill response	Trans Mountain and WCMRC are both pursuing opportunities with Indigenous groups through engagement.
Planning	Adequacy of response time	The ERR has been developed by WCMRC based on risk assessments carried out by Det Norske Veritas (DNV). The ERR is above requirements of Canada's current response regime and plans to significantly reduce response time as well as increase response capacity for the region.
Planning	Protection of environmental, cultural, economic assets specific to each indigenous community	WCMRC Geographic Response Strategies (GRS) are site specific; informed through engagement with Indigenous groups. This includes potential impact to salmon habitat and managing spills in critical habitat of Southern Resident Killer Whale (SRKW). Environmental mitigations explained in Direct Evidence [A95280] filed as part of the Reconsideration Hearing (MH 052-2018); e.g. Trans Mountain was a founding funder of the Enhancing Cetacean Habitat and Observation (ECHO) Program which is developing mitigations for shipping impacts to SRKW and has an MOU to support research with the Pacific Salmon Foundation; best practices to mitigate impacts of shipping will be incorporated into Trans Mountain's vessel acceptance criteria (VAS & WMTROG).

Planning	Handling of heavy / sunken oil	WCMRC has developed a submerged and sunken oil plan applicable to marine spill response. Trans Mountain has posted information about diluted bitumen to www.transmountain.com/diluted-bitumen-information and WCMRC will post submerge and sunken oil plan to www.coastalresponse.ca
Prevention	Protection of Fraser River from effects of oil spills	<p>Prevention: Pilots and tug escort are part of the enhanced maritime situational awareness and spill prevention measures introduced as a result of Project risk assessments; mitigating incidents with laden tanker transits.</p> <p>Response: Lower Fraser River is part of WCMRC response area. GRSs have been and will continue to be developed by WCMRC through engagement with Indigenous groups. WCMRC will be establishing a base on the Fraser River.</p>
Prevention	Protection of culturally sensitive sites	WCMRC GRSs identify areas for protection through proactive boom deployment; sites are informed through engagement with Indigenous groups
Prevention	Indigenous participation in tug program	Trans Mountain is facilitating escort tug procurement on behalf of Project shippers. The Tug RFP shall encourage tug service proponents to develop and share plans for Indigenous participation in their work.
Prevention	Environmental effects of tugs	Tug RFP identifies environmental considerations such as low emission and low noise features that proponents of tug service will be required to consider in their equipment and working practices, including measures and practices that will apply to underwater noise radiation.
Response	Tugs for Oil Spill Response in addition to Spill Prevention	During Hearing MH 052-2018 Trans Mountain committed to consider possibility of the escort tugs being provided the capability to participate in oil spill response. The Marine Shipper Sub-committee has considered this and a decision has been made to require tugs offered by proponents for escort of loaded tankers in the Juan de Fuca to be equipped with some amount of spill response equipment and the tug crew will be provided training by WCMRC on spill response. Response will be situation dependant, e.g. prevailing environmental conditions, the priorities of the circumstances of the incident, etc.