

Appendix C.1 - Kwikwetlem First Nation

I – Background Information

The Kwikwetlem First Nation (Kwikwetlem) is part of the Downriver Halkomelem dialect subdivision of the Central Coast Salish community, centred in the municipalities of Coquitlam and Port Coquitlam, British Columbia (BC) on the north shore of the Fraser River. There are two Kwikwetlem reserves, with the principle being Coquitlam Indian Reserve #2. As of January 2016, Kwikwetlem has a registered population of 96 people, of which 36 individuals live on reserve. Kwikwetlem members historically spoke hə́nqəmínəhə́nqəwnriver dialect of the Halkomelem Salishan language.

Kwikwetlem signed a 2015 Forest and Range Consultation and Revenue Sharing Agreement, identifying a defined area as its traditional territory.¹ The reserves lie within Kwikwetlem Core Territory, which is defined by Kwikwetlem as “those lands, waters, and resources centred on the Coquitlam watershed and within which the Nation asserts title and rights. An adjoining Area of Use and Interest marks the region of regular ancient and ongoing travel, resource use, and social interaction surrounding the core territory and in which the Nation asserts resource and heritage management interests” ([A4S9A7](#)). Together, these areas are referred to as “Kwikwetlem territory”.

Kwikwetlem is not currently involved in negotiations with the BC Treaty Commission, but did file a Statement of Intent (SOI) map in 1999.

II – Preliminary Strength of Claim Assessment

- The Project corridor transects approximately 26 kilometers (km) of Kwikwetlem’s asserted traditional territory from Fort Langley to the east of the pipeline’s crossing under the Fraser River through to Burnaby Mountain and the terminus of the pipeline. The distance from the Right of Way (RoW) to the nearest Kwikwetlem community is estimated to be 0.6 km. Less than 1 km of the marine shipping route would pass within Kwikwetlem’s asserted traditional territory.
- The Crown's preliminary assessment of Kwikwetlem's claim for rights over the area associated with the terminus of the Project to Fort Langley ranges from weak to strong. The portion of proposed pipeline that runs parallel to the Fraser River to the mouth of the Coquitlam River and the section between this and the Pitt River is within an area ethnographers considered to be part of the historical territory of the Kwikwetlem people. The Coquitlam watershed area was used for sustenance activities prior to contact with European settlers, which would support a strong claim. For portions of the proposed RoW to the east and west of this area, the claim weakens as these areas were considered by ethnographers to be outside the historical territory of the Kwikwetlem people. There is limited information of their historical use of these areas.

¹ http://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/consulting-with-first-nations/agreements/kwikwetlem_fcrsa_executed_april_30_2015.pdf

- The Crown's preliminary assessment of Kwikwetlem's claim for title over the area associated with the terminus of the Trans Mountain pipeline to Fort Langley ranges from weak to strong. The portion of proposed pipeline that runs parallel to the Fraser River to the mouth of the Coquitlam River on the north side of the Fraser is within an area ethnographers considered to be part of the historical territory of the Kwikwetlem people. The Kwikwetlem were present and utilizing the Coquitlam watershed at 1846, particularly the Coquitlam River, which would support a strong claim. For portions of the pipeline to the east and west of this area, the claim weakens as these areas were considered by ethnographers to be outside the historical territory of the Kwikwetlem people with limited information of their historical use at 1846.
- The Crown's preliminary assessment of Kwikwetlem's claims for Aboriginal rights to harvest marine resources within the shipping route of the Project near the terminus of the pipeline in Burnaby is that it appears to be weak. This area is considered by ethnographers to be outside of the Kwikwetlem traditional territory and there is limited information of their historical use of this area. Kwikwetlem maintains that it has a strong claim for Aboriginal rights to harvest marine resources within the shipping route.
- The Crown's preliminary assessment of Kwikwetlem's *prima facie* claim of Aboriginal title to the upland area of the shipping route of the Project near the terminus of the pipeline in Burnaby is considered weak. Kwikwetlem core territory is associated with the Coquitlam River and watershed with some village sites on the Fraser River and in Port Moody connected by overland trails. Port Moody is proximal to the marine shipping route; however, information of Kwikwetlem use of the area is minimal and indicates seasonal use rather than sufficient and exclusive occupation at 1846. Kwikwetlem believes that it has a strong claim for Aboriginal title in this upland area, since there are resource sites and connecting trails subject to regular use on a seasonal basis.

III – Involvement in the NEB and Crown Consultation Process

Given the nature and location of the Project, and the potential impacts of the Project on Kwikwetlem's Aboriginal Interests, the Crown is of the view that the legal duty to consult Kwikwetlem lies at the deeper end of the *Haida* consultation spectrum. Kwikwetlem was placed on Schedule B of the section 11 order issued by the Environmental Assessment Office (EAO), which afforded Kwikwetlem opportunities to be consulted at a deeper level.

Kwikwetlem registered as an intervenor in the National Energy Board (NEB) hearing process. Their involvement included an Application to Participate, Late Evidence Filing (August 21, 2015) which was denied by the NEB, and a written final argument. The Late Evidence Filing included a Kwikwetlem Interests Report including a Heritage and Traditional Knowledge study, a Fraser River Area Eulachon Study and a Re-Establishment Plan for the Coquitlam Reservoir Sockeye. Although Kwikwetlem's late evidence was not considered formally by the NEB in its review of the Project, the Crown received the late evidence and confirmed to Kwikwetlem that this material will be considered by the Crown as part of the consultation process.

Kwikwetlem filed a written argument in chief with the NEB, including several comments on the draft NEB conditions, several of which were adopted by the NEB in its May 19, 2016 Report. Kwikwetlem's comments were with respect to the requirements placed on the proponent to engage potentially affected First Nations in the development of draft plans to be filed with the NEB as part of detailed Project planning and operation.

In August 2015, Kwikwetlem wrote to the Major Projects Management Office (MPMO) to express concern over a perceived lack of Crown consultation. Follow-up was conducted via phone calls, emails and by letter dated February 18, 2016, which set out the details of the government's transition plan for the Project, including the key remaining steps of the consultation process.

The Crown consultation team met with Kwikwetlem representatives on March 2, 2016 to discuss the Project, federal government's interim measures for the Project, and the ongoing consultation process. Kwikwetlem raised their concerns over the First Nation's strained relationship with the proponent and at the request of Kwikwetlem, MPMO shared the record of this meeting with the proponent as an encouragement for more in depth engagement. A second meeting between the Crown consultation team and Kwikwetlem representatives was held on September 15, 2016 to identify key concerns, receive feedback, and discuss impacts of the Project on the Kwikwetlem. The key topic of discussion was to identify outstanding issues and concerns which haven't been fully dealt with through the conditions in the NEB report. Kwikwetlem's concerns centered on what they viewed as an inadequate assessment of the adverse impacts of the Project on its Aboriginal rights due primarily to insufficient information in the possession of the Crown, as well as a lack of attention to the need to obtain Kwikwetlem's consent to the Project in an area over which it claims title.

Kwikwetlem signed a contribution agreement with the NEB for \$5,550 in participant funding plus travel for one to the hearing. According to NEB records, Kwikwetlem have fully invoiced the NEB for expenses, with the full \$5,500 paid out to the group. Kwikwetlem received \$11,980 from the MPMO in participant funding to facilitate participation in consultation with the Crown following the close of the NEB hearing record. Kwikwetlem also received an additional \$14,000 to support their participation in consultations following the release of the *NEB Recommendation Report*. Kwikwetlem signed contribution agreements with the MPMO in response to both of these offers, for a total of \$25,980 in allocated funding. On July 26, 2016 Kwikwetlem was issued \$5,000 in capacity funding from EAO to participate in consultation with the Crown.

The Crown provided a first draft of the Consultation and Accommodation Report (the Report) to Kwikwetlem for review and comment on August 17, 2016. Kwikwetlem provided comments on the draft Report to the Crown on September 23, 2016. A second draft of this Report was provided to Aboriginal groups for review and comment on November 1, 2016. The Crown has not received comments from Kwikwetlem.

Kwikwetlem provided a separate Aboriginal group submission to the Crown on November 15, 2016.

IV – Summary of Key Kwikwetlem Issues and Concerns Raised

Kwikwetlem, in their filing to the NEB, noted their Aboriginal interest as follows: “to enact and exercise Aboriginal rights and title in our relations with other governments and stakeholders within our traditional territory including all matters related to impacts to and management of lands, waters and heritage”(A3U2J6).

As a key procedural concern, Kwikwetlem have noted that the Crown must consider and address impacts to Kwikwetlem’s Aboriginal title from the Project, including by seeking Kwikwetlem’s consent if that is what is required. Kwikwetlem wants to be involved in this assessment, and are seeking a consent-based consultation process related to their title claim.

Kwikwetlem have also written correspondence to highlight their concerns with the proponent’s consultation efforts as well as Crown consultation efforts.

In the May 2, 2016 meeting with the Crown consultation team, Kwikwetlem explained that the NEB process was viewed as not open to them. Kwikwetlem noted it is a small First Nation with limited capacity, and the NEB process is a significant administrative burden. Kwikwetlem noted that they are disengaged from the NEB process not due to a lack of interest, but because the NEB feels like a “wall.”

In the September 15, 2016 meeting with the Crown consultation team and subsequent submission to the Crown on September 19, 2016, Kwikwetlem emphasized a number of outstanding issues related to Strength of Claim preliminary assessment outcomes related to exercise of its Aboriginal rights and title; lack of appropriate detail on the Projects adverse impacts on its Aboriginal rights, title and Interests; disagreement with the Crown’s reliance on the NEB process to fulfill its legal duty to consult, to the fullest extent possible; and, that consultation has been inadequate.

In addition, Kwikwetlem have noted their view that they received insufficient participant funding to enable the First Nation to have the opportunity to conduct its own assessment of the risks of a spill from the Project or the ability of the proponent to adequately respond to an accident or malfunction leading to a spill.

This section offers a summary of the key issues raised by Kwikwetlem, 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 Kwikwetlem’s key Project-related issues and concerns are summarized below:

Environmental Impacts

- Effects of large construction projects on the health of the Fraser River fishery as well as the potential for the Project to have adverse effects on Kwikwetlem lands and water; and
- Conservation of species including eulachon, heron and sturgeon was also raised as a key concern.

Pipeline Safety

- Pipeline spill prevention through pipeline design features;
- Leak detection;
- Particular challenges in responding to a pipeline spill;
- Pipeline spill preparedness and spill response planning; and
- Marine spill preparedness and response.

Cumulative Effects

- Cumulative effects on traditional use areas across Kwikwetlem territory;
- Alteration of traditional lands and landscape, and access restrictions that limit opportunities to engage in traditional activities represent a profound cultural loss to the Kwikwetlem community; and
- Displacement of Kwikwetlem members due to the industrialization, urbanization and privatization of lands in Kwikwetlem traditional territory.

Impacts on Archaeological Sites and Sites of Cultural Importance

- Kwikwetlem indicated that a number of known archaeological sites have been located as part of small-scale development-based surveys. Intensive and long-term use of the area and the close proximity of the Project area to known Kwikwetlem villages suggest that unrecorded place names and archaeological sites should be anticipated.

The following areas within the Project footprint and adjacent areas are considered to be of high or profound cultural sensitivity to Kwikwetlem:

- Fraser Heights / Surrey Bend;
- Fraser River Crossing (Colony Farm / Cape Horn) – used for hunting, fishing, plant gathering, settlements, spiritual uses, ceremonial activities, technological production; and
- Fraser Mills / Brunette River.

In Kwikwetlem's Final Written Argument to the NEB ([A75112](#)), Kwikwetlem indicated that:

- The proposed pipeline route goes through "the heart of [Kwikwetlem] traditional territory, crossing lands, waterways, and culturally significant sites that have supported and helped to define [Kwikwetlem's] distinct culture for millennia." Moreover, they expressed concerns that construction for additional infrastructure on Kwikwetlem lands may result in restricted access to parts of Kwikwetlem territory.
- "...further assessment of the impacts to [Kwikwetlem's] Aboriginal rights and interests is required before any recommendation can be made."
- "The loss of this species [sockeye salmon] as both a food source and a hallmark of [Kwikwetlem's] distinct culture has provided [Kwikwetlem] with direct experience of the devastating impact of unmitigated development within their territory."

At the March 2, 2016 meeting with the Crown, Kwikwetlem expressed interest in conducting a more comprehensive use and occupation study and is seeking funding to support this work. Councillor Hulbert discussed various changes to the ecosystem in Kwikwetlem territory, including silt in the river, which impacts fish and how urbanization has impacted their ability to hunt. He noted that impacts have already taken away a huge part of who Kwikwetlem are and what they are about. He highlighted that decisions that happen today are going to affect their great-grandchildren, and they are trying to alleviate those effects as much as possible. He said, “We’re here and we want to keep it going.”

In letters sent to the EAO in April and May 2016, Kwikwetlem identified the following issues and concerns:

- The Project crosses lands, waterways, and culturally significant sites in Kwikwetlem’s asserted traditional territory;
- Potential impacts of the Project RoW on the Fraser River, which supports key cultural and spiritual activities and provides critical habitat for fish species relied upon by Kwikwetlem;
- Potential impacts from construction, operation, and spills on Kwikwetlem’s Aboriginal title, rights, and Interests; and
- Perceived process-related concerns, including a narrow scope of consultation, discretionary nature of supplemental information, insufficient detail in the Report, and discretionary nature of the consultation process and a lack of meaningfulness.

V – Potential Impacts of the Project on Kwikwetlem’s Aboriginal Interests

A discussion of the Crown’s assessment approach and understanding of the potential impacts of the Project on Aboriginal Interests is provided in Sections 2.4.3 and Section 4.3 of this Report, respectively. The Crown recognizes that areas within the asserted traditional territory of each Aboriginal group, including areas within the vicinity of marine shipping related to the Project, 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 Kwikwetlem’s Aboriginal Interests. These potential impacts are characterized by considering how the Project could affect several factors important to Kwikwetlem’s ability to practice Aboriginal Interests. Where information was available, the Crown considered the following:

- Biophysical effects to values linked to Aboriginal rights (e.g., fish) that were assessed by the NEB;
- Impacts on specific sites or areas identified as important to traditional use; and
- Impacts on social, cultural, spiritual, and experiential aspects of exercising Aboriginal Interests.

Additional factors considered in the assessment of impacts on Aboriginal Interests are described in Section 2.4.3 of this Report. The Crown’s conclusion on the seriousness of Project impacts on Kwikwetlem’s Aboriginal Interests considers information available to the Crown from the NEB process,

consultation with Kwikwetlem, Kwikwetlem'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.

Kwikwetlem completed a traditional land use (TLU) study in 2014 entitled "*Respect and Care for Our Lands, Water, and Heritage: Report on Kwikwetlem Interests as Related to Kinder Morgan Canada's Proposed Trans Mountain Pipeline Expansion Project*" ([A4S9A7](#)). The report included identification of traditional land uses in the segment of the proposed pipeline from Burnaby to Westridge. Traditional land uses identified by Kwikwetlem include hunting, gathering plants, information on fishing sites, sacred sites, trapping sites, habitation sites, gathering areas for community members, and trails and travelways. Kwikwetlem's TLU information is also summarized in the Project Application ([A3S1S0](#), [A4F5D1](#)).

Impacts on Hunting, Trapping and Plant Gathering

TLU information describes Kwikwetlem community members' historical travel over a large region to hunt for large and small game. Presently, Kwikwetlem community members hunt large and small mammals, waterfowl and birds. Small animals are trapped using snares, nets and trap lines. Hunted species include bear, cougar, wolverine, coyote, wolf, lynx, deer, mountain goat, elk, rabbit, mink, marten, fisher, beaver and muskrat. Birds hunted include pheasant, grouse, geese, duck and swan. The south side of the Fraser River between the Pattullo and Golden Ears bridges is used for hunting deer, and the north Fraser River shoreline from the Pitt River to New Westminster is used for hunting deer, lynx, duck, beaver, geese, grouse, pheasant, mink, rabbit and bear. Plants, berries and roots gathered are used for food and medicinal purposes. Wood and bark are harvested for both ritual and utilitarian objects, such as canoes, nets, baskets and masks. Community members gather red cedar wood, bark and root, yellow cedar, cascara bark, yew wood and bark, Douglas fir, birch, cottonwood, cherry bark, crabapple, alder, sap, balsam, stinging nettle, cattail, salal, devil's club, Labrador tea, "frog leaf", salmon berries and shoots, huckleberry, cranberry, blueberry, blackberry, Saskatoon berry and wood, hazelnut, big leaf maple, Oregon grape, and wapato. Most of these plants are collected from sloughs, riverbanks and upland environments.

Kwikwetlem identified many concerns related to the impacts of the Project on hunting (of large and small game), plant gathering activities including berries, traditional medicine and harvesting opportunities. As described in the *NEB Recommendation Report*, Project-related activities are likely to result in low to moderate magnitude effects on soil and soil productivity, rare plants and lichens and vegetation communities of concern, old growth forests, 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 4.3.1 of this Report). With regards to specific concerns raised by Kwikwetlem the proponent would implement several mitigation measures to reduce potential effects to species important for Kwikwetlem's hunting, trapping, and plant 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 and the vegetation and wildlife management plans.

Kwikwetlem identified five hunting sites during the TLU study for the Project, of which one was identified within the proposed pipeline corridor at Fraser Crossing. Two hunting sites are located within 500 metres (m) of the proposed pipeline corridor at Fraser River/Surrey Bend Park and Brunette River, respectively. The location of two hunting sites was not specified. Kwikwetlem identified three trapping sites during the TLU study for the Project. One trapping site at Fraser River/Surrey Bend Park is located approximately 128 m northeast of the proposed pipeline corridor. Two trapping sites are located at Fraser Crossing; however the distances from the proposed pipeline corridor were not specified. Kwikwetlem identified five plant gathering sites during the TLU study for the Project, of which one plant gathering site was identified within the proposed pipeline corridor at the Fraser Mills/Brunette River area. Four plant gathering sites are located within 2 km of the proposed pipeline corridor, with the nearest 128 m northeast of the proposed pipeline corridor at Fraser Heights/Surrey Bend Park.

Kwikwetlem raised concerns with the Project's potential impacts relating to specific locations and access to hunting, trapping and plant gathering activities, including areas of high sensitivity such as Fraser Heights/Surrey Bend, Fraser Mills/Brunette River, and the Fraser River Crossing (Colony Farm / Cape Horn), which are used for hunting and plant gathering. Project-related construction and routine maintenance is expected to cause short-term, temporary disruptions to Kwikwetlem's access to hunting, trapping and plant gathering activities, largely confined to the Project footprint for the pipeline and associated facilities. The Crown appreciates that with construction and reclamation activities disruptions to access may result in a loss of harvesting opportunities for Kwikwetlem. 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 Kwikwetlem the proponent would implement several mitigation measures to reduce potential effects on TLRU sites important for Kwikwetlem'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 Kwikwetlem'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 Kwikwetlem prior to construction, the sites will be assessed, and appropriate mitigation measures will be determined. The proponent committed to working with Kwikwetlem to

develop strategies to most effectively communicate the construction schedule and work areas to community members.

Kwikwetlem 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 cultural loss to the Kwikwetlem community and displacement of Kwikwetlem members. Project-related construction and routine maintenance is expected to cause short-term, temporary disruptions to Kwikwetlem's hunting, trapping, and plant gathering activities. The Crown appreciates 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 have spiritual and cultural impacts on 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 Kwikwetlem, the proponent has committed 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 Kwikwetlem, Kwikwetlem'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 are expected to result in a minor impact on Kwikwetlem's hunting, trapping and plant gathering activities. In reaching this conclusion, the Crown has considered several factors that have been discussed above, which are summarized as follows:

- Project-related construction and routine maintenance activities are likely to have minor to moderate environmental effects on species harvested by Kwikwetlem;
- Project-related pipeline and facility construction and routine maintenance activities within Kwikwetlem's traditional territory are temporary and thus, likely to cause minor disruptions to Kwikwetlem's community members accessing traditional hunting, trapping and plant gathering sites within the Project footprint, and negligible disruptions for sites that are not within the Project footprint; and
- Concerns identified by Kwikwetlem regarding Project-related effects on social, cultural, spiritual, and experiential aspects of their hunting, trapping and plant gathering activities.

Impacts on Freshwater Fishing

TLU information describes the connection of Kwikwetlem community members to the Fraser River and its resources. Historically, the Kwikwetlem caught salmon, sturgeon, eucaloon, trout, catfish and carp in the Coquitlam, Fraser and Pitt rivers. Currently, the south side of the Fraser River, between Pattullo and Golden Ears bridges, and the north Fraser River shoreline, from the Pitt River to New Westminster, are used for fishing for salmon, eucaloon, and sturgeon. Many Kwikwetlem families have specific fishing

spots along the shoreline of the south Fraser River. Specific fishing sites used by community members cluster around the mouths of the Coquitlam and Pitt rivers, at Tree Island and also extending from Barnston Island downstream to the Pattullo Bridge. Community members fish sockeye, chum and Coho salmon, steelhead, eulachon, sturgeon, Jack spring, cutthroat trout, brook trout, rainbow trout, carp, catfish, red-sided shiner, three-spine stickleback and crayfish. Marine and freshwater shellfish gathered include freshwater clams and scallops. Drift nets, gills nets, dip nets, and hook and line are typically used for fishing.

Kwikwetlem identified many concerns related to environmental effects of the Project on fishing activities, particularly the fishing and conservation of salmon, eulachon, and sturgeon, the health of the Fraser River fishery, and potential for the Project to have adverse effects on Kwikwetlem water. As described in the *NEB Recommendation Report*, Project-related construction and operation could result in low to moderate magnitude effects on fish and fish habitat and surface water. Moderate effects to fish and fish habitat would be localized to individual watercourse crossings where any potential serious harm would be compensated by offset measures. NEB conditions, if the Project is approved, would either directly or indirectly avoid or reduce potential environmental effects on fishing activities (Section 4.3.2 of this Report). A number of recommended NEB conditions require the proponent to file reports that will monitor Project-related impacts to fish, fish habitat and riparian habitats. With regards to specific concerns raised by Kwikwetlem the proponent would implement several mitigation measures to reduce potential effects to species important for Kwikwetlem's fishing activities. The proponent has committed to time watercourse crossing construction activities to occur within the least risk biological windows in an attempt to avoid causing serious harm to fish, has committed to working with Aboriginal groups to identify the most appropriate means of offsetting serious harm to marine fish and fish habitat, and has proposed the implementation of channel and bank reclamation measures at each watercourse crossing to help maintain the productive capacity of water bodies that provide fish habitat.

Kwikwetlem community members identified nine fishing sites during the TLU for the Project. Five fishing sites are located within 2 km of the proposed pipeline corridor, of which the nearest is at Fraser Heights/Surrey Bend Park, approximately 128 m northeast of the proposed pipeline corridor. Two fishing sites are located more than 2 km from the proposed pipeline corridor. The location of two fishing sites were not specified.

Kwikwetlem raised concerns with the Project's potential impacts relating to specific locations and access to fishing activities, particularly areas of high sensitivity including Fraser Heights/Surrey Bend, Fraser Mills/Brunette River, and the Fraser River Crossing (Colony Farm / Cape Horn). Project-related construction and routine maintenance activities are expected to cause short-term, temporary disruptions to Kwikwetlem's access to fishing activities. The Crown appreciates that if construction and reclamation occur during the fishing season there could be a potential reduction in access to waterways, staging areas, and fishing sites for Kwikwetlem's community members. However, disruptions to access would largely be confined to the Project footprint for the pipeline and associated facilities during construction and reclamation. NEB conditions, if the Project is approved, would either directly or indirectly avoid or reduce potential impacts on specific locations and access to fishing sites important for

Kwikwetlem (Section 4.3.2 of this Report). With regards to the Surrey Bend Regional Park, NEB Condition 7 requires the proponent to file an environmental and socio-economic assessment for the route re-alignment that must include, among other things, potential residual effects, mitigation measures, and a summary of consultations with potentially affected Aboriginal groups. With regards to specific concerns raised by Kwikwetlem, the proponent would implement several mitigation measures to reduce potential effects to fishing sites important for Kwikwetlem's fishing activities. As previously discussed, the proponent is committed to minimize disturbance to access to Kwikwetlem's traditional lands, as described in the Access Management Plan. The proponent committed to working with Kwikwetlem to develop strategies to most effectively communicate the construction schedule and work areas to community members.

Kwikwetlem expressed concern with direct and indirect effects of the Project on social, cultural, spiritual, and experiential aspects of its fishing activities, including the deep cultural importance of salmon. The name "Kwikwetlem" refers to a variety of sockeye salmon that used to run through the Coquitlam River and Coquitlam Lake. The construction of the Coquitlam Dam in 1914 drove the species to extinction. Currently, Kwikwetlem are involved in a number of environmental stewardship projects in order to restore critical habitat for fish. Kwikwetlem identified the loss of sockeye salmon as a food source and distinct cultural hallmark. As described previously, the Project construction and routine maintenance is expected to cause short-term, temporary disruptions to Kwikwetlem's fishing activities. The Crown appreciates that this temporary interruption could mean that community members alter their fishing activities during construction, which could affect their participation in the traditional activity. NEB conditions, if the Project is approved, would either directly or indirectly reduce potential social, cultural, spiritual or experiential effects associated with fishing activities (Section 4.3.2 of this Report).

In consideration of the information available to the Crown from the NEB process, consultation with Kwikwetlem, Kwikwetlem'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 are expected to result in a minor impact on Kwikwetlem's freshwater fishing activities. In reaching this conclusion, the Crown has considered several factors that have been discussed above, which are summarized as follows:

- Project-related construction and routine maintenance activities are likely to have minor to moderate environmental effects on species harvested by Kwikwetlem;
- Project-related pipeline and facility construction and routine maintenance activities within Kwikwetlem's traditional territory are temporary and thus, likely to cause minor disruptions to Kwikwetlem's community members accessing traditional fishing sites within the Project footprint, and negligible disruptions for sites that are not within the Project footprint; and
- Concerns identified by Kwikwetlem regarding Project-related effects on social, cultural, spiritual, and experiential aspects of their freshwater fishing activities.

Impacts on Other Traditional and Cultural Practices

Sites for traditional and cultural practices such as trails and travelways, habitation sites, gathering places, and sacred areas are described in Kwikwetlem's TLU information. A well-established network of land and water routes is located in Kwikwetlem asserted traditional territory. Many of the trails are now the roads used by Kwikwetlem community members. Historically, rivers were used for travel, and overland routes were used where travel by canoe was not possible. Habitation sites include settlements such as villages, resource camps and refuge locations. River drainages, such as Barker Creek, Como Creek, Bon Accord Creek, Cape Horn Creek and Mundy Creek, serve as gathering places for cultural activities, both past and present. The mouth of Brunette River was also identified as an area of important cultural use. Kwikwetlem asserted traditional territory was historically a fishing area and gathering place, where neighboring groups would come to fish and gather plant foods. Sacred areas may also include features such as promontories, pools and rocks, and land forms marking travel.

Kwikwetlem identified many concerns related to environmental effects of the Project on other traditional and cultural practices, including spiritually and culturally important sites for traditional and cultural practices such as trails and travelways, habitation sites, gathering places, and sacred areas. Sites used for cultural events include Barker Creek, Como Creek, Bon Accord Creek, Cape Horn Creek and Mundy Creek. As described in Section 4.3.4 of the Report, Project-related activities are not likely to result in significant adverse effects on the ability of Aboriginal groups to use land, waters or resources for traditional purposes. NEB conditions, if the Project is approved, would either directly or indirectly avoid or reduce potential environmental impacts on physical and cultural heritage resources (Section 4.3.4 of this Report). With regards to specific concerns raised by Kwikwetlem the proponent would implement several mitigation measures to reduce potential effects on physical and cultural heritage resources important for Kwikwetlem's traditional and cultural practices. The proponent has also committed to reduce potential disturbance to community assets and events by implementing several measures that include avoiding important community features and assets during RoW finalisation, narrowing the RoW in select areas, scheduling construction to avoid important community events where possible, communication of construction schedules and plans with community officials, and other ongoing consultation and engagement with local and Aboriginal governments.

Kwikwetlem identified nine trails and travelways during the TLU study for the Project, of which one trail was identified within the proposed pipeline corridor on Fraser River Heights. Four trails and travelways are located within 2 km of the proposed pipeline corridor. Four are located more than 5 km from the proposed pipeline corridor. Kwikwetlem identified 8 habitation sites during the TLU study for the Project, one of which is within the proposed pipeline corridor at Fraser River Heights/Surrey Bend. Three habitation sites were identified within 2 km of the proposed pipeline corridor. Three habitation sites are located more than 3.7 km from the proposed pipeline corridor, and the location of one habitation site was not specified. One gathering place was identified approximately 470 m southwest of the proposed pipeline corridor at Brunette River. Kwikwetlem community members reported intercommunity meeting sites, named spirit sites, and pictographs located along the North Fraser River shoreline from the Pitt River to New Westminster; however specific locations in relation to the proposed pipeline corridor were not provided. Kwikwetlem identified five sacred areas during the TLU study for the Project, of which two

are located within the proposed pipeline corridor at Fraser Mills / Brunette River. Two sacred areas are located at Colony Farm and in the Coquitlam River, 840 m east and 1.3 km northeast, respectively, of the proposed pipeline corridor. The location of the other sacred site was not identified.

Kwikwetlem raised concerns with the Project's potential impacts relating to specific locations and access to other cultural and traditional practices, including archaeological sites and sites of cultural importance, known Kwikwetlem villages, areas of high sensitivity (e.g., Fraser Heights/Surrey Bend, Fraser Mills/Brunette River, and the Fraser River Crossing [Colony Farm/Cape Horn]), and access restrictions that limit opportunities to engage in traditional activities represent a profound cultural loss. Project-related activities are expected to cause short-term disruptions that temporarily affect the ability of Aboriginal groups to access land, waters or resources for traditional purposes. The Crown appreciates that Kwikwetlem's opportunities for certain traditional and cultural activities will be temporarily interrupted during construction and routine operation, and there could be reduced access to travelways, habitation sites, gathering sites, and sacred areas. However, temporary disruptions to Kwikwetlem's traditional and cultural practices would be largely confined to sites within the Project footprint for the pipeline and associated facilities. NEB conditions, if the Project is approved, would either directly or indirectly avoid or reduce potential impacts on specific sites and access to physical and cultural heritage resources (Section 4.3.4 of this Report). The Crown notes the proponent's commitment to ongoing engagement with Aboriginal groups in providing traditional knowledge related to the location and construction of the Project.

Kwikwetlem expressed concern with direct and indirect effects of the Project on social, cultural, spiritual, and experiential aspects of its other traditional and cultural practices. Throughout the NEB process and Crown consultation process, Kwikwetlem raised specific concerns with potential Project impacts relating to their traditional and cultural activities, particularly the cumulative effects on traditional use areas across Kwikwetlem territory, as well as alteration of traditional land and landscapes and access restrictions that limit opportunities to engage in traditional activities. As described previously, the Crown appreciates that Project-related activities may result in temporary interruptions to Kwikwetlem's cultural and spiritual practices, or that their participation in the traditional activity is curtailed, during Project construction and routine maintenance activities.

In consideration of the information available to the Crown from the NEB process, consultation with Kwikwetlem, Kwikwetlem'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 are expected to result in a minor impact on Kwikwetlem's other traditional and cultural practices. In reaching this conclusion, the Crown has considered several factors that have been discussed above, which are summarized as follows:

- Project-related construction and routine maintenance activities are likely to have minor to moderate environmental effects on Kwikwetlem's traditional and cultural practices;
- Project-related construction and routine maintenance activities within Kwikwetlem's traditional territory are temporary and thus, likely to cause minor disruptions to Kwikwetlem community

members accessing traditional and cultural practice sites within the Project footprint, and negligible disruptions for sites that are not within the Project footprint; and

- Concerns identified by Kwikwetlem regarding Project-related effects on social, cultural, spiritual, and experiential aspects of their other cultural and traditional practices.

Impacts on Aboriginal Title

The Crown has actively consulted with Kwikwetlem throughout the NEB process and Crown consultation process at a deeper level in an attempt to better identify, understand, and resolve concerns relating to Aboriginal title. Concerns related to Aboriginal title raised by Kwikwetlem throughout the NEB and Crown consultation process include:

- Impacts that could impede or disrupt Kwikwetlem's use of its asserted traditional territory, including access restrictions that limit opportunities to engage in traditional activities, and displacement of Kwikwetlem members; and
- Activities that affect Kwikwetlem's ability to manage and make decisions over the Project area, including construction and operation of the Project in the heart of Kwikwetlem's traditional territory.

Kwikwetlem asserts an inherent right to govern all lands, waters and resources within Kwikwetlem territory:

"Like all Salish Nations, we recognize our own leaders, hold sacred hereditary knowledge, host community gatherings, value traditional customs of esteemed behaviour, and recognize stories and legends that link us to the natural places and cultural landscapes of our territory. As in the past, we sustain our community and territory by hunting, fishing, gathering, and caring for all the resources of our territory²".

Kwikwetlem's Heritage Policy (2013) states:

"Kwikwetlem asserts an inherent right to govern all lands, waters and resources within Kwikwetlem territory. The Nation seeks to protect, manage and preserve heritage sites, heritage objects, heritage places and resources in our territory, according to traditional values and practices. We are stewards of generations to come and hold a responsibility to protect, promote and enhance Kwikwetlem lands, resources and culture in perpetuity".

The Crown provides a description of the potential impacts of the Project on Aboriginal title in Section 4.3.5 of this Report, which includes a discussion of the numerous mitigation measures that avoid or minimize potential impacts associated with Project-related activities on asserted Aboriginal title claims. Some of these mitigations include NEB Conditions that would either directly or indirectly avoid/reduce Project impacts associated with the degree of disturbance to terrestrial and aquatic environments, ongoing engagement with Aboriginal groups that has the potential to reduce impacts on the ability of Aboriginal groups to manage and make decisions over the area impacted by the Project, as

² <http://www.kwikwetlem.com/our-people.htm>

well as NEB Conditions that could provide Aboriginal groups with direct and/or indirect economic benefits if the Project is approved.

Given the potential impacts of the Project on Aboriginal title and various measures to address those impacts, as described in Section 4.3.5, it is the Crown's opinion that the Project is expected to have a minor-to-moderate impact on Kwikwetlem's asserted Aboriginal title to the proposed Project area.

Impacts Associated with Accidental Pipeline, Tanker, or Terminal Spill

Kwikwetlem expressed several concerns about the direct and indirect effects of Project-related pipeline spills on their Aboriginal Interests, particularly the potential impacts of a spill on fish and fish habitat in the Fraser River that are of cultural, spiritual and economic significance to Kwikwetlem.

The Crown also appreciates Kwikwetlem's concerns regarding spills, and the potential for a spill to impact Kwikwetlem's use and occupation of its asserted traditional territory, ability to make decisions over the area impacted, and the potential for a spill to adversely impact any economic development aspirations Kwikwetlem has for its territory.

A discussion of the potential impacts of a pipeline spill on Aboriginal Interests 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 Kwikwetlem's Aboriginal Interests and concerns raised by Kwikwetlem during the NEB process and Crown consultation process, a pipeline spill associated with the Project could result in minor to serious impacts on Kwikwetlem's Aboriginal Interests. The Crown acknowledges the numerous factors that would influence the severity and types of effects associated with a pipeline spill, and that an impacts determination that relates the consequences of a spill to specific impacts on Aboriginal Interests has a high degree of uncertainty. In making this general conclusion, the Crown acknowledges that Aboriginal peoples who live nearby and 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 safety regime would only partially address these ongoing burdens and risks. Under the typical conditions for construction and operations, the Crown expects impacts of the Project on the exercise of Kwikwetlem's Aboriginal Interests would be up to minor-to-moderate.

The Crown is supportive of consultation requirements provided by the NEB and EAO in the various conditions, which would support Kwikwetlem's ongoing involvement and participation in the proponent's detailed Project planning, including the development of site-specific measures or pipeline

³ Trans Mountain Final Argument, p. 85 and 207

routing to further avoid or mitigate adverse impacts on Aboriginal Interests, as well as the involvement of Kwikwetlem in emergency response planning activities. The federal Crown is also considering incremental measures that would further accommodate the potential adverse impacts of the Project on Kwikwetlem, as discussed in Sections 4 and 5 of the main body of this Report.