Appendix C.5 – Tsawwassen First Nation

I – Background Information

Tsawwassen First Nation (Tsawwassen) is located in southwestern British Columbia (BC). Tsawwassen entered into the Tsawwassen First Nation Final Agreement (Final Agreement), a modern comprehensive land claim agreement concluded with Canada and British Columbia under the BC Treaty Commission process that took effect April 3, 2009. The Final Agreement includes treaty settlement lands (i.e., Tsawwassen Lands) located near Roberts Bank Superport and the BC Ferries Terminal in Delta, BC. Tsawwassen's Fishing Area and Intertidal Bivalve Area are set out in the Final Agreement, along with other marine harvesting areas within the Salish Sea. The Final Agreement outlines provisions for the management of Tsawwassen Lands, natural resources, culture, governance, and finances.

The Tsawwassen are Coast Salish people and belong to the Hun'qum'i'num linguistic group. Fishing plays a central role in the diet, culture, and traditional lifestyle of the Tsawwassen, with salmon, crab, eulachon, and sturgeon serving as traditional food resources. Harvesting activities respect stewardship principles. The First Salmon ceremony, for example, recognizes that the salmon are "supernatural beings who [come] every year to give their flesh to the people who were obliged to treat them properly." As part of this ceremony, the salmon are prepared in a special way and their bones are returned to the water.

II – Tsawwassen First Nation Treaty Rights

- The shipping component of the Project would transect approximately 10 kilometres (km) of Tsawwassen's Fishing Area and Intertidal Bivalve Area, areas where the Tsawwassen has the right to harvest fish and intertidal bivalves for food, social and ceremonial purposes, as set out in the Final Agreement.
- The pipeline right-of-way (RoW) would transect approximately 11 km of the Tsawwassen
 Migratory Bird Harvest Area and Tsawwassen Wildlife Harvest Area, areas where the
 Tsawwassen has the right to harvest migratory birds and wildlife for food, social and ceremonial
 purposes, as set out in the Final Agreement.
- The Project does not intersect areas where the Tsawwassen have the right to gather plants, nor any Tsawwassen treaty settlement lands as defined under the Final Agreement.
- Tsawwassen's Treaty rights include the right to harvest fish and wildlife (including migratory birds) within Tsawwassen territory for food, social, and ceremonial purposes. The Final Agreement articulates treaty rights to harvest sockeye, chum, and chinook salmon, with allocations varying each year depending on species abundance. The Final Agreement also provides an opportunity for Tsawwassen to participate in new commercial fisheries established in Pacific Fishery Management Areas 14 20, 28, and 29.

¹ http://tsawwassenfirstnation.com/general-info/tfn-history-and-timeline/tsawwassen-culture/

III - Involvement in the NEB and Crown Consultation Process

The Tsawwassen First Nation Final Agreement is a treaty and land claims agreement within the meaning of s.25 and s.35 of the *Constitution Act, 1982* and guarantees Tsawwassen consultation rights with Canada, including the right to participate in federal and provincial environmental assessment processes, as defined within Chapter 15 of the Final Agreement. Specifically, it commits the federal government to providing Tsawwassen with an opportunity to comment on the scope, environmental effects, mitigation measures, and any follow-up programs associated with an environmental assessment of a federal project. For provincial environmental assessments, Final Agreement specifies that BC will ensure that Tsawwassen: receives timely notice of, and relevant available information on, the project and the potential adverse environmental effects; is consulted regarding the environmental effects of the project; and, receives an opportunity to participate in any environmental assessment of that project. It is noted that pursuant to the Final Agreement, British Columbia has no obligation to consult with Tsawwassen in respect of authorized uses that may affect the methods, times and locations of Tsawwassen harvesting of fish, intertidal bivalves and wildlife, where such authorized uses may result in Tsawwassen having no meaningful opportunity to harvest such resources. The term "consult" is defined in Chapter 1 and the consultation obligations under the Final Agreement are defined in Chapter 2, ss. 45-46.

Given the nature and location of the Project, including the potential impacts of increased marine vessel traffic within Tsawwassen's Fishing Area and Intertidal Bivalve Area and the potential impacts of a new pipeline RoW within the Tsawwassen Migratory Bird Harvest Area and Wildlife Harvest Area, the Crown is of the view that the federal and provincial environmental assessment provisions of Chapter 15 of the Final Agreement were triggered and that the legal duty to consult Tsawwassen lies at the deeper end of the *Haida* consultation spectrum. Tsawwassen was placed on Schedule B of the section 11 order issued by the BC Environmental Assessment Office (EAO), which afforded Tsawwassen opportunities to be consulted at a deeper level.

In order to fulfill the obligations for consultation under the Final Agreement, through the National Energy Board (NEB) process, Tsawwassen had the opportunity to comment on the scope, environmental effects, mitigation measures proposed by the proponent, and the NEB's recommended conditions. If the Project receives approval to proceed, the proponent would be required to consult with Tsawwassen on many of the management plans, including follow up programs, set out in NEB conditions, and in any relevant EAO proposed conditions. EAO provided Tsawwassen with the opportunity to comment on the draft referral materials, including the draft proposed conditions.

Tsawwassen was an active intervenor in the NEB hearings, filed written evidence, participated in two rounds of information requests, and submitted a written final argument. Tsawwassen also responded to the Crown's Issues Tracking Table Information Request by further elaborating their concerns [A71215].

The NEB provided \$40,000 in participant funding, plus travel for one individual to the hearing. The Major Projects Management Office (MPMO) offered Tsawwassen \$12,000 in participant funding for consultations following the close of the NEB hearing record. MPMO offered Tsawwassen an additional \$14,000 to support their participation in consultations following the release of the *NEB*

Recommendation Report. Tsawwassen signed a contribution agreement with the MPMO in response to the first of these offers, receiving a total of \$11,904 in allocated funding.

On September 12, 2016, Tsawwassen was provided \$5,000 in capacity funding by the EAO to assist with participation in consultation.

The Crown consultation team made efforts to meet with Tsawwassen during the period in advance of the release of the *NEB Recommendation Report* (February 2016 – May 2016), but were not successful in meeting. The Crown met with Tsawwassen on September 14, 2016. Additionally, Tsawwassen's Chief Bryce Williams met with the Minister of Natural Resources on July 5, 2016.

The Crown provided a first draft of the Consultation and Accommodation Report (Report) to Tsawwassen for review and comment on August 17, 2016. Tsawwassen provided comments on the first draft of this Report on October 5, 2016. Those comments have been considered and addressed in this Report. A second draft of this Report was provided to Tsawwassen for review and comment on November 3, 2016. The Crown has not received comments from Tsawwassen.

IV - Summary of Key Tsawwassen Issues and Concerns Raised

The Crown has gained its understanding of how Tsawwassen currently exercises its Treaty rights and its Project-related concerns through the nation's involvement in the NEB process (including Tsawwassen's submissions to the NEB and responses to the Crown's Information Request) as well as through correspondence and a consultation meeting with the Crown. In addition, the Crown has considered information regarding the proponent's engagement with Tsawwassen, as described in the proponent's <a href="https://doi.org/10.1001/journal.org/10.1001/jou

This section offers a summary of the key issues raised by Tsawwassen and does not present the views of the Crown as to whether it agrees or not with the issues. The Crown's assessment of the impact of the Project presented in the subsequent section incorporates a consideration of these issues and includes the Crown's views and conclusions. The Crown's understanding of Tsawwassen's key Project-related issues and concerns are summarized below:

Impacts on Treaty Rights

Tsawwassen's Application to Participate notes that the physical pipeline component transect a portion of Tsawwassen's territory, over which Tsawwassen members have a Treaty right to hunt and gather. In addition, the marine traffic plans associated with the proposed Project traverse Tsawwassen's marine-based territory (the southwest corner of the Tsawwassen Fishing Area), over which Tsawwassen has a Treaty right to fish for cultural and commercial purposes. Tsawwassen is concerned about the potential impacts of the proposed Project infringing on their treaty rights, particularly their rights related to harvesting, governance and culture. Particular concerns include effects on current and future commercial fishing interests and opportunities, aquaculture opportunities, and marine resource harvesting rights.

Tsawwassen noted that the proponent has not adequately assessed Tsawwassen's Treaty rights, and the impacts the Project may have on those rights.

Methodology, Process and Consultation

Tsawwassen expressed concerns with the NEB review process. Notably, Tsawwassen filed two Information Requests and follow-up Motions to Compel full and adequate responses from the proponent. Tsawwassen deemed many of the responses it received to be inadequate, though the NEB was generally satisfied. Tsawwassen believes that because adequate responses were not provided to its information requests, Tsawwassen, the NEB Panel, and the Crown do not fully understand the potential impacts of the Project on Tsawwassen's Treaty rights.

Tsawwassen raised concerns about the scope of the NEB's review of the Project, suggesting that consideration of environmental effects may have been limited. Tsawwassen believes that there is a fundamental difference between the Eurocentric worldview that underpins the scientific and economic analysis of the NEB review process and Tsawwassen's Indigenous worldview that places a greater emphasis on conservation. Tsawwassen believes the differences between these worldviews create a practical divide that is difficult to overcome.

Tsawwassen is concerned about the model the proponent used to assess the economic impacts of the proposed Project, particularly with respect to recent changes in the economic climate and production decisions in the Canadian oil sands. Tsawwassen specifically noted the assumption in the model that there are no supply constraints on the economy.

Tsawwassen believes that the NEB process and the Crown consultation process have not adequately fulfilled the Final Agreement's consultation requirements.

Cumulative Effects

Tsawwassen is also participating in the regulatory process for the Roberts Bank Terminal 2 Project and has raised concerns regarding the cumulative impact from known and reasonably foreseeable shipping activities off of the west coast. Tsawwassen has stated that increased vessel traffic amplifies the probability of accidents occurring.

Tsawwassen is concerned about potential and cumulative impacts (including underwater noise and shipstrike mortality) that the Project could have on the southern resident killer whale, a listed species under the *Species at Risk Act* (SARA). Tsawwassen has strong cultural ties to the southern resident killer whale and has suggested that regulatory action is required to attenuate underwater noise levels in the Salish Sea.

Marine Impacts

Tsawwassen notes that routine shipping could adversely impact marine organisms (plants and animals) of critical importance to Tsawwassen members through the accidental release of chemicals, the spread of invasive species, and the cumulative impacts of underwater shipping noise. Tsawwassen also

indicated that routine shipping could affect Tsawwassen members' use of and access to those organisms.

Accidents and Malfunctions (marine/terrestrial)

Tsawwassen is concerned about the potential release of diluted bitumen into the environment as a result of a spill or malfunction from the proposed pipeline or a tanker. The community anticipates that this would impact Treaty rights to harvest fish, aquatic plants and migratory birds under the Final Agreement. In particular, the pipeline crossing of the Fraser River near the Port Mann Bridge, the transit of ships through the Tsawwassen Fishing Area and Tsawwassen Intertidal Bivalve Harvest Area, and the brackish marshes in the Fraser River Delta adjacent to Tsawwassen Lands, are of great concern.

Tsawwassen also highlighted how a potential spill or malfunction could reduce Tsawwassen's ability to pass down traditional ecological knowledge from elders and experienced harvesters to younger generations. Tsawwassen notes that fewer opportunities for experiential teaching and learning can reduce members' quality of life.

In terms of regulations and compliance, Tsawwassen is concerned that current regulations do not eliminate the possibility that accidents (or illegal actions) will occur, and that screening efforts at the Westridge Marine Terminal do not identify steps that will be taken if/when a docking vessel does not meet regulatory standards. In the event of marine emergency involving oil tankers in the Salish Sea, Tsawwassen is concerned about the rescue tug fleet's current response capabilities.

Health and Human Safety

Tsawwassen continues to rely on and value access to country foods (e.g. salmon, bivalves, crab, and eulachon). Not only do these species provide sustenance to Tsawwassen members, they also have great cultural and economic importance to Tsawwassen. One central concern is that a spill or malfunction could impact their ability to access country foods, which in turn could lead to health repercussions and impacts on Treaty right to harvest fish and wildlife (including migratory birds) for food, social, and ceremonial purposes. The Final Agreement articulates treaty rights to harvest sockeye, chum, and chinook salmon, with allocations varying each year depending on species abundance.

The potential impacts of routine, marine shipping on Tsawwassen's access to and use of country foods was highlighted in Tsawwassen's Application to Participate. Specifically, it stated that risks include accidental releases of chemicals (e.g. through the discharge of ballast water), the spread of invasive species transported via hull fouling or ballast water, and underwater shipping noise and related cumulative impacts on marine life.

Cultural and Social Impacts

Tsawwassen indicated that the proposed Project may affect Tsawwassen's heritage and cultural interests (both known and unknown) as a result of construction, ongoing operations, and potential pipeline malfunctions. Tsawwassen noted that the Project Application does not make reference to cultural and historic sites of significance set out in the Final Agreement. Tsawwassen expressed concerns

that impacts to marine species, especially salmon, Dungeness crab and eulachon, could have a cultural, spiritual, social and economic impact to Tsawwassen members. Tsawwassen also expressed concerns about the impact of increased marine tanker traffic on the Southern resident killer whale.

Environmental Impacts

Tsawwassen is concerned about impacts of climate change, particularly with regards to greenhouse gas (GHG) emissions from operations in connection with the Project. Tsawwassen also raised concerns related to potential vibrations and noise introduced to the aquatic environment of the Fraser River during horizontal directional drilling (HDD) of the watercourse crossing.

Tsawwassen's Response to NEB Recommendation Report

Tsawwassen expressed concerns about the scope of the NEB review and by extension the limitations this places on the information contained in the *NEB Recommendation Report*. Tsawwassen conveyed their view that the Crown should be aware that the information contained in the *NEB Recommendation Report* does not contain all of the relevant information that they believe is necessary for the Governor in Council to make a decision on the Project. Tsawwassen also expressed their belief that the NEB's findings about the frequency and probability of spills are inaccurate and understate the true degree of risk.

Tsawwassen commented that while the NEB found there will be adverse impacts from the Project, the NEB assessed those impacts against the lowest denominator, and downplayed the potential for more serious impacts beyond a small spill. Tsawwassen expressed their belief that the NEB did not clearly define what is meant by "temporary", "reversible" or "low magnitude" when making findings in respect to adverse impacts on resources, mammals and birds. Tsawwassen have a low level of confidence in these NEB conclusions as, in Tsawwassen's view, they were developed by entities who do not live adjacent to and subsist from marine waters, where all of these adverse effects have the potential to significantly – and in some cases, irretrievably – impact Tsawwassen's Treaty rights.

V – Potential Impacts of the Project on Tsawwassen's Treaty Rights

A discussion of the Crown's assessment approach and understanding of the potential impacts of the Project on Aboriginal Interests are provided in Sections 2.4.3 and Section 4.3 of this Report, respectively. The Crown recognizes that areas within the asserted or established traditional territory of each Aboriginal group may be particularly important and valuable for specific qualities associated with traditional cultural or spiritual practices. These areas may also be used for traditional harvesting activities (e.g., hunting, trapping, fishing and gathering), by individual members or families.

The discussion in this section focuses on potential impacts of the Project on Tsawwassen's Treaty rights. These potential impacts are characterized by considering how the Project could affect several factors that may inform Tsawwassen's ability to practice Treaty rights:

- Biophysical effects to values linked to Tsawwassen's Treaty rights (e.g., fish, migratory birds, wildlife) that were assessed by the NEB;
- Impacts on the areas set out in the Final Agreement; and

Impacts on social, cultural, spiritual, and experiential aspects of exercising Treaty rights.

The ways in which the Project would more generally impact various types of Aboriginal Interests are described in Section 2.4.3 of this Report. The Crown's conclusion on the seriousness of Project impacts on Tsawwassen's Treaty rights considers information available to the Crown from the NEB process, consultation with Tsawwassen, Tsawwassen's engagement with the proponent, proponent commitments, recommended NEB conditions, as well as relevant proposed conditions of any Environmental Assessment Certificate issued by the Province.

It is the Crown's understanding that Tsawwassen completed a traditional land and resource use (TLRU) study in 1998 entitled: "Reconstructing Culture: A Traditional Use Study of the Tsawwassen First Nation" (A4Q1W3). The Report is based on secondary sources and primary ethnographic interviews conducted with Elders and community members with knowledge of the Tsawwassen First Nation territory. In comments provided to the Crown on the first draft of this Report and at the meeting with the Crown consultation team on September 14, 2016, Tsawwassen stated that it believes that overreliance on the TLRU study could lead to false conclusions about the potential impacts of the Project because Tsawwassen's cultural practices and activities have changed over time. Tsawwassen also stated that it believes that relying solely on the TLRU studies can be misleading because Tsawwassen's Treaty rights are broader than the context in which the TLRU study presented them.

The Tsawwassen First Nation Final Agreement (2009) was filed to the NEB as part of an Information Request (A3W8G0, A3W8G1, A3W8G2). In its Supplemental Technical Report (A4A0W1, A4S7I7, A4S7I8), the proponent estimated approximate distances and directions from the marine shipping lanes based on information in Tsawwassen's report. Additional information for Tsawwassen was presented in *Volume 5B* (A3S1S0) and *Volume 8B* (A3S4K3) of the Project application. Traditional uses identified by Tsawwassen include hunting, gathering plants, and access to fishing sites, sacred sites, habitation sites, gathering areas for community members, and trails and travelways. Tsawwassen people rely on the Salish Sea for food, social and ceremonial purposes, and have a deep cultural connection to the Salish Sea and to surrounding areas.

Impacts on Treaty Rights to Harvest Wildlife and Migratory Birds and Gather Plants

The extent of the Tsawwassen Wildlife Harvest Area and Tsawwassen Migratory Bird Harvest Area is the same as the Tsawwassen Territory, which the Project crosses. Specific species and harvesting sites (except Burns Bog for wildlife) are not identified in the Final Agreement.

Wildlife, as defined under the Final Agreement, includes all vertebrate and invertebrate animals, including mammals, birds, reptiles, and amphibians, and the eggs, juvenile stages, and adult stages of these animals. The definition excludes fish, as defined under the Final Agreement, and migratory birds. Migratory birds, under the Final Agreement, means birds, as defined under federal law enacted further to international conventions, and includes their eggs.

Tsawwassen's rights to harvest wildlife and migratory birds includes harvesting for domestic purposes and to trade or barter wildlife, wildlife parts, and migratory birds among themselves or with other Aboriginal people resident in BC. Harvested wildlife, wildlife parts (including meat and furs), migratory birds, and inedible migratory bird by-products (including down) may also be sold if the sale is permitted by federal, provincial, and Tsawwassen law. Wildlife and migratory bird harvesting rights may be exercised on private land (with the owner's permission) and, in the case of migratory birds, within National Wildlife Areas (with Canada's permission). With respect to wildlife harvesting specifically, the Final Agreement acknowledges there is "limited existing opportunity to harvest Wildlife and [there is] the likely future diminution or loss of any meaningful opportunity to harvest Wildlife in the Tsawwassen Wildlife Harvest Area".

Under the Final Agreement BC may authorize uses or dispositions of provincial Crown land that may affect the methods, times and locations of the Tsawwassen Right to Harvest Migratory Birds provided that BC ensures that those uses or dispositions do not deny Tsawwassen a reasonable opportunity to harvest under the Tsawwassen Right to Harvest Migratory Birds.

At present, Tsawwassen is not harvesting any wildlife or migratory bird species for which a conservation risk has been identified. Harvesting of migratory birds is permitted throughout the year.

Tsawwassen hunters have previously described locations throughout their traditional territory as preferred harvesting areas for wildfowl, including all of what are now Tsawwassen Lands and nearby fields, the shoreline from west of the Roberts Bank causeway up to and including Brunswick Point, and areas in and around Westham Island. Species harvested in the past include mallards, snow geese, and brant along the foreshore, and pintails, teals and widgeons in the back fields. Pheasants were previously taken "all over", and quail was also eaten. Other species identified as valuable are gadwall, goldeneye, bufflehead, and canvasback ducks; as well as Canada geese, gulls, and songbirds.

Tsawwassen explain that birds are no longer as abundant as they once were, with some species, such as the pheasant, now scarcely found and others, such as geese, preferring Boundary Bay over Roberts Bank. Ducks and geese remain an important winter food and source of feathers, used for ceremonial purposes. Tsawwassen report the number of hunters has diminished and along with it the opportunities for transference of knowledge to youth.

Plants, as defined under the Final Agreement, includes all flora and fungi but does not include aquatic plants (included in the definition for fish) or trees except for their bark, branches and roots.

Tsawwassen's right to harvest plants allows members to harvest plants for domestic purposes and includes the right to trade or barter plants among themselves or with other Aboriginal people resident in BC, as well as to exchange regalia or traditional or artistic objects made of plants among themselves or with other Coast Salish people for ceremonial purposes. There are four Tsawwassen Plant Gathering Areas designated under the Final Agreement

As described in the TLRU study, their Final Argument (A4X5LO), Written Evidence (A4L7T2), and in the proponent's Aboriginal Engagement Report (July 2016), Tsawwassen community members hunt elk, deer, black bear, beaver, ducks, mallards and loons; however, fishing remains the staple of subsistence harvesting. Traditionally, Tsawwassen hunted seafaring mammals, such as porpoises, seals and sea lions. Nets, bows and arrows, pitfall traps, concealed nets and two-pronged spears were traditional hunting instruments, although today Tsawwassen members utilize modern technology. Tsawwassen notes plants such as camas, bog blueberries and wild cranberries as being important, as well as an additional 34 plants, not specifically identified. Traditionally, western red cedar was used to fashion rope and canoes, and create clothing; Douglas-fir was used to make tools and the bark was used medicinally; and maple and red alder were used for preserving and preparing fish.

Tsawwassen identified six hunting sites and two plant gathering sites in the TLRU study, none of which are located within the pipeline corridor. The nearest hunting and plant gathering sites are approximately 17 km and 20 km, respectively, from the proposed pipeline corridor. No specific trapping sites were identified by Tsawwassen in the TLRU. In *Volume 8B* (A3S4K3) of the Project application, Westham Island was identified as a marine bird hunting site within the Marine RSA²; however, shipping lanes are not crossed to access the site.

Tsawwassen raised the following issues and concerns related to potential Project impacts on their Treaty rights to harvest wildlife, migratory birds and to gather plants:

- Cumulative impact from known and reasonably foreseeable shipping activities off the west coast;
- The physical pipeline component bisects a portion of Tsawwassen's territory, over which Tsawwassen members have Treaty rights to hunt and gather;
- Potential release of diluted bitumen into the environment as result of a spill or malfunction from the proposed pipeline or a tanker; and
- A spill or malfunction from the proposed pipeline or a tanker would impact their Treaty rights to hunt migratory birds.

Tsawwassen identified many concerns related to the environmental effects of the Project on their Treaty rights to harvest wildlife and migratory birds, and gather plants. As described in the *NEB Recommendation Report*, Project-related activities are likely to result in low to moderate magnitude effects on rare plants and lichens and vegetation communities of concern, , wetlands, and wildlife and wildlife habitat (including species at risk) listed species. NEB conditions, if the Project is approved, would either directly or indirectly avoid or reduce potential environmental effects associated with hunting, trapping, and gathering (Section 4.3 of this Report). With regards to specific concerns raised by

² The area extending beyond the LSA boundary (i.e. the zone of influence or area where the element and associated indicators are most likely to be affected by Project-related marine vessel traffic.) where the direct and indirect influence of other activities could overlap with Project-specific effects and cause cumulative effects on the environmental or socio-economic indicator.

Tsawwassen, the proponent would implement several mitigation measures to reduce potential effects to species important for Tsawwassen's hunting, trapping, and gathering activities. The proponent is committed to minimizing the Project footprint to the maximum extent feasible, and all sensitive resources identified on the Environmental Alignments Sheets and environmental tables within the immediate vicinity of the RoW will be clearly marked before the start of clearing. Mitigation measures to reduce effects on habitat, limit barriers to movement, avoid attraction to wildlife to the work site, minimize sensory disturbance and protect site specific habitat features are outlined in the Project Environmental Protection Plan (EPP) and the Wildlife Management Plans.

Tsawwassen raised concerns with the Project's potential impacts relating to specific locations and access to hunting, trapping, and plant gathering activities, including their harvesting grounds along the Fraser River near the Port Mann Bridge (Site FR).

Project-related construction and routine maintenance is expected to cause short-term, temporary disruptions to Tsawwassen's access to hunting, trapping and plant gathering activities, largely confined to the Project footprint for the pipeline and associated facilities. The Crown understands that with construction and reclamation activities disruptions to access may result in a loss of harvesting opportunities for Tsawwassen. NEB conditions, if the Project is approved, would either directly or indirectly avoid or reduce potential impacts on specific locations and access associated with hunting, trapping, and gathering sites (Section 4.3.1 of this Report). With regards to specific concerns raised by Tsawwassen, the proponent would implement several mitigation measures to reduce potential effects on TLRU sites important for Tsawwassen's hunting, trapping, and plant gathering activities, such as management plans that include access management, scheduling and notification of Project activities, and environmental monitoring programs that monitor access control measures. The Access Management Plan is intended to reduce disturbances caused by access, construction equipment and vehicle traffic, during and following construction in order to minimize disturbance to access to Tsawwassen's traditional lands. The proponent has committed to minimizing the development of access routes, controlling public access along the construction right-of-way, selecting appropriate access routes that cause the least disturbance to high quality, sensitive wildlife habitat, managing traffic on these routes and determining appropriate construction reclamation. The proponent has also committed to work with applicable resource managers, traditional land and resource users to define locations where access control is necessary, and what type(s) of access control will be implemented. In the event that hunting, trapping, and plant gathering sites are identified during ongoing engagement with Tsawwassen prior to construction, the sites will be assessed, and appropriate mitigation measures will be determined. The proponent committed to working with Tsawwassen to develop strategies to most effectively communicate the construction schedule and work areas to community members.

Tsawwassen expressed concern with direct and indirect effects of the Project on social, cultural, spiritual, and experiential aspects of its hunting, trapping, and plant gathering activities, including particular concerns about the adverse impacts of the Project on their ability to exercise their Treaty right to harvest migratory birds.

Project-related construction and routine maintenance is expected to cause short-term, temporary disruptions to Tsawwassen's hunting, trapping, and plant gathering activities. The Crown understands that this short-term disruption could temporarily alter the behaviour of community members' hunting, trapping or plant gathering activities during construction, and that reduced participation in traditional activities, while not expected to occur from temporary access disruptions within the footprint of the Project, could impact the practices of community members. NEB conditions, if the Project is approved, would either directly or indirectly avoid or reduce potential social, cultural, spiritual, and experiential effects associated with hunting, trapping, and plant gathering activities (Section 4.3.1 of this Report). With regards to specific concerns raised by Tsawwassen, the proponent would implement several mitigation measures to reduce potential effects to Tsawwassen hunting, trapping, and plant gathering activities. The proponent is committed to implementing weed management (as outlined in the Weed and Vegetation Management Plan) to reduce the potential for weed infestation following construction, and utilizing an Integrated Vegetation Management approach intended to reduce the use of herbicides and promote healthy ecosystems. The proponent would consult with Aboriginal groups regarding problem vegetation management and methods of treatment. Measures outlined in the proponent's Reclamation Management Plan are intended to stabilize and revegetate affected lands to achieve land productivity along the construction ROW and footprint, equivalent to the adjacent land use. The Crown notes the proponent's commitment to ongoing engagement with Aboriginal groups that are interested in providing traditional knowledge related to the location and construction of the Project.

In consideration of the information available to the Crown from the NEB process, consultation with Tsawwassen, Tsawwassen's engagement with the proponent, the proponent's proposed mitigation measures and the recommended NEB conditions, as well as relevant proposed conditions of any Environmental Assessment Certificate issued by the Province, Project construction and routine maintenance during operation and Project-related marine shipping activities are expected to result in a negligible-to-minor impact on Tsawwassen's Treaty rights to harvest wildlife and migratory birds, and gather plants.

Impacts on Treaty Rights to Fish and Harvesting Aquatic Plants

Chapter 9 of the Tsawwassen First Nation Final Agreement establishes rights to fish, which also includes intertidal bivalves and other shellfish, crustaceans, and marine animals (excluding cetaceans), the parts of these fish, as well as their eggs, sperm, spawn, larvae, spat, juvenile stages and adult stages. The right to harvest fish under the Final Agreement includes the right to fish for domestic purposes and to trade or barter those fish among Tsawwassen members or with other Aboriginal people resident in BC.

The Tsawwassen Fishing Area, which applies to fish and aquatic plants but excludes intertidal bivalves, includes the waters of the Main Arm of the Fraser River westerly of the power lines downstream of the Port Mann Bridge, the waters of the North Arm of the Fraser River from the junction of the Main Arm downstream to the Arthur Laing Bridge, the Middle Arm of the Fraser River, the South Arm of the Fraser River, and parts of the waters of the Strait of Georgia and Boundary Bay. This area would be crossed by Project-related vessels in the Strait of Georgia.

Under the Final Agreement BC may authorize uses or dispositions of provincial Crown land that may affect the methods, times and locations of the harvest of Fish and Aquatic Plants under the Tsawwassen Fishing Right, provided that BC ensures that those uses or dispositions do not deny Tsawwassen a reasonable opportunity to harvest Fish and Aquatic Plants in the Tsawwassen Fishing Area.

Domestic allocations for sockeye, chum pink, chinook, and Coho salmon, which are centrally important to Tsawwassen, are calculated using formulas described in the Final Agreement. Salmon are fished in accordance with Tsawwassen Harvest Documents as set out in the Final Agreement and salmon fishing may occur between April to November, though more commonly salmon fishing occurs between May and October.

In addition to fishing for domestic purposes, the Tsawwassen Harvest Agreement, which is a separate contractual arrangement between the parties to the Final Agreement, is intended to increase commercial fishing capacity for Tsawwassen. The Tsawwassen Harvest Agreement provides for an annual commercial allocation of Fraser River sockeye, chum, and pink salmon (odd years only).

Aquatic plants (including attached and detached kelp and seaweeds) may be harvested for domestic purposes in the Tsawwassen Fishing Area at any time of day or year. These plants are specifically defined in the Final Agreement as all benthic and detached algae, brown algae, red algae, green algae, golden algae and phytoplankton, and all marine and freshwater flowing plants, ferns and mosses, growing in water or soils that are saturated during most of the growing season.

Marine mammals, including porpoise, seals, and sea lions, were once harvested by the Tsawwassen. These marine animals (with the exception of porpoise, a cetacean) fall within the meaning of fish under the Final Agreement. Tsawwassen have indicated that the community does not currently harvest marine mammals and that there is no desire to harvest marine mammals; however, marine mammals, including killer whale, remain culturally important to the community.

Tsawwassen's TLRU study (A4Q1W3), Written Evidence (A4L7T2), Final Argument (A75121), and the proponent's Aboriginal Engagement Report (July 2016), all discussed that Tsawwassen members are a fishing people and they consider fishing to be the most important subsistence harvesting activity available. In their written evidence, Tsawwassen highlighted the nutritional, economic, and cultural importance of salmon and Dungeness crab, which they harvest in large quantities, and eulachon, which they are only able harvest in small quantities because of its COSEWIC endangered status. According to their written evidence (A4L7T2), the importance of these three species "to the Tsawwassen people cannot be overstated" (p. 7).

Salmon fishing is concentrated at New Westminster, Lulu Island, Cannery Point at the southeastern shore of the Point Roberts peninsula and various sites along the Fraser River. Sturgeon is also an important aquatic resource for Tsawwassen. Historically, sturgeon were caught using tidal traps, gaff-hooking, sack nets and harpoons and are currently caught at Roberts Bank, Canoe Pass, Lulu Island and along the Fraser River. Other marine resources harvested include flounder, herring, clams, cockles, blue

mussels, crabs and mollusks. Historically, porpoises, sea lions and whales were also harvested. In addition, several cannery sites were identified as being involved in traditional use activities.

In their TLRU study, Tsawwassen identified two salmon and sturgeon fishing sites, Fraser River and New Westminster, within the proposed pipeline corridor. Six marine fishing sites within the Marine RSA were identified, of which shipping lanes are crossed to access five fishing sites in the New Westminster, Lulu Island, Roberts Bank, Canoe Pass and Point Roberts. As summarized in the Supplemental Reports, seven marine harvesting and fishing sites were identified in the Marine RSA during the desktop study and literature review conducted for the Project: Galiano Island, Mayne Island, Samuel Island, Saturna Island, Tumbo Island, Gulf Islands and Strait of Georgia. Shipping lanes are crossed to access these seven sites. According to Tsawwassen, members use modern technologies when fishing at these sites, which generally results in larger yields relative to effort invested.

Tsawwassen raised specific concerns regarding potential Project impacts on their freshwater fishing, marine fishing, and harvesting activities, including that:

- A spill or malfunction from the proposed pipeline or a tanker would impact Treaty rights to fish.
 The two Project works/activities of greatest concern are (a) the crossing of the Fraser River near
 the Port Mann Bridge; and (b) the transit of ships through the Tsawwassen Fishing Area and
 Tsawwassen Intertidal Bivalve Harvest Area;
- Effects on current and future commercial fishing interests and opportunities, aquaculture opportunities, and marine resource harvesting rights;
- Concerns related to potential vibrations and noise introduced to the aquatic environment of the Fraser River during horizontal directional drilling (HDD) of the watercourse crossing;
- Cumulative impact from shipping activities off the west coast;
- Potential impacts of routine marine shipping on country food (e.g., accidental releases of chemicals, including discharge of ballast water; impacts of invasive species transported via hull fouling or ballast water; underwater shipping noise and cumulative impacts thereof) and potential resulting health impacts on Tsawwassen; and
- A spill or malfunction could impact the ability to access country food, which in turn could have health implications.

The general direct and indirect effects of the Project on the Treaty rights to fish and harvest aquatic plants, along with key mitigation measures, are described in Sections 4.3.2 and 4.3.3 of the main body of this Report. The conditions in the NEB Report would either directly or indirectly avoid or reduce potential impacts on specific locations associated with freshwater fishing and marine fishing and harvesting sites (Section 4.3.3 of this Report). With regards to specific concerns raised by Tsawwassen, the proponent would implement a range of mitigation measures to reduce potential effects on TLRU/TMRU sites important for Tsawwassen's freshwater and marine fishing and harvesting activities, such as access management plans, scheduling and notification of Project activities including Project-related marine vessel traffic, and environmental monitoring programs.

In consideration of the information available to the Crown from the NEB process, consultation with Tsawwassen, Tsawwassen's engagement with the proponent, the proponent's proposed mitigation measures and the recommended NEB conditions, as well as relevant Provincial proposed conditions of any Environmental Assessment Certificate issued by the Province, Project construction and routine maintenance during operation and Project-related marine shipping activities are expected to result in minor impacts on Tsawwassen's Treaty rights to fish and harvest aquatic plants.

Impacts on Treaty Rights to Culture and Heritage

Tsawwassen's right to practice their culture, as well as use of the Hənqəminəm language, is identified in the Final Agreement Chapter 14.

Tsawwassen emphasize the importance of the Fraser River to their members for fishing, transportation, recreation, and cultural purposes. Tsawwassen stress the importance of their continued ability to fish, along with and the significance of fishing and associated activities to their community's culture and economy. Participation in fishing, an integral element of Tsawwassen culture, is decreasing, due to diminishing stocks, increasing harvesting restrictions and higher costs related to having to travel farther to harvest traditional resources.

The TLRU study indicated that Tsawwassen community members would historically leave their semi-permanent winter homes to travel to sites along the Fraser River from spring until late summer before moving back to their wintering grounds as plant and animal resource availability decreased. Village and campsites associated with fishing activities are the most common type of habitation site, of which many are found on or near the Fraser River. Historically, shared camp sites were located along the Fraser River, shared between Tsawwassen people and other nearby communities due to intermarriage. Burial sites, primarily ground burials, were reported in the TLRU study; however, many of the names or locations of ceremonial and religious sites were confidential. Tsawwassen did not identify any gathering specific trails or travelways, habitation sites, gathering places, or sacred areas in the TLRU study.

In their written evidence and final argument, Tsawwassen expressed concerns about the potential impacts of the Project on southern resident killer whales, with which they have strong cultural ties. Historically, Tsawwassen adorned their ocean-going canoes with images of the *kwulhmulucun* (killer whales) and *kwulhmulucun* feature prominently in many of their stories. Given those close cultural ties, Tsawwassen is deeply concerned about the impact of Project related tanker traffic, an in particular the impacts of an increase in marine noise, will have on this endangered species. Tsawwassen raised other specific concerns regarding potential Project impacts on their other traditional and cultural practices, including:

- Cumulative impacts (including underwater noise and ship-strike mortality) to the southern resident killer whale, a SARA-listed species with which the Tsawwassen have strong cultural ties;
- The proposed Project may adversely impact Tsawwassen's heritage and cultural interests (both known and unknown), which are of importance to Tsawwassen, as a result of construction, ongoing operations, and potential malfunctions of the pipeline;

- The Project application does not make reference to cultural and historic sites of significance set out the Final Agreement;
- Potential spill or malfunction could reduce Tsawwassen's ability to pass down traditional ecological knowledge from elders and experienced harvesters to younger generations; and
- Fewer opportunities for experiential teaching and learning can reduce members' quality of life.

The general direct and indirect effects of the Project on Treaty rights to culture and heritage, along with key mitigation measures, are described in Section 4.3.4 of the main body of this Report. Tsawwassen identified cultural use of or concerns regarding southern resident killer whales during the NEB and Crown consultation processes. The *NEB Recommendation Report* concluded that the increase in marine vessel traffic associated with the Project is likely to result in significant adverse effects on the traditional Aboriginal use associated with the southern resident killer whale. The Crown understands that the southern resident killer whale population is in decline, and that additional adverse environmental effects from Project-related marine shipping would be considered significant.

The Crown understands that there will be temporary interruptions to Tsawwassen's cultural and spiritual practices, or that their participation traditional activities is curtailed during Project construction and routine maintenance activities. It is noted that the proponent has committed to ongoing engagement with Aboriginal groups in providing traditional knowledge related to the location and construction of the Project.

In consideration of the information available to the Crown from the NEB process, consultation with Tsawwassen, Tsawwassen's engagement with the proponent, the proponent's proposed mitigation measures and the recommended NEB conditions, as well as relevant Provincial proposed conditions of any Environmental Assessment Certificate issued by the Province, Project construction and routine maintenance during operation and Project-related marine shipping activities are expected to result in minor to moderate impacts on Tsawwassen's Treaty rights to culture and heritage. The moderate impacts on Tsawwassen's culture and heritage would arise from Project-related marine shipping activities on traditional Aboriginal use associated with the Southern resident killer whale.

Impacts Associated with Accidental Tanker or Pipeline Spills

Tsawwassen expressed concern with direct and indirect effects of a pipeline spill or a Project-related tanker spill on their Treaty rights, in particular spills at Salish Sea (Site D) and Salish Sea, Archane Reef (Site E) and at the pipeline's Fraser River Crossing near the Port Mann Bridge (Site FR). These concerns include:

Impact of a spill on Treaty rights to harvest fish, aquatic plants and migratory birds under the
Final Agreement. In particular, the pipeline crossing of the Fraser River near the Port Mann
Bridge, the transit of ships through the Tsawwassen Fishing Area and Tsawwassen Intertidal
Bivalve Harvest Area, and the brackish marshes in the Fraser River Delta adjacent to
Tsawwassen Lands, are of great concern;

- Reduction of Tsawwassen's ability to pass down traditional ecological knowledge from elders and experienced harvesters to younger generations;
- Impact of a spill on Tsawwassen's ability to access country foods, which in turn could lead to health repercussions and impacts on Treaty right to harvest fish and wildlife (including migratory birds) for food, social, and ceremonial purposes;
- Lack of a full understanding of the risks and effects of a potential marine or terrestrial oil spill;
- An oil spill in Tsawwassen's territory would be extremely traumatic to community members;
- Releases of crude oil would adversely impact marine ecosystems, which would hinder Tsawwassen's conservation and habitat restoration efforts; and
- A major spill could destroy Tsawwassen's way of life, including shoreline of reserve land, culture, domestic harvesting, as well as commercial harvesting.

The Crown acknowledges the numerous factors that would influence the severity and types of effects associated with a tanker or pipeline spill, and that an impacts determination that relates the consequences of a spill to specific impacts on Tsawwassen's Treaty rights has a high degree of uncertainty. A discussion of the potential impacts of an accidental tanker spill or pipeline spill is provided in Section 4.3.6 of this Report. In consideration of this information and analysis, as well as information available to the Crown on Tsawwassen's Treaty rights raised by Tsawwassen during the NEB process and Crown consultation process, a tanker or pipeline spill associated with the Project could result in minor to serious impacts on Tsawwassen's Treaty rights. In making this general conclusion, the Crown acknowledges that Aboriginal peoples who rely on subsistence foods and natural resources are at greatest risk for adverse effects from an oil spill.³

VI - Conclusion

The Crown understands the Project could adversely impact the ability of Aboriginal groups to use lands, waters and resources for traditional purposes. The Crown acknowledges that proponent commitments, recommended NEB conditions and the existing pipeline and marine safety regimes would only partially address these ongoing burdens and risks.

Under the typical conditions for pipeline construction and operations and for marine vessel use of the area between the WMT and the 12 nautical mile limit (J-buoy) through the Salish Sea and Strait of Juan de Fuca, the Crown expects impacts of Project-related activities on the exercise of Tsawwassen's Treaty rights would be up to moderate.

The Crown is supportive of consultation requirements provided by the NEB and EAO in the various conditions, which would support Tsawwassen's ongoing involvement and participation in the proponent's detailed Project planning, including the development of site-specific measures or pipeline routing to further avoid or mitigate adverse impacts on Treaty rights, as well as the involvement of the Tsawwassen First Nation in emergency response planning activities. The federal Crown is considering

³ Trans Mountain Final Argument, p. 85 and 207

incremental measures that would further accommodate the potential adverse impacts of the Project on Tsawwassen First Nation, as discussed in Sections 4 and 5 of the main body of this Report.