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July 14, 2022

Commercial Energy Consumers Association of British Columbia  
c/o Owen Bird Law Corporation  
P.O. Box 49130  
Three Bentall Centre  
2900 – 595 Burrard Street  
Vancouver, BC  
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Attention: Mr. Christopher P. Weafer

Dear Mr. Weafer:

**Re: FortisBC Energy Inc. (FEI)**

**Application for a Certificate of Public Convenience and Necessity (CPCN) for the Tilbury Liquefied Natural Gas (LNG) Storage expansion (TLSE) Project (Application)**

**Response to the Commercial Energy Consumers Association of British Columbia (CEC) Information Request (IR) No. 3 on Rebuttal Evidence**

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On December 29, 2021, FEI filed the Application referenced above. In accordance with the regulatory timetable established in Order G-132-22 for the review of the Application, FEI respectfully submits the attached response to CEC IR No. 3 on Rebuttal Evidence.

For convenience and efficiency, FEI has occasionally provided an internet address for referenced reports instead of attaching lengthy documents to its IR responses. FEI intends for the referenced documents to form part of its IR responses and the evidentiary record in this proceeding.

If further information is required, please contact the undersigned.

Sincerely,

**FORTISBC ENERGY INC.**

***Original signed:***

Diane Roy

Attachments

cc (email only): Commission Secretary  
Registered Parties

<p>FortisBC Energy Inc. (FEI or the Company)</p> <p>Application for a Certificate of Public Convenience and Necessity (CPCN) for the Tilbury Liquefied Natural Gas (LNG) Storage Expansion (TLSE) Project (Application)</p>	<p>Submission Date:</p> <p>July 14, 2022</p>
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1 117. Reference: Exhibit B-44, Q2

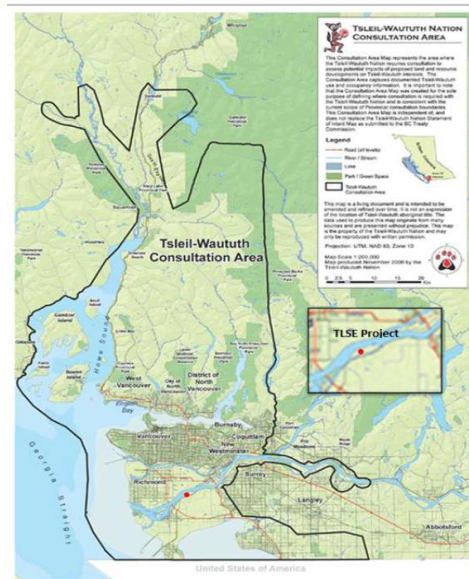
1 **2. TLSE PROJECT LOCATION**

2 **Q2:** On page ii of Appendix B of its evidence, TWN provides a map titled “Tsleil-Waututh Nation Consultation Area” which represents the area where TWN “requires consultation” to assess potential impacts of proposed land and resource developments. On page 12 of Appendix C of its evidence, TWN provides another map titled “Statement of Intent for the Tsleil-Waututh Nation” which forms part of the TWN Constitution Act, 1997. Does the TLSE Project fall within the boundaries identified on each map?

3 **A2:** The location of the TLSE Project, which will be constructed within the site boundaries of the existing Tilbury LNG facility in Delta, BC, falls within the boundaries of TWN’s asserted “consultation area” (page ii of Appendix B) but is beyond of the boundaries of “TWN’s Statement of Intent for the Tsleil-Waututh Nation” map (page 12 of Appendix C). For additional clarity, the following Figures 1 and 2 add the TLSE Project location in red dots to the TWN’s respective maps. The TLSE Project location is more than 5 kilometers south of the nearest boundary of “TWN’s Statement of Intent for the Tsleil-Waututh Nation”.

2

Figure 1: TWN Consultation Area Map



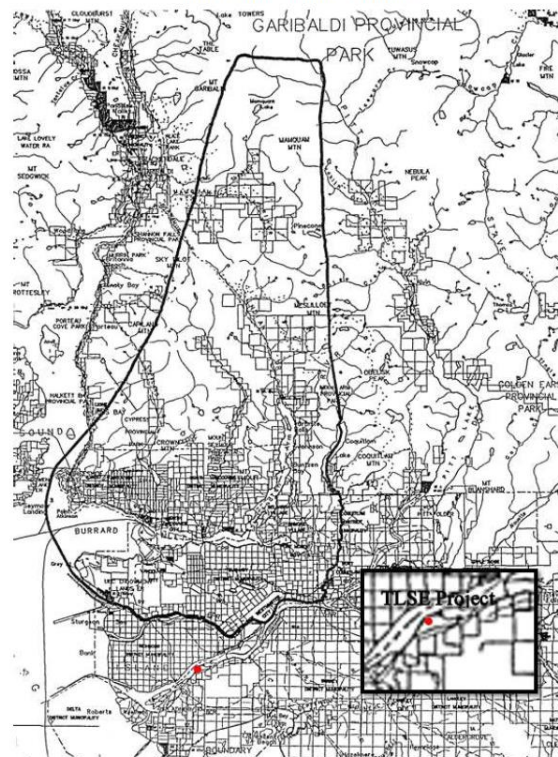
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Figure 1: TWN Consultation Area Map



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Figure 2: TWN Statement of Intent Map



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117.1. Please provide FEI's understanding of why there is a significant difference between the larger 'Consultation area' map and the map showing the 'Statement of Intent' area.

**Response:**

FEI is unable to speculate on why there is a "significant difference" between TWN's 'Consultation Area' and 'Statement of Intent' maps; however, TWN provides the following descriptions of each map as part of its written evidence.<sup>1</sup>

**Consultation Area Map**

On the 'Consultation Area' map, TWN provides the description below (Appendix B, p. iii):

This Consultation Area Map represents where the Tsleil-Waututh Nation requires consultation to assess potential impacts of proposed land and resource developments on Tsleil-Waututh interests. The Consultation Area captures documented Tsleil-Waututh use and occupancy information. It is important to note that the Consultation Area Map was created for the sole purpose of defining where consultation is required with the Tsleil-Waututh Nation and is consistent with the current scope of Provincial consultation boundaries. The Consultation Area Map is independent of, and does not replace the Tsleil-Waututh Nation Statement of Intent Map as submitted to the BC Treaty Commission.

**Statement of Intent Map**

TWN provides the following definition of its traditional territory in the *TWN Constitution* (Appendix C, p. 10):

"traditional territory" means our land. We do not recognize the borders imposed by other governments and have always shared with our neighbours as our neighbours have shared with us. However, we have created a map of our traditional territory to protect our land from the actions of other governments and their people (See Part II- "Our TWFN Declaration")

117.2. Please clarify any inferences that FEI would like the Commission to draw from the differences between the two maps.

<sup>1</sup> Exhibit C7-9.



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1    **Response:**

2    These maps show the geographic location of the TLSE Project in relation to: (1) the area where  
3    TWN requires consultation to assess potential impacts of proposed land and resource  
4    developments (Consultation Area Map); and (2) TWN's asserted traditional territory as identified  
5    in the TWN Constitution (Statement of Intent Map). The Tilbury facility is within the consultation  
6    area, but outside of the Statement of Intent area.

7    Please refer to the response to CEC IR3 117.1 for a description of each map provided as part of  
8    TWN's written evidence.

9    As explained in Section 8.4.2 of the Application, for the purposes of engagement regarding the  
10   TLSE Project, FEI has relied on the list of Indigenous groups identified in its Engagement Plan  
11   prepared as part of the environmental assessment for the Tilbury Phase 2 LNG Expansion  
12   Project. Table 8-4 of the Application identifies 20 Indigenous groups FEI is consulting with  
13   regarding the Project, including TWN.

14  
15

16  
17           117.3. Please clarify any inferences FEI would like the Commission to draw from the fact  
18           that the TLSE project falls outside of the Statement of Intent area.

19

20   **Response:**

21   Please refer to the response to TWN IR3 117.2.

22  
23

24  
25           117.4. Please confirm or otherwise explain whether FEI is suggesting that the  
26           consultation with TWN should be limited as a result of the project being outside the  
27           Statement of Intent area.

28

29   **Response:**

30   Not confirmed. Please refer to the response to CEC IR3 117.2.

31

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1    **118. Reference: Exhibit B-44, Q3**

**Q3: Is any engagement with the TWN occurring in an environmental assessment process?**

A3: Yes. The main component of the TLSE Project, the storage tank, is included in the ongoing environmental assessment (EA) process for the Tilbury Phase 2 Expansion Project initiated by FortisBC Holdings Inc.<sup>1</sup> and FortisBC Energy Inc. (collectively, FortisBC). Those components of the TLSE Project which are not specifically in scope of the Tilbury Phase 2 Expansion Project Environmental Assessment have been identified as reasonably foreseeable projects, and will be considered within the Tilbury Phase 2 Expansion Project Environmental Assessment within the Cumulative Effects Assessment. The Tilbury Phase 2 Expansion Project also encompasses facilities that are not regulated by the BCUC.

2  
3            118.1. Please identify any component pieces of the total Project that would not be  
4            included in any environmental or cumulative effects assessment, and please  
5            explain why they are excluded.

6  
7    **Response:**

8    All component pieces of the TLSE Project are included in the environmental or cumulative effects  
9    assessment of the Tilbury Phase 2 LNG Expansion Project.

10  
11  
12  
13            118.2. Please identify any related projects that FEI is reviewing but are not considered to  
14            be 'reasonably foreseeable'.

15  
16    **Response:**

17    FEI considers a variety of development opportunities in the course of its ongoing business as a  
18    public utility. The proponents of the Tilbury Phase 2 LNG Expansion Project have identified a list  
19    of reasonably foreseeable projects consistent with the guidance published by the BC EAO. Those  
20    projects are being reviewed for the purposes of the Tilbury Phase 2 LNG Expansion Project  
21    environmental assessment process. The only development that is the subject of this BCUC  
22    proceeding is the TLSE Project, as described in the Application.

23

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## 1 119. Reference: Exhibit B-44, Q4 and Q6

**Q4: Please describe at a high level an environmental assessment process?**

A4: An EA is a decision-making tool which identifies, evaluates, and ultimately, mitigates the potential impacts of a major project before the project is constructed. The EA process administered by the BC Environmental Assessment Office (BC EAO) and the impact assessment (IA) process administered by the Impact Assessment Agency of Canada (IAAC) is described below.

Attached to this Rebuttal Evidence as Appendix A is a copy of a user guide published by the BC EAO which provides an overview of the EA process in British Columbia. The process summary below is based on this user guide.

### Provincial Environmental Assessment Process

In British Columbia, the BC EAO leads the assessment process under the 2018 British Columbia *Environmental Assessment Act* (BC EAA). The three objectives of the 2018 update to the BC EAA are:

- 1) Enhancing public confidence and meaningful participation;
- 2) Advancing reconciliation by implementing the standards set out in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), the Truth and Reconciliation Commission (TRC) Calls to Action, and the *Tsilhqot'in*

*Nation v. British Columbia* (2014 SCC 44) decision in the context of environmental assessment; and

- 3) Protecting the environment while offering clear pathways to sustainable project development.

The Tilbury LNG Phase 2 Expansion Project is reviewable under the 2018 BC EAA because it exceeds one or more of the reviewable project thresholds identified in the *Reviewable Projects Regulation*. Reviewable projects are assessed for their potential:

- Effects on Indigenous nations and rights recognized and affirmed by section 35 of the *Constitution Act, 1982*;
- Positive and negative direct and indirect effects, including environmental, economic, social, cultural, and health effects;
- Adverse cumulative effects; and
- Other assessment matters under section 25 of the BC EAA.

Reviewable projects<sup>2</sup> assessed under British Columbia's EA process must progress through a number of phases, beginning with the Early Engagement phase, before a decision is issued by the BC EAO. Please refer to the figure below, which provides a summary of the BC EA process, associated timelines and, as discussed further below, the processes focus on consensus-seeking with Indigenous nations.

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**Q6: Please describe how the EA process specifically incorporates engagement with Indigenous nations?**

A6: Attached to this Rebuttal Evidence as Appendix B is a copy of a guide to consensus-seeking published by the BC EAO, which provides an overview of processes for working with Indigenous nations. The BC EAO intends this approach to be adapted and tailored according to specific project effects on Indigenous nations and the specific governance and decision-making requirements of a participating Indigenous nation. The process is summarized below.

As described in the response to Question 4 to this Rebuttal Evidence above, one of the objectives of the 2018 BC EAA is to advance reconciliation with Indigenous peoples in British Columbia. According to the BC EAO, this includes:<sup>5</sup>

- Supporting the implementation of UNDRIP;
- Recognizing the inherent jurisdiction of Indigenous nations and their right to participate in decision-making in matters that would affect their rights;
- Collaborating with Indigenous nations in relation to reviewable projects, consistent with UNDRIP; and
- Acknowledging Indigenous peoples' rights recognized and affirmed by section 35 of the *Constitution Act, 1982* in the course of assessments and decision-making under this BC EAA.

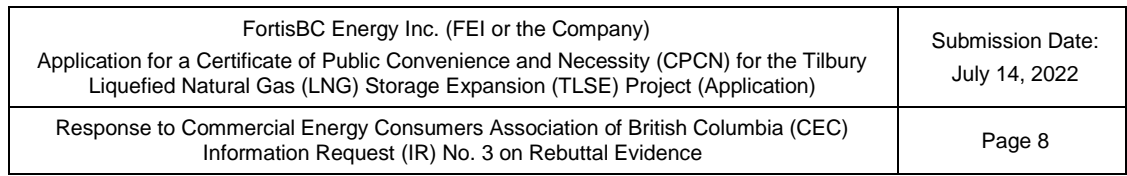
1  
2 119.1. FEI provides significant details of the EA process and a copy of the BC  
3 Environmental Assessment Office User Guide. In Q6, FEI describes EA  
4 processes. Please explain whether BC First Nations as a group, or TWN  
5 specifically, have indicated formal or informal acceptance or recognition of EA  
6 reports as being sufficient for their consultation needs.

7  
8 **Response:**

9 As explained in the response to Q6 of FEI's Rebuttal Evidence to the TWN Written Evidence, the  
10 environmental assessment process in British Columbia has been designed to support  
11 consultation with Indigenous nations through, for example, consensus-seeking by the BC EAO  
12 throughout the process, including with respect to the recommendation to be made to the Minister,  
13 the assessment report and any proposed conditions. As part of the environmental assessment  
14 process for the Tilbury Phase 2 LNG Expansion Project, the BC EAO has reached consensus or  
15 sought to reach consensus with Indigenous nations, including TWN.

16 In particular, the BC EAO indicates reaching consensus with TWN in the Readiness Decision  
17 Report<sup>2</sup> dated January 12, 2022, page 10; namely that TWN's outstanding issues would be  
18 addressed in the environmental assessment process. The BC EAO has also reached consensus  
19 with other Indigenous nations on later documents, as outlined in Schedule B of the Process Order  
20 (Assessment Plan) dated June 13, 2022. A copy of the Process Order and its schedules is  
21 provided as Attachment 119.1. At this stage of the environmental assessment process, the BC  
22 EAO and TWN have also sought to reach consensus on the scope and procedure for the

<sup>2</sup> Exhibit B-44, Appendix F, p. 10.



3 The remainder of this response is redacted and is being filed on a confidential basis, pursuant to  
4 Section 19 of the BCUC's Rules of Practice and Procedure regarding confidential documents as  
5 set out in Order G-178-22, as it contains commercially sensitive information. The information is  
6 of a commercially sensitive nature and significant harm or prejudice to FEI's competitive or  
7 negotiating position is reasonably expected to result if the confidential information was made  
8 public.

9 [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]  
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1     **120. Reference: Exhibit B-44, Q8**

**Q8: Has TWN been an active participant in the EA process?**

          A8: Yes. Since 2019, TWN has actively participated in the EA process, including when FEI was first developing the IPD, during the Early Engagement and Readiness Decision phases (between 2019 and 2022), and in the current Process Planning phase. As described in the response to Question 7 of this Rebuttal Evidence, TWN has provided comments on the IPD (Appendix C-1 to this Rebuttal Evidence) and DPD, including the

          Finally, FEI understands that TWN intends to undertake an Indigenous-led assessment under section 19(4) of the BC EAA, in addition to those of the Musqueam Indian Band,

          Quw'utsun Nation, Snuneymuxw First Nation and Tsawwassen First Nation. The scope and associated details of TWN's assessment have yet to be finalized. FortisBC has offered to provide capacity funding to support TWN's completion of an Indigenous-led assessment.

          120.1. Please provide FEI's understanding as to how the Indigenous-led assessment might differ from the EA process FEI is currently undertaking.

**Response:**

          On June 13, 2022, the BC EAO released the Assessment Plan<sup>3</sup> for the Tilbury Phase 2 LNG Expansion Project. As recognized by the BC EAO, each Indigenous nation is unique (p. 5) and so too are the scope and methods used in a given Indigenous-led Assessment. Please refer to Appendix 6 of the Assessment Plan which outlines the scope, objectives, and methodology of TWN's Indigenous-led Assessment. In particular, TWN's assessment will follow the principles laid out in its Stewardship Policy and primarily focus on its cultural health.

          TWN's Indigenous-led Assessment will form part of the environmental assessment. TWN will be assessing the impacts of the Tilbury Phase 2 LNG Expansion Project on one component (cultural health), which will provide TWN with additional qualitative and quantitative data. As explained in Section 11.1.2 of the Assessment Plan, the objective of TWN's Indigenous-led Assessment is to provide benefits to TWN regarding study capacity, cultural knowledge (in terms of loss and future planning and growth), and a lens into the cultural health of TWN and its members. It is also intended to meet a number of specific objectives, including: (1) providing a baseline of TWN cultural health; and (2) better assessing the Tilbury Phase 2 LNG Expansion Project's effects on TWN's culture.

<sup>3</sup> Process Order, Schedule B (Attachment 119.1, provided in response to CEC IR3 119.1).

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120.2. Please provide an estimate of the capacity funding FEI expects to provide to TWN.

**Response:**

A portion of this response is redacted and is being filed on a confidential basis, pursuant to Section 19 of the BCUC's Rules of Practice and Procedure regarding confidential documents as set out in Order G-178-22, as it contains commercially sensitive information. The information is of a commercially sensitive nature and significant harm or prejudice to FEI's competitive or negotiating position is reasonably expected to result if the confidential information was made public.

FEI has received and paid interim capacity funding invoices of approximately [REDACTED] to TWN to date for engagement on the Tilbury Phase 2 LNG Expansion Project. FEI and TWN are also in the process of negotiating further capacity funding for engagement. However, as those negotiations are ongoing it is premature to disclose details of any such additional funding.

120.3. When does FEI expect the scope of the TWN assessment to be available?

**Response:**

The scope of TWN's Indigenous-led Assessment is provided in Appendix 6 of the Assessment Plan.<sup>4</sup> Please refer to the response to CEC IR3 120.1 and Attachment 119.1 provided in the response to CEC IR3 119.1.

120.4. Does FEI expect to have any input into the Indigenous-led assessment? Please explain why or why not.

120.4.1. If yes, what contribution does FEI expect to make to such an assessment?

**Response:**

The extent of FEI's involvement in a given Indigenous-led Assessment in relation to the Tilbury Phase 2 LNG Expansion Project varies depending on the Indigenous nation. For example, for

<sup>4</sup> Process Order, Schedule B (Attachment 119.1, provided in the response to CEC IR3 119.1).

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1 TWN's Indigenous-led Assessment, FEI will provide TWN with information from its Application to  
2 inform the Indigenous-led Assessment.

3 Please also refer to Table 3 of the Assessment Plan<sup>5</sup> (pp. 18-21), which sets out the roles and  
4 responsibilities of participants in the environmental assessment process, including supporting  
5 participating Indigenous nations undertaking Indigenous-led Assessments.

6  
7  
8  
9 120.5. How would FEI expect to use the Indigenous-led assessment if it produces  
10 different results from those of the EA being conducted by FEI? Please explain.

11  
12 **Response:**

13 The premise of the question is incorrect in that it assumes that an Indigenous-led Assessment  
14 produces its own results that are then compared and contrasted with those forming part of the  
15 environmental assessment process generally. However, as explained below, this assumption  
16 over-simplifies the environmental assessment process and the contribution of Indigenous nations.

17 The effects of a project on Indigenous nations and rights recognized and affirmed by section 35  
18 of the *Constitution Act, 1982* must be assessed in every environmental assessment (see section  
19 25(1) of the *BC Environmental Assessment Act*). Should participating Indigenous nations choose  
20 to carry out an Indigenous-led Assessment, it would assess the effects of the project on the  
21 Indigenous nation and its rights. This assessment then informs the broader effects assessment,  
22 including the development of proposed conditions and whether a certificate should ultimately be  
23 issued. As such, FEI will not be "using" TWN's Indigenous-led Assessment as a comparator  
24 against other information, but rather, will rely on information gathered as part of the assessment  
25 to guide engagement related to effects, mitigation and accommodation in relation to the Project.

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<sup>5</sup> Ibid.

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1    **121. Reference: Exhibit B-44, Q10**

**Q10: In Appendix E of its evidence, TWN provides comments on the draft EA Application Information Requirements as part of the EA process for the Tilbury Phase 2 Expansion Project. Did FortisBC respond to and/or incorporate TWN's comments into the Project?**

**A10:** Yes, FortisBC has provided responses to TWN's comments on the dAIR, including those related to components of the TLSE Project. Where applicable, these comments were addressed directly through FortisBC's response or will be addressed, or incorporated into, the Environmental Assessment Application.

2

3            121.1. Has FEI received any further feedback from TWN regarding its responses to TWN?

4            121.1.1. If yes, please provide any further feedback received.

5

6    **Response:**

7    FEI received seven additional comments from TWN regarding the draft Application Information

8    Requirements (dAIR) in March 2022, and FEI's responses were posted to the EAO EPIC website

9    on June 22, 2022. None of these comments directly relate to the TLSE Project or the system

10    resiliency benefits it will provide. Please refer to Attachment 121.1 which provides this further

11    feedback from TWN and FEI's responses.

12

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1    **122. Reference: Exhibit B-44, Q12**

**Q12: On page 9 of Appendix G of its evidence, TWN states that it is “concerned that consultation [regarding the Tilbury Phase 2 Expansion Project] will be inadequate including rushed timelines and constraints from online meetings”. Does FEI agree with this statement and, if not, what efforts has it made to ensure consultation and engagement with TWN is adequate?**

A12: FEI respectfully disagrees. FortisBC has taken a number of steps to ensure that engagement and Crown consultation with TWN is fulsome, meaningful and fulfils the Crown’s duty to consult, and where appropriate, accommodate, Indigenous peoples.

First, FortisBC’s engagement with Indigenous nations, including TWN, began in 2019 *before* it initiated the EA process by submitting the IPD for the Tilbury Phase 2 Expansion Project – reflecting the importance and effort undertaken by FortisBC to facilitate engagement with Indigenous nations. This “pre-application” engagement occurred in addition to the legislated Early Engagement phase of the BC EA process.

Second, with the onset of the COVID-19 pandemic, FortisBC continued to engage with TWN regarding the Tilbury Phase 2 Expansion Project through a number of methods, including project specific meetings, virtual technical workshops, and virtual open houses. In particular, as explained below, where TWN has been unable to attend an in-person engagement activity (e.g., field survey work), FortisBC has been responsive to alternative methods of participation or provided additional information to ensure TWN continues to receive the most up-to-date information regarding the Tilbury Phase 2 Expansion Project.

Third, in addition to the above-noted accommodations to support the engagement of Indigenous groups during the COVID-19 pandemic, FortisBC has been, and continues to be, responsive to capacity constraints associated with the COVID-19 pandemic, including requesting two separate 30 day extensions to the legislated EA timelines in order to allow additional time for engagement with TWN and other Indigenous nations.<sup>17</sup> A number of extensions have also been granted generally as part of the EA process, including most recently, an extension to the 120 day Process Planning phase by 32 days (to conclude June 13, 2022) in order for the BC EAO to work with Indigenous nations, including TWN, that have indicated that they will be conducting an Indigenous Led Assessment pursuant of section 19(4) of the BC EAA.<sup>18</sup> Moreover, it took approximately 2 years to reach the Readiness Decision phase of the EA process, which has provided ample time.

Fourth, FortisBC has also facilitated a number of additional opportunities to support the participation of Indigenous nations in field work even if they could not attend in person.

2

These opportunities go beyond the traditional engagement activities that are required as part of an EA process. In particular, FortisBC facilitated field visit video calls so TWN (and other Indigenous nations) could observe and provide comments to technical staff in the field. At the end of the field days, crews conducted remote video call sessions with the Indigenous nations that participated in order to provide a summary on the methods and results from the fieldwork, and any sightings of culturally important species. After the field visit is completed, FortisBC shares a written summary of the methods and field findings to participants for their review and feedback. TWN participated in three of these field study summary calls.

Ultimately, FortisBC has endeavored to go beyond what is required as part of the EA process to ensure TWN is afforded a meaningful way to participate in, and contribute to, the development of the Tilbury Phase 2 Expansion Project, including the TLSE Project.

3

4

5

122.1. Does FEI require sign-off from TWN that the consultation has been adequate in order to proceed with the Project? Please explain.



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1 122.1.1. If no, how will FEI determine when the consultation has been adequate if  
2 TWN does not agree?

3 122.1.2. If yes, what form of approval documentation will FEI require in order to  
4 proceed with the Project?

5  
6 **Response:**

7 FEI does not require “sign-off” from TWN that consultation has been adequate in order to proceed  
8 with the TLSE Project. Whether consultation with Indigenous nations, including TWN, has been  
9 adequate to date is a determination made by statutory decision-makers and not FEI. This reflects  
10 the foundation of the duty to consult, which is grounded in the honour of the Crown and requires  
11 it to respect potential, but yet unproven, Aboriginal interests protected by section 35 of the  
12 *Constitution Act, 1982*.

13 In relation to the TLSE Project, both the BC EAO, through the substituted environmental  
14 assessment process, and the BCUC will assess the adequacy of consultation. As such, while FEI  
15 may be delegated procedural aspects of the duty, ultimate responsibility for fulfilling the duty to  
16 consult, and the associated assessment of the adequacy of its efforts, is borne by the Crown.

17

FortisBC Energy Inc. (FEI or the Company) Application for a Certificate of Public Convenience and Necessity (CPCN) for the Tilbury Liquefied Natural Gas (LNG) Storage Expansion (TLSE) Project (Application)	Submission Date: July 14, 2022
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1     **123. Reference: Exhibit B-44, Q15**

**Q15: At paragraph 1.7(a) of its evidence, TWN states that the TLSE Project will adversely affect lands, water, and resources within its territory and unjustifiably infringe its rights. Can you please comment?**

**A15: Assessment work is still ongoing, and it is premature for TWN to reach definitive conclusions about impacts to lands water and resources and any necessary mitigation.**

FortisBC is currently conducting assessments of impacts to the environment in collaboration with TWN. Further, in addition to the comments received from TWN as part of the BC EA process (see Appendix C to this Rebuttal Evidence), FortisBC has provided TWN with draft Technical Data Reports (TDR)<sup>21</sup> addressing the existing condition of specific valued components. At the time of filing this Rebuttal Evidence, TWN had not provided comments on the TDRs. FEI also made attempts to engage with TWN about their concerns expressed through the CPCN process and has received no response.

FEI will reserve commenting on legal issues related to infringement until final submissions.

<sup>21</sup> This presentation was also given to the CEC and it is in material 123.1.  
TWN accessed and downloaded the TDRs on April 26 and May 10, 2022.

123.1. Please briefly summarize the evidence provided in the draft Technical Data Reports with respect to the existing condition of the specific valued components.

**Response:**

The Technical Data Reports (TDRs) remain in the draft stages and, given their considerable scope and complexity, would be difficult to summarize. FortisBC will provide the TDRs as part of its Application for an Environmental Assessment Certificate within the Tilbury Phase 2 LNG Expansion project environmental assessment process, and they are best addressed in that process. TWN has had the opportunity to review the draft TDRs.

123.2. Please explain whether or not the existing condition is considered to be the only starting point for assessing the impacts or whether the impacts could also be examined from an earlier condition, such as before the Tilbury plant was constructed or from any other time.

**Response:**

Assessing a project's impacts to the environment is based on existing conditions, as opposed to an earlier condition.

FortisBC Energy Inc. (FEI or the Company) Application for a Certificate of Public Convenience and Necessity (CPCN) for the Tilbury Liquefied Natural Gas (LNG) Storage Expansion (TLSE) Project (Application)	Submission Date: July 14, 2022
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1 As outlined in Section 3.2 of the BC EAO's *Effects Assessment Policy*, "[f]or each selected VC  
2 [valued component], the existing conditions in the study areas should be described in sufficient  
3 detail to enable potential project-VC interactions to be identified, understood and assessed". This  
4 assessment may require "reference to baseline information that describe the existing conditions  
5 of the linked VCs".

6 The policy also recognizes the importance of discussing the factors that have led to the existing  
7 conditions. As such, while factors that have led to the existing conditions may help inform the  
8 current state of the area being assessed, they are not the "starting point" of the assessment.

9

FortisBC Energy Inc. (FEI or the Company) Application for a Certificate of Public Convenience and Necessity (CPCN) for the Tilbury Liquefied Natural Gas (LNG) Storage Expansion (TLSE) Project (Application)	Submission Date: July 14, 2022
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1    **124. Reference: Exhibit B-44, Q16**

**Q16: At paragraph 1.7(b) of its evidence, TWN states that the TLSE Project will contribute to the cumulative effects on TWN and further constrain its ability to exercise its rights. Can you please comment?**

**A16:** Assessment work on cumulative effects is still ongoing, and it is premature for TWN to reach this conclusion.

FortisBC will be conducting a cumulative effects assessment as part of the EA process for the Tilbury LNG Phase 2 Expansion Project, which accounts for (among other things) all remaining aspects of the TLSE Project not specifically part of the Tilbury Phase 2 Expansion Project (e.g., vapourization and ancillary equipment). In preparation for this assessment process, FortisBC invited Technical Advisory Committee (TAC)<sup>22</sup> members, including TWN, to participate in a cumulative effects workshop held in February 2022. This workshop was an opportunity for TAC members to provide feedback on how the cumulative effects assessment should be conducted. Representatives from TWN were present at the workshop, but did not provide any feedback. Attached as Appendix J-4 and

J-5 to this Rebuttal Evidence are copies of the cumulative effects workshop presentation and associated meeting notes.

124.1. Please confirm or otherwise explain that at this point FEI does not anticipate receiving any feedback from TWN from its cumulative effects workshop held in February.

**Response:**

While FEI does not anticipate receiving any feedback from TWN regarding the cumulative effects workshop held in February 2022, the environmental assessment process allows TWN to submit feedback to FEI at any point during the process and such feedback may therefore still be forthcoming.

124.2. Why does the cumulative effects assessment work not include Phase 2 Expansion?

**Response:**

This question is directed at a matter that is within the jurisdiction of the BC EAO. However, for clarity, in the assessment of Tilbury Phase 2 LNG Expansion Project, the assessment of cumulative effects will take into account potential effects of the Project itself.

FortisBC Energy Inc. (FEI or the Company) Application for a Certificate of Public Convenience and Necessity (CPCN) for the Tilbury Liquefied Natural Gas (LNG) Storage Expansion (TLSE) Project (Application)	Submission Date: July 14, 2022
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124.3. Please provide FEI’s understanding as to why TWN reached its conclusion regarding cumulative effects when FEI states that the work is ongoing.

**Response:**

FEI is unable to speculate on how TWN determined that the TLSE Project will contribute to the cumulative effects on TWN at this stage of the environmental assessment process and reiterates that assessment work remains ongoing.

124.4. In its response to Q16, FEI addresses the ongoing work related to cumulative effects, but does not address the issue of TWN rights being constrained. Please provide FEI's understanding as to why TWN considers that its rights will be constrained, and in what way FEI is directly addressing this concern.

**Response:**

It is premature to make a determination with respect to the effects or impacts of the TLSE Project, including any effects or impacts on TWN rights, as the cumulative effects assessment has not yet been undertaken as part of the environmental assessment process for the Tilbury Phase 2 LNG Expansion Project.

The environmental assessment process will seek to identify the nature of cumulative effects and the means to address them with participating Indigenous nations, including TWN, and Technical Advisory Committee members.



FortisBC Energy Inc. (FEI or the Company) Application for a Certificate of Public Convenience and Necessity (CPCN) for the Tilbury Liquefied Natural Gas (LNG) Storage Expansion (TLSE) Project (Application)	Submission Date: July 14, 2022
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1    **125. Reference: Exhibit B-44, Q19**

**Q19: At paragraph 1.7(e) of its evidence, TWN states that the TLSE Project has no demonstrated benefits to TWN. Can you please comment?**

**A19: FEI has described in the Application and responses to information requests how the TLSE Project provides significant benefits for all people and businesses in the Lower Mainland, including but not limited to its customers. Members of TWN are served by FEI's natural**

gas system both directly and indirectly and would obtain a benefit from the added resiliency provided by the TLSE Project in a similar way as other customers and members of the public. A number of critical public safety institutions like hospitals, emergency shelters, and first responders rely on natural gas and would be adversely affected by an outage.

125.1. Please confirm that FEI has communicated the above benefits to TWN in the past and prior to TWN's statement regarding demonstrated benefits.

**Response:**

Confirmed. As part of the environmental assessment process for the Tilbury Phase 2 LNG Expansion Project, FortisBC has detailed the benefits of system resiliency, including drafts of the Initial Project Description, and final versions of both the Initial Project Description (Appendix Q-1 to the Application, pp. 1-8 and 2-1) and the Detailed Project Description (Appendix D to FEI's Rebuttal Evidence, pp. 1-1, 1-2, 1-12, 2-1, 2-13).

Moreover, FortisBC has raised the benefits of system resiliency in the event of a gas system disruption in meetings and correspondence with TWN regarding the CPCN Application for the TLSE Project (e.g., refer to meeting notes of June 12, 2020 and letter of February 11, 2021 in Appendix L to FEI's Rebuttal Evidence).

125.2. What forms of benefits does FEI expect that TWN is seeking if not those identified in FEI's response? Please quantify if possible.

**Response:**

TWN has not identified any forms of benefits it is seeking through its engagement with FortisBC regarding the Tilbury Phase 2 LNG Expansion Project or the TLSE Project. While FEI is unable to speculate on these benefits, if TWN has comments or questions in this regard, FEI encourages TWN to raise them as part of ongoing engagement activities, including the bi-weekly meetings



FortisBC Energy Inc. (FEI or the Company) Application for a Certificate of Public Convenience and Necessity (CPCN) for the Tilbury Liquefied Natural Gas (LNG) Storage Expansion (TLSE) Project (Application)	Submission Date: July 14, 2022
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1 between FortisBC and TWN which have regularly taken place when possible since the beginning  
2 of 2020, after the Initial Project Description was shared with TWN in November 2019.

3

FortisBC Energy Inc. (FEI or the Company) Application for a Certificate of Public Convenience and Necessity (CPCN) for the Tilbury Liquefied Natural Gas (LNG) Storage Expansion (TLSE) Project (Application)	Submission Date: July 14, 2022
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1    **126.    Reference:    Exhibit B-44, Q22**

**Q22:    At paragraph 1.7(h) of its evidence, TWN states that engagement on the TLSE Project has failed to abide by TWN's engagement protocols. Can you please comment?**

**A22:**    FEI disagrees. In particular, as explained in the response to Question 13 of this Rebuttal Evidence and Section 8.2.2 of the Application, FEI has synchronized consultation activities for both the Tilbury Phase 2 Expansion Project and the TLSE Project. This approach is consistent with FEI's approach to engagement; namely, that engagement practices are not one size fits all and must reflect the needs and interests of the Indigenous groups involved, and occur at an early stage in the project lifecycle.<sup>24</sup>

FEI believes the ongoing substituted BC EA process (which was 'revitalized' in 2018 to advance reconciliation with Indigenous peoples), in conjunction with FEI's specific engagement regarding the TLSE Project and this Application, is consistent with the requirements set out in the TWN Stewardship Policy, including early engagement, information sharing and consent seeking.<sup>25</sup>

2  
3            126.1. FEI's response to Q22 indicates that FEI has complied with its own engagement  
4            protocols, but does not speak to TWN engagement protocols. Please describe  
5            FEI's understanding of TWN's engagement protocols and whether or not these  
6            have been addressed.

7  
8    **Response:**

9    Please refer to the response to TWN IR3 2.1.

10

FortisBC Energy Inc. (FEI or the Company) Application for a Certificate of Public Convenience and Necessity (CPCN) for the Tilbury Liquefied Natural Gas (LNG) Storage Expansion (TLSE) Project (Application)	Submission Date: July 14, 2022
Response to Commercial Energy Consumers Association of British Columbia (CEC) Information Request (IR) No. 3 on Rebuttal Evidence	Page 22

1    **127. Reference: Exhibit B-44, Q23**

**Q23: At paragraph 1.7(i) of its evidence, TWN states that there has been no Crown consultation in respect of the BCUC decision to grant a CPCN for the TLSE Project. Can you please comment?**

**A23: FEI disagrees, and will be prepared to address the adequacy of the consultation described in the evidence in final submissions as necessary.**

2

3            127.1. Please explain why FEI is not prepared to address this question in this evidence,  
4            and is instead waiting for Final Argument.

5

6    **Response:**

7    As noted in the response to Q23 of FEI's Rebuttal Evidence to the TWN Written Evidence, FEI  
8    disagrees with TWN's position that there has been no Crown consultation in respect of the BCUC  
9    decision to grant a CPCN for the TLSE Project. FEI has discussed the synchronized nature of  
10   the ongoing consultation activities throughout the evidence. The adequacy of consultation is a  
11   matter to be assessed by the BCUC based on the entirety of the evidentiary record, and is  
12   therefore properly addressed through final submissions.

13

**Attachment 119.1**

---

**IN THE MATTER OF**  
**THE *ENVIRONMENTAL ASSESSMENT ACT*, S.B.C. 2018, c. 51**  
**(ACT)**

**AND**  
**FORTISBC ENERGY INC.**  
**FORTISBC HOLDINGS INC.**  
**(TOGETHER, FORTISBC OR THE PROPONENT)**

**AND**  
**AN ENVIRONMENTAL ASSESSMENT OF THE PROPOSED**  
**TILBURY PHASE 2 LNG EXPANSION PROJECT**  
**(TILBURY PHASE 2)**

**PROCESS ORDER UNDER SECTION 19(2)**

**WHEREAS:**

- A. The Proponent proposes to construct and operate an expansion of the existing Tilbury LNG facilities (Tilbury Phase 2) to increase the capacity to store liquefied natural gas (LNG) by 142,400 cubic metres (m<sup>3</sup>) and increase the LNG production capacity by up to an additional 7,700 tonnes and is more particularly described in Part A of Schedule A attached to this Process Order.
- B. Tilbury Phase 2 is a reviewable project pursuant to Part 4 of the Reviewable Projects Regulation (B.C. Reg. 607/19) because, with the expansion, the Tilbury LNG facilities would have a total design capacity to store one or more energy resources in a quantity that can yield by combustion  $\geq 3$  petajoules of energy.
- C. Tilbury Phase 2 also requires an impact assessment under the *Impact Assessment Act*, 2019.
- D. On February 27, 2020, the Chief Executive Assessment Officer (CEAO) approved the Initial Project Description and Engagement Plan for Tilbury Phase 2.
- E. On August 14, 2020, the CEOA issued a notice under Section 13(5) of the Act setting out a summary of comments received on the Initial Project Description and the Indigenous nations that are participating Indigenous nations.
- F. On September 7, 2021, the Proponent submitted a Detailed Project Description in accordance with Section 15 of the Act to the CEOA.

- G. On January 4, 2022, the Proponent submitted an updated Detailed Project Description to provide clarifications and meet the requirements of the *Impact Assessment Act*.
- H. On January 12, 2022, the CEAO issued a notice of decision that Tilbury Phase 2 proceed to an environmental assessment by the Environmental Assessment Office (EAO) under Section 19 of the Act.
- I. On January 20, 2022, the federal Minister of Environment and Climate Change approved the Government of British Columbia's request to substitute the provincial environmental assessment process for the federal impact assessment process.
- J. The EAO sought to achieve consensus with participating Indigenous nations with respect to this Order under Section 19 of the Act.
- K. The EAO has established a Technical Advisory Committee for the assessment of Tilbury Phase 2.
- L. The EAO has established a Community Advisory Committee for the assessment of Tilbury Phase 2.

**NOW THEREFORE:**

Pursuant to Section 19(2) of the Act, I order that the environmental assessment of Tilbury Phase 2 be conducted according to the scope, procedures, methods, and requirements set out in Schedules A, B and C to this Process Order.



\_\_\_\_\_  
Natalie Schell  
Project Assessment Director  
Environmental Assessment Office  
Dated June 13, 2022

Enclosures: Schedule A, Scope of Proposed Project and Environmental Assessment  
Schedule B, Assessment Plan  
Schedule C, Application Information Requirements



## **SCHEDULE A**

### **SCOPE OF PROPOSED PROJECT AND ENVIRONMENTAL ASSESSMENT**

## PART A – SCOPE OF TILBURY PHASE 2

### 1. FACILITIES AND ASSOCIATED ACTIVITIES

- 1.1 The approximate location of Tilbury Phase 2 is shown on Figure 1-1.
- 1.2 Pursuant to Section 19(2)(a) of the Act, the facilities and activities of Tilbury Phase 2 are:
  - 1.2.1 Construction and operation of one new liquefied natural gas (LNG) storage tank with a working volume of 142,400 cubic metres (3.5 petajoules), including infrastructure to receive LNG and deliver LNG from the storage tank;
  - 1.2.2 Construction and operation of new liquefaction facilities with a production capacity of up to 7,700 tonnes per day including: natural gas receiving facilities, pre-treatment facilities, liquefaction facilities, and infrastructure to transfer LNG;
  - 1.2.3 Construction of upgrades to the existing materials offloading facility, including cargo vessels moving modules to the Project Site from Sand Heads lighthouse;
  - 1.2.4 Construction, use, and decommissioning of temporary infrastructure and facilities required for construction and commissioning of the new LNG storage tank and the new liquefaction facilities, including construction offices, ground preparation, and laydown areas to be located outside of the facility site;
  - 1.2.5 Hydro-testing of the LNG tank and piping systems;
  - 1.2.6 Construction and operation of supporting infrastructure including: administration facilities; control room(s); roadways; lighting equipment; security and safety facilities; liquid hydrocarbon/ chemical storage and handling facilities; and onsite connections to power systems;
- 1.3 Investigation activities and other activities required to prepare the Application for an environmental assessment certificate, regulatory permit applications, or mitigation development are not part of the reviewable project for the purposes of the assessment.

## PART B – SCOPE OF THE ASSESSMENT

### 2. SCOPE OF THE ASSESSMENT

- 2.1 The assessment of Tilbury Phase 2 includes an assessment of the effects of Tilbury Phase 2 on Indigenous nations and rights recognized and affirmed by Section 35 of the *Constitution Act, 1982*, as referred to in Section 25(1) of the Act and Section 22 of the Impact Assessment Act.

- 2.2** The assessment of Tilbury Phase 2 includes a consideration of the matters referred to in Section 25(2) of the Act and Section 2 and Section 22 of the Impact Assessment Act.
- 2.3** As per the conditions of substitution, the assessment of Tilbury Phase 2 includes:
- 2.3.1** The requirements of the Strategic Assessment of Climate Change, prepared by Environment and Climate Change Canada, including information on the project's greenhouse gas emissions, mitigation measures and requirements of any follow-up program that may be warranted, and climate change resilience.
  - 2.3.2** Consideration of federal policy measures and commitments outline in the Government of Canada's Strengthened Climate Plan.
  - 2.3.3** Consideration of commitments to be outlined in Canada's 2030 Emissions Reduction plan as required under the Canadian Net-Zero Emissions Accountability Act, including consideration of a cap on emissions from the oil and gas sector.

## **PART C – CONSULTATION AND ADDITIONAL INFORMATION**

### **3. CONSULTATION**

- 3.1** The Proponent must consult with: Chawathil First Nation; Cheam First Nation; Katzie First Nation; Kwantlen First Nation; Kwikwetlem First Nation; Leq'á:mel First Nation; Malahat First Nation; Matsqui First Nation; Métis Nation British Columbia; Musqueam Indian Band; Pauquachin First Nation; Popkum First Nation; Quw'utsun Nation (Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe and Stz'uminus First Nation); S'ólh Téméxw Stewardship Alliance (Kwaw-Kwaw-Apilt First Nation, Seabird Island Band, Sq'éwlets (Scowlitz) First Nation, Sq'ewá:lwax (Skawahlook) First Nation, Skwah First Nation, Semá:th (Sumas) First Nation, Yale First Nation, Aitchelitz First Nation, Shxwhá:y Village, Skowkale First Nation, Soowahlie First Nation, Squiala First Nation, Tzeachten First Nation, Yakweakwioose First Nation); Semiahmoo First Nation; Shxw'ōwhámel First Nation; Snuneymuxw First Nation; Squamish Nation; Ts'uubaa-asatx Nation; Tsartlip First Nation; Tsawout First Nation; Tsawwassen First Nation; Tseycum First Nation; and Tsleil-Waututh First Nation in accordance with the Assessment Plan.
- 3.2** The scope and methods of engagement with participating Indigenous nations and with any other Indigenous nation is set out in the Assessment Plan.

- 3.3** Pursuant to s.19(4) of the Act, the following participating Indigenous nations will carry out an assessment with respect to the potential effects of Tilbury Phase 2 on the Nation and on its rights recognized and affirmed by Section 35 of the *Constitution Act, 1982*, as set out in the Assessment Plan: Musqueam Indian Band, Quw'utsun Nation, Snuneymuxw First Nation, Tsleil-Waututh Nation, and Tsawwassen First Nation.
- 3.4** The EAO will undertake additional measures for consultation, where appropriate, with participating Indigenous nations and with any other Indigenous nation identified in Section 3.1.
- 3.5** If directed by the EAO, the Proponent must undertake additional consultation activities with participating Indigenous nations and with any other Indigenous nation identified in Section 3.1.

#### **4. ADDITIONAL INFORMATION**

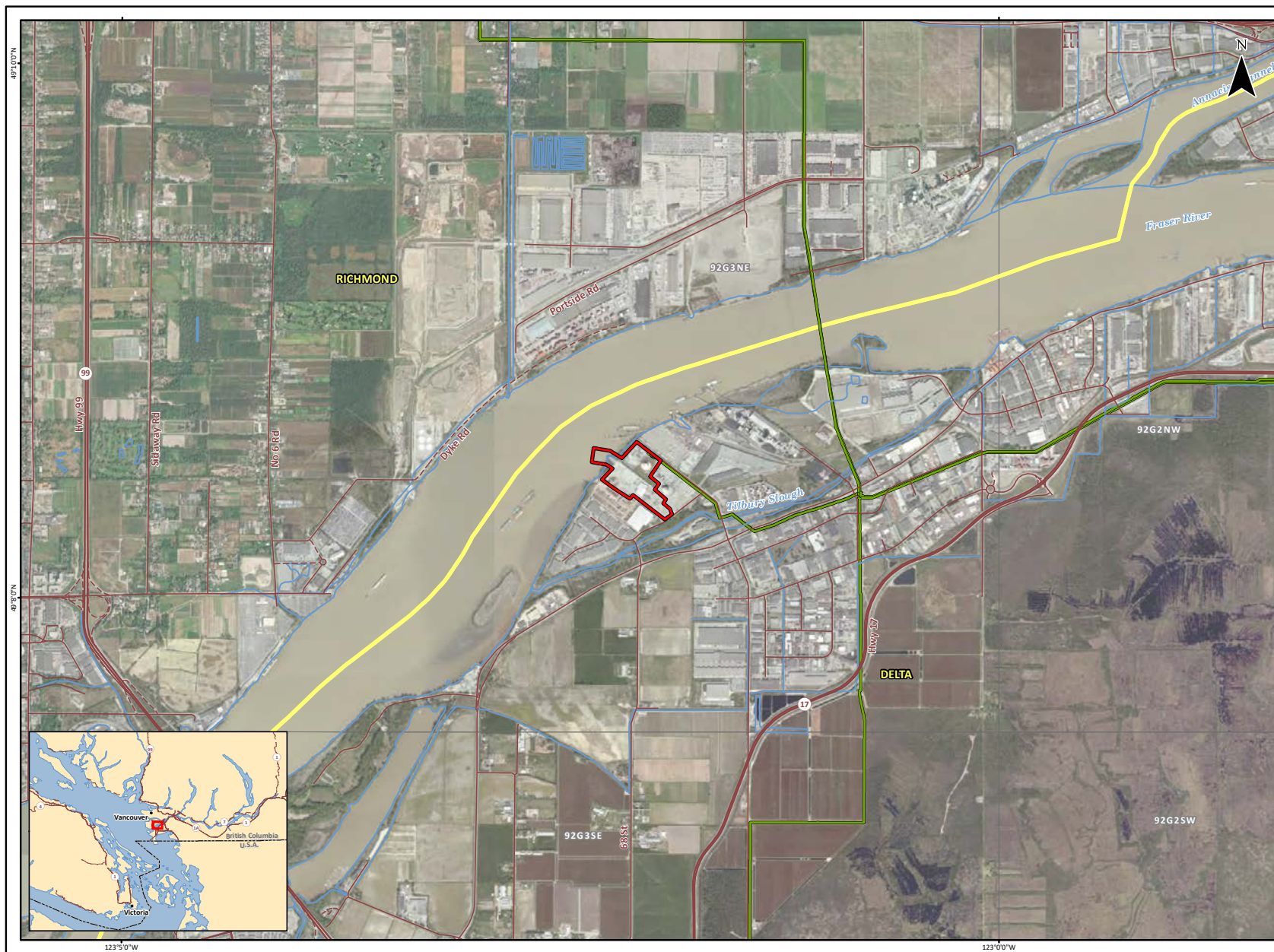
- 4.1** Without limiting any of the requirements in this Process Order, the Proponent must, at the request of the EAO (Project Assessment Director), provide the EAO with any information or address any issues that the EAO (Project Assessment Director), considers necessary in order to complete the environmental assessment of Tilbury Phase 2.

#### **5. ASSESSMENT PLAN**

- 5.1** The procedures and methods for the environmental assessment of Tilbury Phase 2 are set out in the Assessment Plan.

#### **6. APPLICATION INFORMATION REQUIREMENTS**

- 6.1** The information requirements for the environmental assessment of Tilbury Phase 2 are set out in the Application Information Requirements.



January 2022

**FIGURE 1-1**  
**REGIONAL LOCATION**  
**TILBURY PHASE 2**  
**LNG EXPANSION PROJECT**

**Proposed Project Components**

Proposed Project Footprint

**Base Data**

Existing FortisBC Pipeline

Highway

Road

Resource Road

Railway

Watercourse

Municipality

Waterbody

Project Site at NTS Grid: 092G03

49° 8' 27.4" N 123° 2' 4.8" W

SCALE: 1:25,000

0 200 400 600 800 1,000 m  
(All Locations Approximate)

**Jacobs**

Project Number CE778100

UTM Zone 10 North, NAD 1983.  
Existing FortisBC Pipeline: FortisBC 2012; Transportation: BC  
FLMCHD 2012; Regional Districts & Municipalities: BC FLMCHD;  
2017; Political Boundaries: ESR 2005; USNMMA 2000; Hydrology: BC  
FLMCHD 2012; Imagery Service Layer Credits: Sources: Esri, Maxar  
GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,  
AerialGRID, IGN, and the GIS User Community  
Sources: Esri, Airbus DS, USGS, NASA, CGAR, N Robinson,  
NCEAS, NCS, OS, NOAA, GeoDataByte.com, RiverwaterStats, GSA,  
Geoland, FEMA, Intermap and the GIS user community.

Although there is no reason to believe that there are any errors associated  
with the data used to generate this product or in the product itself,  
users of these data are advised that errors in the data may be present.

Mapped By: SL

Checked By: TW

# **Schedule B – Assessment Plan**

**FOR THE  
TILBURY PHASE 2 LNG EXPANSION PROJECT**

**DRAFTED BY THE  
ENVIRONMENTAL ASSESSMENT OFFICE**

**JUNE 13, 2022**



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## 1.0 PURPOSE

The purpose of the Assessment Plan is to specify for each subsequent phase of the environmental assessment (EA) for the Tilbury Phase 2 LNG Expansion Project (Tilbury Phase 2):

- The procedures for the assessment;
- Who will be engaged in the development and review of information produced during the EA and associated timelines;
- Who will be engaged in the EA, and the means and timelines by which they will be engaged; and
- Roles and responsibilities of each of the EA participants, which include:
  - The proponent, FortisBC Holdings Inc., with its regulated natural gas subsidiary FortisBC Energy Inc. (collectively defined as FortisBC);
  - The Environmental Assessment Office (EAO);
  - The Impact Assessment Agency of Canada (the Agency);
  - Indigenous nations;
  - Local governments;
  - The Technical Advisory Committee (TAC), including participating Indigenous nations, local governments, provincial, and federal agencies;
  - The Community Advisory Committee (CAC);
  - The public and stakeholders; and
  - Any consultants, mediators, and experts, if applicable.

The Assessment Plan is divided into the subsequent phases of the EA:

- Application Development and Review;
- Effects Assessment and Recommendation; and
- Decision.

## 2.0 CONSULTATION WITH INDIGENOUS NATIONS

Recognizing that each Indigenous nation is unique, the EAO seeks to work with all potentially affected Indigenous nations to understand their distinct rights, interests, and relationship to their territory. Indigenous interests are described as interests related to an Indigenous nation and their rights recognized and affirmed by Section 35 of the *Constitution Act*, 1982, including Treaty rights and Aboriginal rights and title that may be impacted by the project. Below is a description of how the EAO will consult with Indigenous nations, including participating Indigenous nations, during the EA.

In addition to the consultation described below that the EAO will undertake, procedural aspects of consultation will be undertaken on behalf of the EAO by FortisBC, as set out in the roles and responsibilities tables for each subsequent phase of the EA.

### 2.1. Participating Indigenous nations

The following participating Indigenous nations have been identified for the purpose of the assessment of Tilbury Phase 2 in accordance with [Section 14](#) of the *Environmental Assessment Act* (2018) (the Act):

- Chawathil First Nation;

- Cheam First Nation;
- Kwantlen First Nation;
- Kwikwetlem First Nation;
- Musqueam Indian Band;
- Quw'utsun Nation (Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe and Stz'uminus First Nation);
- Snuneymuxw First Nation;
- S'ólh Téméxw Stewardship Alliance (Kwaw-Kwaw-Apilt First Nation, Sq'éwlets (Scowlitz) First Nation, Sq'ewá:lwx (Skawahlook) First Nation, Skwah First Nation, Seabird Island Band, Semá:th (Sumas) First Nation, Yale First Nation, Aitchelitz First Nation, Shxwhá:y Village, Skowkale First Nation, Soowahlie First Nation, Squiala First Nation, Tzeachten First Nation, Yakweakwioose First Nation);
- Ts'uubaa-asatx Nation;
- Tsawwassen First Nation; and
- Tsleil-Waututh Nation.

The EAO will continue to collaborate with participating Indigenous nations as described in the roles and responsibilities tables in this plan below. Roles and responsibilities regarding Indigenous Led assessments (Indigenous Led Assessment) under Section 19(4) of the Act as proposed by several Nations are described in the appendices of this plan.

## 2.2. Indigenous Nations – Katzie First Nation and Semiahmoo First Nation

Katzie First Nation and Semiahmoo First Nation chose not to identify as a participating Indigenous nation in the Tilbury Phase 2 EA. The EAO will consult these Nations as described below and as described in the roles and responsibilities tables in this plan. The EAO has also delegated some procedural components of consultation with Katzie First Nation and Semiahmoo First Nation to FortisBC as described in the roles and responsibilities tables of this plan.

The EAO will continue to engage with Katzie First Nation and Semiahmoo First Nation during the Tilbury Phase 2 EA process as follows:

- Notifying Katzie and Semiahmoo of the five key milestones:
  - Receipt of FortisBC's Application for an environmental assessment certificate (Application)) under Section 27 of the Act;
  - Public comment periods required by Sections 27(2)(a) and 28(2)(b) of the Act;
  - Acceptance of a revised Application under Section 27(4) of the Act;
  - Referral to Ministers for decision on an EAC under Section 29 of the Act; and
  - Issuance of any legal orders issued under the Act in relation to Tilbury Phase 2.
- Seek comments on Applications and any supplemental information, EAO's draft assessment report, and the draft EAC, including proposed conditions and project description, within established legislated timelines under the Act:
  - Offer meetings to discuss issues and concerns;
  - Invite members to attend TAC meetings; and
  - Provide an opportunity to collaborate with the EAO on the drafting of their respective sections of the draft Assessment Report.

## 2.3. Indigenous Nations – Notification

The EAO will consult the Indigenous nations listed below by providing notifications during the EA and as described in the roles and responsibilities tables in this plan. The EAO has also delegated some procedural components of consultation with the Indigenous nations listed below to FortisBC as described in the roles and responsibilities tables of this plan.

- Leq'á:mel First Nation;
- Malahat First Nation;
- Matsqui First Nation;
- Métis Nation British Columbia<sup>1</sup>;
- Pauquachin First Nation;
- Popkum First Nation;
- Shxw'ōwhámel First Nation;
- Squamish Nation;
- Tsartlip First Nation;
- Tsawout First Nation; and
- Tseycum First Nation.

The EAO will notify these Indigenous nations of these five key milestones:

1. Receipt of FortisBC's Application under Section 27 of the Act;
2. Public comment periods required by Sections 27(2)(a) and 28(2)(b) of the Act;
3. Acceptance of a revised Application under Section 27(4) of the Act;
4. Referral to Ministers for decision on an EAC under Section 29 of the Act; and
5. Issuance of any legal orders issued under the Act in relation to Tilbury Phase 2.

For the purposes of this Assessment Plan and the tables that follow, "Indigenous Nations – Notification" is a reference to the above listed Indigenous nations and "Indigenous nation" is a reference to any of the Indigenous nations listed in this Section 2.

## 3.0 APPLICATION DEVELOPMENT AND REVIEW

Within this phase, there are two main stages:

- (1) Development of FortisBC's Application for an EAC (Application); and
- (2) Review of FortisBC's Application.

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<sup>1</sup> As the federal Minister of Environment and Climate Change has approved British Columbia's (B.C.) request for substitution by the provincial process, the EAO will direct FortisBC to undertake specific consultation activities with Métis Nation British Columbia to meet the federal requirements of the *Impact Assessment Act* (2019) and associated consultation activities. Any consultation conducted by B.C. with Métis or organizations representing Métis within B.C. under a substituted impact assessment is understood to be conducted on behalf of the Government of Canada and should not be construed in any way as an acknowledgement by B.C. that it owes a duty of consultation or accommodation to Métis within B.C. under Section 35 of the *Constitution Act*, 1982.

### 3.1. Application Development

After the EAO issues the Process Order, including this Assessment Plan and the Application Information Requirements (AIR), and the Joint Permitting/Regulatory Coordination Plan, Tilbury Phase 2 then moves into the Application Development and Review phase of the EA. The first stage of this phase is for FortisBC to begin developing its Application in alignment with the Process Order, including the AIR and this Assessment Plan. The EAO, Indigenous nations, members of the TAC and the Agency are engaged by FortisBC and provide feedback during FortisBC's development of the Application.

#### Deliverables

FortisBC will develop the following deliverables during the Application Development stage:

1. Engagement Log – As per Section 19.5 of the AIR, FortisBC maintains an engagement log summarizing which documents were provided for review to members of the TAC prior to the Application being submitted to the EAO, when they were provided, and identifying to whom they were provided to;
2. Issues tracking document – As per Section 19.5 of the AIR, FortisBC must outline any feedback received on the Reviews of Information documents and demonstrate how the feedback was addressed in the Application. This tracking document is submitted to the EAO with the Application;
3. Application – FortisBC submits its Application to the EAO for review, which begins the Application Review phase;
4. Public Engagement Plan – FortisBC develops a plan outlining how FortisBC will undertake consultation with the public during the EA; and
5. Indigenous Engagement and Collaboration Plan – FortisBC develops a plan that guides engagement and collaboration activities with Indigenous nations identified in Section 2 during subsequent phases of the EA.

#### Timeline

The timeline for this stage is at the discretion of FortisBC; however, the information required by the Process Order is to be provided within three years from the date of issuance of the Process Order (see [Section 39\(b\)](#) of the Act).

The expected timelines for providing information to reviewers in support of Application development is as required by the AIR (Section 19.5).

#### Roles and Responsibilities

Table 1 specifies the roles and responsibilities of the EA participants during the Application Development stage. Note that the roles and responsibilities of the TAC and CAC are further detailed by the TAC Terms of Reference and CAC Terms of Reference, respectively.

Table 1. Roles and Responsibilities of EA Participants during Application Development

Participant	Roles and Responsibilities
FortisBC	<ul style="list-style-type: none"> <li>• Develop Application.</li> <li>• Conduct studies and/or modelling, including providing information to support the assessment of effects on Indigenous nations and rights in accordance with the requirements set out in the AIR.</li> </ul>

Participant	Roles and Responsibilities
	<ul style="list-style-type: none"> <li>• Discuss data collection methods and results with appropriate provincial agencies and identify any data to be submitted to provincial warehouses where they exist at the time of submission of the revised Application (See <a href="#">Effects Assessment Policy</a>).</li> <li>• Provide to the EAO a Public Engagement Plan prior to submitting the Application which outlines how FortisBC will undertake consultation with the public during the remaining phases of the EA process. The plan must be approved by the EAO.</li> <li>• Develop and provide to the EAO an Indigenous Engagement and Collaboration Plan, prior to submitting the Application, that will guide engagement and collaboration activities with all Indigenous nations during subsequent phases of the EA. The plan must be developed in consultation with Indigenous nations and outline how FortisBC will undertake procedural aspects of consultation with Indigenous nations on behalf of the Crown during the EA. FortisBC must advise the EAO on how Indigenous nations were consulted on the plan and what feedback was provided when submitting the Indigenous Engagement and Collaboration Plan. The plan must be approved by the EAO.</li> <li>• Track and respond to feedback received during Application development.</li> <li>• Engage with EA participants to provide input on the development of its Application and, as directed by the EAO, to respond to issues raised.</li> <li>• Seek information for inclusion in the Application from Indigenous nations, including Indigenous knowledge.</li> <li>• Engage with participating Indigenous nations and Indigenous nations on the development of components of the Application, if agreed to by the participating Indigenous nation or Indigenous nation.</li> <li>• Support participating Indigenous nations undertaking an Indigenous Led Assessment by providing necessary information for the assessments, as outlined in Appendices <a href="#">1</a>, <a href="#">2</a>, <a href="#">3</a>, <a href="#">4</a>, <a href="#">5</a> and <a href="#">6</a>.</li> <li>• Engage with the EAO to request feedback prior to and during, the development of the Application.</li> <li>• See Appendices <a href="#">1</a>, <a href="#">2</a>, <a href="#">3</a>, <a href="#">4</a>, <a href="#">5</a> and <a href="#">6</a> for FortisBC's role and responsibilities in supporting participating Indigenous nations undertaking Indigenous Led Assessments.</li> </ul>
EAO	<ul style="list-style-type: none"> <li>• Review FortisBC's Public Engagement Plan to determine if the plan is sufficient for approval by the EAO.</li> <li>• Review FortisBC's Indigenous Engagement and Collaboration Plan to determine if the plan is sufficient for approval by the EAO.</li> <li>• Engage as necessary and upon request to provide FortisBC feedback prior to and during, the development of the Application.</li> <li>• Follow the progress of FortisBC's development of its Application and facilitate engagement of Indigenous nations and members of the TAC by FortisBC as per the Process Order.</li> <li>• Engage, as necessary, to attempt to resolve issues identified in FortisBC's engagement during the development of the Application and any issues identified by Indigenous nations.</li> <li>• Engage, as necessary, with the CAC to provide updates on the progress of the development of the Application and next steps in the EA.</li> <li>• Work with provincial agencies and federal authorities to identify and resolve any policy gaps or agency capacity issues and provide regulatory context to EA participants.</li> <li>• Seek the Agency's advice on the development of the Application in order to fulfill the federal requirements for substitution, where appropriate.</li> <li>• Provide the public with access to records in relation to the assessment to enable its meaningful participation.</li> <li>• Instruct FortisBC to work with Indigenous nations to gather and incorporate Indigenous knowledge.</li> <li>• Provide Indigenous nations with guidance on how to protect confidential information.</li> <li>• Facilitate issues resolution as required.</li> </ul>



Participant	Roles and Responsibilities
	<ul style="list-style-type: none"> <li>See Appendices <a href="#">1</a>, <a href="#">2</a>, <a href="#">3</a>, <a href="#">4</a>, <a href="#">5</a> and <a href="#">6</a> for EAO's role and responsibilities in supporting participating Indigenous nations undertaking Indigenous Led Assessments.</li> </ul>
Participating Indigenous Nations	<ul style="list-style-type: none"> <li>May provide information, including Indigenous knowledge, to be applied throughout the EA process. Nations may work with FortisBC to include this knowledge in the Application or it may be provided in some other format. More information can be found in the Guide to Indigenous Knowledge in Environmental Assessments.</li> <li>Engage with FortisBC on the development of portions of the Application.</li> <li>Review and provide input to FortisBC during the development of the Application.</li> <li>Engage with FortisBC in the development and review of FortisBC's Indigenous Engagement and Collaboration Plan.</li> <li>Building off discussions during Early Engagement regarding understanding of Indigenous interests, identify potential effects of Tilbury Phase 2 on the Nation and its rights to FortisBC.</li> <li>May undertake community engagement and inform FortisBC and the EAO on community engagement requirements.</li> <li>See Appendices <a href="#">1</a>, <a href="#">2</a>, <a href="#">3</a>, <a href="#">4</a>, <a href="#">5</a> and <a href="#">6</a> for the roles and responsibilities of participating Indigenous nations undertaking Indigenous Led Assessments.</li> </ul>
Indigenous Nations – Katzie First Nation and Semiahmoo First Nation	<ul style="list-style-type: none"> <li>May provide information, including Indigenous knowledge, to be applied throughout the EA process. Nations may work with FortisBC to include this knowledge in the Application, or it may be provided in some other format. More information can be found in the Guide to Indigenous Knowledge in Environmental Assessments.</li> <li>Engage with FortisBC on the development of portions of the Application.</li> <li>Review and provide input to FortisBC during the development of the Application.</li> <li>Building off discussions during Early Engagement regarding understanding of Indigenous interests, identify potential effects of Tilbury Phase 2 on the Nation and its rights.</li> <li>Review FortisBC's Indigenous Engagement and Collaboration Plan.</li> <li>May undertake community engagement and inform FortisBC and the EAO on community engagement requirements.</li> </ul>
Indigenous Nations - Notification	<ul style="list-style-type: none"> <li>Attend meetings with FortisBC, EAO, and the Agency as requested.</li> <li>Review and provide input to FortisBC during the development of the Application.</li> </ul>
Local governments	<ul style="list-style-type: none"> <li>Review and provide input to FortisBC during the development of the Application.</li> <li>Participate in TAC.</li> <li>Identify individuals that may hold local knowledge.</li> </ul>
CAC	<ul style="list-style-type: none"> <li>Participate in any CAC engagement led by the EAO.</li> </ul>
TAC	<ul style="list-style-type: none"> <li>Review and provide input to FortisBC during the development of the Application, including the methods to consider the matters referenced in Section 25(2) of the Act as per the AIR and Section 22 of the <i>Impact Assessment Act</i> (IAA).</li> <li>Participate in TAC meetings and calls led by the EAO.</li> <li>Provincial and federal agencies: Identify regulatory issues and any policy or technical gaps as well as complementary measures.</li> </ul>
The Agency	<ul style="list-style-type: none"> <li>At the request of the EAO, review and provide advice to the EAO during the development of the Application on matters related to implementing the substituted assessment.</li> </ul>

Participant	Roles and Responsibilities
	<ul style="list-style-type: none"> <li>• Provide advice on matters of federal jurisdiction or interest and meeting the requirements of substitution to EAO at their request.</li> <li>• Engage with the EAO and Indigenous nations upon request.</li> <li>• See Appendices <a href="#">1</a>, <a href="#">2</a>, <a href="#">3</a>, <a href="#">4</a>, <a href="#">5</a> and <a href="#">6</a> for the Agency's role and responsibilities in supporting participating Indigenous nations undertaking Indigenous Led Assessments.</li> </ul>
Public and Stakeholders	<ul style="list-style-type: none"> <li>• Remain informed on the assessment process and how to participate once the Application is submitted.</li> </ul>

### 3.2. Application Review

In the Application review portion of this phase, the EAO leads the review of FortisBC's Application, submitted under [Section 27](#) of the Act, with EA participants, including participating Indigenous nations, and issues a notice to FortisBC respecting the Application. This stage will include review and comment periods on the Application by the members of the TAC, the CAC, Indigenous nations, and the public. These reviews may result in information requests issued to FortisBC by the EAO informed by advice provided by the advisory committee members, Indigenous nations, and the Agency and input from the public, that then have associated review and response periods. FortisBC is responsible for responding to the information requests generated within the timelines provided by the EAO.

The EAO will seek consensus with the participating Indigenous nations on any matters that pertain to the Nations' interests to include in the EAO's notice to FortisBC respecting the Application and any revised Application. Once FortisBC prepares and submits an Application and any revised Application, and prior to the decision on whether to accept any revised Application, the EAO will seek consensus with participating Indigenous nations as to whether or not any revised Application contains the information required by the Process Order and responds to matters set out in the EAO's notice to FortisBC regarding its Application.

#### Deliverables

The following deliverables will be developed during the Application review stage:

1. Information requests issued to FortisBC by the EAO informed by advice provided by the advisory committee members, participating Indigenous nations, and input from the public;
2. FortisBC responses to information requests, as well as responses to any Indigenous nation, the TAC, the CAC, and the comments received during the public comment period;
3. Issuance of the EAO's notice under Section 27(2)(b) to FortisBC respecting the Application;
4. Revised Application – FortisBC submits its revised Application to the EAO addressing the requirements in the EAO's notice;
5. FortisBC submission of data to the EAO and provincial databases following Appendix 2 of the [Effects Assessment Policy](#). For a list of data to be submitted by FortisBC, see Appendix 1; and
6. Notice of Application Acceptance – EAO confirms that the Application meets the requirements of Schedule A of the Process Order.

#### Timeline

The timeline for the EAO issuing a notice to FortisBC respecting the Application is up to 180 days following submission of the Application. This timeline is legislated under [Section 27\(2\)](#) of the Act. A minimum 45-day public comment period will

be held during this stage on the EAO's Project Information Centre (EPIC) website. During the public comment period, the EAO will hold an open house(s) to provide information on the EA process and Tilbury Phase 2, respectively. The public comment period and open house(s) will be advertised by FortisBC and coordinated by the EAO a minimum of seven days in advance of the public comment period commencing.

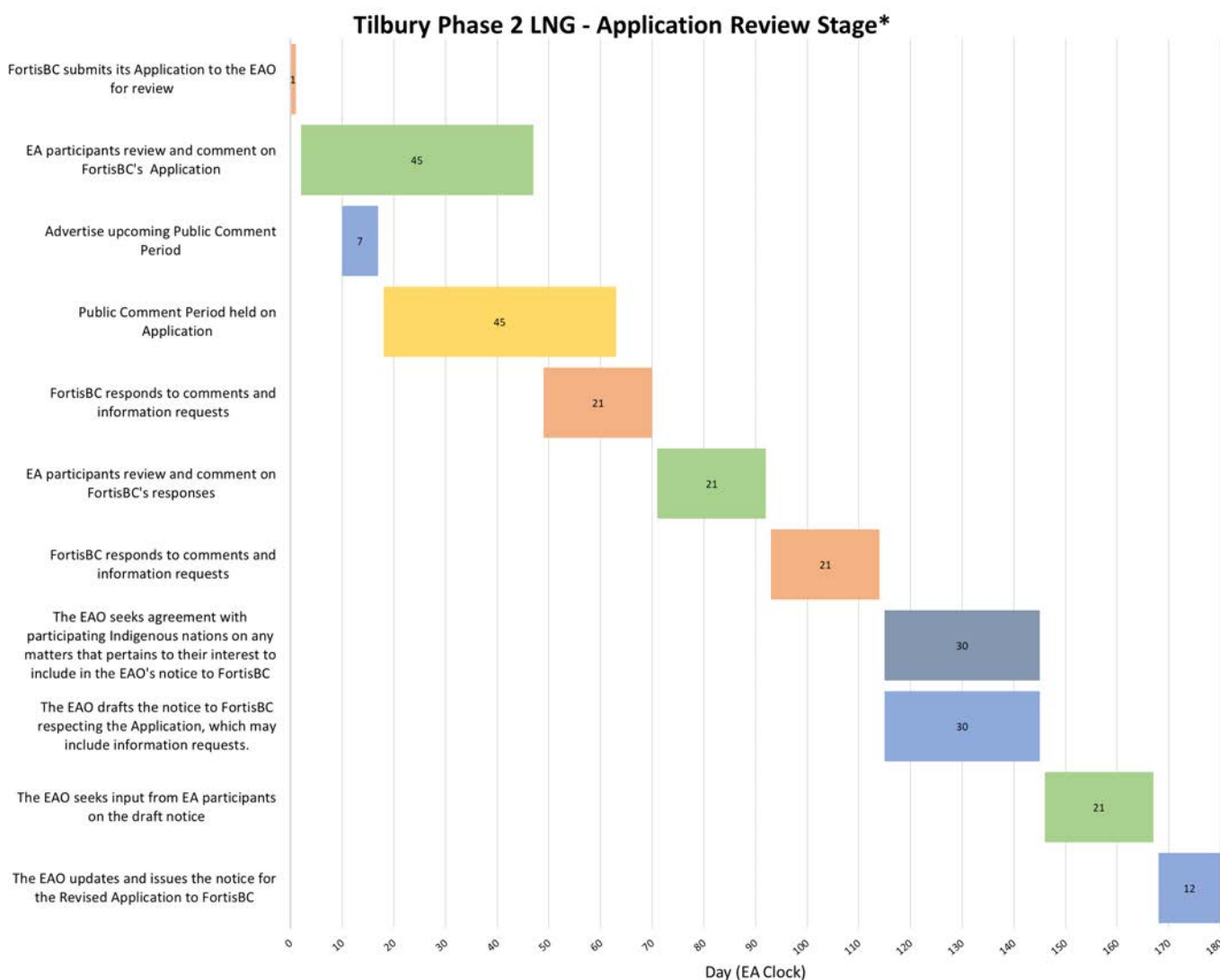


Figure 1: \* This is the anticipated schedule and timelines during this stage. A more detailed workplan will be developed for each phase prior to it occurring.

### Roles and Responsibilities

[Table 2](#) (below) specifies the roles and responsibilities of the EA participants during the Application review stage. Note that the roles and responsibilities of the TAC and CAC are further detailed by the TAC Terms of Reference and CAC Terms of Reference, respectively.

Table 2. Roles and Responsibilities of EA Participants during Application Review

Participant	Roles and Responsibilities
FortisBC	<ul style="list-style-type: none"> <li>• Respond to comments and information requests issued by the EAO in the timelines set by the EAO.</li> <li>• Record the concerns raised by all parties and measures being implemented to avoid, reduce, or otherwise address them.</li> <li>• Submit a Public Engagement Report to the EAO within 30 days of the closing date for the public comment period on the Application, in accordance with the approved Public Engagement Plan.</li> <li>• Submit an Indigenous Engagement Report to the EAO with the revised application, in accordance with the approved Indigenous Engagement and Collaboration Plan. When submitting a report, FortisBC must describe how each Indigenous nation was consulted about the Indigenous Engagement Report, what feedback was provided and how any concerns were resolved.</li> <li>• Participate in CAC and TAC meetings and public engagement as required by the EAO.</li> <li>• Engage Indigenous nations in reviewing the Application and respond to issues regarding potential effects and proposed mitigations.</li> <li>• Revise Application based on the EAO's notice and document changes made and supporting rationale.</li> <li>• Submit any identified data to the EAO and provincial warehouses where they exist (see the Effects Assessment Policy here) at the time of submission of the revised Application.</li> <li>• See Appendices <a href="#">1</a>, <a href="#">2</a>, <a href="#">3</a>, <a href="#">4</a>, <a href="#">5</a> and <a href="#">6</a> for FortisBC's role and responsibilities in supporting participating Indigenous nations undertaking Indigenous Led Assessments.</li> </ul>
EAO	<ul style="list-style-type: none"> <li>• Review FortisBC's Application against the Process Order and seek consensus with participating Indigenous nations on the sufficiency of the Application.</li> <li>• Post Application for public review and comment, post public notices announcing participation opportunities, administer public comment period through EPIC.</li> <li>• Conduct engagement with the public, local government, other stakeholders, CAC, and Indigenous nations, in accordance with this Assessment Plan.</li> <li>• Review FortisBC's Public Engagement Report to determine if the report is sufficient for approval by the EAO.</li> <li>• Review FortisBC's Indigenous Engagement Report to determine if the report is sufficient for approval by the EAO.</li> <li>• Lead TAC review of Application.</li> <li>• Develop information requests, as needed, by advice provided by the TAC, participating Indigenous nations, and input from the public.</li> <li>• Set timelines for TAC review of proponent documents.</li> <li>• Issue information requests to FortisBC.</li> <li>• Lead TAC and CAC, including meetings, calls, and provide secretariat role for these committees.</li> <li>• Seek advice from the Agency on the Applications and information requests in meeting requirements for substitution.</li> <li>• Facilitate issue resolution as required.</li> <li>• Track information requests and responses and provide them to participating Indigenous nations, any other Indigenous nations and members of the TAC and CAC to review adequacy of responses, and post to EPIC.</li> <li>• Notify Indigenous nations of: <ul style="list-style-type: none"> <li>◦ Receipt of FortisBC's Application for an EAC under Section 27 of the Act;</li> </ul> </li> </ul>

Participant	Roles and Responsibilities
	<ul style="list-style-type: none"> <li>○ Public comment periods required by Sections 27(2)(a) and 28(2)(b) of the Act; and</li> <li>○ Acceptance of a revised Application under Section 27(4) of the Act.</li> <li>• Follow up on timelines for participating Indigenous nations, any other Indigenous nations, and members of the TAC to provide comments and FortisBC to respond to information requests.</li> <li>• Update the Regulatory Coordination Plan with details with respect to how issues are or will be addressed through the EA and other regulatory requirements or government initiatives.</li> <li>• Facilitate information flow between participating Indigenous nations and members of the TAC as necessary.</li> <li>• Collaboratively identify matters for the notice to FortisBC respecting the revised Application with participating Indigenous nations.</li> <li>• Issue notice to FortisBC respecting the Application.</li> <li>• Review FortisBC's revised Application against the Process Order and the EAO's notice and seek consensus with participating Indigenous nations on the sufficiency of the revised Application.</li> <li>• Administer participant funding provided by the Agency to eligible recipients.</li> <li>• Provide learning opportunities on the assessment process to the public and Indigenous nations, and share guidance on how to protect confidential information.</li> <li>• See Appendices <a href="#">1</a>, <a href="#">2</a>, <a href="#">3</a>, <a href="#">4</a>, <a href="#">5</a> and <a href="#">6</a> for EAO's role and responsibilities in supporting participating Indigenous nations undertaking Indigenous Led Assessments.</li> <li>• Issue a Notice of Application Acceptance once the EAO confirms that the Application meets the requirements of Schedule A of the Process Order.</li> </ul>
Participating Indigenous nations	<ul style="list-style-type: none"> <li>• Review and provide feedback on Application, including feedback on potential effects of Tilbury Phase 2 on the Nation and its rights and proposed mitigation measures.</li> <li>• Work with EAO to collaboratively develop information requests.</li> <li>• Review and assesses adequacy of FortisBC responses to comments on the Application and information requests.</li> <li>• Participate in TAC meetings and calls.</li> <li>• Engage government to government with the EAO and the Agency as requested.</li> <li>• Pro-actively and collaboratively identify matters for the notice to FortisBC respecting the revised Application with the EAO.</li> <li>• Participate in consensus seeking with the EAO on the sufficiency of the revised Application.</li> <li>• Review FortisBC's Indigenous Engagement and Collaboration Report.</li> <li>• Support participating Indigenous nations' internal governance, as appropriate.</li> <li>• See Appendices <a href="#">1</a>, <a href="#">2</a>, <a href="#">3</a>, <a href="#">4</a>, <a href="#">5</a> and <a href="#">6</a> for the roles and responsibilities of participating Indigenous nations undertaking Indigenous Led Assessments.</li> </ul>
Indigenous nations – Katzie First Nation and Semiahmoo First Nation	<ul style="list-style-type: none"> <li>• Review and provide feedback on Application, including feedback on potential effects of Tilbury Phase 2 on the Nation and its rights and proposed mitigation measures.</li> <li>• Work with EAO to collaboratively develop information requests.</li> <li>• Review and assesses adequacy of FortisBC responses.</li> <li>• May participate in TAC meetings and calls.</li> <li>• May review FortisBC's Indigenous Engagement and Collaboration Reports.</li> <li>• Engage government to government with the EAO and the Agency as requested.</li> </ul>

Participant	Roles and Responsibilities
	<ul style="list-style-type: none"> <li>• Collaboratively identify matters for the notice to FortisBC respecting the revised Application with the EAO.</li> <li>• Review Indigenous engagement report submitted by FortisBC.</li> </ul>
Indigenous nations - Notification	<ul style="list-style-type: none"> <li>• Provide feedback on FortisBC's assessment of effects to Nation and its rights in the Application.</li> <li>• Attend meetings with FortisBC, the EAO, and the Agency as requested.</li> </ul>
Local governments	<ul style="list-style-type: none"> <li>• Identify potential effects of Tilbury Phase 2 on the community and areas of interest to local governments.</li> <li>• Review and provide advice on Application.</li> <li>• Review and assess adequacy of FortisBC responses.</li> <li>• Participate in TAC meetings and calls and/or CAC engagement.</li> <li>• Provide advice as requested by the EAO during the review of the revised Application.</li> </ul>
CAC	<ul style="list-style-type: none"> <li>• Identify potential effects of Tilbury Phase 2 on the community.</li> <li>• Review and comment on Application during public comment period.</li> <li>• Provide advice on the potential positive and negative effects of Tilbury Phase 2 as it pertains to the community.</li> <li>• Review FortisBC responses.</li> <li>• Participate through CAC and public engagement activities of the EAO and FortisBC.</li> </ul>
TAC	<ul style="list-style-type: none"> <li>• Review and provide advice on Application, including the methods to consider the matters referenced in Section 25 of the Act and Section 22 of the IAA including the feasibility and completeness of proposed mitigations for addressing potential adverse effects, risk and uncertainty, and advice on any complementary measures.</li> <li>• Participate in TAC meetings and calls led by the EAO.</li> <li>• Work with the EAO and other TAC members to define information requests for specific additional information required.</li> <li>• Review new information or issues raised during public comment periods, provide advice to the EAO as required to inform responses.</li> <li>• Attend public open houses and other public forums upon request of the EAO.</li> <li>• Provide advice as requested by the EAO during the review of the revised Application and any supplementary information.</li> <li>• Collaborate with the EAO during the updating of the Joint Permitting/Regulatory Coordination Plan to provide details with respect to how issues will be addressed through the EA and other regulatory requirements or government initiatives.</li> </ul>
The Agency	<ul style="list-style-type: none"> <li>• At the request of the EAO, review and provide advice to the EAO on matters related to implementing the substituted assessment.</li> <li>• The Agency will provide advice on matters of federal jurisdiction or interest and meeting the requirements of substitution to EAO at their request.</li> <li>• Engage with EAO and Indigenous nations upon request.</li> <li>• Coordinate the administration of participant funding through the EAO to Indigenous nations and the public.</li> </ul>

Participant	Roles and Responsibilities
	<ul style="list-style-type: none"> <li>Review and collaborate with the EAO on any updates to the Joint Permitting/Regulatory Coordination Plan with respect to how issues are or will be addressed through the EA and other federal regulatory requirements or federal government initiatives.</li> <li>See Appendices <a href="#">1</a>, <a href="#">2</a>, <a href="#">3</a>, <a href="#">4</a>, <a href="#">5</a> and <a href="#">6</a> for the Agency's role and responsibilities in supporting participating Indigenous nations undertaking Indigenous Led Assessments.</li> </ul>
Public and Stakeholders	<ul style="list-style-type: none"> <li>Identify potential effects of Tilbury Phase 2 based on local knowledge.</li> <li>Share views of whether the Application contains the required information and studies.</li> <li>Apply and coordinate receiving participant funding from the EAO on behalf of the Agency to review the Application.</li> <li>Submit comments to the EPIC website during public comment period.</li> <li>Participate in public engagement activities of the EAO and FortisBC.</li> </ul>

## 4.0 EFFECTS ASSESSMENT AND RECOMMENDATION

The decision to accept the Application or revised Application under [Section 27\(4\)](#) of the Act marks the beginning of this next phase. The notice of acceptance of the revised Application is posted to the EAO's website.

In the Effects Assessment and Recommendation phases, the EAO works with participating Indigenous nations and engages members of the TAC and CAC, any other Indigenous nations and FortisBC to complete an assessment of Tilbury Phase 2.

The EAO then develops a draft Assessment Report and draft EAC, including proposed conditions and project description (together referred to as the draft Referral Package). The EAO must seek consensus with participating Indigenous nations on the draft Referral Package. The EAO coordinates with the Agency during this phase so that the Agency may develop draft federal potential conditions to be considered for a federal Decision Statement.

A minimum 30-day public comment period on the draft Referral Package and draft federal potential conditions will be held on the EPIC website. The public comment period will be advertised by FortisBC and coordinated by the EAO, along with the Agency, a minimum of seven days in advance of the public comment period commencing. The EAO will consider and address comments on the draft Referral package, as appropriate, received before the referral to the provincial Ministers and provision of the final Assessment Report to the federal Minister.

During the public comment period, participating Indigenous nations can provide notice of consent or lack of consent to issuing the EAC and reasons for this decision. Upon completion of the public comment period, the EAO seeks consensus with participating Indigenous nations to finalize the Referral Package in response to comments received during the public comment period. During this time, FortisBC will also have the opportunity to comment on the Referral Package.

The Chief Executive Assessment Officer (CEAO) develops recommendations regarding whether Tilbury Phase 2 is consistent with the promotion of sustainability ([Section 29\(2\)\(b\)\(i\)](#) of the Act), the required assessment matters, the duration of the EAC, and reasons for the recommendation. The CEAO must seek consensus with participating Indigenous nations on the CEAO's recommendations regarding the sustainability recommendation identified in [Section 29\(2\)\(b\)\(i\)](#) of the Act. At this stage, the CEAO builds upon the consensus-seeking that occurred during the finalization of the Referral Package, which directly informs the provincial Ministers' decision as to whether to issue an EAC for Tilbury Phase 2.

In this phase, the Joint Permitting/Regulatory Coordination Plan will also be updated with details with respect to how issues have been addressed through the EA or will be addressed through other regulatory requirements or government initiatives.



There is an opportunity for participating Indigenous nations or the EAO to trigger dispute resolution if consensus is not reached on the draft Referral Package and/or the CEAO's recommendations.

This phase ends with the final Referral Package being referred to the provincial Ministers for decision by the EAO, and the final Assessment Report and potential federal conditions being provided to the federal Minister by the Agency to inform respective decision making. Once the Agency provides the final Assessment Report and potential federal conditions to the federal Minister, the substituted process is concluded.

### **Deliverables**

The following deliverables will be developed during the Effects Assessment and Recommendation phase:

1. Any additional information provided by participating Indigenous nations or other Indigenous nations to inform the assessment of effects to Nations and rights, including any Indigenous Led Assessments under Section 19(4) of the Act;
2. Draft Referral Package developed by the EAO including:
  - Draft Assessment Report;
  - Draft executive summary of the Assessment Report in English and French; and
  - Draft EAC including proposed conditions and project description;
3. Draft federal potential conditions;
4. Indigenous Led Assessments from Quw'utsun Nation, Musqueam Indian Band, Snuneymuxw First Nation, Tsawwassen First Nation and Tsleil-Waututh Nation;
5. Participating Indigenous nations notice of consent or lack of consent;
6. Final Referral Package developed by the EAO including:
  - Final Assessment Report;
  - Draft EAC including proposed conditions and project description;
  - Notifications of consent or lack of consent from participating Indigenous nations, if any; and
  - CEAO Recommendations.

The EAO will provide the final Assessment Report, including the final executive summary of the Assessment Report in English and in French, to the Agency. The Agency will provide the final Assessment Report and the draft federal potential conditions, to the federal Minister to inform their decision-making.

### **Timeline**

The timeline for the development of the EAO's final Referral Package is up to 150 days following the acceptance of FortisBC's revised Application. This timeline is legislated under [Section 29\(2\)](#) of the Act.

A minimum 30-day public comment period on the draft Referral Package will be held during this phase.

### Tilbury Phase 2 LNG - Effects Assessment and Recommendation Stage\*

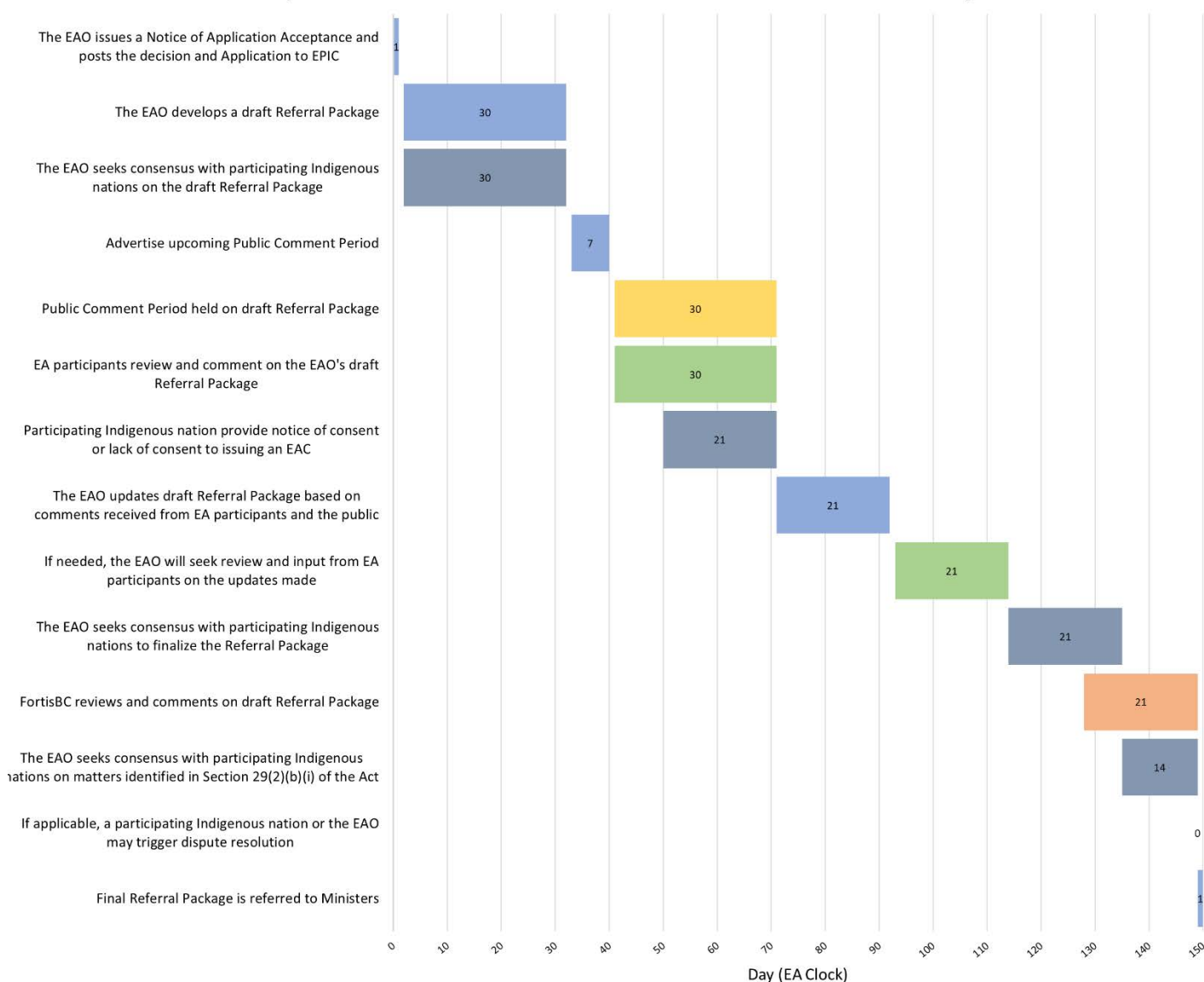


Figure 2: \* This is an anticipated schedule and timelines during this stage. A more detailed workplan will be developed for each phase prior to it occurring.

### Roles and Responsibilities

Table 3 specifies the roles and responsibilities of the EA participants during the Effects Assessment and Recommendation phases. Note that the roles and responsibilities of the TAC and CAC are further detailed by the TAC Terms of Reference and CAC Terms of Reference, respectively.

Table 3. Roles and Responsibilities of EA Participants during the Effects Assessment and Recommendation Phases

Participant	Roles and Responsibilities
FortisBC	<ul style="list-style-type: none"> <li>Provide responses to comments from the TAC, CAC, public, Indigenous nations, or the Agency as directed by the EAO.</li> </ul>

Participant	Roles and Responsibilities
	<ul style="list-style-type: none"> <li>Review and provide feedback to the EAO on draft Referral Package and draft federal potential conditions.</li> <li>Respond to information requests if directed by the EAO.</li> <li>Participate in meetings with Indigenous nations, including Indigenous community meetings upon a Nation's request.</li> <li>Participate in TAC or CAC meetings if requested by the EAO.</li> <li>See Appendices <a href="#">1</a>, <a href="#">2</a>, <a href="#">3</a>, <a href="#">4</a>, <a href="#">5</a> and <a href="#">6</a> for FortisBC's role and responsibilities in supporting participating Indigenous nations undertaking Indigenous Led Assessments.</li> </ul>
EAO	<ul style="list-style-type: none"> <li>Issue notice of Application acceptance.</li> <li>Provide the key mitigation measures from the revised Application to the Agency to inform development of draft federal potential conditions.</li> <li>Develop draft Referral Package with participating Indigenous nations and advice from any other Indigenous nations, the Agency, and members of the TAC and CAC.</li> <li>Identify the need for independent advice, with advice from participating Indigenous nations, the Agency, and members of the TAC.</li> <li>Seek consensus with participating Indigenous nations on the draft Referral Package.</li> <li>Engage FortisBC during development of the draft Referral Package.</li> <li>Engage agencies when updating the Joint Permitting/Regulatory Coordination Plan with details with respect to how issues are or will be addressed through the EA and other regulatory requirements or government initiatives, and drafting the EAC to ensure the requirements align with future permitting processes and other regulatory requirements.</li> <li>Coordinate the public comment period for the draft Referral Package with the Agency and FortisBC.</li> <li>Post draft Referral Package and draft potential federal conditions for public review and comment and administer public comment period on EPIC; post comments and responses to EPIC.</li> <li>Conduct engagement with the public, local government, other stakeholders, CAC, and Indigenous nations.</li> <li>Coordinate responses to public comments in response document or by making changes to the draft Referral Package to address the comments received.</li> <li>Seek advice from the members of the TAC to respond to public comments, if required.</li> <li>Facilitate issues resolution as required.</li> <li>Order FortisBC to provide further information pursuant to Section 19(2)(c)(i)(B), as required.</li> <li>Engage with participating Indigenous nations in the development of mitigation and accommodation measures.</li> <li>Seek consensus with participating Indigenous nations on the CEO's recommendations regarding the matters identified in Section 29(2)(b)(i) of the Act.</li> <li>Provide FortisBC an opportunity to review and respond to any revised Referral Package.</li> <li>Develop final provincial Referral Package.</li> <li>See Appendices <a href="#">1</a>, <a href="#">2</a>, <a href="#">3</a>, <a href="#">4</a>, <a href="#">5</a> and <a href="#">6</a> for EAO's role and responsibilities in supporting participating Indigenous nations undertaking Indigenous Led Assessments.</li> </ul>
Participating Indigenous Nations	<ul style="list-style-type: none"> <li>Provide additional information to inform the assessment of effects to the participating Indigenous nation and its rights, including any assessments under Section 19(4) of the Act.</li> </ul>

Participant	Roles and Responsibilities
	<ul style="list-style-type: none"> <li>Support the EAO in developing the draft Referral Package as it pertains to the interests of the participating Indigenous nation.</li> <li>Participate in the consensus seeking process leading to the draft Assessment Report and draft EAC.</li> <li>Work with the EAO in updating the Joint Permitting/Regulatory Coordination Plan with details on how issues are or will be addressed through the EA and other regulatory requirements or government initiatives.</li> <li>Seek consensus with the EAO on the draft Referral Package, which included matters under Section 25 of the Act.</li> <li>Facilitate consideration of draft Referral Package by Indigenous decision-makers to inform notification of consent or lack of consent.</li> <li>Provide notice, pursuant to Section 29(2)(c) of the Act, of its Nation's consent or lack of consent to the issuance of an EAC with reasons during the public comment period.</li> <li>Seek consensus with the CEAO regarding the CEAO's recommendations regarding the matters identified in Section 29(2)(b)(i) of the Act.</li> <li>Participate in TAC meetings and calls.</li> <li>Engage with the EAO in the development of mitigation and accommodation measures.</li> <li>Support participating Indigenous nations' internal governance, as appropriate Coordinate participant funding by the EAO on behalf of the Agency to support engagement on the draft Assessment Report and draft potential conditions review.</li> <li>See Appendices <a href="#">1</a>, <a href="#">2</a>, <a href="#">3</a>, <a href="#">4</a>, <a href="#">5</a> and <a href="#">6</a> for the roles and responsibilities of participating Indigenous nations undertaking Indigenous Led Assessments.</li> </ul>
Indigenous Nations – Katzie First Nation and Semiahmoo First Nation	<ul style="list-style-type: none"> <li>Provide additional information to inform the assessment of effects to the Indigenous nation and its rights.</li> <li>Support the EAO in developing the draft Referral Package as it pertains to the interests of the Indigenous nation.</li> <li>Work with the EAO in updating the Joint Permitting/Regulatory Coordination Plan with details on how issues are or will be addressed through the EA and other regulatory requirements or government initiatives.</li> <li>May participate in TAC meetings and calls.</li> <li>Support Indigenous nations' internal governance, as appropriate.</li> </ul>
Indigenous Nations – Notification	<ul style="list-style-type: none"> <li>Provide feedback to the EAO on assessment of effects to the Indigenous nation and its rights.</li> <li>Attend meetings with the EAO, FortisBC and the Agency as requested.</li> </ul>
Local governments	<ul style="list-style-type: none"> <li>Advise the EAO and participating Indigenous nations on effects of Tilbury Phase 2 on the community and areas of interest to local governments.</li> <li>Review and provide input on the draft Referral Package to ensure local issues and concerns raised by local governments are accurately reflected.</li> <li>Participate in TAC meetings and calls.</li> </ul>
CAC	<ul style="list-style-type: none"> <li>Advise the EAO on potential effects of Tilbury Phase 2 on the community.</li> <li>Review and provide comments on the draft Referral Package during the public comment period.</li> </ul>
TAC	<ul style="list-style-type: none"> <li>Provide advice as directed by the EAO to inform the assessment.</li> </ul>

Participant	Roles and Responsibilities
	<ul style="list-style-type: none"> <li>Review, provide feedback and advise the EAO on the effects assessment and determinations of significance in the draft Assessment Report and draft EAC, including potential conditions.</li> <li>Federal authorities: Review, provide feedback and advice to the Agency on the draft federal potential conditions.</li> <li>Agencies collaborate with the EAO during the updating of the Joint Permitting/Regulatory Coordination Plan to provide details with respect to how issues will be addressed through other regulatory requirements or government initiatives, and drafting of the EAC to help ensure it aligns with future permitting and regulatory processes Participate in TAC meetings and calls led by the EAO.</li> </ul>
The Agency	<ul style="list-style-type: none"> <li>Develop draft federal potential conditions for the federal Minister to consider for inclusion in the Decision Statement.</li> <li>Engage with the EAO and FortisBC on issues related to the IAA and within federal jurisdiction.</li> <li>Consult with Indigenous nations on the draft federal potential conditions.</li> <li>Coordinate the administration of participant funding through the EAO to Indigenous nations and the public.</li> <li>Coordinate the public comment period with the EAO.</li> <li>Coordinate with EAO on any updates to the Joint Permitting/Regulatory Coordination Plan with respect to how issues are or will be addressed through the EA and other federal regulatory requirements or federal government initiatives.</li> <li>See Appendices <a href="#">1</a>, <a href="#">2</a>, <a href="#">3</a>, <a href="#">4</a>, <a href="#">5</a> and <a href="#">6</a> for the Agency's role and responsibilities in supporting participating Indigenous nations undertaking Indigenous Led Assessments.</li> </ul>
Public and Stakeholders	<ul style="list-style-type: none"> <li>Provide comments on the draft Referral Package and federal potential conditions to the EAO and the Agency during the public comment period.</li> <li>Participate in public engagement activities of the EAO.</li> </ul>

### Undertaking Assessments with Participating Indigenous Nations

Table 4 below describes the methods used to assess effects of Tilbury Phase 2 to the participating Indigenous nation and its rights either through a [19\(4\)](#) assessment or an assessment that the EAO will collaboratively undertake with a participating Indigenous nation or conduct and have the Nation review and provide comment on.

Table 4. Assessment scope and responsibilities of EAO and participating Indigenous nations

Indigenous Nation	Assessment scope and responsibilities
Chawathil First Nation	<ul style="list-style-type: none"> <li>Effects to fish and fish habitat (including salmon, Salish Sucker, Stickleback, and Brown Salish Catfish) and Chawathil First Nation's way of life.</li> <li>Effects to Aboriginal rights in the Fraser River.</li> <li>Effects on stewardship rights and responsibilities, including ongoing conservation efforts targeted at restoring important fish species and habitat.</li> <li>The EAO will co-draft the assessment of project effects on the Nation and its rights and seek consensus with the Nation on the assessment.</li> </ul>
Cheam First Nation	<ul style="list-style-type: none"> <li>Effects to salmon and salmon habitat and Cheam First Nation's way of life.</li> <li>Effects on Aboriginal rights in the Fraser River.</li> </ul>

	<ul style="list-style-type: none"> <li>The EAO will co-draft the assessment of project effects on the Nation and its rights and seek consensus with the Nation on the assessment.</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>The EAO will conduct an assessment of project effects on the Nation and its rights and seek consensus with the Nation on the assessment.</li> </ul>
Kwantlen First Nation	<ul style="list-style-type: none"> <li>Effects on Aboriginal rights to Tilbury Island and surrounding area and general effects to this area.</li> <li>Effects to salmon and salmon habitat, and Kwantlen First Nation's way of life.</li> <li>Effects to emotional and cultural health and wellbeing.</li> <li>The EAO will co-draft the assessment of project effects on the Nation and its rights and seek consensus with the Nation on the assessment.</li> </ul>
Kwikwetlem First Nation	<ul style="list-style-type: none"> <li>Effects to salmon and salmon habitat and waters and species that call their territory home (permanently and passing through).</li> <li>Tilbury Phase 2 contributions to climate change and resulting direct and indirect effects to the Nation, including increased flood risks.</li> <li>The EAO will co-draft the assessment of project effects on the Nation and its rights and seek consensus with the Nation on the assessment.</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>The EAO will conduct an assessment of project effects on the Nation and its rights and seek consensus with the Nation on the assessment.</li> </ul>
Musqueam Indian Band	<ul style="list-style-type: none"> <li>Indigenous Led Assessment under Section 19(4) – see Appendix XX.</li> </ul>
Quw'utsun Nation (Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe and Stz'uminus First Nation)	<ul style="list-style-type: none"> <li>Indigenous Led Assessment under Section 19(4) – see Appendix XX.</li> </ul>
Snuneymuxw First Nation	<ul style="list-style-type: none"> <li>Indigenous Led Assessment under Section 19(4) – see Appendix XX.</li> </ul>
S'ólh Téméxw Stewardship Alliance (STSA)	<ul style="list-style-type: none"> <li>Effects on rights to fish salmon relied on by Nations for food, social and ceremonial well-being.</li> <li>Effects on community members' health, including from air quality effects.</li> <li>Effects on cultural and spiritual practices and related effects on health and wellbeing.</li> <li>Protection of S'ólh Téméxw ecosystem as an integrated system.</li> <li>The EAO will co-draft the assessment of project effects on the Nation and its rights and seek consensus with the Nation on the assessment.</li> <li></li> </ul>
Tsawwassen First Nation (TFN)	<ul style="list-style-type: none"> <li>Indigenous Led Assessment under Section 19(4) – see Appendix XX.</li> </ul>
Tsleil-Waututh Nation (TWN)	<ul style="list-style-type: none"> <li>Indigenous Led Assessment under Section 19(4), focusing on cultural health – see Appendix XX.</li> <li>The EAO will co-draft the introduction and conclusions of the assessment of project effects on the Nation and its rights and seek consensus with the Nation on the assessment.</li> </ul>

Ts'uubaa-asatx Nation (Lake Cowichan)	<p>The assessment of impacts to Ts'uubaa-asatx Nation will include an assessment of project-related impacts to the following Indigenous interests, as identified in Ts'uubaa-asatx Nation's draft Advocacy Policy:</p> <ul style="list-style-type: none"> <li>• Effects to harvesting and subsistence activities;</li> <li>• Effects to cultural use sites and areas;</li> <li>• Effects to cultural continuation;</li> <li>• Effects to Indigenous governance systems;</li> <li>• Effects to economic activities;</li> <li>• Effects to Indigenous health and well-being; and</li> <li>• Effects to governance relationship to the environment.</li> </ul> <p>The EAO will co-draft the assessment of project effects on the Nation and its rights and seek consensus with the Nation on the assessment.</p>
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### Undertaking Assessments with Indigenous nations

Table 5 below describes the procedures to assess effects of the project to the Indigenous nation and its rights.

Table 5. Assessment scope and procedures for Indigenous nations

Indigenous Nation	Assessment scope and methods	Timeline
Katzie First Nation	<ul style="list-style-type: none"> <li>• Access to and use of the Fraser River as a transportation corridor and as a source of fisheries resources, and potential impacts of the project on navigation and fishing activities.</li> <li>• Cumulative effects.</li> <li>• The EAO will conduct an assessment of project effects on the Nation and its rights and will provide the assessment for review and comment.</li> </ul>	The assessment will be conducted by the EAO during the Effects Assessment Phase.
Semiahmoo First Nation	<ul style="list-style-type: none"> <li>• The EAO will conduct an assessment of project effects on the Nation and its rights and will provide the assessment for review and comment.</li> </ul>	The assessment will be conducted by the EAO during the Effects Assessment Phase.
Leq'á:mel First Nation Malahat First Nation Matsqui First Nation Métis Nation British Columbia Pauquachin First Nation Popkum First Nation Shxw'ōwhámél First Nation Squamish Nation Tsartlip First Nation Tsawout First Nation Tseycum First Nation	<ul style="list-style-type: none"> <li>• The EAO will conduct an assessment of project effects on the Nation and its rights and will provide the assessment for review and comment.</li> </ul>	The assessment will be conducted by the EAO during the Effects Assessment Phase.

## 5.0 DECISION

This phase begins when a Referral Package is submitted to Ministers under [Section 29\(1\)](#) of the Act and ends when Ministers decide whether to issue or refuse an EAC and publish reasons for their decision. When deciding on whether a project should receive an EAC, the Ministers must consider the materials in the Referral Package, the sustainability and reconciliation purposes of the EAO, and other prescribed matters, if any. The Ministers may consider any other matters that they consider relevant to the public interest.

If the recommendation of the CEOA respecting the project's consistency with the promotion of sustainability is contrary to the consent or lack of consent indicated by participating Indigenous nations, the Ministers must, before deciding, offer to meet with the Nation(s) that provided the notice. If the offer is accepted within three days of being made, the Ministers will provide notice to FortisBC that a meeting is taking place. Ministers will attend the meeting to attempt to achieve consensus with the Nation on the decision. If new information is provided by the Nation(s), the EAO must share this information with FortisBC and provide it with an opportunity to respond.

Whatever the decision, reasons for the decision must be published. Additionally, the Ministers must provide reasons if a decision is made to issue an EAC that is contrary to the consent or lack of consent indicated by a participating Indigenous nation.

In some circumstances, it is possible that dispute resolution between a participating Indigenous nation and the CEOA could be appropriate following referral to the Ministers but prior to the Ministers' decision under [Section 29\(4\)](#) of the Act, to address matters not captured in the final Assessment Report or EAC. This facilitation could be in addition to or in conjunction with a participating Indigenous nation's meeting with Ministers pursuant to [Section 29\(6\)](#) of the Act.

As this is a substituted assessment, both the federal and provincial Ministers, or the federal Governor in Council, retain the responsibility to make a decision on whether a project may proceed. If the Agency is of the opinion that additional information is required for the purposes of informing the federal Minister's decision (pursuant to [Section 35](#) of the IAA), the Agency will request this information from FortisBC through the EAO, or from the EAO, and will endeavour to do so within 45 days of receiving the Final Referral Package from the EAO. The federal Minister will issue a Decision with reasons for the public interest determination and potential conditions within 30 days, or 90 days for a Governor in Council decision.

### **Deliverables**

The following deliverable will be achieved in the Decision phase:

- Decision with reasons (provincial) – decision to issue or refuse to issue an EAC and reasons for decision.

### **Timeline**

The timeline for this phase is 30 days. This timeline is legislated under [Section 29\(4\)\(c\)](#) of the Act.

### **Roles and Responsibilities**

Table 6 specifies the roles and responsibilities of the EA participants during the decision phase.



Table 6. Roles and Responsibilities of EA Participants During the Decision Phase

Participant	Roles and Responsibilities
FortisBC	<ul style="list-style-type: none"> <li>• Opportunity to be heard, if the reasons for notification of consent or lack of consent are contrary to the recommendations and introduces new information that has the potential to materially impact the decision, or similarly with respect to information provided at a meeting held pursuant to Section 29(6) of the Act.</li> </ul>
EAO	<ul style="list-style-type: none"> <li>• Brief provincial decision-makers.</li> <li>• Support participating Indigenous nations' meeting with Ministers, if needed.</li> <li>• Provide notice to FortisBC that a meeting with a participating Indigenous nation will be held pursuant to Section 29(6) of the Act.</li> <li>• Provide any new information provided by a participating Indigenous nation that has the potential to materially impact the decision to FortisBC and provide an opportunity to respond.</li> <li>• Distribute and post Ministers' reasons for decision and final Referral Package.</li> </ul>
Participating Indigenous nations	<ul style="list-style-type: none"> <li>• Undertake steps necessary to inform Indigenous decision makers.</li> <li>• If requested by the Nation, meet with Ministers (if notice of consent or lack of consent is contrary to the CEAO's recommendations respecting the project's consistency with the promotion of sustainability).</li> </ul>
The Agency	<ul style="list-style-type: none"> <li>• Brief federal decision makers.</li> <li>• Translate the Decision Statement and post it on the Canadian Impact Assessment Registry, including reasons for the public interest determination and potential conditions.</li> <li>• Have ongoing dialogue with Indigenous nations, brief them regarding on the federal Decision Statement, and provide them with opportunities to learn about next steps post-assessment decision.</li> <li>• Transition Tilbury Phase 2 to post-decision-making phase for follow-up, monitoring and compliance activities.</li> </ul>

## 6.0 APPENDIX 1: LIST OF DATA FROM FORTISBC TO BE SUBMITTED TO THE EAO AND PROVINCIAL DATABASES

Table 7. Database info to be submitted from FortisBC

Discipline	Provincial Database	Data Submission	Format
Surface Water Quality	Environmental Monitoring System (EMS)	Surface Water Quality Data	Excel
Wildlife and Wildlife Habitat	Provincial Species Inventory Database (SPI) - Wildlife Species Inventory (WSI)	Amphibian survey results (May 2021) Breeding bird survey results (May 2021) Barn owl nest survey results (Nov 2021/April 2022)	Online form, spatial data & excel (SPI General Survey Sample Stations and Transect template, and SPI Bird Nest Survey template)
Vegetation	Provincial Species Inventory Database (SPI)	BC CDC Plants Species of Concern Observation BC CDC Ecological Communities of Concern	Online form and excel (SPI General Plant & Lichen Template)
Vegetation	Provincial Species Inventory Database (SPI)	Invasive Species Observation	Online form, spatial data & excel (General Plant & Lichen Template)

## 7.0 APPENDIX 2: MUSQUEAM INDIAN BAND INDIGENOUS LED ASSESSMENT

### 7.1. Introduction

Musqueam Indian Band (Musqueam) has confirmed, under Section 19(4) of the Act, that it intends to carry out an assessment with respect to the potential effects of the project on Musqueam Indian Band and its rights. This assessment (“Musqueam-led Assessment”) will utilize a Musqueam-developed approach that reflects the values and perspectives of Musqueam. The Musqueam-led Assessment will include an assessment of effects to Musqueam’s Indigenous interests, which are described in the Act (2018) as interests related to an Indigenous nation and its rights recognized and affirmed by Section 35 of the *Constitution Act*, 1982, including Aboriginal rights and title, that may be impacted by the Tilbury Phase 2 Project. Musqueam Indian Band has an established Aboriginal right to fish for food, social and ceremonial purposes, as established in the *Sparrow* decision (*R v. Sparrow*, [1990] 1 S.C.R. 1075) and is a priority rights holder within the project affected area<sup>2</sup>. In this context, assessment of effects to Musqueam’s Indigenous interests include, but are not limited to: fishing rights, including use of the Fraser River as defined by the *Sparrow* decision; sense of place and identity; cultural continuity and heritage; and human health

One of the key purposes of this Appendix is to provide process certainty with respect to the methodological requirements and the approach that will be taken for the assessment and consideration of project-specific and cumulative effects on Musqueam rights through the course of the environmental assessment.

This Appendix provides an overview of the scope of the Musqueam-led Assessment, a general description of the methodology to be used, information requirements for the assessment, roles and responsibilities of the parties conducting and supporting the Musqueam-led Assessment, and the timing of the Musqueam-led Assessment milestones. During the Process Planning phase for Tilbury Phase 2, Musqueam, the EAO, and the Agency worked collaboratively on, and then sought consensus on<sup>3</sup>, the content regarding the Musqueam-led Assessment included in this Appendix.

#### 7.1.1. Supporting principles

The principles below are proposed to guide the overall approach to conducting the Musqueam-led Assessment and to support effective collaboration between the technical staff of Musqueam, the EAO and the Agency throughout the process:

- Principle 1: The methodology for the assessment of impacts on rights and interests should be informed by or, where possible, developed in collaboration with the rights-holding Indigenous group.
- Principle 2: The assessment must consider the nature and scope of rights and interests, as those rights and interests are asserted, and how the rights might be impacted.
- Principle 3: The focus of the Musqueam-led Assessment is on potential impacts to Musqueam rights and interests, not on environmental effects.
- Principle 4: Assessing new project-specific impacts on the exercise of Musqueam rights and interest requires understanding the context of historical and contemporary cumulative effects in which rights are exercised. How

<sup>2</sup> This sentence was written by and represents the perspective of Musqueam Indian Band and does not necessarily reflect the views of the EAO.

<sup>3</sup> Musqueam is currently developing criteria and an internal process to reach consensus, however, this has not yet been completed. Musqueam and EAO sought consensus on this document but are unable to reach consensus until Musqueam’s internal process has been confirmed in alignment with the EAO’s Process Planning Policy (2020), as Musqueam and the EAO continue to seek consensus on this document, Musqueam may at a later date request that changes be made, or additional information be included.

conditions supporting the opportunity to exercise rights have changed over time must be evaluated in order to understand the potential severity of new project-specific effects on those rights and interests.

- Principle 5: The impacts of the project on the exercise of Musqueam rights and interests should be assessed in a broad sense, inclusive of any type of potential project effect on the conditions that support the continuity of rights and way of life.
- Principle 6: The assessment must consider Musqueam’s perspective and knowledge.
- Principle 7: The assessment must consider Musqueam values, norms and laws, as provided by Musqueam.
- Principle 8: Musqueam will lead the selection of methods and indicators for assessing impacts on Musqueam rights and interests. The determination of the severity of impacts on Musqueam rights and interests will be informed by the understandings and worldview of Musqueam and its members.
- Principle 9: Thresholds and measures to understand the potential severity of effects of a project on the exercise of rights, interests and culture are to be utilized where they have been defined by Musqueam.
- Principle 10: The potential effectiveness of proposed mitigation and off-setting measures (“mitigation measures”) must be determined through a collaborative analysis undertaken by Musqueam and other appropriate parties, based on existing evidence and examples from current projects. Where a proposed mitigation measure is unprecedented, and/or where there is a high level of uncertainty as to its effectiveness, the assessment will include an estimation of its potential effectiveness to reduce residual effects.

### 7.1.2. Supporting workplans

Musqueam, the EAO and the Agency will work to develop a collaboration workplan to support work conducted during the EA process, including the Indigenous Led Assessment. FortisBC is committed to continuing discussions on how they will support the collaboration workplan. Some components of the workplan could include engagement principles, use and protection of Indigenous knowledge, process commitments and collaboration points, issues resolution, and consensus seeking. This workplan will act as a living document and will be updated regularly throughout the EA as more information becomes available.

## 7.2. Scope of Musqueam Led Assessment

### 7.2.1. Scope

The scope of Musqueam Led Assessment includes all Musqueam’s Indigenous interests<sup>4</sup>, as identified by Musqueam. Based on the available information, Musqueam has identified, at a high-level, Musqueam’s Indigenous Interests that are relevant to the assessment of the Project. As the Application is prepared and the assessment proceeds and more project-specific information becomes available the relevant Musqueam interests and indicators will need to be refined to reflect project-specific concerns. Musqueam has identified the following Indigenous interests for consideration in the Musqueam Led Assessment:

<sup>4</sup> Interests are described in the Act (2018) as interests related to an Indigenous nation and its rights recognized and affirmed by Section 35 of the *Constitution Act*, 1982, including Aboriginal rights and title, that may be impacted by a project.

Table 8. Musqueam's Interests for Tilbury Phase 2

Musqueam Interests	Description	Potential Indicator(s)
Musqueam Cultural Continuity	<p>The ability of Musqueam people to maintain their distinct culture, including supporting practices and resources. Includes the ability to continue transmission of knowledge across generations, including place-based knowledge through practice, language, and sharing of oral histories and traditions.</p> <p><b>This is a foundational and overarching value for Musqueam that is maintained or impacted through the other Musqueam rights and interests outlined in this table.</b></p>	<ul style="list-style-type: none"> <li>- Safety—changes in real or perceived personal and community safety impacting the ability to continue cultural practices and transmission as a result of the project</li> <li>- Physical, environmental and multi-sensory changes impacting the ability to practice and transmit cultural knowledge and practices</li> <li>- Changes to availability of resources to support cultural practices and ceremonies</li> </ul>
Musqueam Title (Governance)	Includes the right to decide how the lands/waters will be used; and, Right to proactively use and manage the lands/waters.	<ul style="list-style-type: none"> <li>- Changes to Musqueam decision-making authority within and over Musqueam territorial lands and waters</li> <li>- Changes to ability to derive economic benefits from infrastructural development in Musqueam territory</li> <li>- Changes to ability to proactively govern and control Musqueam territorial lands and waters</li> </ul>
Sense of Place and Identity	Includes the ability to maintain territorial integrity, continue to access and use preferred places for spiritual purposes safely under preferred timing and conditions.	<ul style="list-style-type: none"> <li>- Change in access to spiritual locations</li> <li>- Change in quality of experience due to sensory disturbance</li> <li>- Change in real or perceived safety</li> <li>- Increased psychological and emotional stress from loss of spiritual landscape</li> <li>- Change to ability to traverse and navigate the territory</li> </ul>
Heritage Resources	Includes the tangible and intangible aspects of Musqueam's culture passed down from our ancestors and to which there is an onus to protect and maintain for successive generations. Heritage resources include, but are not limited to, transformer sites, s̓x̓eləqəm sites, named sites, "archaeological" sites, spiritual use sites, aspects of the landscape integral to Musqueam culture and identity and associated hə́nqəmiṇə́m language and knowledge.	<ul style="list-style-type: none"> <li>- Changes to heritage objects</li> <li>- Change to access to heritage objects</li> <li>- Changes to heritage sites</li> <li>- Changes to access to heritage sites</li> <li>- Changes to intangible heritage resources</li> <li>- Changes in access to key teaching cultural areas</li> </ul>

Musqueam Interests	Description	Potential Indicator(s)
Marine Fishing and Estuarine Harvesting	Includes the right and ability to access, harvest, and process marine fish and other marine foods and materials for sustenance, social cohesion, and spiritual/ceremonial purposes.	<ul style="list-style-type: none"> <li>- Change in access to harvesting areas due to physical, temporal, or administrative restrictions</li> <li>- Change in opportunity (current and future) due to impacts on abundance and/or quality (real and perceived) of harvest (including reduction of suitable habitat to support abundance)</li> <li>- Change in opportunity (current and future) due to decreased efficacy and/or increased competition</li> <li>- Change in cultural and sensory experience while marine and estuarine harvesting</li> <li>- Change in ability to transfer marine and estuarine harvesting knowledge intergenerationally</li> </ul>
Terrestrial Harvesting	Includes the ability to access, harvest and process terrestrial goods and materials for sustenance, social cohesion, and spiritual/ceremonial purposes.	<ul style="list-style-type: none"> <li>- Change in access to harvesting areas due to physical, temporal, or administrative restrictions</li> <li>- Change in opportunity (current and future) due to impacts on abundance and/or quality (real and perceived) of harvest (including reduction of suitable habitat to support abundance)</li> <li>- Change in opportunity (current and future) due to decreased efficacy and/or increased competition</li> <li>- Change in cultural and sensory experience while terrestrial harvesting</li> <li>- Change in ability to transfer terrestrial harvesting knowledge intergenerationally</li> </ul>
Human Health	Includes physical, mental and social determinants of health, using an Indigenous determinants of health approach.	<ul style="list-style-type: none"> <li>- Direct changes to human health from changes to physical environment including air and water quality</li> <li>- Changes to food security and/or nutrition from impacts to accessibility to, abundance or quality (measured, observed, and perceived) of harvested foods</li> <li>- Changes to human health resulting from impacts to wellbeing and/or socioeconomic conditions</li> </ul>

Musqueam Interests	Description	Potential Indicator(s)
Economic	Includes the right and ability to access the economic benefits of the lands/waters.	- Changes to economic benefits from infrastructural development in Musqueam territory

[Table 8](#) (above) contains a preliminary description of Musqueam’s Indigenous interests and potential indicators of impacts on those interests. While it may be necessary to define categories of interests for the purpose of conducting the impact assessment, in reality, Musqueam’s Indigenous interests are deeply interrelated. Musqueam’s rights, territory, knowledge and practices all support and rely on each other and are essential for supporting Musqueam’s distinct culture. Just as these concepts are inextricably interrelated, impacts on them are as well. There are both negative and positive feedback loops that are reinforced when these practices are disrupted or practiced.

In this way, cultural continuity is a foundational and overarching value for Musqueam that is maintained or impacted through the other Musqueam rights and interests. For Musqueam, cultural continuity is the ability of Musqueam people to maintain their distinct culture, including the transmission of knowledge across generations and maintaining place-based knowledge, language, oral histories, traditions and practices. Therefore, project effects on other Musqueam interests may also impact Musqueam’s cultural continuity and, as a result, must be assessed accordingly.

### 7.2.2. Assessment Boundaries

Impacts on Musqueam rights will be assessed in the context of the following spatial and temporal boundaries:

- Local Study Area: Project footprint plus a buffer around the project footprint and any relevant navigable waters<sup>5</sup> with a 2 km buffer.
- Regional Study Area: within the relevant navigable waters and within a buffer of the Project footprint.

To adequately address the context influencing the impacts of the project on Musqueam rights, the temporal boundary for the study ranges from the pre-contact period (i.e., prior to 1800) to a future development period. Temporal boundaries were selected by Musqueam to characterize baseline conditions and trends over time with which the proposed project is anticipated to interact.

#### *Cumulative Effects*

It is important to note spatial boundaries and baseline used for cumulative effects assessments under the Musqueam-led assessment may differ from what is used by FortisBC in their application. For Musqueam, it is necessary that the baseline for the cumulative effects assessment consider not only the “existing conditions” at the time the project is proposed, but also relevant activities and changes to Musqueam territory that affect Musqueam’s interests. These changes and activities are crucial to understanding how Musqueam rights and interests may be impacted by the project, including Musqueam’s ability to restore the territory and practices within the territory to a greater extent than is possible under existing

<sup>5</sup> The term 'navigable waters' is described in the Canadian Navigable Waters Act as "any body of water that is used (or is reasonably likely to be used) by vessels as a means of travel or transport for commercial or recreational purposes or as a means of travel or transport by Indigenous peoples to exercise their rights".

conditions. The spatial and temporal boundaries may also differ from the RAA to ensure that the appropriate boundaries are used to adequately understand the cumulative impact on Musqueam interests.

### 7.3. Methods of Musqueam-Led Assessment

Musqueam Indian Band has an established methodology for conducting the Musqueam-led Assessments for Major Projects, which forms the basis of Musqueam-led Assessment process outlined in this appendix. The Musqueam-led assessment will be conducted in parallel with FortisBC's application, which the two documents iteratively informing each other. The EAO, the Agency and FortisBC will continue to support Musqueam in further developing and conducting the Musqueam led assessment that meets the requirements and timelines of the assessment process for the Project and aligns with Musqueam's governance processes.

The steps of Musqueam's assessment process are as follows:

#### ESTABLISH CONTEXT

- Step 1: Identify potential impacted rights and study boundaries.
- Step 2: Establish historical context.
- Step 3: Establish current conditions.
- Step 4: Identify future condition and opportunities for future use.
- Step 5: Identify thresholds of acceptable change.

#### ASSESS PROJECT EFFECTS

- Step 6: Identify potential project-rights interactions and analyze potential project effects.
- Step 7: Identify mitigations and evaluate effectiveness.
- Step 8: Identify project-specific residual effects on rights.
- Step 9: Identify cumulative effects on rights.

#### DETERMINE SEVERITY OF IMPACTS

- Step 10: Characterize net residual project impacts and net residual cumulative impacts.
- Step 11: Determine severity of impacts.

### 7.4. Information Requirements for the Musqueam-led Assessment

Information requirements may become more specific as Musqueam conducts an internal gap analysis, which precedes the Musqueam-led Assessment. The purpose of this gap analysis is to identify the scope of additional research and/or studies as well as internal engagement with Musqueam knowledge-holders that is required to meet the information requirements of the Musqueam-Led Assessment. A summary report of the gap analysis findings will be shared with the EAO and FortisBC. If further information is needed from FortisBC, Musqueam and EAO will work collaboratively to develop an information request.

Information from FortisBC's Application may also be used to inform the Musqueam-led Assessment, such as:



- FortisBC’s assessment of impacts to local vegetation and harvesting sites;
- FortisBC’s assessment of impacts to fish and fish habitat;
- FortisBC’s assessment of impacts to archaeological and heritage resources;
- FortisBC’s assessment of impacts to culture;
- FortisBC’s assessment of impacts to Indigenous Health;
- FortisBC’s assessment of socio-economic impacts; and
- FortisBC’s assessment of cumulative effects on all relevant VCs.

#### *Confidentiality of Knowledge*

Section 75 of the Act (2018) outlines that any Indigenous knowledge that is provided in confidence must not be disclosed without written consent from Musqueam. Musqueam shall remain the exclusive owner of any Musqueam knowledge or information in relation to traditional practices and use of the territory and resources which may be shared. Prior to publishing or sharing Musqueam traditional knowledge, Musqueam, EAO, the Agency and FortisBC will confirm what information can be shared, or needs to be kept confidential. Further details of this will be captured in the collaboration workplan.

## 7.5. Roles and Responsibilities for the Musqueam-led Assessment

[Table 9](#) below describes the roles and responsibilities of FortisBC, EAO, the Agency, and Musqueam in the Musqueam-led Assessment process.

*Table 9. Roles and Responsibilities during Musqueam-led Assessment Process*

Participant	Roles and Responsibilities
FortisBC	<ul style="list-style-type: none"> <li>• Prepare Application.</li> <li>• Engage with Musqueam on the development of components of the Application, including the residual and cumulative effects assessment of VCs, and incorporate information as appropriate.</li> <li>• Work collaboratively with Musqueam to incorporate the analysis and findings of the Musqueam Led Assessment into Section 11.7 of the Application.</li> <li>• Review draft Musqueam-led Assessment Report, Engage with Musqueam on the development of components of the Application, and Incorporate information from the draft Musqueam-led Assessment into Application materials as well as information provided by Musqueam through other means (additional correspondence, meetings etc.).</li> <li>• Work collaboratively with Musqueam to identify areas of alignment, areas of divergence, and gaps between Proponents Application and draft Musqueam-led Assessment.</li> <li>• Work collaboratively with Musqueam to identify information gaps, additional studies, and data that needs to be collected throughout process.</li> <li>• Conduct studies and/or modelling to provide required information identified by the AIR including information to support the assessment of effects on Musqueam’s rights and interests.</li> <li>• Respond to additional information requests from the Agency, EAO and Musqueam.</li> </ul>
EAO	<ul style="list-style-type: none"> <li>• Develop draft Referral Package.</li> </ul>

Participant	Roles and Responsibilities
	<ul style="list-style-type: none"> <li>• Seek input from Musqueam on draft Referral Package and incorporate information from draft Musqueam-led Assessment into draft Referral Package as required.</li> <li>• Seek consensus with Musqueam on the CEO's recommendations regarding the matters identified in <a href="#">Section 29(2)(b)(i)</a> of the Act.</li> <li>• Engage FortisBC during development of draft Referral Package.</li> <li>• Provide support to Musqueam during development of the draft Musqueam-led Assessment.</li> <li>• Provide support to Proponent during development of Application.</li> <li>• Identify additional agencies, or other parties who may provide support or information that may assist in development of the Musqueam-led Assessment.</li> <li>• Facilitate issues resolution as required.</li> <li>• The EAO will work collaboratively with Musqueam to develop information requests for FortisBC, as needed.</li> </ul>
the Agency	<ul style="list-style-type: none"> <li>• Provide advice on matters of federal jurisdiction or interest and meeting the requirements of substitution.</li> <li>• Coordinate the administration of participant funding through the EAO to Musqueam.</li> <li>• Engage with Musqueam and support Musqueam in the Indigenous Led Assessment process, as requested.</li> <li>• Engage with the EAO and Musqueam in the formulation of information requests for FortisBC.</li> <li>• Consult with Musqueam on draft federal potential conditions as related to addressing potential adverse effects on Musqueam Rights and Interests.</li> <li>• Coordination with federal expert departments to provide information and expertise as may be required in the support of assessment of project effects on Musqueam Rights and Interests.</li> </ul>
Musqueam	<ul style="list-style-type: none"> <li>• Prepare both the draft and final versions of the Musqueam Led Assessment Report, with support and input from EAO, the Agency and FortisBC where appropriate.</li> <li>• Provide chapters/sections as necessary for the Proponent to review, so that Fortis can work collaboratively with Musqueam to incorporate the analysis and findings of the Musqueam Led Assessment into Section 11.7 of the Application.</li> <li>• Review Proponent Application materials and provide input (scope of review to be captured in the collaboration workplan).</li> <li>• Work collaboratively with Proponent to identify areas of alignment, areas of divergence, and gaps between Proponents draft application and draft Musqueam Led Assessment.</li> <li>• Work collaboratively with the EAO and FortisBC to identify information gaps, additional studies, and data that needs to be collected throughout process.</li> <li>• Incorporate information and data, that Musqueam deems relevant, from Proponent's Application into the draft Musqueam Led Assessment.</li> <li>• If required, undertake community engagement in order to inform the Musqueam-led Assessment; inform FortisBC and EAO on community engagement requirements.</li> <li>• Update the Draft Musqueam-led Assessment to a Final Musqueam-led Assessment, as required, to inform the assessment of effects to the participating Indigenous nation and its rights, including any assessments under <a href="#">Section 19(4)</a> of the Act.</li> </ul>

## 7.6. Timelines and Milestones for the Musqueam-led Assessment

The key milestones of the Musqueam-led Assessment process and the corresponding EA phases are captured in [Table 10](#) below.

Table 10. Timelines and Milestones for Musqueam Led Assessment

Indigenous Led Assessment Process	EA Phase
Musqueam is conducting a gap analysis to identify the scope of additional research and internal engagement with Musqueam knowledge-holders that is required to meet the information requirements of the Musqueam-Led Assessment as well as to identify areas where further data collection/information is needed. At the end of this gap analysis Musqueam will provide a summary report to be shared with EAO, the Agency, and Fortis BC.	Application Development
Community engagement, additional studies, and data collection, if needed.	Application Development
Musqueam develops the draft Musqueam-led Assessment report (to include Steps 1 to 6 of Musqueam's methods – see Section 7.3 of this appendix). Draft will be shared with FortisBC to inform FortisBC's Application.	Application Development
Musqueam updates the draft Musqueam-led Assessment report (to include Steps 1 to 9 of Musqueam's methods). Updated draft will be shared with EAO, the Agency and FortisBC.	End of Application Review
Musqueam, EAO, the Agency and FortisBC to seek solutions on issues raised in the draft Musqueam-led Assessment, and work collaboratively in the development of conditions and accommodation measures.	Effects Assessment
Musqueam to finalize the Musqueam-led Assessment report (to include Steps 1 to 11). Final report and Musqueam-drafted synopsis to be submitted to EAO and the Agency for inclusion in Referral Packages to provincial and federal decision-makers.	Prior to the end of Effects Assessment

### 7.6.1. Musqueam-led Assessment

To be included with the EAO's referral materials, which will be submitted to the Ministers for decision.

## 8.0 APPENDIX 3: QUW'UTSUN NATION INDIGENOUS LED ASSESSMENT

Quw'utsun Nation has confirmed, under Section 19(4) of the Act, that it intends to carry out an assessment with respect to the potential effects of the project on Quw'utsun Nation and its rights. This Indigenous Led Assessment will utilize a Quw'utsun Nation-developed approach that reflects the values and perspectives of Quw'utsun Nation. This Appendix provides an overview of the scope of the Indigenous Led Assessment, a general description of the methodology to be used, information requirements for the assessment, and the timing of the Indigenous Led Assessment milestones. Quw'utsun Nation's Indigenous Led Assessment will be integrated into the EAO's referral package, as per Section 19(4) of the Act. During the Process Planning phase, as per Section 19 of the Act, Quw'utsun Nation and the EAO worked collaboratively on, and then sought and reached consensus on, the content regarding Quw'utsun Nation's Indigenous Led Assessment included in this Appendix.

### 8.1. Introduction<sup>6</sup>

The Quw'utsun Nation is comprised of Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe, and Stz'uminus First Nation. The present day Quw'utsun Nation bands comprise the descendants of the 11 communities or local groups that made up the historic Quw'utsun Nation which were an Aboriginal people and who existed at the time of European contact and at 1846. The Quw'utsun Nation exclusively occupied and exploited land at the south shore of Lulu Island on the South (i.e. main) Arm of the lower Fraser River known as *Tl'uqtnus*, ("Tl'uqtnus"), located directly across from Tilbury Island. The Quw'utsun Nation citizens also fished, hunted, and gathered subsistence and cultural resources available in the surrounding territory, which includes the proposed Project footprint.

The Quw'utsun Nation is engaged in a trial in the Supreme Court of British Columbia seeking, among other things, a declaration of Aboriginal title to the lands of Tl'uqtnus, and an aboriginal right to fish in the South Arm of the Fraser River for food purposes. The trial commenced in September 2019 and has spanned over 400 days to date. Presentation of evidence at the trial is nearly complete.

The development of the proposed Project and the associated construction and operation activities hold the potential to impact the ability of Quw'utsun Nation members to exercise their Indigenous rights as per the UN Declaration on the Rights of Indigenous People (as recognized by British Columbia's *Declaration on the Rights of Indigenous Peoples Act, SBC 2019, c 44*) and Section 35 of the *Constitution Act, 1982*. As such, the Quw'utsun Nation will be completing an assessment of those impacts as an Indigenous Led Assessment under Section 19(4) of the Act in a manner consistent with the guiding principles, scope, and methods described in the following sections.

#### 8.1.1. Guiding Principles

The Quw'utsun Nation's Indigenous Led Assessment will proceed in tandem with FortisBC's Application Submission and the EAO's Effects Assessment guided by the EAO's process timelines. As the changes to the Act are relatively recent, the Quw'utsun Nation would like to acknowledge that there will need to be collaboration, flexibility, and collective learning from all parties in order to reach shared objectives. The following guiding principles are aimed to ensure the intention behind Section 19(4) is respected through the environmental assessment process.

Representatives from Quw'utsun Nation, FortisBC, and the EAO will:

1. Respect and prioritize the meaningful application of Quw'utsun Nation values to the process,
2. Provide reasonable opportunity for consultation with Quw'utsun Nation leadership and members,

<sup>6</sup> Section 8.1 (Introduction) was written by Quw'utsun Nation and does not necessarily reflect the views of the EAO. The EAO also acknowledges the ongoing Aboriginal rights and title litigation between *Cowichan Tribes v. Attorney General of Canada et. al* currently before the British Columbia Supreme Court.

3. Implement a transparent process that is clear and predictable, where information is shared between FortisBC, EAO and Quw'utsun Nation,
4. Make reasonable efforts to streamline communications between the parties,
5. Meet regularly to discuss progress, timelines, and information needs,
6. Inform each other of any changes to project details, work plans, and timelines in a timely manner,
7. Make reasonable efforts to clarify requirements,
8. Acknowledge that the work plans and timelines associated with this undertaking are subject to change, and
9. Acknowledge that Quw'utsun Nation requires sufficient capacity funding to meaningfully exercise its ability under Section 19(4) to complete the scope of the Indigenous Led Assessment, as described in this appendix.

## 8.2. Scope of Indigenous Led Assessment

### 8.2.1. Scope

The Quw'utsun Nation has identified preliminary categories of interests to be assessed in the Indigenous Led Assessment:

- Protection and stewardship of Quw'utsun Nation territory;
- Economic activity and opportunities;
- Cultural integrity and continuity of culture; and
- Health and well-being of current and future generations of the Quw'utsun Nation.

These interests are deeply interconnected, and will need to be further refined, validated, and may be subject to change based on the methodologies proposed in Section 1.3 of this appendix.

Each of these interests are connected to Quw'utsun Nation's rights that are recognized and affirmed through Section 35 of the *Constitution Act*, 1982, and re-affirmed through the recent adoption of the *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP) by BC (*Declaration on the Rights of Indigenous Peoples Act*, SBC 2019, c 44) and Canada (*United Nations Declaration on the Rights of Indigenous Peoples Act*, SC 2021, c 14)

More specifically, Quw'utsun Nation has identified the following interests to be assessed:

- Indigenous rights to protect archaeological and historical sites and artifacts,
- Indigenous rights to maintain, protect and have access to our cultural sites,
- Indigenous rights to revitalize, develop and transmit to future generations our histories, oral traditions, and place names relating to the Tilbury Phase 2 project area,
- Indigenous rights to participate in decision-making in matters which would affect our rights in the Tilbury Phase 2 project area, through representatives chosen by ourselves,
- Indigenous rights to be secure in the enjoyment of our own means of subsistence and to engage freely in all our traditional and other economic activities and to just and fair redress if we are deprived of the same,
- Indigenous rights to improve our social and economic conditions,
- Indigenous rights to our traditional medicines and to maintain our health practices, including the conservation of our medicinal plants, animals, and minerals,
- Indigenous rights to enjoyment of the highest attainable standard of physical and mental health,

- Indigenous rights to maintain and strengthen our distinctive spiritual relationship with our traditionally owned or otherwise occupied and used lands, territories, waters, and other resources and to uphold our responsibilities to future generations in this regard,
- Indigenous rights to the lands, territories, and resources which we have traditionally owned, occupied, or otherwise used or acquired,
- Indigenous rights to own, use, develop and control lands, territories, and resources that we possess by reason of traditional ownership or other traditional occupation or use, as well as those which we have otherwise acquired,
- Indigenous rights to have our lands, territories, and resources legally recognized and protected by the State,
- Indigenous rights to redress (including restitution) or just, fair, and equitable compensation for lands, territories, and resources which we have traditionally owned or otherwise occupied or used, and which have been confiscated, taken, occupied, used, or damaged without our free, prior, and informed consent,
- Indigenous rights to the conservation and protection of the environment and the productive capacity of our lands or territories and resources,
- Indigenous rights to determine and develop strategies for the development or use of our lands or territories and other resources,
- Aboriginal rights (within the meaning of s. 35(1) of the *Constitution Act*, 1982) to harvest wildlife, waterfowl, vegetation, and other resources,
- Aboriginal rights (within the meaning of s. 35(1) of the *Constitution Act*, 1982) to fish for food, social, and ceremonial purposes,
- Aboriginal rights (within the meaning of s. 35(1) of the *Constitution Act*, 1982) to the land itself (i.e., Aboriginal title interests), including the right to benefit economically from the land, and
- Additional Quw'utsun Nation values as understood during the development of the Indigenous Led Assessment.

The development of the Indigenous Led Assessment may also identify other incidental rights.

### 8.2.2. Assessment boundaries

#### 8.2.2.1. Temporal Boundaries

To capture the pathway of effects that may result in impacts to the Quw'utsun Nation's Rights and interests, the temporal boundaries of the Indigenous Led Assessment span from pre-contact period (pre-1846) to future generations. In order to consider the impacts of the project in a culturally appropriate way, the temporal boundaries must allow for a fulsome understanding of how the Quw'utsun Nation exercised their rights in absence of the barriers of development, as well as deep consideration for how impacts might be felt in the lives of future generations.

#### 8.2.2.2. Spatial Boundaries

The spatial scope for the assessment will include but is not limited to the lands and waters of Tilbury Island, the lands of Tl'uqtinus, and the South Arm of the Fraser River surrounding the Tilbury Phase 2 project area from the south to north bank. Areas outside of Tl'uqtinus and the Tilbury Phase 2 project area may be included if consideration of those areas is required to fully understand the potential impacts of the project.

## 8.3. Methods of Indigenous Led Assessment

### 8.3.1. Values-Based Assessment

The Quw'utsun Nation Indigenous Led Assessment will complete a values-based assessment of potential project impacts on the rights and interests outlined in Section 1.2.1. Specifically, the values-based assessment will seek to understand,

characterize, and assess impacts and their significance from the perspective of the Quw’utsun Nation. While the Indigenous Led Assessment will be conducted holistically using a Quw’utsun Nation-centric approach which includes the historical context and the Quw’utsun Nation’s world view, the conclusions of the Indigenous Led Assessment will be centered on the effects of the Tilbury Phase 2 project.

To support the implementation of the values-based assessment, the Quw’utsun Nation will use the following supporting approaches and methods to validate interests, establish baselines, collect data, assess effects, including establishing reasonable and probable counterfactuals to understand the nature and significance of Tilbury Phase 2’s effects:

- **Grounded Research Approach:** A grounded research approach does not test a predetermined hypothesis; instead, a conclusion is built based on the data collected to synthesize a conclusion. The Quw’utsun Nation does not presuppose any outcomes of the Indigenous Led Assessment. Instead, the Quw’utsun Nation will use the process described below to inform the assessment components as they are developed.
- **Cumulative Effects:** Tilbury Phase 2 is in a location experiencing high rates of development, both historic and planned. The Indigenous Led Assessment will assess the impacts of the project in the context of how Tilbury Phase 2 effects can deepen the impacts felt by the Quw’utsun Nation from this historic use. Cumulative effects are also relevant to understanding Quw’utsun Nation’s tolerance to anticipated project effects. Future effects of the project along the South Arm of the Fraser River must be understood through a multi-generational lens, in the context of the effects that have been experienced to date, effects that will be experienced by future generations, and how the project intersects with those effects.
- **Mixed-methods Data Collection:** A meaningful Indigenous Led Assessment will comprise of both qualitative and quantitative data, which requires a methodology that accounts for both types of information. To this end, the Quw’utsun Nation will collect data from a variety of sources to create a rich and nuanced understanding of historic and existing conditions and how they relate to the proposed project design from the unique Quw’utsun Nation perspective. This will comprise of, but is not limited to:
  - Quw’utsun Nation Indigenous Knowledge (oral and documented),
  - Spatial data from FortisBC and Quw’utsun Nation communities,
  - Economic, project, and operational plans and data from a variety of sources,
  - Historical data from both the Indigenous and colonial perspectives,
  - Biophysical data provided by FortisBC and previous Quw’utsun Nation reports, and
  - Legal and regulatory information.

Analysis of mixed-methods data collection may also seek to understand how unavailable data affects our understanding. Qualitative data collection across all categories can include oral information from Quw’utsun citizens, data from document review, and observations from key individuals who are strongly grounded in Quw’utsun Nation history and values.

- **Opportunity Loss Analysis:** For Quw’utsun, the effects of the project must be understood in the context of their rights, and in this case, the loss of opportunity to exercise those rights associated with the unlawful alienation from the project area and lands of Tl’uq̓tinus.<sup>7</sup> This can manifest in a wide variety of effects. For example, a loss in economic opportunity associated with not having access to or control over territories or a loss in cultural continuity and transmission associated with disrupted access to particular places of social and cultural significance. The effects of the project on Quw’utsun Nation interests will be assessed through the lens of

<sup>7</sup> This sentence was written by Quw’utsun Nation and does not necessarily reflect the views of the EAO. The EAO also acknowledges the ongoing Aboriginal rights and title litigation between *Cowichan Tribes v. Attorney General of Canada et. al* currently before the British Columbia Supreme Court.

opportunity loss, both in terms of the cumulative effects of historic alienation, but also in terms of the anticipated effects of the project on Quw'utsun Nation's interests in the territory for future generations' opportunities and uses. Opportunity loss is a critical lens for the Quw'utsun Nation to fully understand how impacts of the Tilbury Phase 2 Project assessed in the Indigenous Led Assessment will affect the opportunities for members to exercise their Rights.

### 8.3.2. Approach to Methodological Limitations

Given the temporal and spatial boundaries of the assessment, the Indigenous Led Assessment will involve understanding the cumulative effects of activities on Quw'utsun Nation's rights and interests. As such, establishing a clear baseline will require the use of data throughout the time span described in the temporal boundaries in Section 1.2.2.1. This may be limited by the availability of data, and feasibility of undertaking a study of this scope in alignment with the outlined timelines. An additional limitation may be the difficulty of translating cultural information into a written document. Lastly, there is potential for financial constraints to limit the final Indigenous Led Assessment. The assessment will include an overview of limitations and any resulting uncertainty in the characterization of effects.

## 8.4. Information Requirements for the Indigenous Led Assessment

Quw'utsun Nation's has identified the following information requirements for their Indigenous Led Assessment:

- The Quw'utsun Nation Title and Rights Submission (once complete),
- The list of Indigenous Interests each Quw'utsun Nation community submitted to the EAO,
- Report of Dr Nancy Turner: Culturally Significant Vegetation of Tilbury Island (September 1, 2020),
- Key expert reports and evidence from *Cowichan Tribes et al. v Canada (Attorney General)*,
- Other traditional knowledge as applicable,
- A complete understanding of current biophysical conditions from FortisBC-led studies, and
- Relevant Project-related documents, such as the Detailed Project Description, Project Application and various studies.

Information requirements may become more specific as Quw'utsun Nation conducts an internal gap analysis, which will precede Quw'utsun Nation's Indigenous Led Assessment. A summary report of the gap analysis findings will be shared with the EAO, the Agency and FortisBC. The EAO will work collaboratively with Quw'utsun Nation to develop information requests for FortisBC as needed.

## 8.5. Roles and Responsibilities

Quw'utsun Nation, EAO and FortisBC agreed to capture the roles and responsibilities of each party in the Collaboration Workplan.

## 8.6. Timelines and Milestones for the Indigenous Led Assessment

### TIMELINES

EAO and Quw'utsun Nation to continue to discuss specific timelines throughout the EA to ensure Quw'utsun Nation has adequate time to meaningfully finalize their Indigenous Led Assessment Report.

### DELIVERABLES

Quw'utsun Nation Indigenous Led Assessment deliverables:

- Letter indicating known data gaps at time of Application Submission (if applicable);



- Complete Draft Indigenous Led Assessment Report within 30 days of the beginning of the Effects Assessment phase; and
- Final Indigenous Led Assessment Report submitted prior to the end of the Effects Assessment phase.

FortisBC deliverables

- Other Project Data as required, including but not limited to information related to permits and habitat enhancement, and other relevant FortisBC projects, as reasonably requested by the Quw'utsun Nation;
- Application Development Data and Reports as available; and
- Application.

EAO/the Agency deliverables

- Information requests issued to FortisBC by the EAO, informed by advice provided by the advisory committee members and participating Indigenous nations;
- Notices of Application Acceptance;
- Draft provincial Referral Package, including draft Assessment Report, draft conditions and draft project description;
- Draft federal potential conditions; and
- Final provincial Referral Package, including final Assessment Report, draft EA certificate (including proposed conditions and project description), notifications of consent or lack of consent from participating Indigenous nations, and CEAO Recommendations.

## 9.0 APPENDIX 4: SNUNEYMUXW FIRST NATION INDIGENOUS LED ASSESSMENT

### 9.1. Introduction

The purpose of Snuneymuxw First Nation’s Indigenous Led Assessment (“Indigenous Led Assessment”) is two-fold. The first purpose is to examine how changes from FortisBC’s Tilbury Phase 2 LNG Project (“LNG” or the “Project”) within Snuneymuxw’s traditional territory may impact Snuneymuxw First Nation’s Section 35 rights, including but not limited to the Treaty of 1854, harvesting rights, cultural rights, rights to self-government, and economic rights. The second purpose is to define the internal conditions by which Snuneymuxw First Nation’s consent or lack of consent will be given to the issuance an environmental assessment certification within Snuneymuxw First Nation traditional territory. The spirit and intent of the Treaty of 1854 is to preserve and protect Snuneymuxw First Nation villages, fields, waterways, fisheries, and gathering and harvesting sites for the Snuneymuxw People. As such, consent to impact Snuneymuxw rights and title can only be given by Snuneymuxw First Nation.

#### 9.1.1. Supporting principles and workplans

Snuneymuxw First Nation intends to carry out the entirety of the work involved in our Indigenous Led Assessment. Upon completion, an Impact Assessment Report will be provided to Fortis BC and the EAO for consideration during the Tilbury Phase 2 LNG Project EA phase. Additionally, Snuneymuxw First Nation will collaborate with the EAO to develop a workplan agreement and engagement principles, including provisions for confidentiality.

EAO and FortisBC acknowledge that Snuneymuxw First Nation requires sufficient capacity and funding to complete the scope of the Indigenous Led Assessment, as described in this appendix. Snuneymuxw First Nation is not responsible for the provision of capacity funding.

### 9.2. Scope of Indigenous Led Assessment

#### 9.2.1. Scope

The scope of Snuneymuxw First Nation’s Indigenous Led Assessment will be determined through engagement with Snuneymuxw community members and leadership. Snuneymuxw First Nation’s interests and assessment boundaries related to Tilbury Phase 2 will rely on the identification of community priorities and values. Such priorities/rights & interests may include:

- Treaty;
- Harvesting;
- Stewardship;
- Governance;
- Lands and Waters;
- Safe travel;
- Fisheries;
- Village sites;
- Sacred and ceremonial sites and places;
- Economic Prosperity;
- Community Health and Wellness;
- Language;

- Cultural Identity;
- Cultural Heritage;
- Cultural Education/Transmission of Knowledge;
- Accessibility; and
- Cumulative Effects.

### 9.2.2. Assessment Boundaries

Temporal and spatial boundaries for Snuneymuxw First Nation's Indigenous Led Assessment will be determined through preliminary work with the community. Snuneymuxw First Nation will work with the community to confirm assessment areas defined in Fortis BC's Application and/or define a Cultural Assessment Area associated with Snuneymuxw Section 35 rights and interests. Similarly, the cumulative effects approach for Snuneymuxw First Nation's Indigenous Led Assessment will be determined through preliminary work, and will consider the historic, current, and future projects and activities within Snuneymuxw First Nation's territory. Future projects and activities to be considered in the cumulative effects assessment includes, but is not limited to, Tilbury Marine Jetty, Roberts Bank Terminal 2, Deltaport Expansion Berth 4, and Delta Grinding Facility Project.

## 9.3. Methods of Indigenous Led Assessment

Snuneymuxw First Nation's methodology for the Indigenous Led Assessment, aligned with the EAO's legislated timelines, is as follows:

- 1) Identify Snuneymuxw values and priorities related to Tilbury Phase 2 through community engagement.
- 2) Validate community priorities and values chosen for impact assessment.
- 3) Establish appropriate baselines for values.
- 4) Conduct supplemental data collection (including Traditional Use data) to identify areas important for current and historical use.
- 5) Identify potential Project-related impacts to community priorities and values.
- 6) Identify any mitigating measures for impacts to Snuneymuxw priorities and values in collaboration with FortisBC and the EAO.
- 7) Validate information shared by community, review the results of the Indigenous Led Assessment including proposed mitigation measures.
- 8) Develop mitigations and accommodations in collaboration with FortisBC and the EAO before providing notice of consent or lack of consent from Snuneymuxw First Nation.

## 9.4. Information Requirements for the Indigenous Led Assessment

Information that will be required and integrated into Snuneymuxw First Nation's Indigenous Led Assessment include but are not limited to:

- VCs Effects Assessments selected by FortisBC (Air Quality, Acoustic, Fish and Fish Habitat, Wildlife and Wildlife Habitat, Surface Water, Culture, Archaeological and Heritage Resources, Land and Resource Use, Employment and Economy);
- Shapefiles from FortisBC; and
- Existing data from Snuneymuxw First Nation, if available (i.e., oral history, previous elder recordings, and ethnohistoric research).

## 9.5. Roles and Responsibilities for the Indigenous Led Assessment

The following roles and responsibilities are outlined in the collaborative workplan developed between Snuneymuxw First Nation and the EAO. The responsibilities are summarized as follows:

### 9.5.1. Snuneymuxw First Nation

- Define the scope of the Indigenous Led Assessment.
- Collect baseline data (community engagement and verification).
- Conduct the Assessment of Effects on Snuneymuxw First Nation and its rights.
- Work collaboratively with EAO and FortisBC to develop mitigations and accommodation measures to address the impacts to Snuneymuxw First Nation rights and interests.
- Participate in a process that is aligned with the Free, Prior and Informed Consent standard set out in UNDRIP.

### 9.5.2. The EAO

- Provide support and transparency through the EA process.
- Develop the draft referral package, and work with Snuneymuxw First Nation to incorporate information from Snuneymuxw First Nation's Indigenous Led Assessment into the referral package.
- Facilitate issues resolution as required, and work collaboratively with Snuneymuxw First Nation to develop information requests for FortisBC, as needed.
- Work collaboratively with Snuneymuxw First Nation and FortisBC to develop mitigations and accommodation measures to address the impacts to Snuneymuxw First Nation rights and interests. The EAO will seek consensus with Snuneymuxw First Nation on the adequacy of the mitigations and accommodation measures, but in the event that consensus is not reached, the perspectives of both EAO and Snuneymuxw First Nation will be presented in the referral package.
- Participate in a process that is aligned with the Free, Prior and Informed Consent standard set out in UNDRIP.

### 9.5.3. FortisBC

- Providing support and transparency throughout the EA process.
- Provide Project Application, project-related data and shapefiles, and any revised or supplemental information.
- Work collaboratively with Snuneymuxw First Nation and EAO to develop mitigations and accommodation measures to address the impacts to Snuneymuxw First Nation rights and interests.
- Participate in a process that is aligned with the Free, Prior and Informed Consent standard set out in UNDRIP.

## 9.6. Timelines and Milestones for the Indigenous Led Assessment

Key milestones and deliverables for Snuneymuxw First Nation's Indigenous Led Assessment are listed below. Snuneymuxw's assessment timelines align with the EAO's legislated Project timelines as indicated above in the Methodology section.

- 1) Community Workshops – Notice to be provided to EAO upon completion. (Application Development and Review Phase).
- 2) Priorities and Values Validation - Notice to be provided to EAO upon completion. (Application Development and Review Phase).

- 3) Data needs identified – Notice to EAO once data collection planning is underway. (Application Development and Review Phase).
- 4) Data collection based on #3 (including additional interviews if needed) – Notice to EAO that data collection has commenced. (Application Development and Review Phase).
- 5) Draft Snuneymuxw First Nation Rights and Interests Impact Assessment Report – to be sent to EAO within 30 days of the beginning of the Effects Assessment Phase.
- 6) Discussions on Proposed Accommodations and Conditions. (Within the Effects Assessment Phase).
- 7) Final Snuneymuxw First Nation Rights and Interests Impact Assessment Report – to be sent to EAO prior to the end of the Effects Assessment Phase.

EAO and FortisBC acknowledge that Snuneymuxw First Nation requires sufficient capacity and funding to complete the scope of the Indigenous Led Assessment, as described in this appendix. Snuneymuxw First Nation is not responsible for the provision of capacity funding.

#### **9.6.1. Snuneymuxw's Indigenous Led Assessment**

To be included with the EAO's referral materials, which will be submitted to the Ministers for decision.

## 10.0 APPENDIX 5: TSAWWASSEN FIRST NATION INDIGENOUS LED ASSESSMENT

### 10.1. Introduction

The Project is proposed to be constructed and operated in an area that is culturally significant to Tsawwassen and where Tsawwassen has rights under the Tsawwassen Agreement. As such, Tsawwassen, the EAO and the Agency agree that the preparation of an assessment of Project effects on Tsawwassen's rights is of great importance and an essential part of continuing to honour and grow the Treaty relationship between Tsawwassen, British Columbia and Canada. A proper assessment of a project's impacts to the rights of Indigenous peoples is a critical part of provincial and federal decision-makers upholding the honour of the Crown and discharging their duty to consult potentially impacted groups before making a decision on a project.

Tsawwassen has confirmed, under Section 19(4) of the Act, that it intends to carry out an assessment with respect to the potential effects of the project on Tsawwassen and its Aboriginal and Treaty rights. The Tsawwassen Indigenous Led Assessment will utilize a Tsawwassen-developed approach that reflects the values and perspectives of Tsawwassen, is consistent with federal guidance for the assessment of impacts to aboriginal and treaty rights (the Agency's [Guidance: Assessment of Potential Impacts on the Rights of Indigenous Peoples](#)) and is supported by the EAO. Tsawwassen's Indigenous Led Assessment will be integrated into the EAO's referral package, as per Section 19(4) of the Act. Tsawwassen, the EAO and the Agency have experience applying this approach in recent assessments.

This content below reflects the consensus of the EAO, the Agency and Tsawwassen regarding the Tsawwassen First Nation Indigenous Led Assessment for Tilbury Phase 2.

#### 10.1.1. Supporting principles

The Tsawwassen First Nation Indigenous Led Assessment will be guided by and consistent with the following assessment principles:

1. The assessment must consider the nature and scope of rights as those rights are asserted, and how the rights might be impacted.
2. Assessing impacts on Aboriginal and Treaty rights requires more than assessing environmental effects on the current use of lands and resources for traditional purposes or on physical and cultural heritage.
3. Assessing impacts on the exercise of Aboriginal and Treaty rights requires understanding the context of historical and contemporary cumulative effects in which rights are exercised. This context needs to be evaluated before looking at Project effects on those rights.
4. The assessment should not be limited to site-specific effects but must consider all impacts on the exercise of rights within the defined temporal and geographic boundaries in Section 1.2.2.
5. Utilizing an Indigenous perspective and Indigenous knowledge is an imperative.
6. The assessment must consider Indigenous values, norms, and laws, where provided by a community.
7. Where a community has elected to participate, the selection of methods and indicators for assessing impacts to Aboriginal and Treaty rights must be community driven.
8. Thresholds and measures to understand the potential effects of a project on the exercise of Aboriginal and Treaty rights and culture are to be utilized where they have been defined by the community.
9. Assessments of impact to the exercise of Aboriginal and Treaty rights should consider a project's contribution to reconciliation.

Engagement between Tsawwassen First Nation, the EAO, and the Agency (the **"Governments"**), and the Governments and FortisBC (the **"Parties"**) will be guided by and consistent with the following reconciliation and sustainability engagement principles:

### *Reconciliation Engagement Principles*

1. **Reconciliation and the Tsawwassen Treaty.** The Government of Canada has described the modern Treaty process as “reconciliation in action.” The Governments will work together in a manner that is rooted in the commitments enshrined within the Tsawwassen Treaty. Throughout the EA Process, the Governments will embody the foundational principle of: *One Treaty; One Voice*. This means the Governments will seek an outcome where the voices of the Treaty partners are unified with respect to Tilbury Phase 2, rather than presenting competing narratives. The Government will work together to ensure all Parties understand the significance of the Treaty.
2. **Reconciliation and the Government-to-Government Relationship.** The Governments recognizes that reconciliation through the Treaty relationship requires government-to-government partnership throughout the EA of Tilbury Phase 2. The Governments will work to embody the foundational principle of: “Nothing about us without us.” This means that the Governments share the responsibility for ensuring that an understanding of impact includes those tied to current and future community concerns, values, and practices.
3. **Reconciliation through regulatory coordination, efficiency and cooperation.** The Governments will take responsibility to participate and advance their processes and decision-making in a way that achieves efficiencies and regulatory coordination, with a goal of an integrated EA Process. The Governments will make decisions with the understanding that each government has its own internal processes, while also seeking regulatory coordination as Treaty partners. This means that coordination will honour the responsibilities of each government, while seeking to strengthen the government-to-government relationship through coordinated efforts and working as Treaty partners. The Governments will strive and make all best efforts to ensure that all Parties honour timelines that allow Tsawwassen to carry out its responsibilities as a government.
4. **Reconciliation and Tsawwassen’s Vision.** The Parties must recognize that the implementation of Tsawwassen’s self-government strategic vision – as expressed through the governing Strategic Plan and operationalized according to the priorities of elected leadership – is part of supporting the exercise of Tsawwassen’s right to self-determination. This means that the Parties will assess how Project impacts may be detrimental to Tsawwassen’s vision and will strive and make all best efforts to develop TFN appropriate accommodations for any impacts that cannot be mitigated.
5. **Reconciliation through a commitment to UNDRIP.** The Act and its incorporation of UNDRIP provides a foundation to advance Tsawwassen self-determination, nationhood and the government-to-government relationship. In the case of Tsawwassen, with established Treaty rights and Treaty commitments by the Crown, seeking TFN consent in a manner that is meaningful to Tsawwassen is imperative. This means that the Governments are committed to the Free, Prior and Informed Consent standard set out in UNDRIP and will work together to reflect this commitment through a jointly developed plan for implementing FPIC.

### *Sustainability Engagement Principles*

1. **Sustainability and ʔxʷkʷecxənəm.** The Parties honour and respect Tsawwassen’s Treaty aspirations, including ʔxʷkʷecxənəm. The Parties will act with the understanding that, at their core, treaties are agreements to create the space and opportunity to restore First Nations’ role in governing their territories and rebuilding cultural identity. This means that the Parties will work to advance ʔxʷkʷecxənəm within the context of Tilbury Phase 2 to serve the goal that a good Project outcome is one where ʔxʷkʷecxənəm is advanced.
2. **Sustainability through Cumulative Effects Management.** Sustainability cannot be achieved without the proper management of cumulative effects and cumulative effects management is required for the sustainability of Tsawwassen’s Treaty rights. Sustainability requires a clear understanding of how new projects may interact with existing impacts to further degrade the natural environment. This means that the Governments will work together to identify mitigation, conditions and accommodation measures that are responsive to the cumulative effects context that already affects the exercise of Tsawwassen’s Treaty rights.

3. **Sustainability from a solution-oriented approach.** Finding sustainable solutions requires a solution-oriented approach. The Parties will approach their work in a solutions-oriented manner, including contributing to consensus seeking as a preferred approach to resolving issues, working together in good faith, and seeking to achieve mutually acceptable solutions built upon consensus. The Parties are committed to candid dialogue and approaching all work with open hearts and minds. This means that when concerns are expressed that a party believes are beyond the scope of the EA Process, the Parties will consider alternatives such as broader systems change efforts.
4. **Transparent and informed decision-making respecting sustainability.** Decisions about sustainability require an understanding of all relevant information. The Parties will work together to ensure any assessment information regarding Tsawwassen First Nation is appropriately captured and considered in the assessment. In doing so, each of the Parties seek to ensure the process advances by mutually informed decisions, with “no surprises”. “No surprises” reflects an EA Process that is clear and transparent, where information is shared and made available. This means that the Governments share the goal that their decision makers will be presented with all the necessary and relevant information, in a sufficient level of detail, to enable decisions, respecting sustainability. The Governments will ensure the Parties provide sufficient information for decisions, respecting sustainability.
5. **Sustainability of the Tsawwassen Identity.** Tsawwassen are the salmon people and are stewards of their Territory. To be Tsawwassen is to have responsible to every living being on their lands, in their air, and in their waters. The Fraser River is integral to Tsawwassen culture, including language, spirituality and identity. The Parties recognize that Tilbury Phase 2 – given its location adjacent to the lower Fraser River, and proximity to Tsawwassen Lands – is proposed to be constructed in the “lifeblood” of Tsawwassen, and at “Tsawwassen’s kitchen table.” This means that the Parties will engage in the EA Process in a manner that seeks to sustain the Tsawwassen Identity, so that it may continue for future generations of Tsawwassen.

### 10.1.2. Workplan

The Tsawwassen Indigenous Led Assessment will be developed in four phases:

- Phase 1: Kick-Off Meeting and Analytical Framework.
- Phase 2: Document and Data Compilation and Gap Analysis.
- Phase 3: Supplementary Community Engagement.
- Phase 4: Assessment and Reporting.

As the EA process proceeds, a collaboration work plan with timelines will be developed collaboratively between Tsawwassen First Nation, the Agency and the EAO. The collaborative work plan between the EAO, the Agency and Tsawwassen First Nation will provide additional detail as to how the Parties will work together during the EA process, including during Application Development and Review and the Effects Assessment and Recommendation phases.

## 10.2. Scope of Indigenous Led Assessment

### 10.2.1. Scope

The Tsawwassen First Nation Indigenous Led Assessment will be scoped around the following three components that support the exercise of Tsawwassen rights. In addition, the assessment may also consider Tilbury Phase 2’s contribution, positive or negative, to reconciliation between Tsawwassen and the Crown.



Table 11. Scope of Tsawwassen Led Assessment

Culture	Stewardship and Governance	Harvesting
<ul style="list-style-type: none"> <li>• Language</li> <li>• Sense of place and identity</li> <li>• Spirituality</li> <li>• Transmission of knowledge</li> <li>• Cultural keystone species</li> <li>• Cultural keystone locations               <ul style="list-style-type: none"> <li>◦ Sacred places</li> </ul> </li> <li>• Continuation of culturally significant activities and practices</li> </ul>	<ul style="list-style-type: none"> <li>• Modern Treaty nation with authority of lands and Treaty rights within Territory</li> <li>• Traditional knowledge</li> <li>• Preservation of lands, waters, and resources</li> <li>• Interconnectedness with lands and waters</li> <li>• Role as stewards               <ul style="list-style-type: none"> <li>◦ Spiritual, psychological, and emotional components of identity</li> </ul> </li> <li>• Intergenerational care and preservation               <ul style="list-style-type: none"> <li>◦ Living on the land</li> </ul> </li> <li>• Social relationships</li> </ul>	<ul style="list-style-type: none"> <li>• Access to preferred areas and species</li> <li>• Confidence and trust in the resources</li> <li>• Experience of harvesting</li> <li>• Transmitting knowledge around harvesting intergenerationally</li> <li>• Harvesting in accordance with Indigenous knowledge and tradition</li> <li>• Safety while harvesting</li> <li>• Sustainable harvesting and interconnectedness of harvested species</li> </ul>

### 10.2.2. Assessment boundaries

**Temporal Boundaries:** Generally speaking, the Tsawwassen First Nation Indigenous Led Assessment approach entails taking the time at the outset to confirm information and understanding relating to two critical contextual factors: the conditions (environmental, cultural, social, physical, etc.) a Nation needs to exercise their rights in a preferred fashion; and how historic and current conditions have deviated from that baseline. The former entails a flexible, community-driven approach to temporal boundaries, in which temporal boundaries have less relevance than in traditional biophysical assessment approaches.

**Geographic Boundaries:** Geographic boundaries for the assessment will be determined based on the results of community interviews, project information and professional judgement. At a minimum, the geographic boundaries will include Tilbury Island and the associated navigable waters.

These study areas and boundaries may be updated during the first phase of the assessment process.

## 10.3. Methods of Indigenous Led Assessment

The three steps in the Tsawwassen First Nation Indigenous Led Assessment include:

**Step 1** - Determining the context in which potential impacts on rights will occur:

- Identifying the conditions that support the community's exercise of their rights;
- Understanding how historic, existing, and approved activities have affected the conditions that support the community's exercise of rights; and
- Identifying the importance of Tilbury Phase 2's location in relation to the exercise of a community's rights.

**Step 2** - Evaluating potential project impacts to rights:

- Identifying the pathways for potential impacts of Tilbury Phase 2 (positive and negative) on the exercise of rights;

- b. Determining, based on step 1 and using Nation-specific indicators and assessment criteria, whether Tilbury Phase 2 will have a low, medium, or high level of impact on the exercise of rights.

**Step 3:** Follow-up and validation.

While the steps are largely sequential, an iterative approach will be utilized as appropriate to appropriately address new information and the results of dialogue between the Parties during the assessment.

## 10.4. Information Requirements for the Indigenous Led Assessment

Sufficient information is required to identify impacts holistically, and to understand the ways in which different impacts will interact with each other and with existing conditions. Tsawwassen First Nation's Indigenous Led Assessment will require information from multiple sources, including:

- Information from FortisBC's Application.
- Tsawwassen community information (existing TUS, Statement of Nationhood, community engagement).
- Information requested by EAO following engagement with Tsawwassen regarding information gaps identified by Tsawwassen during the development of the Tsawwassen-led Indigenous Led Assessment.

## 10.5. Roles and Responsibilities for the Indigenous Led Assessment

Table 12. Roles and Responsibilities during Tsawwassen-led Assessment Process

Participant	Roles and Responsibilities
Tsawwassen First Nation	<ul style="list-style-type: none"> <li>• <u>Collaborate</u>: Work with EAO and FortisBC in a manner that upholds the Collaboration Principles and facilitate issue resolution as required.</li> <li>• <u>Assess</u>: Develop the Indigenous Led Assessment.</li> <li>• <u>Engage internally</u>: Undertake community engagement and other activities that support the Indigenous Led Assessment.</li> <li>• <u>Engage with EAO/FortisBC</u>: Engage with FortisBC on the development of portions of the Application relevant to the Indigenous Led Assessment and engage with the EAO on the development of the draft Referral Package.</li> <li>• <u>Information Sharing</u>: Provide updates on the Indigenous Led Assessment process to FortisBC and EAO as they undertake their tasks in the assessment.</li> <li>• <u>Report</u>: Identify to EAO funding and other constraints that may affect the development of the Indigenous Led Assessment.</li> <li>• <u>Engage in Mitigation and Accommodation Development</u>: Work with the EAO respecting outcomes of the Indigenous Led Assessment for development of mitigation and accommodation measures.</li> <li>• <u>FPIC</u>: Consistent with TFN processes, inform EAO of any consent/non-consent decisions that arise from the Indigenous Led Assessment.</li> </ul>
EAO	<ul style="list-style-type: none"> <li>• <u>Collaborate</u>: Work with Tsawwassen First Nation in a manner that upholds the Collaboration Principles and facilitate issue resolution as required. This includes, among other things, fully and effectively involving Tsawwassen in the EAO's determinations of the sufficiency of FortisBC's information.</li> <li>• <u>Oversight of FortisBC</u>: Review FortisBC's Indigenous Engagement and Collaboration Plan to determine if the plan is sufficient for supporting the Tsawwassen-led Indigenous Led Assessment.</li> <li>• <u>Oversight of FortisBC</u>: Engage as necessary and, upon request of Tsawwassen, instruct FortisBC on improvements in its engagement with Tsawwassen during the development of the Tsawwassen-led Indigenous Led Assessment.</li> </ul>

Participant	Roles and Responsibilities
	<ul style="list-style-type: none"> <li>• <u>Information Gathering</u>: Engage as necessary and upon request of Tsawwassen to identify ways to address information gaps identified by Tsawwassen during the development of the Tsawwassen-led Indigenous Led Assessment.</li> <li>• <u>Access to Information</u>: Provide Tsawwassen with access to information in relation to the assessment to enable its meaningful participation, including, where requested by Tsawwassen, information relevant to the Indigenous Led Assessment in the possession of government departments and agencies.</li> <li>• <u>Protect Information</u>: Provide Indigenous nations with guidance on how to protect confidential information that may be included in the Indigenous Led Assessment.</li> <li>• <u>Engage in Mitigation and Accommodation development</u>: Work with Tsawwassen to develop measures, including those beyond mitigation measures that can be included in Project conditions, that the Crown may take to mitigate or accommodate impacts identified in the Indigenous Led Assessment.</li> <li>• <u>Implement FPIC</u>: Work with Tsawwassen respecting the relationship between the Indigenous Led Assessment and implementation of FPIC.</li> </ul>
the Agency	<ul style="list-style-type: none"> <li>• <u>Advice</u>: Provide advice on matters of federal jurisdiction or interest and meeting federal requirements.</li> <li>• <u>Funding</u>: Coordinate the administration of participant funding through the EAO to Tsawwassen First Nation.</li> <li>• <u>Support</u>: Engage and support as necessary and upon request of Tsawwassen during the Indigenous Led Assessment process.</li> <li>• <u>Conditions development</u>: Work with Tsawwassen First Nation to develop potential federal conditions based on key mitigation measures identified by Tsawwassen First Nation and the EAO, recognizing that project conditions alone may be inadequate for avoiding, mitigating, and accommodating impacts to Tsawwassen's Treaty rights.</li> </ul>
FortisBC	<ul style="list-style-type: none"> <li>• <u>Provide resource capacity</u>: Provide sufficient resource capacity to Tsawwassen throughout the development of the Indigenous Led Assessment.</li> <li>• <u>Reasonable timelines</u>: Work collaboratively with Tsawwassen to address time pressures that could impede Tsawwassen's ability to undertake the Indigenous Led Assessment in a manner that is responsive to community needs and obligations, through, for example, making or supporting applications to extend EA timelines that have a bearing on the undertaking of the Indigenous Led Assessment.</li> <li>• <u>Full and timely information sharing</u>: Provide information requested by Tsawwassen in a timely and transparent fashion, including requests for data.</li> <li>• <u>Information gathering</u>: Conduct studies and/or modelling identified by Tsawwassen and EAO as relevant for supporting the assessment of effects on Indigenous nations and rights.</li> <li>• <u>Engage Collaboratively</u>: Develop and provide to the EAO an Indigenous Engagement and Collaboration Plan, prior to submitting the Application, that will guide engagement and collaboration activities with all Indigenous nations during subsequent phases of the EA. The plan must be developed in consultation with Indigenous nations, including Tsawwassen First Nation and outline how FortisBC will undertake procedural aspects of consultation with Indigenous nations on behalf of the Crown during the EA.</li> <li>• <u>Engage collaboratively</u>: Implement any direction from the EAO for adjusting or correcting engagement issues identified by Tsawwassen.</li> <li>• <u>Demonstrate</u>: Demonstrate how information shared by Tsawwassen, including indigenous knowledge, has informed the development of components of the Application, including effects determinations beyond determination of effects on indigenous rights.</li> </ul>

## 10.6. Timelines and Milestones for the Indigenous Led Assessment

### TIMELINES

The Indigenous Led Assessment will be completed prior to the development of the EAO's final referral package.

It is anticipated that milestones in the Indigenous Led Assessment and the EA processes will roughly align as follows:

Table 13. Timelines and Milestones for Tsawwassen-Led Indigenous Assessment

EA Process	Indigenous Led Assessment Process
Application Development	Kick-Off Meeting and Analytical Framework. Preliminary Document and Data Compilation and Gap Analysis. Community Engagement regarding conditions required for the meaningful practice or experience of the rights and/or value and current conditions/experiences.
Application Review	Further Document and Data Compilation and Gap Analysis. Characterisation of potential project effects, including reasonably foreseeable cumulative effect. Community Engagement.
Effects Assessment and Recommendation	Assessment of the potential severity of project-specific and cumulative impacts with respect to TFN culture and rights. Discussions with EAO on development of conditions and accommodations. Validation with Community. Reporting (updating to the Indigenous Led Assessment document prior to final reporting).
Decision	Implementation of FPIC.

## DELIVERABLES

The Parties acknowledge that Tsawwassen First Nation requires sufficient capacity and funding to complete the scope of the Indigenous Led Assessment, as described in this appendix. Tsawwassen First Nation is not obligated to fund their Indigenous Led Assessment.

Tsawwassen First Nation's Indigenous Led Assessment deliverables included:

- Periodic updates regarding the progress of preparing the indigenous led assessment (ongoing throughout the EA process);
- Report out on gap analysis as it relates to FortisBC and the EAO (Application Development & Review);
- Draft/detailed summary of the Indigenous Led Assessment report (within 30 days of the beginning of the Effects Assessment Phase);
- Indigenous Led Assessment report (Prior to the end of the Effects Assessment Phase); and
- Jointly developed plan for implementing FPIC.

FortisBC deliverables:

- Application; and
- Revised Application;

EAO deliverables:

- Information requests issued to FortisBC by the EAO that reflect Tsawwassen input and needs relating to the Indigenous Led Assessment;
- Notice of Application Acceptance;
  - Draft Referral Package, including draft Assessment Report, draft conditions, and draft project description

- Final Referral Package, including final Assessment Report, draft EA certificate (including proposed conditions and project description), notifications of consent or lack of consent from participating Indigenous nations, and CEO Recommendations; and
- Jointly developed plan for implementing FPIC.

The Agency's deliverables:

- Draft federal potential conditions;
- Jointly developed plan for implementing FPIC; and
- Funding to support Tsawwassen First Nation in consultation activities, to be administered through the EAO.

#### 10.6.1. Tsawwassen's Indigenous Led Assessment

The Tsawwassen-led assessment will be utilized to inform the development of potential mitigation measures, the development of potential Crown accommodation measures, and will be a critical information source to inform Tsawwassen's decision about whether or not to provide consent for Tilbury Phase 2. The Crown and Tsawwassen are in discussions regarding the outcomes of Tsawwassen's decision to provide or withhold consent for the project for the environmental assessment decisions under both the provincial and federal Acts.

## 11.0 APPENDIX 6: TSLEIL-WAUTUTH NATION INDIGENOUS LED ASSESSMENT

### 11.1. Introduction

Tsleil-Waututh Nation has requested to conduct their own Indigenous Led Assessment to evaluate the potential impacts of the project on their rights and interests. Tsleil-Waututh Nation's Indigenous Led Assessment will follow the principles laid out in Tsleil-Waututh Nation's Stewardship Policy (2009). This analysis will focus on the Nation's well-being and cultural health and will be presented as part of the assessment of the effects of Tilbury Phase 2 on Indigenous nations and rights recognized and affirmed by Section 35 of the Constitution Act, 1982 as referred to in Section 25(1) of the Act and Section 22 of the Impact Assessment Act.

The study will be carried out as an interim report until a fulsome Indigenous Led Assessment can be completed. The report will focus primarily on Tsleil-Waututh Nation's cultural health in a way that respects Tsleil-Waututh Nation's knowledge and perspectives and will facilitate informed decision-making by their community members that is consistent with their laws, governance, traditions, and customs.

#### 11.1.1. Supporting principles and workplans

The following draft engagement principles were developed collaboratively by the EAO and Tsleil-Waututh Nation ('Parties'), to help guide engagement throughout the environmental assessment (EA) of Tilbury Phase 2 LNG Expansion (Tilbury Phase 2), and to ensure consistency with the EAO's purpose to support reconciliation under the Act.

#### Principles for Engagement:

- Parties will engage through collaborative approaches to assessing the proposed project in support of Indigenous, provincial, and Crown decision-making. Engagement will recognize the inherent jurisdiction and authority Indigenous leaders have over their communities concerning major projects.
- Parties will build a shared understanding of Tsleil-Waututh Nation's history, culture, traditions and connection to the land and resources, including how Tsleil-Waututh Nation has determined its priorities, visions, governance, and land use planning aspirations into the future.

- Tsleil-Waututh Nation and the EAO will respect each other's authorities and decision-making processes and will work to uphold and coordinate these processes to strive to ensure Tsleil-Waututh Nation's rights are not infringed upon during environmental assessments.
- Tsleil-Waututh Nation and the EAO acknowledge the importance of transparency including the value of clear processes and sharing of information pertaining to EA processes for the proposed project that may affect Tsleil-Waututh Nation.
- Parties agree to be as transparent as possible regarding consultation processes and decision-making while respecting the Parties' government confidentiality requirements and legal obligations.
- Parties are committed to support a process where decision-makers are fully informed, and presented with all the required information, in a sufficient and respectful way, to enable robust dialogue and durable decisions.
- Parties agree to share information which will impact discussions and decision-making in matters relevant to EAs for the proposed project and commit to exploring creative solutions to address concerns.
- Parties will recognize each other's respective accountabilities, inform mutual decisions and timelines, and respect that each Party has a decision to make relating to the proposed project.
- Parties agree to work collaboratively in a manner that establishes and fosters a relationship based on understanding, trust and mutual respect. If a dispute arises, the Parties and their respective representatives will, in good faith, attempt to reach a resolution.
- The EAO acknowledges Tsleil-Waututh Nation's policies towards timelines and processes and is also subject to the legislated timelines and processes set out by the legal framework established under the Act and its associated regulations.
- The EAO recognizes that meaningful engagement with Indigenous peoples aims to secure their free, prior, and informed consent, when British Columbia proposes to take actions which impact Indigenous peoples and their rights, including their lands, territories, and resources.

In addition to these Principles, the EAO will work in accordance with the Act, and strive to support the implementation of the UN Declaration and the Declaration on the Rights of Indigenous Peoples Act (2019); the EAO uses the Act, DRIPA and the UN Declaration to Consult with Tsleil-Waututh Nation to identify, assess and, as required, mitigate the potential effects of proposed projects on Tsleil-Waututh Nation's rights, title and interests.

The EAO, FortisBC and Tsleil-Waututh Nation have also agreed to a review period of a minimum of 45 days for Tsleil-Waututh Nation to review documents, followed by time for discussion and solution-seeking. However, a consensus-seeking approach may not reflect meaningful consultation unless Tsleil-Waututh Nation's concerns are adequately addressed, and Indigenous Knowledge is appropriately characterized and validated.

As the process proceeds, EAO, FortisBC and Tsleil-Waututh Nation will develop consultation agreements in order to undertake an engagement process with respect to the project and facilitate a positive and respectful working relationship between the Parties in accordance with the terms and conditions of such agreements. This consultation protocol will be followed by a collaborative work plan between the EAO and Tsleil-Waututh Nation to provide some guiding principles and additional detail as to how the Parties will work together during the EA process, including during Application Development and Review and the Effects Assessment and Recommendation phases.

The EAO and Tsleil-Waututh Nation will set up semi-regular meetings throughout the EA process as "check-in points" (to provide each other updates and seek consensus on key aspects of the EA process).

### 11.1.2. Purpose of the Study

#### 11.1.2.1. Overall Objective

To provide benefit to the Tsleil-Waututh Nation regarding study capacity, cultural knowledge (in terms of loss and future planning and growth), a lens into the cultural health of the Nation and its members. To also provide qualitative and

quantitative data to continue to advocate for Tsleil-Waututh Nation's improved way of life and the health of its members and their territory.

#### **11.1.2.2. Specific objectives for Tsleil-Waututh's Indigenous Led Assessments**

1. To provide a baseline of Tsleil-Waututh cultural health to start to build data in this regard, similar to the way Tsleil-Waututh use Traditional Use Studies baselines, to understand cumulative effects and project-specific impact contributions.
2. To better assess project effects on Tsleil-Waututh Nation culture and to ensure that VCs on health include Values-Based indicators that can effectively assess impacts on Cultural Health and community well-being.
3. Identify potential impacts on Tsleil-Waututh Nation's health and well-being, including impacts that go beyond the physical determinants of health. For example, social and cultural VCs such as spiritual practices.
4. To provide direction for identifying, mitigating, and managing health risks and impacts from the project on Indigenous health, as well as the project's cumulative effects on health and well-being in an area characterized by a legacy of industrial development.
5. Introduce Indigenous knowledge to proponents and government bodies Indigenous knowledge to assess health effects from an Indigenous perspective to ensure a fulsome understanding of potential project effects.
6. Improve the incorporation of Indigenous health components into the EA process in order to better assess cumulative effects.
7. Make recommendations for future Application Information Requirements on including requirements related to Indigenous health, so that it is adequately assessed and weighed throughout a proponent's Application, and not solely in the assessment of effects to an Indigenous nation and their rights.

### **11.2. Scope of Indigenous Led Assessment under Section 19(4)**

#### **11.2.1. Tsleil-Waututh Nation's cultural health interests/Valued components**

The Tsleil-Waututh Nation Cultural Health Study will be a longitudinal study of Tsleil-Waututh Nation's peoples' level of familiarity and degree of participation in Tsleil-Waututh Nation's traditional Coast Salish culture. Indicators for Tsleil-Waututh Nation's Cultural Health and Community Well-Being will also rely on those used by other VCs. The scope of Tsleil-Waututh Nation's Cultural Health Assessment will include, but is not limited to, potential effects of Tilbury Phase 2 on:

- Tsleil-Waututh Nation's right to occupy and use lands and resources, including the right to fish, hunt, harvest, manufacture, and trade.
- Tsleil-Waututh Nation's right to practice and preserve traditional knowledge of Tsleil-Waututh Nation's territory, culture, laws, and their right to self-governance.
- Tsleil-Waututh Nation's right to protect, maintain and promote tangible and intangible cultural heritage resources: family history, gatherings, oral traditions, songs, knowledge of natural spaces, healing traditions, foods, ceremonies, beliefs, cultural practices, traditional navigation skills, etc.
- Tsleil-Waututh Nation's right to food sovereignty and access to local and traditional foods and medicines.
- Tsleil-Waututh Nation's cultural, sacred, and spiritual activities, including the use and safeguarding of specific ceremonial sites.
- Tsleil-Waututh Nation's Cultural health as a whole: Indigenous language (hənqəminəŋ) revitalization and revitalization of traditional spiritual/ceremonial practices.

### 11.2.2. Assessment Scope

The following are the assessment scopes that Tsleil-Waututh Nation will use to inform their assessment of effects to Cultural Health.

Temporal scope: The temporal scope or the time length of the baseline community profile extends back to pre-contact times. The study tracks historical changes from the late 18th century to the present day that have impacted Tsleil-Waututh Nation's cultural health and is part of the ethnographic and historical context that informs the amount of cumulative change that has occurred for Tsleil-Waututh Nation.

Geographic scope: The spatial scope of the project generally corresponds to Tsleil-Waututh Nation's Consultation Area but will also include cultural activities undertaken beyond this area. Studies like this are typically focused on Burrard Inlet, as it is Tsleil-Waututh Nation's homeland, core territory, and central to the nation's culture. However, the Fraser River is also incredibly important for both traditional and current Tsleil-Waututh Nation cultural practices. Historical changes due to the industrial development of both the Burrard Inlet and Fraser River are highly relevant to Tsleil-Waututh Nation's well-being and cultural health.

### 11.3. Methods of Indigenous Led Assessment under Section 19(4)

Tsleil-Waututh Nation will be undertaking their own Cultural Health Indigenous Led Assessment, which will be informed by Tsleil-Waututh Nation's traditional use study (TUS) data, Coast Salish place names, archaeological sites, oral history sources and other ethnographic information, including Tsleil-Waututh Nation's ethnohistorical studies and research already available and in progress.

#### 11.3.1. Background and literature review

Tsleil-Waututh Nation has raised concerns regarding the applicability of B.C. Guidance for Prospective Human Health Risk Assessment (HHRA) (Version 1.0)<sup>8</sup> as the main reference considered in the development of the VCs, the dAIR and other sections of the Application for this project to assess human health and particularly Indigenous health in the EA process. From Tsleil-Waututh Nation's perspective, current health impact assessment approaches often omit important health priorities rooted in the history, social structures, and cultural context of Indigenous communities. Aspects of health extend beyond direct biophysical exposures (e.g. through air quality and water contamination) and can also be mental, socio-cultural, spiritual and emotional due to impacts on key cultural values. In recent EAs, Tsleil-Waututh Nation has continuously expressed concerns about the linkage between consumption of traditional foods, such as shellfish and salmon, and cultural health; eating lower amounts of fish and shellfish is both a health risk and an emotional and spiritual loss related to traditional activities, ceremonies, their sense of place and collective identity.

Tsleil-Waututh people view people-nature interactions as the basis for significant cross-generational contact and teaching; food gathering, in particular, is often a family affair, with several generations fishing or working together digging clams. However, the limited availability of traditional foods impairs Tsleil-Waututh Nation's ability to undertake important cultural activities that require traditional local foods<sup>9</sup>. Collectively, these impacts on Tsleil-Waututh Nation's traditional harvesting areas have corresponding negative effects on Tsleil-Waututh Nation's physical, spiritual, cultural and community health. Likewise, Tsleil-Waututh maintains an important and ongoing cultural relationship with killer whales that links them to spiritual power, their past ancestors, the passage of their ancestors to the hereafter, and view the presence of killer whales as a barometer of the health of their territory. From their perspective, the loss of SRKWs could negatively impact the cultural health of their community members. Yet, impacts on traditional practices often are overlooked or minimized in assessments of health risks.

<sup>8</sup> <https://www2.gov.bc.ca/assets/gov/health/keeping-bc-healthy-safe/healthy-communities/bc-hhra-guidance.pdf>

<sup>9</sup> Morin J (2015) Tsleil-Waututh Nation's History, Culture and Aboriginal Interests in Eastern Burrard Inlet.



Therefore, Tsleil-Waututh Nation has requested to conduct their own assessment of community/cultural health as an extension of the Human Health Criteria and Indicators. Possible metrics include but are not limited to changes to biophysical aspects like noise and light. There are also cultural aspects related to traditional practices, sense of place, sense of community, knowledge transmission, well-being, capacity to act as stewards, food security, and both intra- and inter-nation relationships/trade. Health assessments should also reflect the link between consumption of certain traditional foods and culture; how Indigenous groups may be disproportionately affected by project-related effects, and how these groups are especially vulnerable to socioeconomic and health impacts from projects like the Tilbury Phase 2 expansion.

Along with an extensive literature review and ethnohistoric analysis, Tsleil-Waututh Nation will use a cumulative effects approach for their assessment that extends back to pre-contact conditions instead of using the present day. Tsleil-Waututh Nation recognizes that using a pre-contact baseline for this assessment is difficult; nevertheless, new studies provide evidence of how Tsleil-Waututh Nation's territory has been heavily impacted for over 150 years by industrial development and how habitat loss has severely impacted Tsleil-Waututh Nation's way of life<sup>10</sup>. Tsleil-Waututh Nation has also engaged with DFO's Coastal Environmental Baseline Program in conducting a monitoring program to assess chemical and biotoxin contamination with specific consideration of human health impacts. In addition, Tsleil-Waututh Nation is part of Transport Canada's Cumulative Effects of Marine Shipping program. Tsleil-Waututh Nation's Cumulative Effects Monitoring Initiative (CEMI) has identified several valued cultural components, including cultural health.

### 11.3.2. Methodological Framework

For the purpose of the Cultural Health Indigenous Led Assessment, we will use a Rights-based approach to assess the potential effects of the project on the exercise of Tsleil-Waututh Nation's rights and interests. The conditions supporting the opportunity to exercise Tsleil-Waututh Nation's rights have changed over time and these will be evaluated in order to understand the potential severity of new project-specific effects on those rights. This assessment will be framed under a values-based methodology (how people define what health means, their health priorities, and preferred actions to maintain or improve health). Values-driven data will be gathered via already available materials, internal and external to Tsleil-Waututh Nation, and through community engagement<sup>11</sup>.

## 11.4. Information Requirements for the Indigenous Led Assessment under Section 19(4)

In addition to the Indigenous knowledge that will be gathered from community engagement (see Section 1.3 above), the Tsleil-Waututh Nation Indigenous Led Assessment would also be informed by FortisBC Impacts assessment on the VCs identified by EAO (including other S. 25 (2) of the Act). The VC framework will be used to assess the effects on Indigenous interests to ensure that the impacts on relevant VCs are properly evaluated through Tsleil-Waututh Nation's Indigenous Led Assessment and that Tsleil-Waututh Nation's interests and concerns are appropriately reflected in the assessment.

Potential information requirements contained in the Application include:

- FortisBC's assessment of impacts to Land and Resource Use, including wildlife, local vegetation and harvesting sites;
- FortisBC's assessment of impacts to fish and fish habitat; and
- FortisBC's assessment of impacts to Surface Water and groundwater.

<sup>10</sup> Taft, S., Oldford, G., Lilley, P.L., Oetterich, S.B., Morin, J., George, M., George, M., and Christensen, V. (2022). Reconstructing the pre-contact shoreline of Burrard Inlet (British Columbia, Canada) to quantify cumulative intertidal and subtidal area change from 1792 to 2020. Fisheries Centre Research Report 30(1) 48 pp. See also Morin, J., & Evans, A.B. (2022). Historical Ecology in Burrard Inlet: Summary of Historic, Oral History, Ethnographic, and Traditional Use Information. Fisheries Centre Research Report 30(2) 64 pp. Retrieved from: <https://fisheries.sites.olt.ubc.ca/files/2022/03/FCRR30-2-CollatedM3b.pdf>

<sup>11</sup> Community engagement will depend on provisions for confidentiality as well as interview protocols and consultation opportunities that may be limited by the pandemic.

- FortisBC’s assessment of impacts to archaeological and heritage resources;
- FortisBC’s assessment of impacts to Health (human health risks related to changes in air quality, water quality, soil quality and country foods);
- FortisBC’s assessment of the impacts and benefits of the project for indigenous groups;
- FortisBC’s assessment of impacts to Air Quality and submission of their Strategic assessment of Climate Change;
- FortisBC’s assessment of impacts and benefits from to archaeological and heritage resources.

Tsleil-Waututh Nation may also use other relevant studies and government guidance documents to inform the Indigenous Led Assessment. These documents outline the requirements and recommendations for project proponents who are undergoing the EA review under the Environmental Assessment Act (2018).<sup>12</sup>

### 11.5. Roles and Responsibilities for the Indigenous Led Assessment under Section 19(4)

Pursuant to s. 19(4) of the Act, Tsleil-Waututh Nation will carry out a Nation-specific assessment with respect to the potential effects of Tilbury Phase 2 on the Nation and on its rights, recognized and affirmed by section 35 of the Constitution Act, 1982, particularly impacts from the project on Tsleil-Waututh Nation’s Cultural Health and the community’s well-being. Tsleil-Waututh Nation reviews projects through the lens of our Stewardship Policy to provide the community with the information required to make informed decisions about whether to consent to a proposal or withhold support. For this purpose, the Cultural Health Indigenous Led Assessment will be led by Tsleil-Waututh Nation community members, Treaty, Lands & Resources (TLR) Staff, a GIS analyst, and an external consultant. EAO, Tsleil-Waututh Nation and FortisBC will follow the engagement principles as described in Section 1.1.1 of this appendix in order to collaboratively engage in the process.

FortisBC will be supporting Tsleil-Waututh by providing information in their Application, as outlined in the Application Information Requirements.

### 11.6. Timeframe and Milestones for the Indigenous Led Assessment under Section 19(4)

The timeframe and scope of this specific Indigenous Led Assessment will depend on capacity funding and the timing of decisions on the application.

Tsleil-Waututh Nation’s Cultural Health Indigenous Led Assessment will consist of a series of activities completed within the EA of Tilbury Phase 2. The approximate timing of each activity is provided in [Table 14](#) below, and begins with preliminary scoping, subsequent collaborative discussions with regulator and proponent for the first draft report thereafter and culminating in a final report to be submitted during the Effects Assessment phase. This roadmap displays two main phases in the timeline with key activities and a summary report at the end with the final comprehensive Tsleil-Waututh Nation Indigenous Led Assessment (specific to the Cultural Health component).

<sup>12</sup> British Columbia Guidance for Prospective Human Health Risk Assessment (Version 2.0) April 2022

<https://www2.gov.bc.ca/assets/gov/health/keeping-bc-healthy-safe/healthy-communities/bc-hhra-guidance.pdf> and the B.C. EAO’s guidance entitled Human and Community Well-being: Guidelines for Assessing Social, Economic, Cultural and Health Effects in Environmental Assessments in B.C. (B.C. Environmental Assessment Office 2020a). Health Canada. (2019a). Guidance for Evaluating Human Health Impacts in Environmental Assessment: Human Health Risk Assessment. Ottawa, ON: <https://www.canada.ca/en/health-canada/services/publications/healthy-living/guidanceevaluating-human-health-impacts-risk-assessment.html>

Also see First Nation’s Health Authority’s website for more information: <https://www.fnha.ca/wellness/wellness-and-the-first-nations-healthauthority/first-nations-perspective-on-wellness>

Table 14. Timing and Milestones for Tsleil-Waututh Nation's Indigenous Led Assessment

Activity	EA Phase
Phase 1 preliminary scoping and foundational research for a second phase.	Application Development & Review
Data collection: Literature review and secondary resources. Develop values-based methodology and identify main Indigenous health indicators.	Application Development & Review
Phase 2 Community engagement: Synthesize community priorities, challenges, and questions, and analyze the community's perception of risk and health. Individual Key Informant Interviews and Meetings.	Application Development & Review
Identify gaps in available resources and recommend the next steps to address gaps, first preliminary draft.	Application Development & Review
Develop conclusions and recommendations.	Application Development & Review
Submit Preliminary Results- interim report, Draft 2.	Within 30 days of the beginning of Effects Assessment
Seek solutions with EAO and proponent on issues raised by Tsleil-Waututh Nation and any outstanding concerns regarding potential effects of the project.	Effects Assessment
Final submission of Tsleil-Waututh Nation's Cultural health – Indigenous Led Assessment and recommendations to inform Provincial decision-makers.	Prior to the end of Effects Assessment

#### 11.6.1. Tsleil-Waututh Nation's Cultural Health Assessment

To be included with the EAO's referral materials, which will be submitted to the Ministers for decision.

# **Schedule C – Application Information Requirements**

**FOR THE  
TILBURY PHASE 2 LNG EXPANSION PROJECT**

**PROPOSED BY  
FORTISBC HOLDINGS INC. AND FORTISBC ENERGY INC.**

**ISSUED BY  
ENVIRONMENTAL ASSESSMENT OFFICE  
JUNE 13, 2022**

## PREFACE TO THE APPLICATION INFORMATION REQUIREMENTS

FortisBC Holdings Inc., with its natural gas subsidiary FortisBC Energy Inc. (collectively defined as FortisBC), propose to expand storage and production capacity at the existing Tilbury liquefied natural gas (LNG) facility. The Tilbury Phase 2 LNG Expansion Project (the Project) consists of construction and operation of a new LNG storage tank with a working volume of 142,400 cubic metres (approximately 3.5 petajoules) and new liquefaction facilities with a capacity of up to 7,700 tonnes per day of LNG production. The Project will receive natural gas at 7651 Hopcott Road, on Tilbury Island in the City of Delta, British Columbia (B.C.) through established gas line systems.

The Project is being assessed under the B.C. *Environmental Assessment Act*, S.B.C 2018, c. 51 (B.C. *EAA*) and the *Impact Assessment Act*, S.C. 2019, c. 28, s. 1 (*IAA*).

Given that environmental assessment under B.C. *EAA* and impact assessment under the *IAA* are required, the Minister of Environment and Climate Change has [approved](#) the Government of British Columbia (B.C.)'s request to substitute the provincial review process under for the federal impact assessment process.

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## TABLE OF CONCORDANCE

A Table of Concordance must be included in the Application for an Environmental Assessment Certificate (the Application). The Table of Concordance must demonstrate where the information requirements are found in the Application, with volume and section in the format of Table 1.

Table 1. Table of Concordance between Application Information Requirements (AIR) and Application

AIR Section & Page No.	AIR Title	AIR Section Language	Application Section Title	Application Volume, Section (or Sub-Section),	Relevant Appendix
Section 7.12 Pages 22 to 29	Freshwater Fish Assessment Boundaries	The Application must define assessment boundaries for the freshwater fish Valued Component (VC), including spatial, temporal, and administrative and technical boundaries.	Freshwater Fish Assessment Boundaries	Volume 2 Section 4.2.2	Volume 6 Appendix K

## ABBREVIATIONS AND ACRONYMS

The Application must include a list of all acronyms and abbreviations used and their definitions. This list will likely be an expanded version of the list below, which consists of terms that appear in this document.

AIR	Application Information Requirements
BAT	Best Available Technology
B.C.	British Columbia
B.C. CDC	British Columbia Conservation Data Centre
B.C. EAA	British Columbia <i>Environmental Assessment Act</i>
B.C. EAO	British Columbia Environmental Assessment Office
B.C. MFLNRORD	British Columbia Ministry of Forests, Lands, Natural Resource Operations and Rural Development
B.C. OGC	British Columbia Oil and Gas Commission
BCR	Bird Conservation Region
BEC	Biogeoclimatic Ecosystem Classification
BEP	Best Environmental Practice
CAAQS	Canadian Ambient Air Quality Standards
CCRA	Climate Change Resilience Assessment
CEA	Cumulative Effects Assessment
CO	carbon monoxide
COPC	Contaminant of Potential Concern
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
dAIR	draft Application Information Requirements

DFO	Fisheries and Oceans Canada
DO	dissolved oxygen
DPD	Detailed Project Description
DPM	Diesel Particulate Matter
EA	Environmental Assessment
EAC	Environmental Assessment Certificate
ECCC	Environment and Climate Change Canada
FortisBC	FortisBC Holdings Inc. with its natural gas subsidiary FortisBC Energy Inc.
FRAMP	Fraser River Ambient Monitoring Program
GBA+	Gender-Based Analysis Plus <sup>1</sup>
GHG	greenhouse gas
ha	hectare(s)
IAA	<i>Impact Assessment Act</i>
IAAC	Impact Assessment Agency of Canada
IBA	Important Bird Area
INFC	Infrastructure Canada
IPCA	Indigenous Protected and Conserved Areas
IPCC	Intergovernmental Panel on Climate Change
ISO	International Organization for Standardization
km	kilometre(s)
LAA	Local Assessment Area
LNG	liquefied natural gas
m	metre(s)
m <sup>2</sup>	square metre
MBCA	<i>Migratory Birds Convention Act</i>
NO <sub>2</sub>	nitrogen dioxide
NOC	National Occupational Classification
PAH	Polycyclic Aromatic Hydrocarbon
PM <sub>2.5</sub>	fine particulates smaller than 2.5 microns
PM <sub>10</sub>	respirable particulates of less than 10 microns
RAA	Regional Assessment Area
SACC	Strategic Assessment of Climate Change

<sup>1</sup> Gender Based Analysis Plus (GBA+) provides a framework to describe the full scope of potential adverse and positive effects under the proposed *Impact Assessment Act* (IAA). GBA+ is an analytical framework that guides practitioners, proponents, and participants to ask important questions about how designated projects may affect diverse or potentially vulnerable population groups (IAAC 2020).

SARA	<i>Species at Risk Act</i>
SO <sub>2</sub>	Sulphur dioxide
TDR	Technical Data Report
the Application	an Application for an Environmental Assessment Certificate
the Project	Tilbury Phase 2 LNG Expansion Project
the Project Footprint	The area directly disturbed by proposed Project activities
TISG	Tailored Impact Statement Guidelines Template
TOC	Total Organic Carbon
TSP	total suspended particulate
TSS	total suspended solid
TUS	Traditional Use Study
UNESCO	United Nations Educational, Scientific and Cultural Organization
US	United States
VC	Valued Component
VOC	Volatile organic compound
ZOI	Zone of Influence

## APPLICATION SUMMARY

The proponent must:

- a) prepare a stand-alone plain language summary of the Impact Statement in both of Canada's official languages (French and English). The summary must contain sufficient details for the reader to understand the Project, any potential environmental, economic, social, culture, and health effects, potential adverse effects on Indigenous nations, proposed mitigation measures, residual effects, and any required follow-up programs as determined in an assessment conducted in accordance with these Application Information Requirements (AIR).
- b) The Application must include a summary with the following:
  - i. A summary description of the Project;
  - ii. A summary description of the assessment scope;
  - iii. A brief overview of engagement activities with Indigenous nations, the public, Local governments, Provincial and Federal government agencies, and stakeholders;
  - iv. A summary of the key issues raised by Indigenous nations, the public, Local governments, Provincial and Federal government agencies, and stakeholders;
  - v. A summary of anticipated key effects by Valued Component, proposed mitigation measures, and predicted residual and cumulative effects and any required follow-up programs;
  - vi. A summary of anticipated key effects on Indigenous nations and their rights, and proposed mitigation measures; and

- vii. Key maps or figures illustrating the Project location and key Project components.

## 1.0 PROJECT OVERVIEW

### 1.1. Project Introduction

The Application for an Environmental Assessment Certificate (the Application) will provide a high-level overview of the Tilbury Phase 2 LNG Expansion Project (the Project), including:

- The type of project;
- The objective of the Project;
- Key project components;
- A statement of the general project location and names of the nearest communities; and
- The relevant history of the Project, including exploratory or investigative history.

The Application must outline the larger context of developments on Tilbury Island and their relationship to the Project, including:

- The Phase 1 developments constructed and those in development; and
- The Tilbury Marine Jetty Project, which is currently being assessed under the British Columbia (B.C.) *Environmental Assessment Act* (B.C. EAA) (2002) and the *Canadian Environmental Assessment Act*, 2012.

### 1.2. Proponent Description

The Application must:

- Describe the proponent (FortisBC Holdings with its natural gas subsidiary FortisBC Energy Inc., collectively FortisBC), including company history, type of company or organization, affiliations, headquarter location, corporate and management structures;
- Provide contact information for proponent representatives for the Project (for example, name, address, phone, fax, email);
- Specify the mechanism used to ensure that corporate policies will be implemented and respected for the Project; and
- Identify the main contractor/company responsible for the preparation of the Application. Refer to subsection 19.4 that identifies key personnel responsible for preparing the Application, including their qualifications.

### 1.3. Project Location

The following information will be included and, where appropriate, located on map(s):

- Project location, including the latitude and longitude coordinates (using international standard representation in degrees, minutes, seconds) ;
- Past development or existing infrastructure;
- Distance of the Project components to any Federal lands and the location of any Federal lands within the Regional Assessment Area (RAA);
- All waterbodies and their location on a map;
- Navigable waterways;

- Project access route and transportation corridors;
- Summary of historical environmental characteristics of the area;
- Environmentally sensitive areas, such as National, Provincial, and Regional parks, ecological reserves, marine protected areas, marine refuges, ecologically and biologically sensitive areas, wildlife habitat areas, old growth management areas, ungulate winter ranges, wetlands, estuaries, habitats of Federally- or Provincially-listed species at risk, Indigenous Protected and Conserved Areas, other identified sensitive areas identified through the assessment process;
- Lands subject to conservation agreements;
- Description and locations of all potable drinking water sources (that is, Municipal or private);
- Description of local communities and nations, including distances to these communities;
- Distance to the international border (for example, the United States [US]) if the potential for effects to cross a border is identified;
- Indigenous Traditional Territories and/or consultation areas, Treaty and/or Title lands, and Indian Reserve lands; Indigenous harvesting regions (with permission of Indigenous nations); Indigenous Land Use Plans and/or Environment Bylaws; and
- Summary of culturally and locally important features of the landscape (both Indigenous and non-Indigenous).

Maps are to be provided as electronic geospatial data file(s) compliant with the International Organization for Standardization (ISO) 19115 standard. The following information will be included on maps:

- All waterbodies and their location;
- On- and off-site Project components;
- Indigenous Traditional Territories and/or consultation areas, Treaty and/or Title lands, and Reserve lands;
- Local and Indigenous nation communities;
- International, Provincial, and Territorial boundaries, where applicable;
- Parks and protected areas;
- Legally protected wildlife habitat;
- Geographic coordinates;
- Major existing infrastructure;
- Proponent lands, properties, or leased lands; and
- Adjacent land uses and any important environmental features.

The following shapefiles and .kmz files for the Project will be provided, where not previously provided or where updates have been made to the shapefiles submitted with the Initial or Detailed Project Description (DPD):

- Project footprint;
- Known or proposed Project components;
- Project access route; and

- Boundaries of Local Assessment Area (LAA) and RAA for each Valued Component (VC).

## 1.4. Project Components

The components of the Project, associated and ancillary works, including both on-and off-site facilities and associated activities are described in the DPD. Any updates or changes to the Project components since submission of the DPD must be described in detail in the Application.

The Application must provide a summary of the information in the DPD, including the Project components, associated and ancillary works, including both on-and off-site facilities and associated activities, past development, and other characteristics to assist in understanding the potential environmental, economic, social, culture, and health effects of the Project, and provide the potential for interaction of the Project with the Indigenous interests and Aboriginal Rights and Title of Indigenous Peoples.

The Project activities and components are set out in the DPD. They are:

- Temporary Construction Activities and Components:
  - Material Offloading Facility;
  - Construction materials delivery;
  - Construction laydown and staging;
  - Construction infrastructure/service;
  - Water management and hydro-testing; and
  - Ground preparation.
- Operation Activities and Components:
  - Liquefied natural gas (LNG) storage;
  - Natural gas receiving;
  - Natural gas processing and liquefaction; and
  - Supporting infrastructure, including a safety flare.

## 1.5. Project Activities

The Application must provide a description of the applicable construction, operations, and decommissioning activities of the Project, including duration and proposed scheduling. Proposed scheduling should identify the time of year, frequency, and duration for key Project activities. Any overlapping phases should be described. The Application must highlight activities that involve periods of increased disturbance to environmental, economic, social, culture, and health conditions, or effects to Indigenous nations and their Aboriginal Rights and Title.

The Application will identify a pre-construction phase and describe any activities that are planned to be conducted prior to construction of the full Project.

The Application must also provide a summary of the changes that have been made to the Project since submission of the DPD, including the rationale for the changes.



### 1.5.1. Site Preparation and Construction

The Application must include a description of the site preparation and construction activities associated with the following (as applicable to the Project):

- Construction staging;
- Site grubbing/clearing and excavation, including tree and vegetation removal;
- Changes to existing infrastructure (such as, relocation of pipelines and the removal of legacy equipment);
- Borrow materials requirement (source and quantity);
- Storage areas for material stockpiles;
- Water management, including water diversions, dewatering or deposition activities, stormwater management required (location, methods, timing), potable water demand including short-term peaks;
- In-water works including descriptions of location, footprint, maps, figures, or site plans where appropriate are required during construction and operation;
- Operation of light-duty, heavy-duty, and mobile off-road equipment (type, quantity);
- Delivery of modules and construction materials by barge to the Material Offloading Facility;
- Construction of administrative buildings, garages, and other ancillary facilities;
- Storage and management of hazardous materials, fuels, and residues; and
- Installation of production platforms and mooring systems.

### 1.5.2. Operation

The Application must include a description of the operation activities associated with the following:

- LNG Storage;
- Natural gas receiving;
- Natural gas processing and liquefaction;
- Supporting infrastructure;
- Management and disposal of wastes onshore;
- Storage, handling, and transport of materials;
- Water management, including hydrostatic test water, potable water, water use requirements, storm water, process water, wastewater, water recycling, and effluent treatment (quantity, treatment requirements, release point[s]);
- Storage and handling of reagents, petroleum products, chemical products, hazardous materials, and residual materials; and
- Waste management and recycling.

### 1.5.3. Decommissioning and Reclamation

The Application must include a preliminary outline of decommissioning and reclamation phase associated with the following activities:

- De-energizing, decommissioning, purging, and dismantling of LNG facilities;
- Repurposing and recycling of materials and equipment;
- Include any known or foreseeable impediments and or challenges to decommissioning and reclamation; and
- Reclamation within the Project Footprint (the area directly disturbed by construction proposed Project activities, including associated physical works and activities) for alternate use.

## 1.6. Workforce Requirements

The Application must describe the anticipated labour requirements, employee programs and policies (if available), and workforce development opportunities for the Project, including:

- Opportunities for employment outlining the anticipated number of full-time and part-time positions, as well as the anticipated proportion of employee to contract positions, to be created for each Project phase, the skill and education levels required for the positions, and working conditions;
- Anticipated workforce region of origin (that is, local and regional employees);
- Investment in training opportunities;
- Expected workforce requirements based on the National Occupational Classification (NOC) system and timelines for employment opportunities;
- Anticipated work rotation schedules and means to get employees to the Project location for construction and operation (for example, hours of work, transportation);
- Anticipated hiring policies, including hiring programs;
- Workplace policies and programs for Indigenous nation employment and employment of underrepresented groups;
- Employee assistance programs and benefits, including career planning, employee counselling, family support, transition planning, pension plan, and group insurance benefit plans; and
- Workplace policies and programs, including codes of conduct, workplace safety programs, and cultural training and awareness programs.

## 1.7. The Need For and Purpose of the Project and Alternatives Considered

### 1.7.1. Need for the Project

The Application must describe the underlying opportunity or issue that the Project intends to seize or solve. The Application must provide supporting information that explains the need that will be served by the Project. The Application must include a summary of any comments or views of Indigenous nations, the public, and other participants the proponent received in the DPD.

### 1.7.2. Purpose of the Project

The Application must describe what is to be achieved by carrying out the Project, including:

- The target market (such as international, domestic, and local); and
- Objectives the proponent has in carrying out the Project.

### 1.7.3. Alternatives to the Project

The Application must:

- Provide a description of the functionally different ways that are technically and economically feasible to meet the need and achieve the purpose of the Project. For these technically and economically feasible alternatives to the Project, the Application must:
  - Provide sufficient information for the identification of the alternatives to the Project; and
  - Demonstrate how the views, information, and knowledge from Indigenous nations, the public and other participants, as well as existing studies and reports were considered in meeting these AIRs.

A technology, mitigation or component of the Project will be assessed for technical feasibility through consideration against several characteristics, including, at a minimum:

- A Technology Readiness Level of 7 or greater;
- Applicable within the constraints of the site (such as physical footprint, adequate utility supplies, etc.); and
- Able to conform with applicable environmental and emissions regulations without capital upgrades or additional treatment technology (e.g., air quality, wastewater, noise).

A technology, mitigation, or component of the Project will be assessed for economic feasibility through consideration against several characteristics, including, at a minimum:

- The lifecycle cost, not the installation cost, will be considered;
- The lifecycle cost of the technology, mitigation, or component is not prohibitive and would not have a detrimental impact on the regulated rate base; and
- Where multiple suitable alternatives exist, preference will be given to the lowest cost option.

The analysis of alternatives to the Project will validate that the preferred alternative is a reasonable approach.

### 1.7.4. Alternative Means of Carrying Out the Project

The Application must identify and consider alternative means of carrying out the Project that are technically and economically feasible, including the use of Best Available Technologies (BAT) and the potential environmental, economic, social, culture, and health effects, potential effects to Indigenous nations and their interests, risks, and uncertainties of those alternatives. The alternative means analysis will address all Project components for all Project phases, where relevant to the Project activities and design. Considerations include, but are not limited to, alternative technologies, processes, mitigation, and design.

The assessment of the alternatives to, and alternative means of carrying out, the Project, must account for the following:

- Any regional or strategic assessment;
- Any study or plan that is conducted or prepared by a government (including Local, Provincial, Federal or Indigenous nation) —in respect to the Project region and that has been provided with respect to Project;
- Any relevant assessment of the effects of the Project that is conducted by or on behalf of an Indigenous nation and that is provided with respect to the Project;
- Indigenous Knowledge, community, or local knowledge, comments received from the public; and
- Other studies or assessments realized by other proponents.

The assessment of the alternative means of carrying out the Project must provide the following:

- Description of the technically and economically feasible alternative means;
- The methods and criteria used to determine technical and economic feasibility of alternative means, including any BATs considered in determining feasibility;
- Criteria to examine the environmental, economic, social, culture, and health effects of each remaining alternative means to identify a preferred alternative such as storage characteristics, liquefaction driver technology, cooling technology, flare technology, liquefaction technology assessment, alternative construction methods, and flexibility of design and location;
- Where alternative means for carrying out the Project result in corresponding changes to the health, social, cultural or economic conditions, Gender-Based Analysis Plus (GBA+) and the Provincial guidelines on Human and Community Well-being will be applied to the effects analysis to describe disproportionate effects on distinct human populations who may be more vulnerable to adverse effects. The proponent will also consider the views or information provided by Indigenous nations, the public and other participants in establishing parameters to compare the alternative means and predicted effects;
- The following Project elements:
  - Project location;
  - Route or corridor and means options for transportation of LNG;
  - Access to the Project location;
  - Location of key Project components;
  - Facility design;
  - Energy sources to power the Project and other stationary sources to provide heat to the Project;
  - Management of water supply and wastewater;
  - Water management and location of the final effluent discharge points;
  - Construction alternatives;
  - Timing options for various components and phases of the Project; and
  - Suspension, abandonment, or decommissioning options.

## 2.0 REGULATORY FRAMEWORK

### 2.1. Environmental Assessment Process

The Application must identify where the Project has met the definition of a reviewable Project, with reference to the appropriate section of the Reviewable Projects Regulation and provide a high-level overview of the assessment process. The Application will state that the federal assessment process has been substituted with the Provincial assessment and whether there is an Indigenous nation-led assessment. Provide a reference to the Assessment Plan which provides details of the process.

The proponent shall identify the components of the Project which are subject to regulation by the British Columbia Utilities Commission and identify those components of the Project which are not subject to regulation by the British

Columbia Utilities Commission. The Application will describe the British Columbia Utilities Commission regulatory approvals process for those components of the Project subject to British Columbia Utilities Commission regulation.

## 2.2. Relevant Policies, Initiatives and Assessments

The Application must:

- Identify and take into account government policies, resource management plans, planning or study initiatives, and regional studies and strategic assessments relevant to the Project and/or assessment and their implications.

## 2.3. Land and Marine Use Plans

The Application must:

- Summarize any land and/or marine use plans, land zoning of a government (Municipal, Provincial, Federal, or an Indigenous nation) that may be relevant to the Project area including whether the Project is consistent with the identified plans.
- Describe any land lease agreements or land tenures required for construction and operation of each component of the Project.

## 2.4. Indigenous Nation Arrangements

The Application must identify and describe how the assessment has considered the following arrangements:

- Any applicable Indigenous nation arrangements between Federal or Provincial governments and Indigenous nations that are pertinent to the Project and/or Environmental Assessment (EA) (for example, any Treaty, self-government, land claims); and
- The Application must, subject to confidentiality requirements, identify and describe all agreements entered into with Indigenous nations as applicable to the Project, as set out in:
  - The AIR;
  - An engagement plan approved under Section 13 of the B.C. EAA; and
  - A Process Order issued under Section 19 of the B.C. EAA.

## 2.5. Permitting

The Application must provide an update to the information provided on permitting in the DPD, which must:

- Describe existing licenses, permits, approvals or tenures and the date received; and
- Describe anticipated federal, provincial, regional and municipal authorizations and permits, their expected submission dates and an indication of whether they would be submitted during the EA.

## 3.0 PUBLIC ENGAGEMENT

The Application must describe the public and stakeholder engagement on the Project and proposed activities during the development of the Application. The proponent must conduct public and stakeholder engagement in accordance with the Assessment Plan issued by the B.C. Environmental Assessment Office (B.C. EAO). The Application must describe whether the engagement is consistent with the requirements in the Assessment Plan, and if not, provide a rationale.

The Application must provide a description of the information and materials that were distributed, and describe the efforts made to distribute Project information during Early Engagement, Process Planning, and Application development. The Application must indicate engagement methods, the groups consulted, the issues identified as well as the location of any in-person engagement, the number of participants and the views expressed. The Application must also describe the extent to which public and stakeholder feedback was incorporated in the design of the Project and in the Application.

The Application must provide a summary of key issues related to the Project, which were raised through engagement with the public and stakeholders and the potential environmental, economic, social, cultural and health effects, including disproportionate effects, for diverse subgroups within the population and effects to current and future generations.

The Application must describe ways to address the issues raised, such as alternative means, specific mitigation measures, or specific monitoring programs and adaptive management to deal with uncertainty. The Application must identify the public and stakeholder concerns that were not addressed, if any, and provide reasons why the concerns were not addressed.

The Application must also provide details regarding how the public and stakeholders will be engaged during all phases of the Project if the Project is approved and proceeds. This includes public and stakeholder involvement in follow-up and monitoring programs.

## 4.0 LOCAL GOVERNMENT ENGAGEMENT

The Application must:

- Describe the proponent's ongoing Local government engagement on the Project and proposed activities during the development of the Application. The proponent must conduct engagement with Local governments in accordance with the Assessment Plan issued by the B.C. EAO.
- Describe whether the engagement is consistent with the requirements in the Assessment Plan, and if not, provide a rationale.
- Describe the information and materials that were distributed, and the efforts made to distribute Project information during the Project engagement.
- Indicate the methods used, where in-person and virtual engagement was held, the views expressed and the extent to which this information was incorporated in the design of the Project as well as in the Application. Also, include any impediments to conducting engagement and actions to address those impediments.
- Provide a summary of key issues related to the Project, which were raised through engagement with Local government and the potential environmental, economic, social, culture, and health effects, including disproportionate effects on distinct human populations and effects to current and future generations.
- Describe ways to address the issues raised, such as alternative means, specific mitigation measures, or specific monitoring programs and adaptive management to deal with uncertainty.
- Identify Local government concerns that were not addressed, if any, and provide reasons why the concerns were not addressed.
- Provide details regarding how Local governments will be engaged during all phases of the Project if it is approved and proceeds.

## 5.0 VALUED COMPONENTS SELECTION

The Application must provide a list of the VCs considered in the Effects Assessment (see Table 2).

Table 2. Potential Valued Components and Subcomponents for Assessment

Valued Components	Sub-Components	Topics to be Captured by the Assessment		Anticipated Linkages to other Valued Components or Sections
		Indicator	Measurable Parameter	
Air Quality	Air Quality	<ul style="list-style-type: none"> <li>Ambient concentrations of criteria air contaminants</li> <li>Odour</li> </ul>	<ul style="list-style-type: none"> <li>Nitrogen dioxide [NO<sub>2</sub>], Sulphur dioxide [SO<sub>2</sub>], carbon monoxide [CO], fine particulates smaller than 2.5 microns [PM<sub>2.5</sub>], respirable particulates of less than 10 microns [PM<sub>10</sub>], total suspended particulate [TSP], total reduced Sulphur, and volatile organic compounds [VOCs])</li> <li>Modelled concentrations of total reduced Sulphur and VOC</li> </ul>	<ul style="list-style-type: none"> <li>Human Health</li> <li>Vegetation</li> <li>Surface Water</li> <li>Groundwater</li> <li>Fish and Fish Habitat</li> <li>Wildlife and Wildlife Habitat</li> <li>Summary of Biophysical Factors that Support Ecosystem Function</li> <li>Soil</li> <li>Malfunctions and Accidents</li> <li>Indigenous Interests</li> </ul>
	Acid Deposition	<ul style="list-style-type: none"> <li>Acidification and eutrophication</li> </ul>	<ul style="list-style-type: none"> <li>Deposition quantities of Sulphur/sulphates, nitrogen, and acid</li> </ul>	
Acoustic	Noise	<ul style="list-style-type: none"> <li>Audible noise levels</li> <li>Low-frequency noise levels</li> </ul>	<ul style="list-style-type: none"> <li>Changes to audible noise levels (including low-frequency noise)</li> </ul>	<ul style="list-style-type: none"> <li>Human Health</li> <li>Wildlife and Wildlife Habitat</li> <li>Fish and Fish Habitat</li> <li>Land and Resource Use</li> <li>Summary of Biophysical Factors that Support</li> </ul>
	Vibration	<ul style="list-style-type: none"> <li>Ground borne vibration</li> </ul>	<ul style="list-style-type: none"> <li>Changes to vibration levels</li> </ul>	



Table 2. Potential Valued Components and Subcomponents for Assessment

Valued Components	Sub-Components	Topics to be Captured by the Assessment		Anticipated Linkages to other Valued Components or Sections
		Indicator	Measurable Parameter	
				Ecosystem Function <ul style="list-style-type: none"> <li>Indigenous Interests</li> </ul>
Surface Water	Surface water quality	<ul style="list-style-type: none"> <li>Changes in water quality relative to baseline conditions</li> <li>Sedimentation</li> </ul>	<ul style="list-style-type: none"> <li>Contaminants</li> <li>Nutrients</li> <li>Total suspended solids (TSS)</li> <li>Turbidity</li> <li>Dissolved oxygen (DO)</li> <li>pH</li> <li>Conductivity</li> <li>Temperature</li> <li>Salinity</li> </ul>	<ul style="list-style-type: none"> <li>Fish and Fish Habitat</li> <li>Human Health</li> <li>Wildlife and Wildlife Habitat</li> <li>Summary of Biophysical Factors that Support Ecosystem Function</li> <li>Groundwater</li> <li>Soil</li> <li>Infrastructure and Services</li> <li>Malfunctions and Accidents</li> <li>Indigenous Interests</li> </ul>
	Surface water quantity (Hydrology)	<ul style="list-style-type: none"> <li>Changes to surface water quantity</li> <li>Interactions with groundwater</li> <li>Tidal patterns</li> </ul>	<ul style="list-style-type: none"> <li>Peak runoff rate to City of Delta's Storm Sewer</li> <li>Changes to groundwater recharge</li> </ul>	
	Sediment quality	<ul style="list-style-type: none"> <li>Sediment disturbance</li> <li>Changes in sediment quality relative to baseline conditions</li> </ul>	<ul style="list-style-type: none"> <li>TSS</li> <li>Contaminants of Concern</li> </ul>	
Groundwater	Groundwater quality	<ul style="list-style-type: none"> <li>Changes to groundwater quality</li> </ul>	<ul style="list-style-type: none"> <li>Contaminants of Concern</li> </ul>	<ul style="list-style-type: none"> <li>Surface Water</li> <li>Soil</li> <li>Human Health</li> <li>Vegetation</li> <li>Summary of Biophysical</li> </ul>
	Groundwater quantity	<ul style="list-style-type: none"> <li>Changes to groundwater quantity</li> </ul>	<ul style="list-style-type: none"> <li>Groundwater elevation</li> <li>Changes to groundwater recharge</li> </ul>	

Table 2. Potential Valued Components and Subcomponents for Assessment

Valued Components	Sub-Components	Topics to be Captured by the Assessment		Anticipated Linkages to other Valued Components or Sections
		Indicator	Measurable Parameter	
		<ul style="list-style-type: none"> <li>Interactions with surface water at proposed Project site.</li> </ul>		<ul style="list-style-type: none"> <li>Factors that Support Ecosystem Function</li> <li>Malfunctions and Accidents</li> <li>Indigenous Interests</li> </ul>
Soil	Terrain	<ul style="list-style-type: none"> <li>Terrain Instability</li> </ul>	<ul style="list-style-type: none"> <li>Altered topography following construction</li> <li>Terrain instability during and following construction</li> </ul>	<ul style="list-style-type: none"> <li>Surface Water</li> <li>Groundwater</li> <li>Vegetation</li> <li>Human Health</li> <li>Summary of Biophysical Factors that Support Ecosystem Function</li> <li>Air Quality</li> <li>Land and resource use</li> <li>Malfunctions and Accidents</li> <li>Indigenous Interests</li> </ul>
	Soil Quality	<ul style="list-style-type: none"> <li>Changes to soil quality</li> </ul>	<ul style="list-style-type: none"> <li>Exposure to areas of known contamination</li> <li>Incidental spills during construction and operations</li> <li>Wind and water erosion</li> <li>Admixing (that is, mixing of topsoil and subsoil), compaction, and rutting</li> <li>Dust accumulation in surrounding agricultural lands</li> </ul>	
	Soil Quantity	<ul style="list-style-type: none"> <li>Reduction in soil quantity</li> </ul>	<ul style="list-style-type: none"> <li>Terrain instability during and following construction</li> <li>Wind and/or water erosion during and following construction</li> </ul>	

Table 2. Potential Valued Components and Subcomponents for Assessment

Valued Components	Sub-Components	Topics to be Captured by the Assessment		Anticipated Linkages to other Valued Components or Sections
		Indicator	Measurable Parameter	
Vegetation	Plant Species of Interest	<ul style="list-style-type: none"> <li>Plant species of conservation concern</li> <li>Invasive plant species</li> <li>Culturally Important Traditional Use species</li> </ul>	<ul style="list-style-type: none"> <li>Number of known individuals and locations of plant species of interest affected by the proposed Project</li> </ul>	<ul style="list-style-type: none"> <li>Land and Resource Use</li> <li>Wildlife and Wildlife Habitat</li> <li>Fish and Fish Habitat</li> <li>Summary of Biophysical Factors that Support Ecosystem Function</li> <li>Air Quality</li> <li>Soil</li> <li>Surface Water</li> <li>Culture</li> <li>Human Health</li> <li>Malfunctions and Accidents</li> <li>Indigenous Interests</li> </ul>
	Ecological communities of interest, including wetland ecosystems	<ul style="list-style-type: none"> <li>Ecological communities of conservation concern, including wetland ecosystems presence, distribution, and function (habitat, hydrologic and biogeochemical)</li> </ul>	<ul style="list-style-type: none"> <li>Area (hectare [ha]) of ecological communities of conservation concern, including wetland ecosystems affected by the proposed Project</li> <li>Loss or alteration of wetland habitat function from direct disturbance</li> </ul>	
	Ecosystems	<ul style="list-style-type: none"> <li>Riparian ecosystems</li> </ul>	<ul style="list-style-type: none"> <li>Area (ha) of riparian ecosystems affected by the Project</li> </ul>	
Wildlife and Wildlife Habitat	Birds (resident and migratory forest birds, waterbirds, wading birds and shorebirds, and species adapted to human infrastructure)	<ul style="list-style-type: none"> <li>Wildlife Habitat Quality and Quantity</li> <li>Wildlife Movement</li> <li>Wildlife health and mortality</li> </ul>	<ul style="list-style-type: none"> <li><b>Loss or alteration of wildlife habitat:</b> <ul style="list-style-type: none"> <li>Habitat disturbance (that is, area and suitability of habitat)</li> <li>Reduced habitat quality or effectiveness within a zone of influence (ZOI)</li> <li>Important wildlife habitat features identified in the proposed Project Footprint or within recommended buffer distances</li> </ul> </li> <li><b>Change in wildlife movement:</b> <ul style="list-style-type: none"> <li>Duration and extent of barriers to wildlife movement</li> </ul> </li> <li>Increased wildlife health and mortality risk:</li> </ul>	<ul style="list-style-type: none"> <li>Air Quality</li> <li>Acoustic</li> <li>Surface Water</li> <li>Vegetation</li> <li>Human Health</li> <li>Land and Resource Use</li> </ul>
	Mammals (terrestrial)			

Table 2. Potential Valued Components and Subcomponents for Assessment

Valued Components	Sub-Components	Topics to be Captured by the Assessment		Anticipated Linkages to other Valued Components or Sections
		Indicator	Measurable Parameter	
	Amphibians and reptiles		<ul style="list-style-type: none"> <li>○ Sources of risk to health and mortality and intensity of effect (qualitative)</li> <li>○ The overlap of construction activities with sensitive periods for wildlife (such as migratory bird nesting period, amphibian breeding period)</li> <li>○ Important wildlife habitat features that may be occupied during construction, and are identified in the proposed Project Footprint or within recommended buffer distances</li> <li>○ Reduced water quality in Fraser River and Tilbury Slough from sedimentation and contaminants of concern</li> <li>○ Altered air, surface water, and soil quality from air contaminants, odours, acidification, or eutrophication</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Culture</li> <li>• Summary of Biophysical Factors that Support Ecosystem Function</li> <li>• Malfunctions and Accidents</li> <li>• Indigenous Interests</li> </ul>
Fish and Fish Habitat	Fish habitat	<ul style="list-style-type: none"> <li>• Fish habitat availability</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Area (meters squared [m2]) of unusable habitat by type</li> </ul>	<ul style="list-style-type: none"> <li>• Air Quality</li> <li>• Acoustic</li> <li>• Human Health</li> <li>• Surface Water</li> <li>• Vegetation</li> <li>• Wildlife and Wildlife Habitat</li> <li>• Land and Resource Use</li> <li>• Summary of Biophysical</li> </ul>

Table 2. Potential Valued Components and Subcomponents for Assessment

Valued Components	Sub-Components	Topics to be Captured by the Assessment		Anticipated Linkages to other Valued Components or Sections
		Indicator	Measurable Parameter	
		<ul style="list-style-type: none"> <li>Fish habitat quality</li> </ul>	<ul style="list-style-type: none"> <li>Area (m2) of modified habitat (such as, altered substrate, shading)</li> <li>Changes to water quality within the ZOI (such as Turbidity and/or TSS, pH, dissolved oxygen, and potential contaminants of concern)</li> <li>Altered surface water quality from air emissions (potential eutrophication and acidification)</li> <li>Riparian vegetation condition (such as area, stage, and composition)</li> <li>Benthic invertebrates as measured by community-level metrics (such as, total abundance and taxonomic richness)</li> <li>Other changes to ambient conditions:               <ul style="list-style-type: none"> <li>- Nighttime light intensity and duration</li> <li>- Level, frequency, and duration of underwater noise</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Factors that Support Ecosystem Function</li> <li>Malfunctions and Accidents</li> <li>Indigenous Interests</li> </ul>
	Fish (freshwater and estuarine fish, including migratory and resident species; marine mammals)	<ul style="list-style-type: none"> <li>Fish health, injury, and mortality</li> <li>Fish distribution and abundance</li> </ul>	<ul style="list-style-type: none"> <li>Sound level, frequency, and duration of underwater noise</li> <li>Number of vessel strikes with fish and marine mammals</li> <li>Changes to water quality within the ZOI from construction-related impacts and run-off (such as turbidity, TSS, pH, DO, potential contaminants of concern, temperature and salinity)</li> <li>Altered surface water quality from air emissions (potential eutrophication and acidification)</li> <li>Fish injury or death from direct equipment or material placement impacts (such as, impingement or entrainment at pumps and injuries from placement of materials)</li> <li>Changes to fish species presence, absence, and relative abundance from short - and long-term effects to fish habitat</li> </ul>	
Employment and Economy	Employment	<ul style="list-style-type: none"> <li>Employment income</li> <li>Education and skills</li> <li>Employment, education and skills for Indigenous people</li> </ul>	<ul style="list-style-type: none"> <li>Income (median and mean) (\$)</li> <li>Unemployment rate and labour force participation rate (%)</li> <li>Job Market and skills</li> <li>Level of education</li> </ul>	<ul style="list-style-type: none"> <li>Land and Resources</li> <li>Summary of Human and</li> </ul>

Table 2. Potential Valued Components and Subcomponents for Assessment

Valued Components	Sub-Components	Topics to be Captured by the Assessment		Anticipated Linkages to other Valued Components or Sections
		Indicator	Measurable Parameter	
		<ul style="list-style-type: none"> <li>Access to economic opportunities/economic equity</li> </ul>		Community Well-being <ul style="list-style-type: none"> <li>Indigenous Interests</li> </ul>
	Economy	<ul style="list-style-type: none"> <li>Tax revenues</li> <li>GDP contributions</li> <li>Business revenue</li> <li>Cost of living</li> </ul>	<ul style="list-style-type: none"> <li>Municipal and Regional government revenues, including property tax revenue and total revenue</li> <li>Total gross output (total expenditure by suppliers) (\$)</li> <li>Total induced effect (consumer expenditures) (\$)</li> <li>Cost of living (\$)</li> <li>Change to property values</li> </ul>	

Table 2. Potential Valued Components and Subcomponents for Assessment

Valued Components	Sub-Components	Topics to be Captured by the Assessment		Anticipated Linkages to other Valued Components or Sections
		Indicator	Measurable Parameter	
Land and Resource Use	Private property	<ul style="list-style-type: none"> <li>• Use and enjoyment of private property</li> <li>• Agricultural use</li> </ul>	<ul style="list-style-type: none"> <li>• Noise</li> <li>• Ambient air quality</li> <li>• Odour</li> </ul>	<ul style="list-style-type: none"> <li>• Air Quality</li> <li>• Acoustic</li> <li>• Vegetation</li> <li>• Wildlife and Wildlife Habitat</li> <li>• Fish and Fish Habitat</li> <li>• Human Health</li> <li>• Malfunctions and Accidents</li> <li>• Summary of Human and Community Well-being</li> <li>• Indigenous Interests</li> </ul>
	Tenured land and resource use	<ul style="list-style-type: none"> <li>• Industrial land uses (for example, cement production, shipping, and gas storage and processing)</li> <li>• Tenured, permitted, or licensed marine uses (for example, aquaculture, moorage, commercial fishing)</li> <li>• Other tenured, permitted, or licensed land uses</li> </ul>	<ul style="list-style-type: none"> <li>• Percentage of leases or licence of occupation</li> <li>• Changes in tenure</li> <li>• Changes in land and marine environments for resource use</li> <li>• Conversion of land from resource use</li> </ul>	
	Public land and resource use	<ul style="list-style-type: none"> <li>• Consumptive land uses (for example, hunting, fishing, trapping, vegetation gathering)</li> <li>• Non-consumptive land uses (for example, dog walking)</li> <li>• Consumptive marine uses (for example, fishing)</li> <li>• Non-consumptive marine uses (for example, boating, canoeing, kayaking)</li> <li>• Tourism</li> </ul>	<ul style="list-style-type: none"> <li>• Percentage of land use for consumptive and non-consumptive purposes</li> <li>• Changes in tenure or land use</li> <li>• Conversion of land and marine resources from public land and resource use</li> </ul>	
	Parks and protected areas	<ul style="list-style-type: none"> <li>• Federal, Provincial, Regional, Municipal parks</li> </ul>	<ul style="list-style-type: none"> <li>• Percentage of land and marine for parks and protected areas</li> <li>• Changes in land and marine resources for parks and protected areas</li> <li>• Conversion of land and marine resources for parks and protected areas</li> </ul>	

Table 2. Potential Valued Components and Subcomponents for Assessment

Valued Components	Sub-Components	Topics to be Captured by the Assessment		Anticipated Linkages to other Valued Components or Sections
		Indicator	Measurable Parameter	
		<ul style="list-style-type: none"> <li>Other protected areas and environmentally sensitive areas</li> <li>Recreation sites/Trails BC areas</li> <li>Marine protected areas</li> <li>Habitat restoration sites</li> </ul>		
	Visual quality	<ul style="list-style-type: none"> <li>Visual resources</li> </ul>	<ul style="list-style-type: none"> <li>Changes to visual quality (that is, percent change in visible landscape/skyline from non-industrial to industrial).</li> <li>Changes to visible light at night.</li> <li>Changes in the visibility of the industrial site from publicly used locations.</li> </ul>	
	Navigation	<ul style="list-style-type: none"> <li>River and marine navigation</li> </ul>	<ul style="list-style-type: none"> <li>Changes in mooring locations</li> <li>Wake size</li> <li>Changes in navigation scheduling</li> <li>Changes in Navigation obstacles</li> </ul>	
Infrastructure and Services	Community infrastructure and services	<ul style="list-style-type: none"> <li>Housing and accommodation</li> <li>Health care and social services facilities</li> <li>Emergency response services</li> <li>Domestic water supply</li> <li>Sewage/water treatment facilities</li> <li>Utilities</li> <li>Landfills and recycling facilities</li> <li>Community recreational facilities</li> </ul>	<p>Changes in expenses or personnel in:</p> <ul style="list-style-type: none"> <li>Health care and social services facilities</li> <li>Emergency response services</li> <li>Domestic water supply</li> <li>Sewage/water treatment facilities</li> <li>Landfills and recycling facilities</li> <li>Community recreational facilities</li> <li>Other public or private infrastructure and services</li> <li>Educational services and facilities, including daycare</li> </ul>	<ul style="list-style-type: none"> <li>Employment and Economy</li> <li>Acoustic</li> <li>Human Health</li> <li>Malfunctions and Accidents</li> <li>Summary of Human and Community Well-being</li> <li>Surface Water</li> <li>Soil</li> <li>Air Quality</li> </ul>



Table 2. Potential Valued Components and Subcomponents for Assessment

Valued Components	Sub-Components	Topics to be Captured by the Assessment		Anticipated Linkages to other Valued Components or Sections
		Indicator	Measurable Parameter	
		<ul style="list-style-type: none"> <li>Educational services and facilities, including daycare</li> </ul>		<ul style="list-style-type: none"> <li>Land and Resource Use</li> <li>Indigenous Interests</li> </ul>
	Transportation infrastructure	<ul style="list-style-type: none"> <li>Transportation infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>Changes in road access</li> <li>Increased traffic</li> <li>Parking changes</li> <li>Changes in mooring locations</li> <li>Wake size</li> <li>Changes in navigation scheduling</li> <li>Navigation obstacles</li> </ul>	
Archaeological and Heritage Resources	<ul style="list-style-type: none"> <li>--</li> </ul>	<ul style="list-style-type: none"> <li>Sites of historical importance and archaeological importance</li> <li>Sites of archaeological importance (including culturally modified trees)</li> <li>Paleontological resources</li> </ul>	<ul style="list-style-type: none"> <li>Number of paleontological, archaeological, or historical or sites, features, and objects affected</li> </ul>	<ul style="list-style-type: none"> <li>Land and Resource Use</li> <li>Culture</li> <li>Summary of Human and Community Well-being</li> <li>Indigenous Interests</li> </ul>

Table 2. Potential Valued Components and Subcomponents for Assessment

Valued Components	Sub-Components	Topics to be Captured by the Assessment		Anticipated Linkages to other Valued Components or Sections
		Indicator	Measurable Parameter	
Culture	• --	<ul style="list-style-type: none"> <li>• Governance and stewardship systems</li> <li>• Customs, beliefs, and values</li> <li>• Language and intergenerational knowledge transfer</li> <li>• Community, cultural cohesion, and continuity</li> </ul>	<ul style="list-style-type: none"> <li>• Changes in governance and stewardship systems such as changes in policy direction or decision-making structures</li> <li>• Changes to cultural practices customs, beliefs and values) including social norms and behaviours</li> <li>• Changes in use of language and intergenerational knowledge transfer</li> <li>• Changes in community, cultural cohesion, and continuity (such as, family disruption, divorce, or size of community)</li> </ul>	<ul style="list-style-type: none"> <li>• Acoustic</li> <li>• Surface Water</li> <li>• Vegetation</li> <li>• Wildlife and Wildlife Habitat</li> <li>• Fish and Fish Habitat</li> <li>• Land and Resource Use</li> <li>• Archaeological and Heritage Resources</li> <li>• Human Health</li> <li>• Indigenous Nations' Interests</li> <li>• Summary of Human and Community Well-being</li> <li>• Indigenous Interests</li> </ul>

Table 2. Potential Valued Components and Subcomponents for Assessment

Valued Components	Sub-Components	Topics to be Captured by the Assessment		Anticipated Linkages to other Valued Components or Sections
		Indicator	Measurable Parameter	
Human Health	• --	<ul style="list-style-type: none"> <li>• Air quality</li> <li>• Drinking water quality</li> <li>• Recreational Water Quality</li> <li>• Noise</li> <li>• Soil quality</li> <li>• Quality and quantity of country foods</li> <li>• Population health</li> </ul>	<ul style="list-style-type: none"> <li>• Changes to measurements/predictions for air, noise, water, soil and country foods applicable to human health guidelines/standards</li> <li>• Changes in population health (such as, asthma, diabetes, obesity)</li> </ul>	<ul style="list-style-type: none"> <li>• Air Quality</li> <li>• Acoustic</li> <li>• Surface Water</li> <li>• Groundwater</li> <li>• Soil</li> <li>• Vegetation</li> <li>• Wildlife and Wildlife Habitat</li> <li>• Fish and Fish Habitat</li> <li>• Employment and Economy</li> <li>• Infrastructure and Services</li> <li>• Land and Resource Use</li> <li>• Culture</li> <li>• Malfunctions and Accidents</li> <li>• Summary of Human and Community Well-being</li> <li>• Indigenous Interests</li> </ul>

## 6.0 VALUED COMPONENT ASSESSMENT METHODS

The Application must describe the assessment of the potential effects of the Project conducted in accordance with these AIRs.

The Application must describe how scientific, Indigenous Knowledge, and local knowledge was used in the assessment. For Indigenous Knowledge, the Application must outline how the Indigenous Knowledge was used in alignment with the Indigenous Knowledge policies and protocols of the Indigenous nations. Further, the Application must confirm that the Indigenous nation has provided consent for its use and public disclosure and that the Indigenous nation agrees that the Indigenous Knowledge has been appropriately characterized within the Application. The application of GBA+ to the effects' analysis will be used to describe disproportionate effects for diverse subgroups.

### 6.1. Relevant Statutes, Policies and Frameworks

The Application must summarize the regulatory and planning context for the management of the VC, including relevant legislation, policies, and frameworks specific to the VC, such as various acts, regulations, policies, standards, cooperation agreements, and/or decision-making frameworks including Indigenous nation legislation or policy.

### 6.2. Assessment Boundaries

The Application must describe the spatial, temporal, administrative, and technical boundaries for each VC (or sub-component) included in assessing the potential adverse and positive environmental, economic, social, culture, and health effects of the Project and provide a rationale for each boundary, as provided in Table 3.

The Application must also describe the methods used to identify the boundaries and provide a rationale for each boundary. Information on boundaries for each VC (or sub-component) will be included in the appropriate VC sections of the Application, and will encompass baseline conditions, all relevant Project phases, components, and activities. In some cases, spatial boundaries may extend to areas outside of the Province of B.C.'s or Government of Canada's jurisdiction. These transboundary spatial boundaries will be identified where transboundary effects are expected. The spatial boundary maps for VCs (or sub components) will clearly identify parts of the Project footprint located on lands and waters that lie within Federal jurisdiction or Treaty Lands.

The following spatial boundaries will be used in the effects assessment:

- **Proposed Project Footprint** - The proposed Project Footprint is the area directly disturbed by proposed Project activities, including associated physical works and activities.
- **Local Assessment Area (LAA)** - The LAA varies with the VC being considered. The LAA includes the proposed Project Footprint and extends beyond it to incorporate the area within which the VC is most likely to be affected by the proposed Project.
- **Regional Assessment Area (RAA)** - The RAA varies with the VC being considered and includes the proposed Project Footprint and LAA, and the area extending beyond the LAA where there is potential for the predicted residual adverse effects from the proposed Project to act in combination with those of other reasonably foreseeable projects and activities to cause cumulative effects on the VC.

No, provincial, national, or international boundaries have been determined for the Project. See the spatial boundary rationale provided in Table 3.

Indigenous Knowledge, when available, has the potential to inform VC linkages related to Land and Resource Use, and to subsequently affect spatial boundaries.

Table 3 provides the LAA and RAA for each of the Project VCs.

Figures 1 to 14 map the spatial boundaries for each VC for the Project.

Table 3. Spatial Boundaries for Valued Components.

Spatial Boundary	Description	Rationale
<b>Air Quality</b>		
LAA	The LAA for air quality is a 20 kilometre (km) by 20 km domain centered on the proposed Project Footprint.	The LAA is consistent with other similar projects and assessments.
RAA	The RAA covers a 30 km by 30 km area centered on the Project Footprint, and extends to the coast on the west, the United States border to the south, Vancouver and Burnaby to the north, and Surrey to the east.	The RAA extent is consistent with the presence of external emissions sources in the vicinity of the Project and cumulative assessment requirements. Based on Project design, available data and preliminary modelling, there is no evidence of transboundary effects.
<b>Acoustic</b>		
LAA	The LAA will be defined as a 1.5 km wide zone around the perimeter of the Project footprint. The historical village of Tl'uq̓tinus as well as portions of the City of Delta and the City of Richmond fall within the LAA.	B.C. Noise Control Best Practice Guideline (B.C. OGC 2021a) is a receptor-based noise regulation that defines a noise receptor as any permanent or seasonally occupied dwelling that may be affected by the Project. In areas where there are no nearby receptors, the B.C. Oil and Gas Commission (B.C. OGC) Noise Guideline sets limits on the noise levels at a distance of 1.5 km from the Project fence line. For the purposes of this assessment, the "facility fence line", as termed in B.C. OGC, is the Project Area boundary. Receptors beyond the 1.5 km LAA may be included in the assessment if there is reason to believe that there may be appreciable noise effects.
RAA	The RAA will be defined as a 3 km wide zone around the perimeter of the Project footprint.	The Acoustic RAA consists of a 3 km buffer from the Project footprint, which corresponds to the extent beyond which Project noise emissions cannot be distinguished from existing ambient noise levels.
<b>Surface Water</b>		
LAA	The LAA for Surface Water encompasses the area 100 metres (m) upstream and 200 m downstream of the Project Footprint. The LAA also includes 100 m upstream and 200 m downstream within the Tilbury Slough from the City of Delta stormwater outlets that drain stormwater from the Project Footprint and adjacent properties.	The Surface Water LAA encompasses the Project Footprint and extends beyond it to include the surrounding area where there is a reasonable potential for Project-specific effects to occur. The LAA includes the terrestrial footprint of the Project to account for potential riparian disturbances. The LAA also includes the Tilbury Slough between 100 m upstream and 200 m downstream of the City of Delta stormwater outlets that drain stormwater from the Project Footprint and adjacent properties.

Table 3. Spatial Boundaries for Valued Components.

Spatial Boundary	Description	Rationale
RAA	The RAA for Surface Water encompasses the Fraser River for 500 m upstream and 1,000 m downstream of the Project Footprint. The RAA also includes Tilbury Slough for 500 m upstream and 1000 m downstream of the City of Delta stormwater outlets that drain stormwater from the Project Footprint and adjacent properties.	The Surface Water RAA encompasses the Project Footprint, Surface Water RAA, and the surrounding area where there is potential for the Project to interact with other activities to have cumulative adverse effects. Extending the RAA upstream 500 m of the Project Footprint includes the Fraser River Ambient Monitoring Program (FRAMP) Site 4 monitoring station and 1,000 m downstream considering tidal flows and potential mobilization of sediment.
<b>Groundwater</b>		
LAA	The LAA encompasses the terrestrial footprint of the Project Footprint.	The Groundwater LAA encompasses the Terrestrial Project footprint where there is a reasonable potential for Project-specific effects to occur.
RAA	The RAA encompasses the mapped extent of the aquifer that is within the Project Footprint.	The Groundwater RAA encompasses the Project footprint, Groundwater LAA, and the extent of mapped aquifers within the Project Footprint where there is potential for the Project to interact with other activities to result in cumulative adverse effects.
<b>Soil</b>		
LAA	The Project footprint plus a 100 m buffer around the Project Footprint and a 50 m buffer around truck routes between Highway 17 and the Project Footprint.	The Soil LAA includes the areas of potential existing contamination that could affect the soil. The 50 m buffer around truck routes encompasses potential dust accumulation effects from truck traffic.
RAA	The RAA is the same as the LAA for Soil.	The RAA for Soil is the same as the proposed LAA because Project activities are not anticipated to interact with soil beyond the LAA.
<b>Vegetation</b>		
LAA	The LAA for Vegetation consists of the Project Footprint plus a 100 m buffer around the Project Footprint and includes both aquatic and terrestrial habitat. The LAA also includes 100 m upstream and 200 m downstream within the Tilbury Slough from the culvert outlet that drains stormwater from the Project Footprint.	The Vegetation LAA encompasses the Project Footprint and extends beyond it to include the surrounding area where there is a reasonable potential for Project-specific effects to occur. The Vegetation LAA includes plant species and ecological communities expected to interact with the Project effect pathways. Riparian areas, including wetlands along the Fraser River and Tilbury Slough, are included in the Vegetation LAA, as well as the intertidal zones and marine areas (delineated by the coastline) within the 100 m buffer area.
RAA	The RAA for Vegetation consists of a 1 km buffer surrounding the Project Footprint and includes both aquatic and terrestrial habitat.	The Vegetation RAA encompasses the Project Footprint, Vegetation LAA, and the surrounding area (including larger drainage area) where there is potential for the predicted residual effects from the Project to interact with effects from other reasonably foreseeable projects and activities resulting in cumulative adverse effects. Riparian vegetation along the Fraser River and Tilbury Slough, as well as intertidal zones and marine areas (delineated by the coastline), are included in the Vegetation RAA, given the Project has potential to interact with marine habitats.
<b>Wildlife and Wildlife Habitat</b>		

Table 3. Spatial Boundaries for Valued Components.

Spatial Boundary	Description	Rationale
LAA	The LAA for Wildlife consists of the Project Footprint plus a 300 m buffer around the Project Footprint and includes both aquatic and terrestrial habitat.	The Wildlife and Wildlife Habitat LAA encompasses the Project Footprint and extends beyond it to include the surrounding area, where there is a reasonable potential for Project-specific effects to occur. The Wildlife and Wildlife Habitat LAA considers the wildlife species expected to interact with the Project, the effect pathways, and available information on wildlife sensitivity to disturbance (such as, setback distances).
RAA	The RAA for Wildlife consists of the Project Footprint and the LAA and includes both aquatic and terrestrial habitat. The RAA also encompasses the Fraser River for 300 m upstream and 2 km downstream of the Project Footprint, including a 50 m buffer from the high-water mark on either side.	The Wildlife and Wildlife Habitat RAA encompasses the Project Footprint, the Wildlife and Wildlife Habitat LAA and the surrounding area, where there is potential for the Project to interact with other activities to result in cumulative adverse effects.
<b>Fish and Fish Habitat</b>		
LAA	The Fish and Fish Habitat LAA is divided into two subareas – a Fish LAA and a Fish Habitat LAA due to the anticipated spatial extent of potential adverse effects to each. The LAA for Fish Habitat encompasses the Fraser River for 100 m upstream and 200 m downstream of the Project Footprint. The Fish Habitat LAA also includes Tilbury Slough for 100 m upstream and 200 m downstream of the City of Delta stormwater outlets that drain stormwater from the Project Footprint and adjacent properties. The Fish LAA includes the Fraser River for 1,000 m upstream and downstream of the Project Footprint.	The Fish Habitat LAA encompasses the Project Footprint and extends beyond it to include the surrounding area where there is a reasonable potential for Project-specific effects to fish habitat to occur, such as habitat alterations or sediment mobilization. The Fish Habitat LAA also includes Tilbury Slough between 100 m upstream and 200 m downstream of the City of Delta stormwater outlets that drain stormwater from the Project Footprint and adjacent properties where there is potential for changes in water quality to occur. The Fish LAA includes the Fraser River for 1,000 m upstream and downstream of the Project Footprint to encompass the area where underwater noise produced during construction activities could occur and result in potential adverse effects to fish and marine mammals.
RAA	The RAA for Fish and Fish Habitat includes the Fraser River for 2,000 m upstream and downstream of the Project Footprint. The RAA also includes Tilbury Slough for 500 m upstream and 1,000 m downstream of the City of Delta stormwater outfall that drains stormwater from the Project Footprint and adjacent properties.	The Fish and Fish Habitat RAA encompasses the Project Footprint, the Fish and Fish Habitat LAA, and the surrounding area where there is potential for residual effects from the Project to interact with other existing and reasonably foreseeable projects and activities resulting in cumulative adverse effects.
<b>Employment and Economy</b>		
LAA	The Employment and Economy LAA includes the boundaries of Metro Vancouver. The LAA includes communities where it can be reasonably expected that the Project will interact with the labour market and economic development. Specific communities within the LAA will be included as applicable.	The LAA for Employment and Economy reflects the area within which the Project is anticipated to interact with the labour market and regional economic development. City-specific data and effects will be included where available/applicable.
RAA	The Employment and Economy RAA includes the boundaries of Metro Vancouver, to provide regional context for the assessment of potential effects on the labour market and regional economic development. The RAA includes the area where future direct and indirect employment, economic activities and labour force conditions could overlap with proposed Project residual effects resulting in cumulative adverse effects.	The RAA for Employment and Economy provides a regional context for the assessment of Project-related effects on the labour market and regional economic development.

Table 3. Spatial Boundaries for Valued Components.

Spatial Boundary	Description	Rationale
<b>Land and Resource Use</b>		
LAA	The Land and Resource Use LAA includes the boundaries of the City of Delta, plus an area of the City of Richmond within a five km radius from the Project Footprint, directly north and across the Fraser River. The LAA includes a section of the lower Fraser River from east of Kirkland Island and includes Westham Island and adjacent marine areas within Delta municipal boundaries.	The LAA for Land and Resource Use reflects the area within which the Project is anticipated to interact with land- and marine- based activities, be they industrial, commercial, agricultural, or recreational in nature. The LAA may be adjusted based on linked VCs, including Air Quality and Acoustics, as necessary. City-specific data and effects will be included where available/applicable.
RAA	The Land and Resource Use RAA includes the boundaries of Metro Vancouver, to provide regional context for the assessment of potential effects on land and marine uses, including industrial, commercial, agricultural, or recreational uses. The RAA includes the area where indirect and cumulative effects may occur on existing use of land and resources.	The RAA for Land and Resource Use provides a regional context for the assessment of Project-related effects on Land and Resource Use.
<b>Infrastructure and Services</b>		
LAA	The Infrastructure and Services LAA includes the boundaries of the City of Delta, plus the section of Fraser River and City of Richmond shoreline where potential effects on municipal flood protection infrastructure could occur during construction.	The LAA will reflect the Regional and Municipal governments from which the Project may source health and emergency services and community infrastructure. The LAA will include traffic effects from construction and operation traffic on Ladner, Tsawwassen, and North Delta residents and farmers. Boundaries will encompass effects on local water infrastructure, including the City of Delta Municipal water demand and forecasts. City-specific data and effects will be included where available/applicable.
RAA	The Infrastructure and Services RAA includes the boundaries of Metro Vancouver, which provides regional infrastructure and services including provision of drinking water, solid waste treatment and wastewater treatment.	The RAA defines the area where indirect and cumulative effects may occur on traffic and roads and other regional infrastructure and services.
<b>Archaeological and Heritage Resources</b>		
LAA	The area of ground disturbance for the Project plus a 100 m buffer around the Project Footprint.	Ground disturbance is the only identified potential effect on potential heritage resources for the Project.
RAA	The RAA for the Archaeological and Heritage Resources Assessment will include the LAA and the south arm of the Fraser River from the Project Footprint downstream to Sand Heads and upstream to Annacis Island and extending 1 km inland from the north and south shores of the river.	The RAA provides the Regional cultural context for the assessment of effects to Archaeological and Heritage Resources.
<b>Culture</b>		
LAA	The Culture LAA includes the boundaries of the City of Delta and the largest LAA boundary for other VCs that may interact with Indigenous interests, including Wildlife and Wildlife Habitat, Vegetation, Air Quality, Acoustic Environment, Surface Water, Infrastructure and Services, Land and Resource Use, Fish and Fish Habitat, and Archaeological and Heritage Resources.	Linked to related VCs including: Wildlife and Wildlife Habitat, Vegetation, Air Quality, Acoustic Environment, Surface Water, Infrastructure and Services, Land and Resource Use, Fish and Fish Habitat, and Archaeological and Heritage Resources. City-specific data and effects will be included where available/applicable.
RAA	The Culture RAA includes the boundaries of Metro Vancouver and the largest RAA boundary for other VCs that may interact with Indigenous interests, including Wildlife and Wildlife Habitat, Vegetation, Air Quality, Acoustic Environment, Surface Water, Infrastructure and Services, Land and Resource Use, Fish and Fish Habitat, and Archaeological and Heritage Resources.	Linked to related VCs including: Wildlife and Wildlife Habitat, Vegetation, Air Quality, Acoustic Environment, Surface Water, Infrastructure and Services, Land and Resource Use, Fish and Fish Habitat, and Archaeological and Heritage Resources.
<b>Human Health</b>		



Table 3. Spatial Boundaries for Valued Components.

Spatial Boundary	Description	Rationale
LAA	The Human Health LAA includes the boundaries of Metro Vancouver for the assessment of social determinants of health. Population health is associated with socio-economic conditions, and the assessment area for population health reflects the largest boundaries of the other socio-economic VCs. The Human Health LAA also encompasses the boundaries of biophysical VCs that may interact with Human Health including environmental determinants of health (Air Quality, Noise, Soil and Sediment Quality, Surface Water and Groundwater Quality), thus use the same LAA study areas as the respective VC assessments. For example, country foods quality assessment area is the combined LAA boundaries for the Vegetation, Fish and Fish Habitat, and Wildlife and Wildlife Habitat VCs.	Country foods are expected to be present throughout the LAA and impacted by activities in the Project Footprint. Potential adverse effects to soil, sediment quality, and groundwater are expected to be limited to the Project Footprint. The Surface Water LAA informs any potential use of surface water as drinking water. Federal guidance on assessment of effects to health includes factors such as social determinants of health, including well-being.
RAA	Human Health RAA boundaries are defined by subcomponent: <ul style="list-style-type: none"> <li>The RAA for the assessment of social determinants of health includes the boundaries of Metro Vancouver. Population health is associated with socio-economic conditions, and as such, the study area for the assessment of population health reflects the largest RAA boundaries of the other socio-economic VCs.</li> <li>The RAAs for the assessment of environmental determinants of health are specific to the environmental indicators. Human health effects associated with Air Quality, Noise, Soil and Sediment Quality, Surface Water, and Groundwater Quality use the same RAA study areas as the respective VC assessments.</li> <li>The RAA for country foods quality is the combined RAAs for the Vegetation, Fish and Fish Habitat, and Wildlife and Wildlife Habitat VCs.</li> </ul>	Country foods are expected to be present throughout the RAA. Effects are most likely in the LAA due to activities in the Project Footprint. The Surface Water LAA informs any potential use of surface water as drinking water where direct and indirect activities may impact drinking water for cumulative effects. Federal guidance on assessment of effects to health includes factors such as social determinants of health, including well-being.
<b>Indigenous Nation identified VC</b>		
LAA	No Indigenous nation-specific VCs have been identified to-date. The LAA for VCs requested by Indigenous nations will be defined if Indigenous nation VCs are identified.	Not applicable at this time.
RAA	No Indigenous nation-specific VCs have been identified to-date. The RAA for VCs requested by Indigenous nations will be defined if Indigenous nation VCs are identified.	Not applicable at this time.

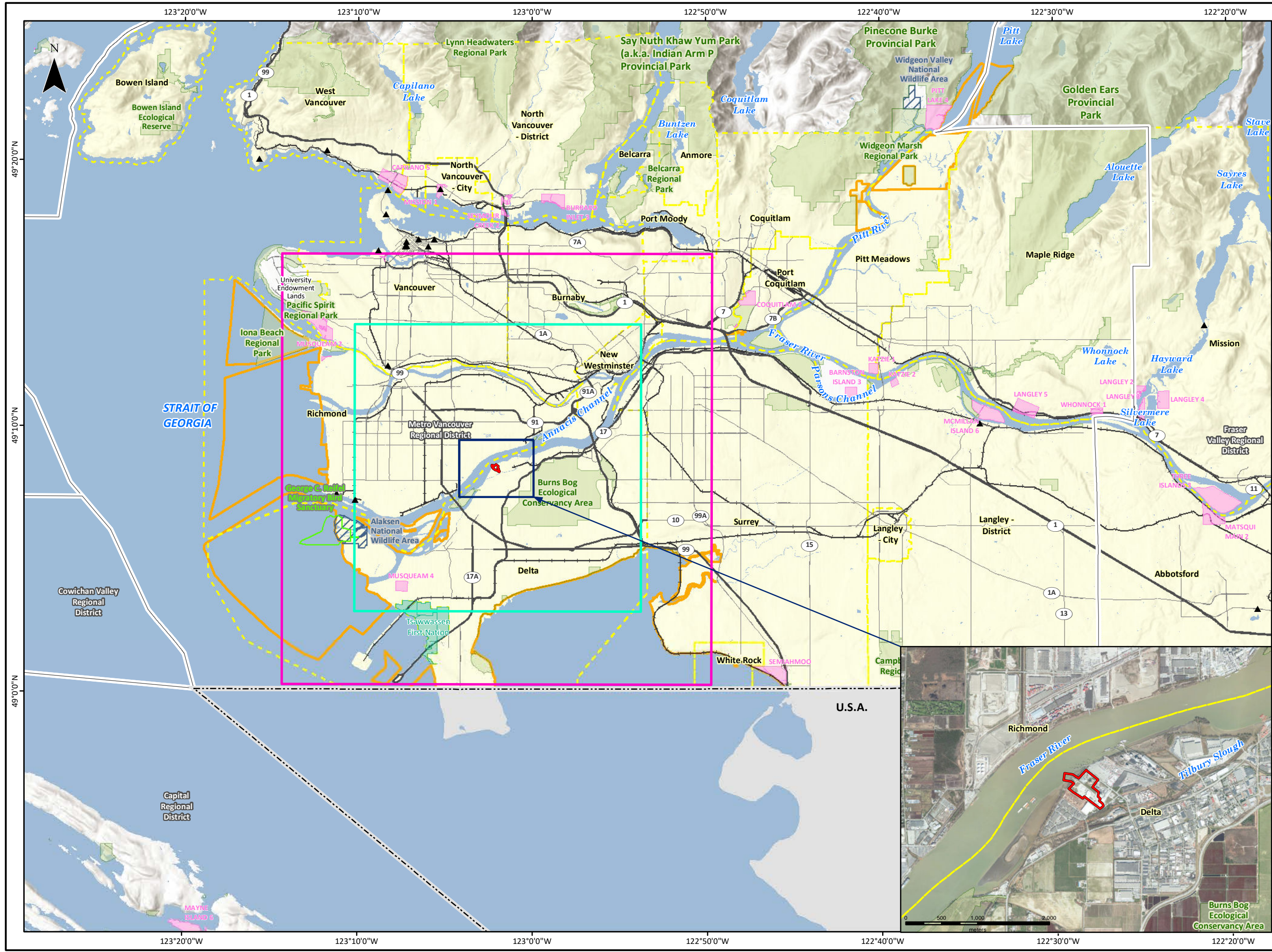
The temporal boundary includes all Project phases as follows:

- Construction – estimated 3 to 4-year duration
- Operation and Maintenance – estimated 40+ year duration
- Decommissioning or Abandonment – estimated 2-year duration

Construction is planned to commence in 2025 or earlier, with anticipated Project in-service date of 2027 to 2028.

Where administrative or technical boundaries have constrained the assessment of potential effects, the nature of the boundaries and their influence on the assessment will be documented in the Application.





**FIGURE 6.2-1**  
**AIR QUALITY ASSESSMENT**  
**AREA BOUNDARIES**  
**TILBURY PHASE 2 LNG**  
**EXPANSION PROJECT**

- Proposed Project Footprint
- Air Quality Local Assessment Area
- Air Quality Regional Assessment Area
- National Historic Site
- Highway
- Road
- Railway
- National Border
- First Nations Reserve
- First Nations Treaty Lands
- Municipality
- Migratory Bird Sanctuary
- National Wildlife Area
- Park/Protected Area
- Regional District
- Waterbody
- Wildlife Management Area

49° 8' 27.4" N 123° 2' 4.8" W  
NTS Grid: 092G03  
Scale: 1:250,000  
(All Locations Approximate)

**Jacobs**

Project Number CE778100

NAD1983 UTM Zone 10 North  
Proposed Project, Local/Regional Assessment Area: Jacobs 2022; National Historic Site: Government of Canada 2018; First Nations Reserves: Government of Canada 2021; First Nations Treaty Lands: BC MFLNRO 2009; Roads: NRCAN 2015; Hydrography: BC Forests, Lands and Natural Resource Operations 2011; Municipal Boundaries, Regional District: BC MFLNRO 2016; Railway: BC Forests, Lands, Natural Resource Operations and Rural Development 2015; Parks: NRCAN 2011; MetroVancouver 2020; BC MFLNRO 2008; Migratory Bird Sanctuaries and National Wildlife Areas: Canadian Wildlife Service 2020; Wildlife Management Areas: BC MFLNRO 2019; Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community  
Sources: Esri, Airbus DS, USGS, NGA, NASA, COAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatasys, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

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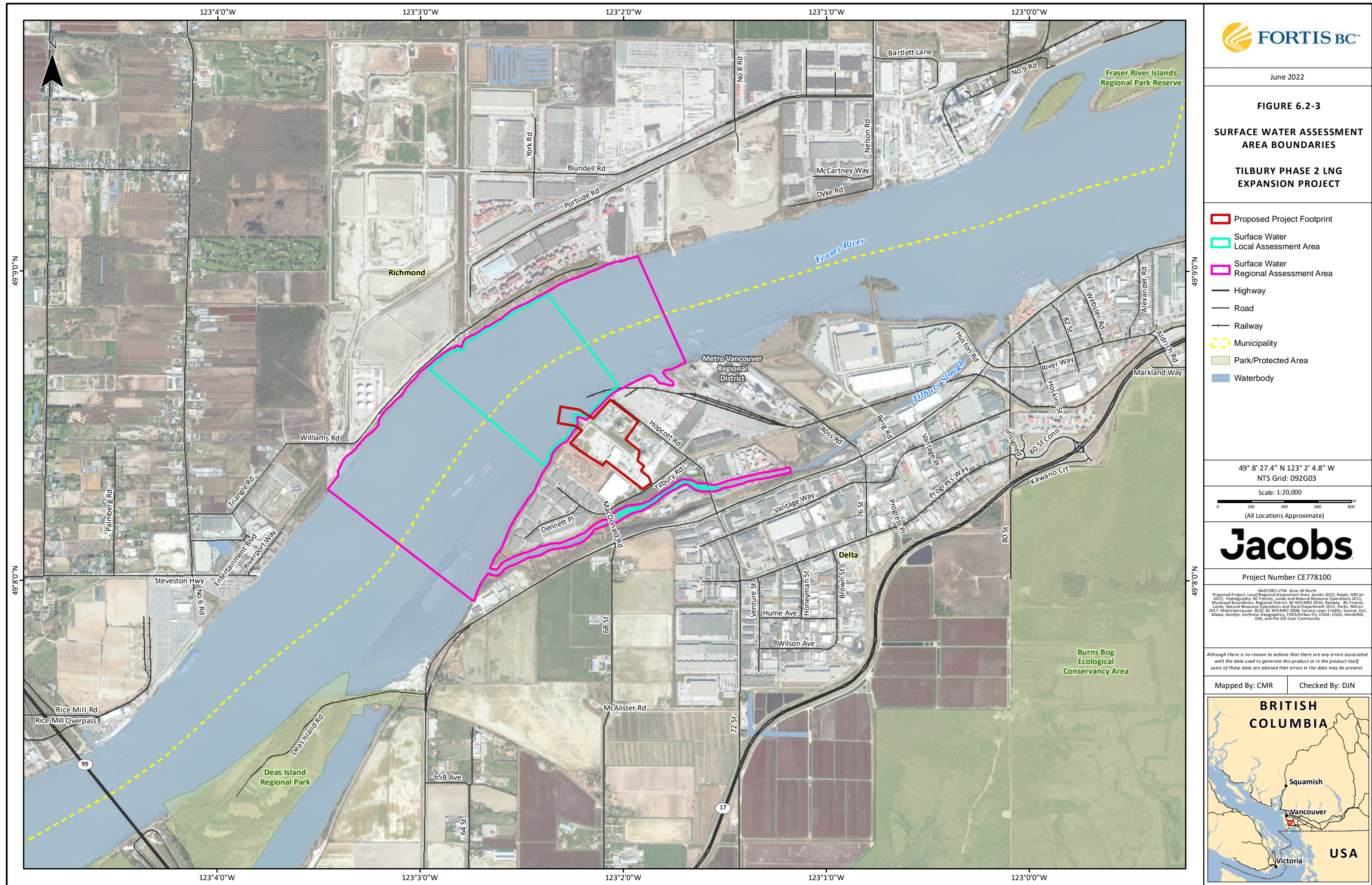
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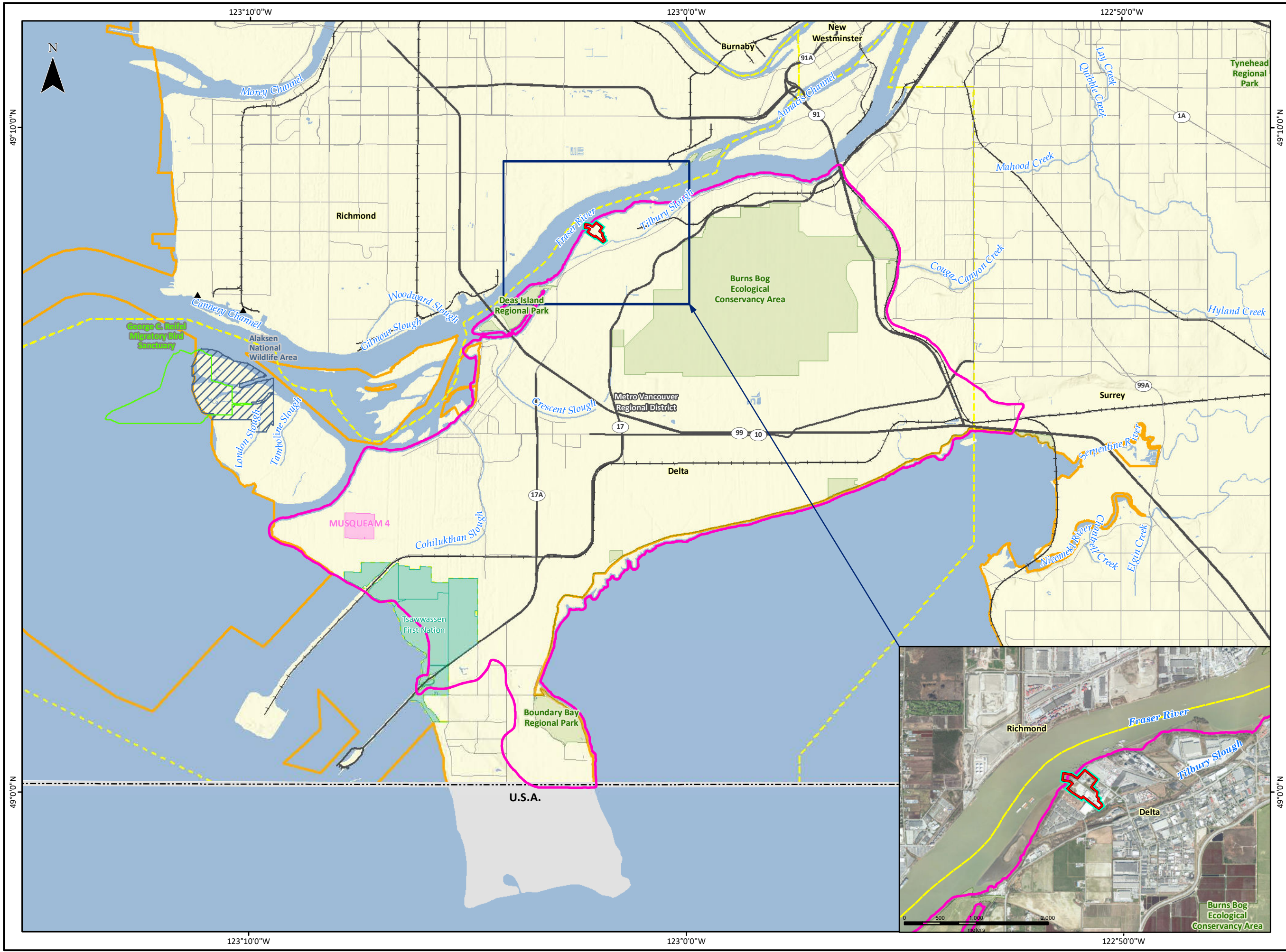












June 2022

**FIGURE 6.2-4**  
**GROUNDWATER ASSESSMENT**  
**AREA BOUNDARIES**

**TILBURY PHASE 2 LNG**  
**EXPANSION PROJECT**

Proposed Project Footprint

Groundwater Local Assessment Area

Groundwater Regional Assessment Area

National Historic Site

Highway

Road

Railway

National Border

First Nations Reserve

First Nations Treaty Lands

Municipality

Migratory Bird Sanctuary

National Wildlife Area

Park/Protected Area

Waterbody

Wildlife Management Area

49° 8' 27.4" N 123° 2' 4.8" W  
NTS Grid: 092G03

Scale: 1:100,000  
0 1 2 3 4 km  
(All Locations Approximate)

**Jacobs**

Project Number CE778100

NAD1983 UTM Zone 10 North.  
Proposed Project, Local/Regional Assessment Area: Jacobs 2022; National Historic Site: Government of Canada 2018; First Nations Reserves: Government of Canada 2021; First Nations Treaty Lands: BC MFLNRO 2009; Roads: NRCAN 2015; Hydrography: BC Forests, Lands and Natural Resource Operations 2011; Municipal Boundaries, Regional District: BC MFLNRO 2016; Railway: BC Forests, Lands, Natural Resource Operations and Rural Development 2015; Parks: NRCAN 2017; Metro Vancouver 2020; BC MFLNRO 2008; Migratory Bird Sanctuaries and National Wildlife Areas: Canadian Wildlife Service 2020; Wildlife Management Areas: BC MFLNRO 2019; Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community  
Sources: Esri, Airbus DS, USGS, NGA, NASA, CGAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatasystyelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the

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**BRITISH COLUMBIA**

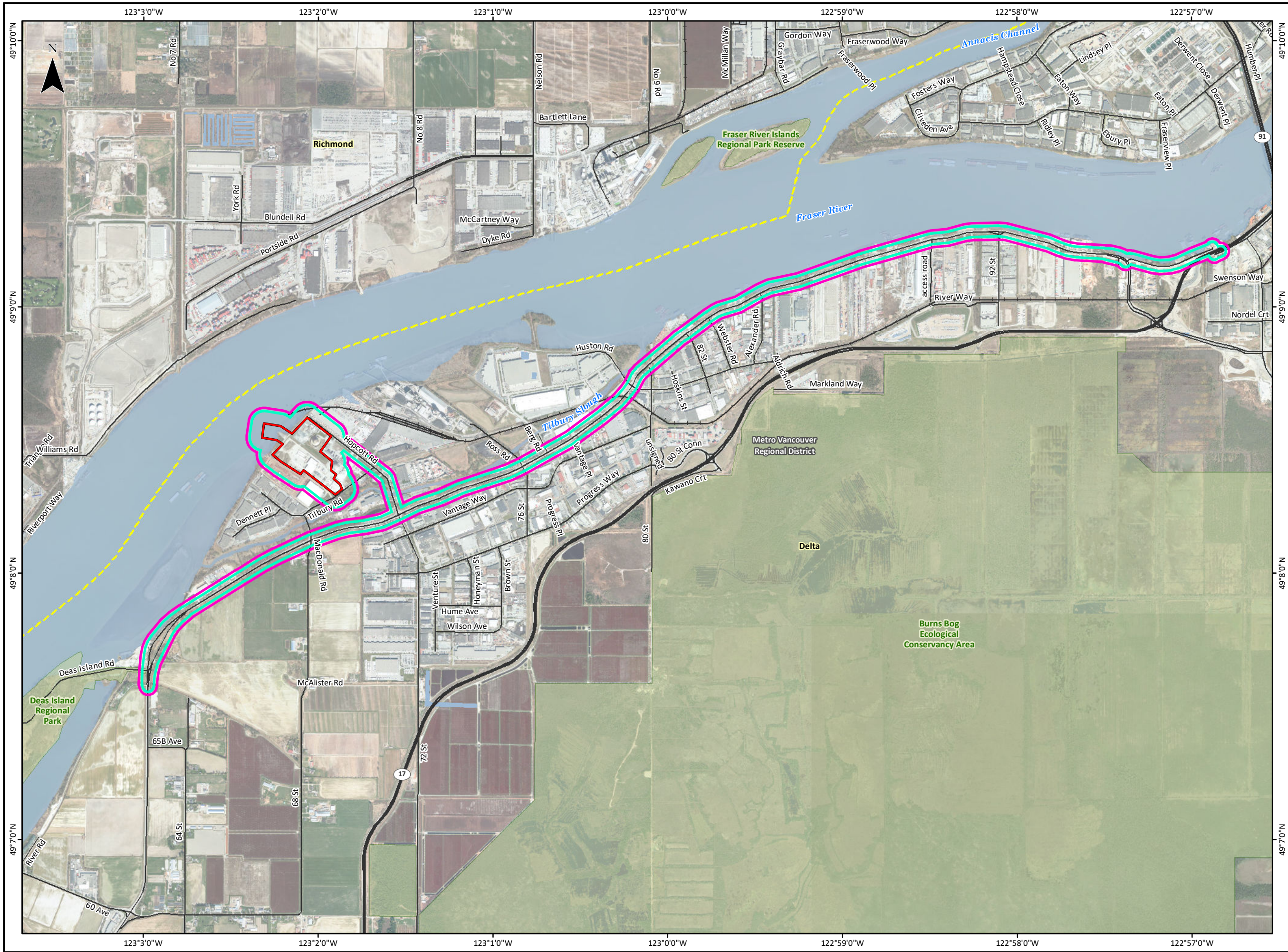
Squamish

Vancouver

Victoria

**USA**





June 2022

FIGURE 6.2-5

SOIL ASSESSMENT  
AREA BOUNDARIES

TILBURY PHASE 2 LNG  
EXPANSION PROJECT

- Proposed Project Footprint
- Soil Local Assessment Area
- Soil Regional Assessment Area
- Highway
- Road
- Railway
- Municipality
- Park/Protected Area
- Waterbody

49° 8' 27.4" N 123° 2' 4.8" W  
NTS Grid: 092G03

Scale: 1:25,000  
0 250 500 750 1,000  
(All Locations Approximate)

Jacobs

Project Number CE778100

NAD1983 UTM Zone 10 North.  
Proposed Project, Local/Regional Assessment Area: Jacobs 2022; First Nation Reserves: Government of Canada 2021; First Nations Treaty Lands: BC MFLNRO 2009; Roads: NRCan 2015; Hydrography: BC Forests, Lands and Natural Resource Operations 2011; Municipal Boundaries: Regional District of Metro Vancouver 2016; Railway: BC Forests, Lands, Natural Resource Operations and Rural Development 2015; Parks: NRCan 2017; Metro Vancouver 2020; BC MFLNRO 2008; Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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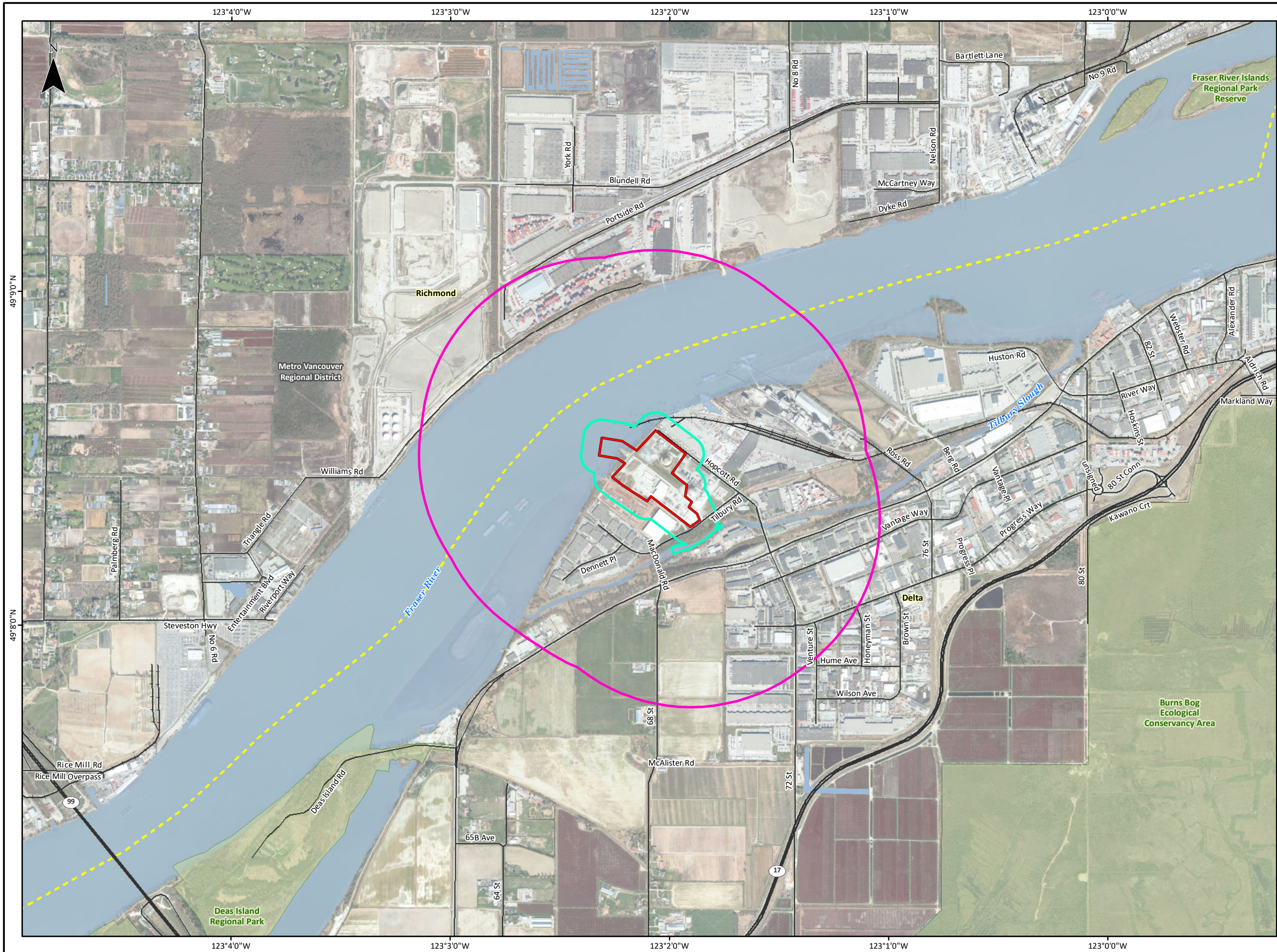



FIGURE 6.2-6

VEGETATION ASSESSMENT  
AREA BOUNDARIES

TILBURY PHASE 2 LNG  
EXPANSION PROJECT

-  Proposed Project Footprint
-  Vegetation Local Assessment Area
-  Vegetation Regional Assessment Area
-  Highway
-  Road
-  Railway
-  Municipality
-  Park/Protected Area
-  Waterbody

49° 8' 27.4" N 123° 2' 4.8" W  
NTS Grid: 092G03

Scale: 1:20,000  
  
(All Locations Approximate)

**Jacobs**

Project Number CE778100

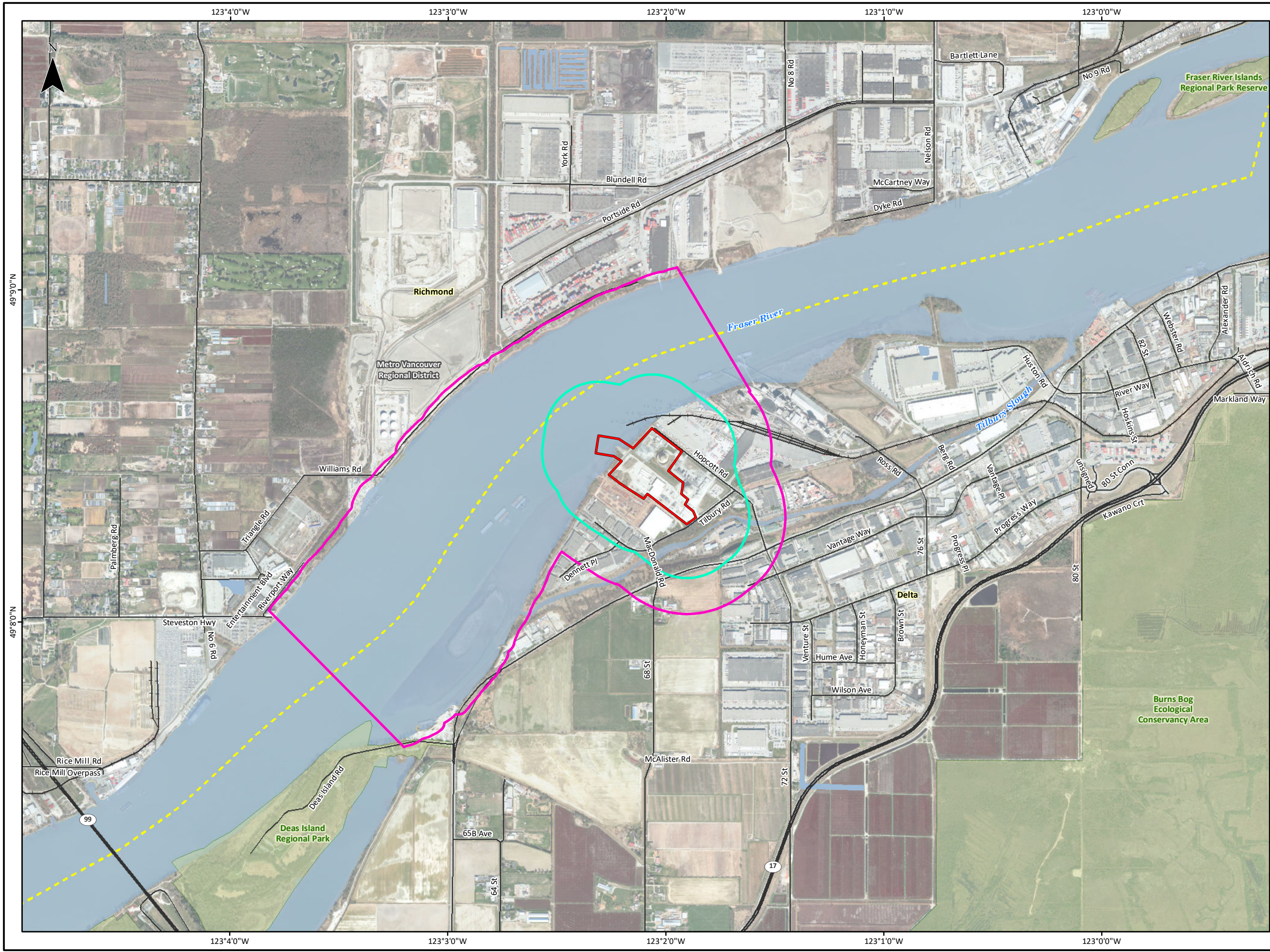
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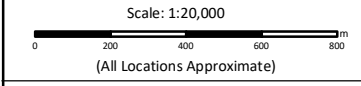
June 2022

**FIGURE 6.2-7**  
**WILDLIFE AND WILDLIFE HABITAT**  
**ASSESSMENT AREA BOUNDARIES**

**TILBURY PHASE 2 LNG**  
**EXPANSION PROJECT**

- Proposed Project Footprint
- Wildlife and Wildlife Habitat Local Assessment Area
- Wildlife and Wildlife Habitat Regional Assessment Area
- Highway
- Road
- Railway
- Municipality
- Park/Protected
- Waterbody

49° 8' 27.4" N 123° 2' 4.8" W  
NTS Grid: 092G03



**Jacobs**

Project Number CE778100

NAD1983 UTM Zone 10 North.  
Proposed Project, Local/Regional Assessment Area: Jacobs 2022; First Nation Reserves: Government of Canada 2021; First Nations Treaty Lands: BC MFLNRO 2009; Roads: NRCAN 2015; Hydrography: BC Forests, Lands and Natural Resource Operations 2011; Municipal Boundaries: Regional District of BC MFLNRO 2016; Railway: BC Forests, Lands, Natural Resource Operations and Rural Department 2015; Parks: NRCAN 2017; Metro Vancouver 2020; BC MFLNRO 2008; Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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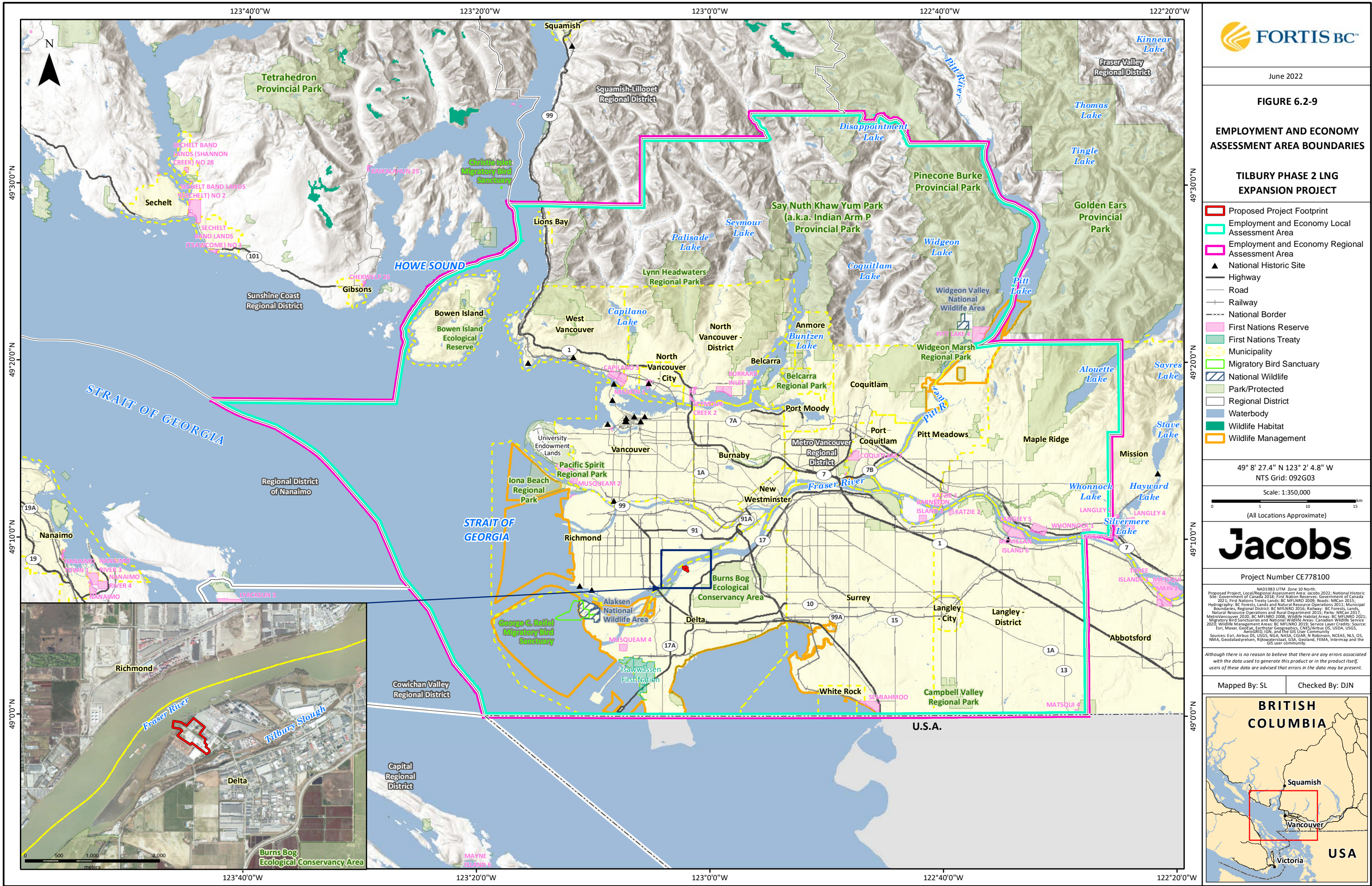
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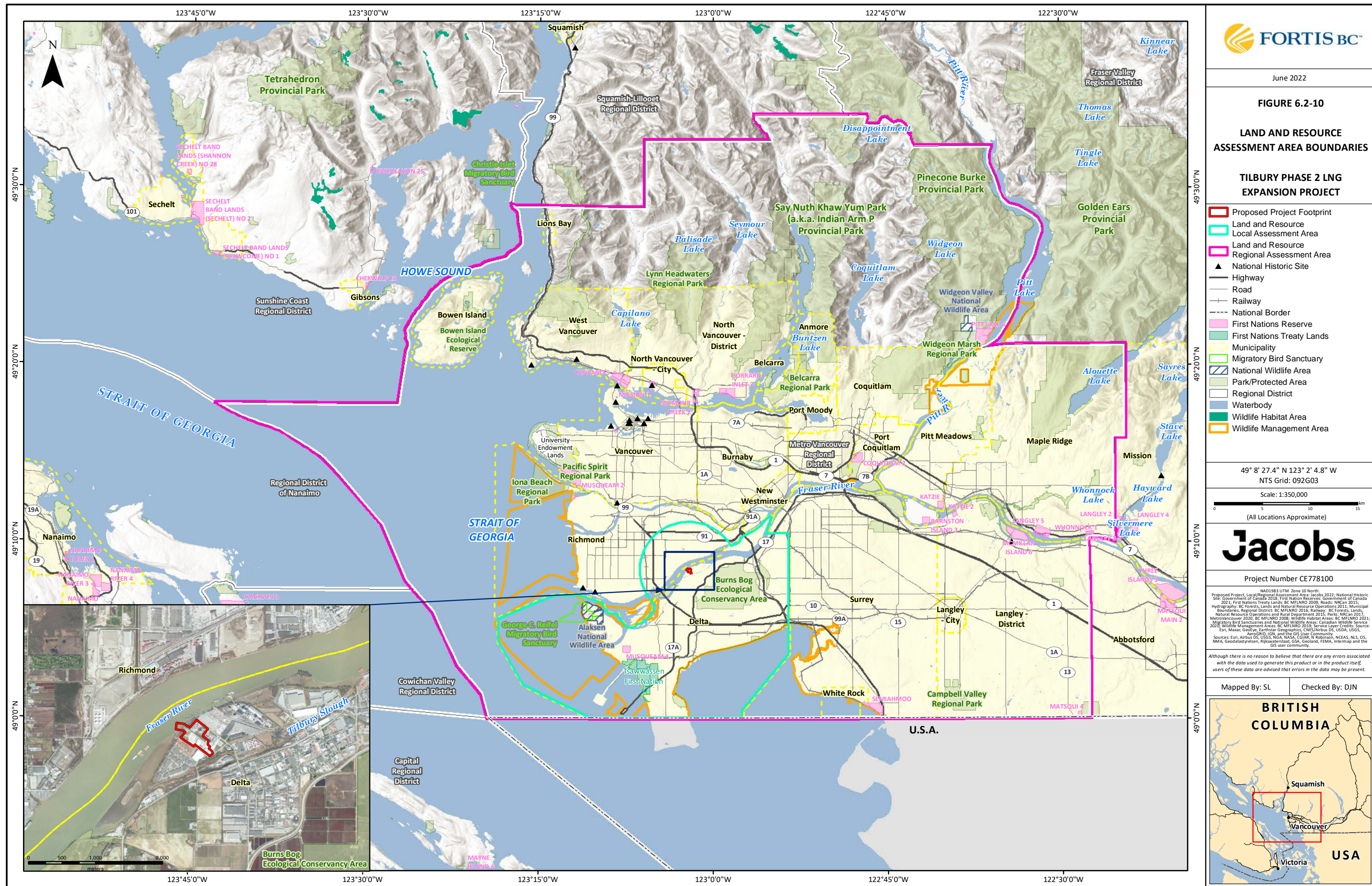














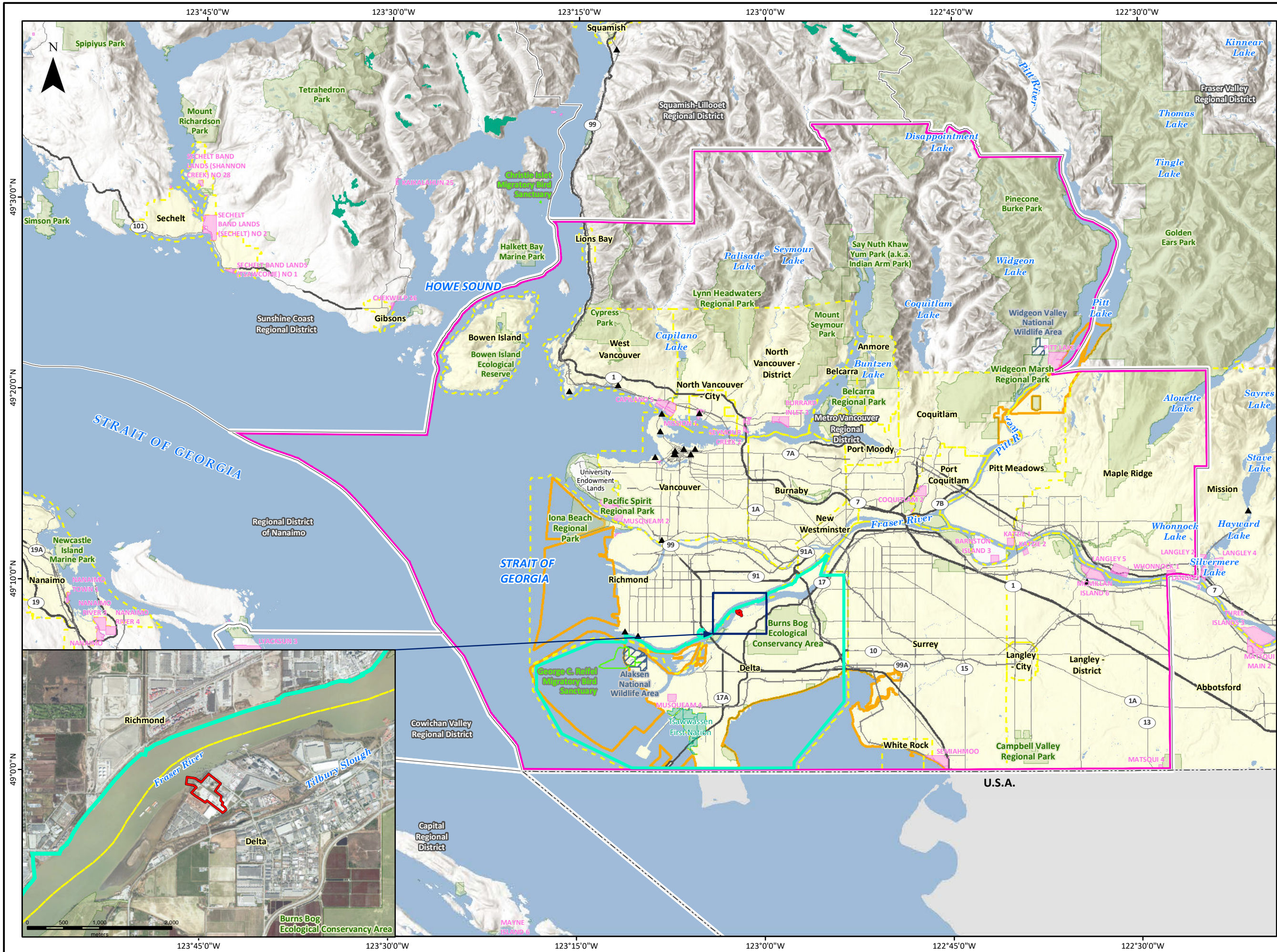


FIGURE 6.2-11

INFRASTRUCTURE AND SERVICES  
ASSESSMENT AREA BOUNDARIES

TILBURY PHASE 2 LNG  
EXPANSION PROJECT

- Proposed Project Footprint
- Infrastructure and Services  
Local Assessment Area
- Infrastructure and Services  
Regional Assessment Area
- National Historic Site
- Highway
- Road
- Railway
- National Border
- First Nations Reserve
- First Nations Treaty
- Municipality
- Migratory Bird Sanctuary
- National Wildlife  
Park/Protected
- Regional District
- Waterbody
- Wildlife Habitat
- Wildlife Management

49° 8' 27.4" N 123° 2' 4.8" W  
NTS Grid: 092G03

Scale: 1:350,000  
0 5 10 15 km  
(All Locations Approximate)

Jacobs

Project Number CE778100

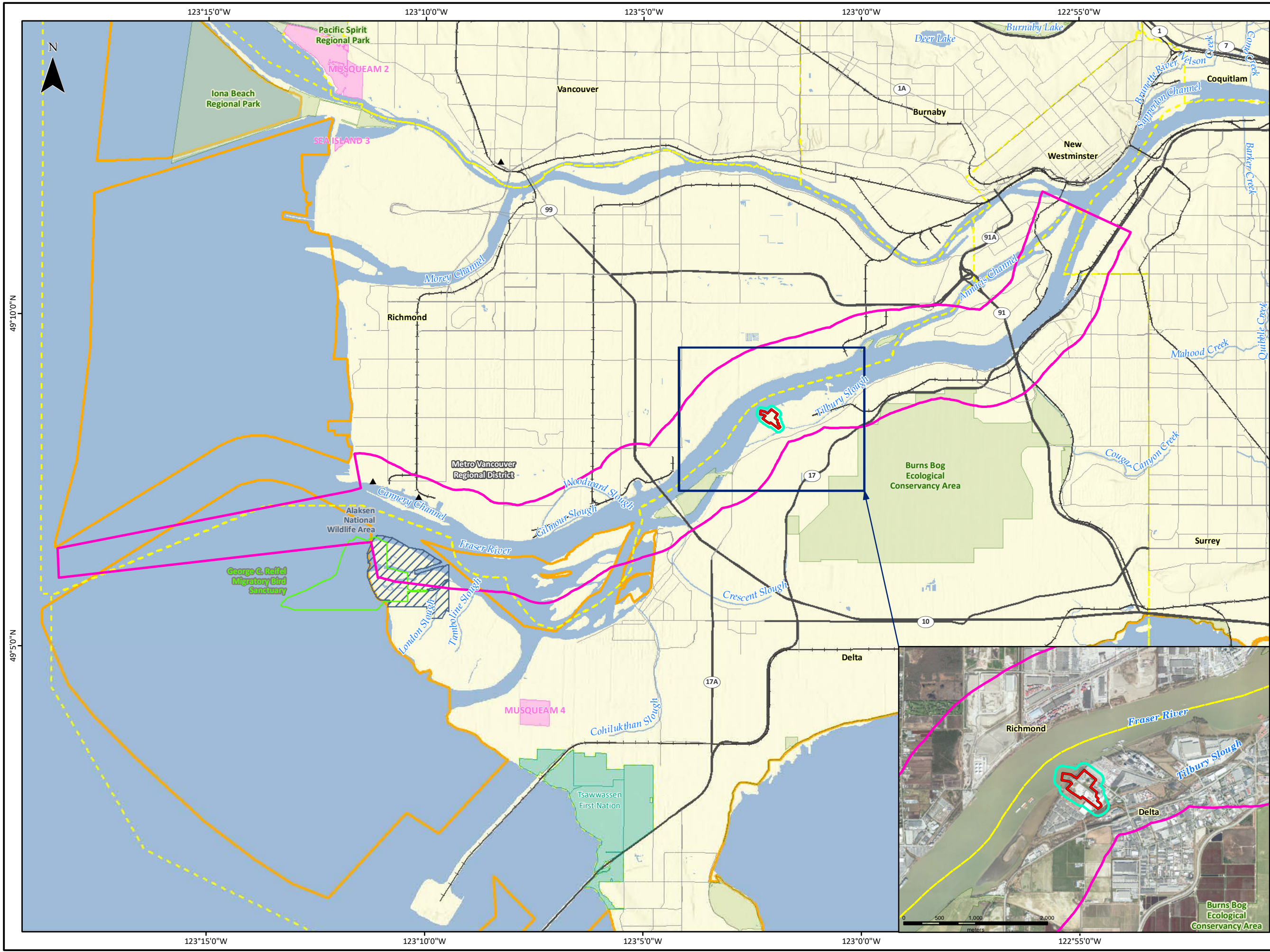
NAD1983 UTM Zone 10 North.  
Proposed Project: Local/Regional Assessment Area Jacobs 2021; National Historic Site: Government of Canada 2018; First Nations Reserves: Government of Canada 2021; First Nations Treaty Lands: BC MFLNRO 2009; Roads: NRCAN 2015; Hydrography: BC Forests, Lands and Natural Resource Operations 2011; Municipal Boundaries: Regional District: BC MFLNRO 2016; Railway: BC Forests, Lands, Natural Resource Operations and Rural Department 2015; Parks: NRCAN 2017; Metro Vancouver 2020; BC MFLNRO 2008; Wildlife Habitat Areas: BC MFLNRO 2021; Migratory Bird Sanctuaries and National Wildlife Areas: Canadian Wildlife Service 2020; Wildlife Management Areas: BC MFLNRO 2015; Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community  
Sources: Esri, Airbus DS, USGS, NOAA, NASA, NOAA, N Robinson, NCEAS, NLS, OS, NMA, Geodatasys, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community.


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June 2022

**FIGURE 6.2-12**

**ARCHAEOLOGICAL AND HERITAGE RESOURCES ASSESSMENT AREA BOUNDARIES**

**TILBURY PHASE 2 LNG EXPANSION PROJECT**

- Proposed Project Footprint
- Archaeological and Heritage Resources Local Assessment Area
- Archaeological and Heritage Resources Regional Assessment Area
- National Historic Site
- Highway
- Road
- Railway
- First Nations Reserve
- First Nations Treaty Lands
- Municipality
- Migratory Bird Sanctuary
- National Wildlife Area
- Park/Protected Area
- Waterbody
- Wildlife Management Area

49° 8' 27.4" N 123° 2' 4.8" W  
NTS Grid: 092G03

Scale: 1:100,000

(All Locations Approximate)


# Jacobs

Project Number CE778100

NAD1983 UTM Zone 10 North  
Proposed Project, Local/Regional Assessment Area: Jacobs 2022; National Historic Site: Government of Canada 2018; First Nation Reserves: Government of Canada 2021; First Nations Treaty Lands: BC MFLNRO 2009; Roads: NRCAN 2015; Hydrography: BC Forests, Lands and Natural Resource Operations 2011; Municipal Boundaries: Regional District of BC MFLNRO 2016; Railway: BC Forests, Lands, Natural Resource Operations and Rural Development 2015; Parks: NRCAN 2017; Metro Vancouver 2020; BC MFLNRO 2008; Migratory Bird Sanctuaries and National Wildlife Areas: Canadian Wildlife Service 2020; Wildlife Management Areas: BC MFLNRO 2019; Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community  
Sources: Esri, Airbus DS, USGS, NGA, NASA, CGLAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatasysteisen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community.

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**BRITISH COLUMBIA**

Squamish

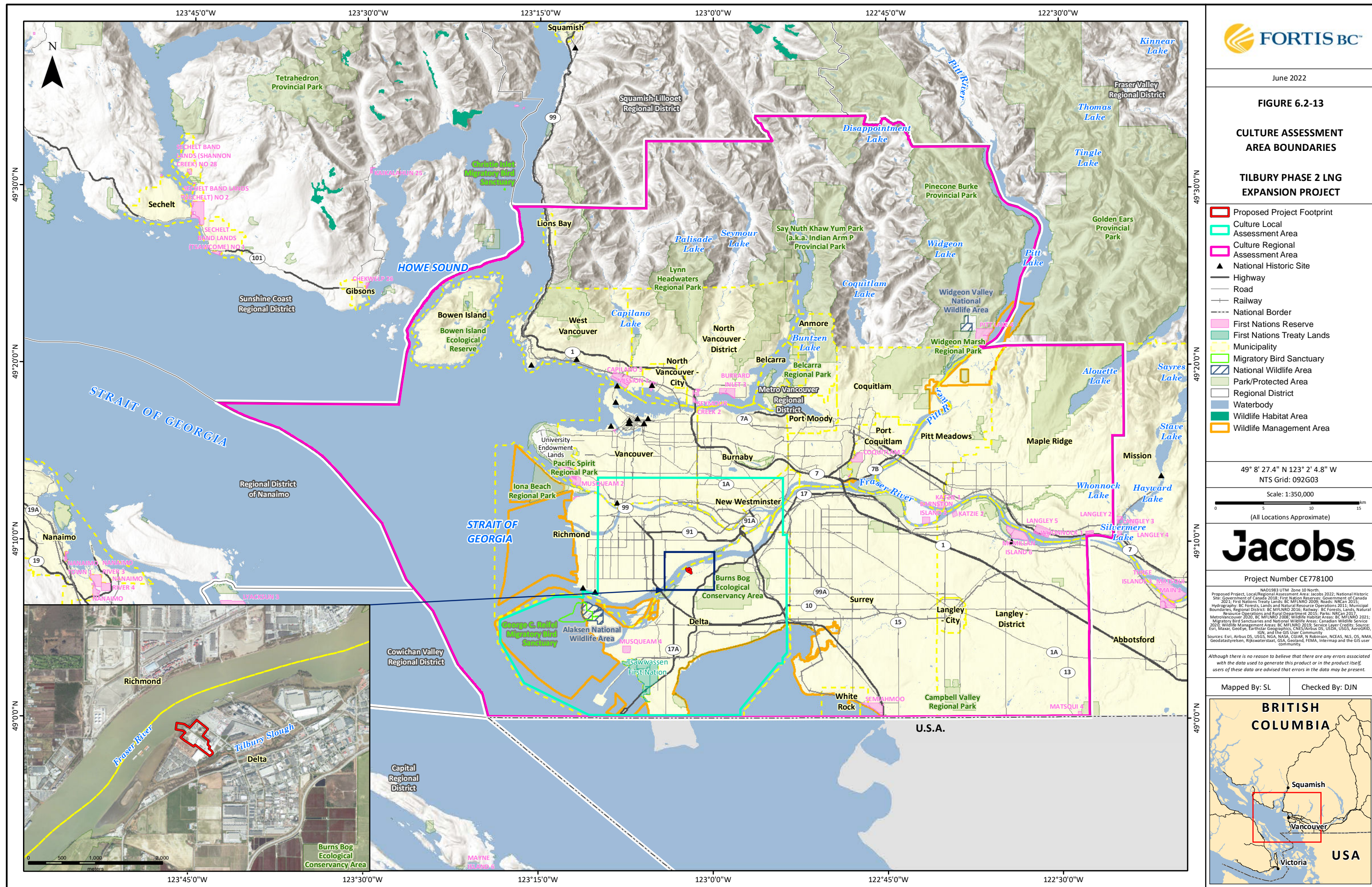
Vancouver

Delta

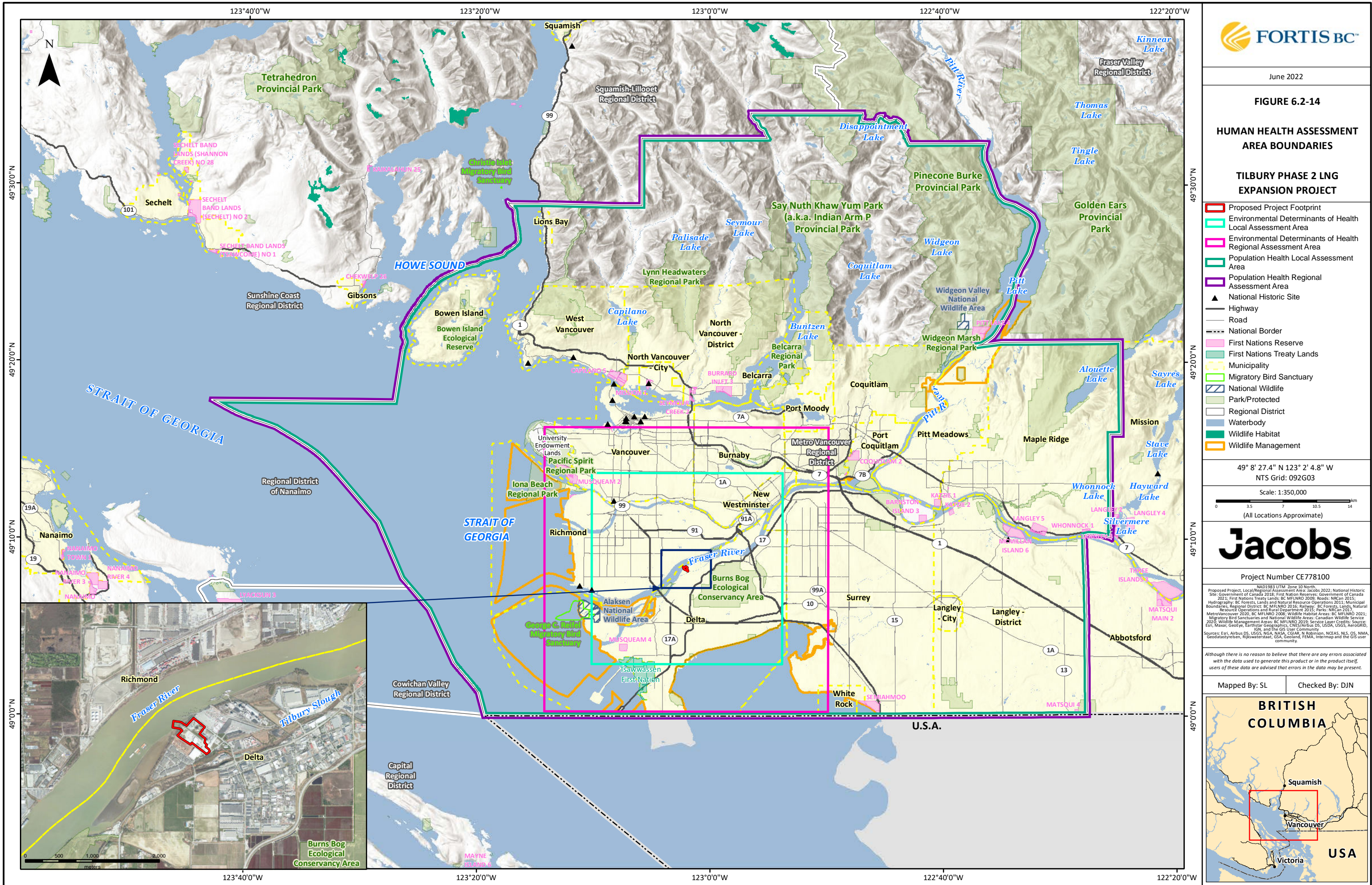
USA

Victoria











### 6.3. Existing Conditions

For each VC (or sub-component), the Application must provide a description of the existing conditions (for example, baseline) within the study areas in enough detail to enable potential Project-VC interactions to be identified, understood and assessed, including characteristics of the VC (or sub component) itself and other components upon which the integrity of the VC relies.

The Application must include:

- A description of the quality and reliability of the existing conditions data and its applicability for the purpose used, including any data gaps, insufficiencies and uncertainties, particularly for the purpose of monitoring activities (such as, outdated information or data);
- Reference to natural and/or human-caused trends that may alter the VC irrespective of the changes that may be caused by the Project or other projects and activities in the local area (for example, climate change);
- An explanation of if and how other past and present projects and activities in the study area have affected, or are affecting, each VC;
- Documentation of the methods and information sources used to compile information on existing (or baseline) conditions, including any standards or guidelines followed;
- Where additional Project- and VC-specific field studies are undertaken, the scope and methods used should follow published documents pertaining to data collection and analysis methods, where these are available. Where methods used for data collection deviate from applicable published guidance, the rationale for the variance will be provided in the Application;
- Description of local and Indigenous Knowledge used in the assessment; and
- Evidence that input from diverse subgroups was sought through engagement activities to identify potential effects or other concerns and issues will be provided. The information will be sufficient to provide an analysis regarding the Project's effects in the context of potential interaction between VCs.

The Application may provide technical reports that present the existing conditions data in Appendices and summarize the key findings of these technical reports directly in the Application. Regardless of the approach, the description of the existing conditions will be presented in a manner that allows the reader to understand the Effects Assessment for each VC (or sub-component).

The application of GBA+, including Disproportionate Effects on Human Populations as described in Provincial guidance related to the B.C. EAA, to these baseline descriptions to disaggregate and specify baseline conditions for diverse or distinct subgroups is necessary to support the GBA+ of effects. Where available, quantitative data will be used to describe baseline conditions across diverse or distinct subgroups, where GBA+ factors have the potential to be relevant to the understanding of effects. If quantitative data is not available, qualitative data will be used in the assessment. Where the available information presents a limitation on the ability to characterize baseline conditions according to GBA+ approaches, this limitation will be articulated, and its implications for analysis described.

### 6.4. Potential Effects

The Application must describe in detail the Project's potential positive and negative direct and indirect effects in relation to each phase of the Project (construction, operation, and decommissioning). The Application must describe the methods used to identify and assess the potential effects of the Project on the identified VCs and sub-components, including the results of any interaction between effects (to one VC or multiple VCs). For each VC, the Application must identify the potential interactions between the Project, including the various physical works and activities, and each VC (or sub-



component). The Application must describe any indicators used for the assessment of potential effects and the parameters used to facilitate the evaluation of potential Project effects. Potential interactions will be identified using a table format.

As applicable, the Effects Assessment will be sufficiently disaggregated and analyzed to support the analysis of disproportionate effects as per GBA+.

The assessment of the effects of each of the Project components and physical activities, in all phases, will be based upon a comparison of baseline environmental, economic, social, culture, and health conditions and the predicted future conditions with the Project and the predicted future conditions without the Project. The Application must include predictions on future conditions of each VC with the Project and without the Project before potential effects of the Project are assessed. The difference between the existing conditions (or future conditions without the Project) and the future conditions with the Project is interpreted as the potential effects of the Project.

## 6.5. Effects Management

For each VC section, the Application must:

- Describe the proposed technically and economically feasible measures to mitigate the potential adverse effects of the Project in a hierarchy: avoid, then reduce, and offset (onsite and then offsite); the proposed mitigation measures and offsetting will include restitution for any damage caused by those effects through replacement, restoration, compensation or other means;
- Provide justification for moving from one mitigation alternative to the next in the mitigation hierarchy;
- Describe enhancement measures to increase positive effects; enhancement measures may include environmental, skills training (including education and hiring practices), local procurement strategies (such as, bid packaging, supplier development initiatives, technology transfer, and research and development programs), investments in community infrastructure (such as roads or services);
- Proposed mitigation measures are to be specific, achievable, measurable and verifiable, and described in a manner that avoids ambiguity in intent, interpretation and implementation;
- Describe any measures incorporated into the Project design to reduce potential effects, including site and route selection, Project scheduling, Project design (for example, equipment selection, placement, emissions abatement measures), and construction and operation procedures and practices;
- Describe any standard mitigation to be implemented that constitute proven technically and economically feasible mitigation measures, including consideration of best management practices, minimal disturbance footprint techniques, environmental management plans, environmental protection plans, contingency plans, emergency response plans and other general or standard practices, corrective measures or additions planned during the Project's various phases to eliminate or reduce adverse effects; where key mitigation measures proposed involve development of a specific management plan, the Application will include an outline (such as, plan headers) of the management plan;
- Identify and describe mitigation measures, that would avoid or lessen potential adverse effects to terrestrial and aquatic species and/or critical habitat listed under Schedule 1 of the *Species at Risk Act* (SARA). These measures:
  - Are to be consistent with any applicable recovery strategy, action plan or management plan and will also identify and describe mitigation measures to avoid or lessen adverse effects to SARA-listed and Committee on the Status of Endangered Wildlife in Canada (COSEWIC) assessed species; and

- Must be described in terms of the effectiveness of each measure to avoid the adverse effect and include a comprehensive science-based rationale for proposing the selected mitigation measures.
- Describe the approach used to identify measures to mitigate potential adverse effects, including;
  - Whether, based on the results of the assessed potential impacts to fish and fish habitat, habitat offsetting is appropriate;
  - Where offsetting is appropriate, a conceptual offsetting plan, prepared by a Qualified Professional, in accordance with the Procedures for Mitigating Effects on Environmental Values (Environmental Mitigation Procedures) (B.C. MOE 2014b), and The Policy for Applying Measures to Offset Impacts to Fish and Fish Habitat Under the *Fisheries Act*, will be prepared;
- Describe passive and active measures that are specific to each identified effect and clearly indicate how the mitigation measures will reduce the potential adverse effects or enhancement measures will increase positive effects on the VC; measures are to be written as specific commitments that clearly describe how the proponent intends to implement them and the outcome these measures are designed to address;
- Discuss the mechanisms the proponent would use to require its Contractors and Sub-contractors to comply with these commitments and policies and with auditing and enforcement programs;
- Identify the party responsible for the implementation of mitigation measures and the system of accountability;
- Where appropriate, provide details regarding financial liability and compensation in place as required by regulation or company commitment in relation to decommissioning or abandonment;
- Describe how disproportionate effects to distinct human populations were used to inform mitigation and enhancement measures, which should be developed in collaboration with those who are vulnerable and/or disadvantaged;
- Where feasible, measures proposed to mitigate potential adverse effects on vulnerable or disadvantaged persons, segments of the human populations will be developed and implemented in collaboration with members of those segments. The potential risks and uncertainties of the measures will be described; in addition, the Application must identify the extent to which technological innovations may help mitigate effects. Where possible, it will provide detailed information on the nature of these measures, their implementation, management, and the requirements of the follow-up program;
- Include the anticipated time required for mitigation measures to become effective, to enable understanding of the duration of residual effects and the temporal characteristics of reversibility;
- Summarize the mitigation measures for potential Project effects by Project phase and identify any mitigation measures that are in management or offset plans;
- Identify other technically and economically feasible mitigation measures that were considered but are not proposed for implementation and explain why they were rejected. Justify any trade-offs between cost savings and effectiveness of the various forms of mitigation measures;
- Assess any potentially negative effects associated with the mitigation method itself;
- Identify and describe the use and application of best available technology and best environmental practice in identifying, assessing and implementing mitigation measures; and
- Provide an assessment of the likely effectiveness of the proposed technically and economically feasible mitigation measures. The reasons for determining if the mitigation measure reduces the extent to which the effects are adverse must be made explicit.

Proposed mitigation and enhancement measures will be discussed during the review of the Application and may be modified as a result of the review. Mitigation and enhancement measures may be considered for inclusion as conditions in the Environmental Assessment Certificate (EAC). If there is an ongoing or completed regional assessment in the Project area, the proponent will use the information generated through that process to inform possible mitigation and enhancement measures.

The Application must describe the Project's environmental protection plan and its environmental management system through which the proponent will deliver this plan. The plan must provide an overall perspective on how potentially adverse effects would be minimized and managed over time.

Section 8 includes requirements for measures to mitigate greenhouse gas (GHG) emissions.

#### 6.5.1. Assessing Positive Effects

The Application must:

- Identify and assess predicted positive effects;
- Describe how long-term trends (for example, changing environment, employment and technology) and market fluctuations have been considered, and provide the results of a sensitivity analysis where appropriate;
- Characterize the positive effect; and
- Describe how the positive effect may be monitored and adaptively managed.

#### 6.5.2. Assessing Negative Effects

Negative effects may result from interactions between the project and VCs, and may be avoided, minimized, restored, or offset through the application of mitigation and management measures. Following the identification of mitigation and management measures, any residual negative effects on VCs must be assessed and described.

The Application must, for each potential effect:

- Describe the analytical methods used to assess the negative effect, including modelling approaches;
- Identify assumptions, parameters, and the quality of the data used in analytical methods and degree of uncertainty of the predictions obtained;
- Present the results of the analyses, including a detailed description of any potential residual effect (the description of the potential effect can be either qualitative or quantitative);
- Describe in qualitative terms the nature and degree of uncertainty or conservatism related to the data, modelling and methods used for the analysis; and
- Describe the effectiveness of mitigation measures and proposed adaptive management measures and describe the probability or likelihood of potential residual effects. If additional risk analysis is required to fully characterize the potential risk where there is high uncertainty about the mitigation effectiveness (for example, where mitigation measures are proposed to be implemented for which there is little experience or questions about their effectiveness), a range of likely, plausible and possible outcomes will be assessed and additional studies, mitigation or contingency plans may be required.

Where appropriate, information regarding potential effects on the human environment will be presented by sex, age, and other community relevant identity factors to identify disproportionate residual effects for diverse subgroups.

Where appropriate, and where the best practice or evidence-based thresholds exist, adverse effects will be described quantitatively using these criteria. Where a quantitative description is not possible, effects will be described qualitatively.

When residual effects on a VC are predicted and the VC is also considered a “pathway” for other potential effects on other VCs, the Application must identify the linkages between the VCs.

Where offsetting measures are proposed to address a potential effect, the Application must first describe any potential effects following the implementation of measures to avoid, minimize, and restore-on-site directly or indirectly. For transparency, the change to the VC prior to the implementation of offsetting should be clearly identified, quantified and characterized in the Application to fully understand the consequences of the Project being assessed. The characterization is best undertaken in the context of describing the proposed suite of mitigation, the need for and scope of offset, and residual effect.

## 6.6. Characterization of Residual Effects

For negative residual effects, the Application must:

- Provide a detailed characterization of residual effects following the implementation of technically and economically feasible mitigation measures;
- For every residual effect, the context needs to be fully described using qualitative and/or quantitative information, including:
  - Effects of past and present projects and activities;
  - Potential trends in the condition of the VC; and
  - Vulnerability and resiliency of the VC;
- For every residual effect use the following criteria in characterizing residual effects:
  - Context;
  - Direction (that is, positive, neutral, or adverse);
  - Magnitude;
  - Geographic Extent;
  - Timing;
  - Duration;
  - Reversibility;
  - Frequency;
  - Affected populations;
  - Likelihood; and
  - Risk and uncertainty;
- Where applicable, determine importance in characterizing residual effects;
- Define the criteria/terms used to characterize the residual effects; and
- Identify and explain relevant sources of information that were used to characterize residual effects, including those provided by Indigenous nations and other participants.

## 6.7. Cumulative Effects Assessment

The Application must:

- Identify and provide a rationale for the VCs that will constitute the focus of the Cumulative Effects Assessment (CEA). The selected VCs are those most likely to be affected by the Project in combination with other projects and activities;
- Include a rationale to justify the exclusion of other VCs from the CEA, as applicable;
- Identify and justify the spatial and temporal boundaries for the cumulative effect assessment for each VC selected. The boundaries for the CEAs may differ for each VC considered, may be larger than the boundaries for the Project effects alone, and will not be constrained by jurisdictional boundaries;
- Temporal boundaries will include an appropriate baseline and should look at all potential effects throughout the lifecycle of the Project, including decommissioning and abandonment;
- Identify past, present, and reasonably foreseeable future projects and activities that have been or that are likely to be carried out that could interact cumulatively with each selected VC within the boundaries defined, and whose residual effects would act in combination with the residual effects of the Project. This assessment will consider the results of any relevant regional study conducted;
- Provide the rationale for selecting past, existing, or reasonably foreseeable future projects or activities to include in the cumulative effects assessment. The list of certain and reasonably foreseeable projects and activities will be reviewed to determine if there is potential for spatial and temporal overlap of residual effects from any of the projects/activities with Project residual effects. The cumulative effects assessment will only consider reasonably foreseeable projects within the RAA for each given VC. Rationale for the exclusion of any projects or activities will be provided in each respective VC section. Rationale could include, but are not limited to, proximity to the project, temporal overlap, VC interactions, unique non-overlapping resource demands, and project certainty.
- The cumulative effects assessment will consider agricultural operations, oil and gas development, utilities and energy transmission developments, mineral resource development, residential and urban development, and transportation and infrastructure development in the RAA. The following projects to be considered in the cumulative effects assessment will have the most likelihood of interacting with the Project and will also have a high probability of proceeding includes, but is not limited to:
  - Oil and Gas Developments
    - Tilbury Phase 1 LNG Expansion Project
    - Pattullo Gas Line Replacement
    - Parkland Burnaby Refinery
  - Utilities and Energy Transmission
    - Annacis Island (Delta) Wastewater Treatment Plant
    - North Shore Wastewater Treatment Plant
    - Second Narrows Water Supply Tunnel
    - Northwest Langley Wastewater Treatment Plant
    - Annacis Water Supply Tunnel
    - Annacis Water Main South
    - Coquitlam Water Main Project
    - Douglas Road Water Main - Still Creek Section
    - Fleetwood Reservoir and Water Main

- Hellings Reservoir
- Jericho Reservoir
- Stanley Park Water Supply Tunnel
- Mineral Resources
  - Delta Grinding Facility Project
  - Residential and Urban Development
  - Delta Fresh Cold Storage Warehouse/Food Processing Facility
  - Rezoning and Design Review at 5519 Admiral Way
  - The Southlands development
- Transportation and Infrastructure
  - Tilbury Marine Jetty Project
  - Roberts Bank Terminal 2
  - Deltaport Expansion Berth 4
  - George Massey Tunnel Replacement
  - Pattullo Bridge Replacement
- Identify the methods used to determine potential cumulative effects, including data sources and collection methods, data analysis, and any other relevant assessment information;
- Identify potential cumulative effects to each VC selected by comparing the current and future conditions, including future scenarios with the Project and without the Project. The effects of past and current activities (activities that have been carried out) are to be used to contextualize the current state of the VC. Climate change is to be considered as part of future conditions or provide a rationale to justify the exclusion of climate change effects on the VC;
- Describe the mitigation measures that are technically and economically feasible to eliminate or reduce adverse cumulative effects, including:
  - The criteria or rationale used to determine technically and economically feasible mitigation measures;
  - Describe and provide an assessment of the effectiveness of the measures applied to mitigate the cumulative effects; and
  - In cases where measures to mitigate these effects are beyond the control of the proponent, the Application must identify any parties that have the authority to act on these measures. In such cases, the Application must summarize any commitments by the other parties regarding implementation of the necessary measures and any associated communication plans.
- Quantify, where appropriate, and evaluate residual cumulative effects using the characterization of residual effects described above; and
- Develop a follow-up program to verify the accuracy of the assessment and the effectiveness of mitigation measures for cumulative effects.

The proponent will engage with the B.C. EAO, Impact Assessment Agency of Canada (IAAC), and Indigenous nations when considering historical conditions in the assessment of cumulative effects. The AIR will be updated with additional details on methodology following additional engagement activities.

## 6.8. Follow-up Strategy

Where a positive or negative residual effect and/or cumulative effect has been identified for a VC, the Application must include a description of a follow-up strategy, where appropriate, that:

- Identifies the measures to ensure that mitigation measures are implemented as planned and evaluates the accuracy of the predicted effects;
- Identifies the measures to evaluate the effectiveness of proposed mitigation measures to meet the intended mitigation commitments and goals;
- Identifies the regulatory instruments that include a monitoring requirement for the VC;
- Proposes an appropriate strategy (for example, adaptive management) to apply if predicted effects and mitigation effectiveness are not as expected. This includes reference to further mitigation, involvement of key stakeholders, Indigenous nations, government agencies, and any other measures deemed necessary to manage the issue;
- Identifies a mechanism to disseminate follow-up results among interested parties;
- Identifies the involvement of Indigenous nations in the follow-up strategy design and the implementation, evaluation of the follow-up results, as well as any updates, including a communication mechanism between the Indigenous nations and the proponent;
- Identifies degree of uncertainty of the effectiveness of Effects Assessment and mitigation measures, duration of follow-up activities and who is responsible, if not only the proponent; and
- Identifies a follow-up program for environmental, economic, social, culture, or health effects, as applicable, include disproportionate effects highlighted by GBA+.

## 7.0 VALUED COMPONENTS EFFECTS ASSESSMENT

### 7.1. Environmental and Community Context

This section provides a landscape-level overview of the Project area that sets the context for the assessment and will allow a comprehensive understanding of the current level of ecosystem functions and community well-being. This sets the stage for the discussion of biophysical factors that support ecosystem function (Section 12) and factors that support human and community well-being (Section 13), based on the results of the VC assessments completed in the following sections. Detailed information on the baseline conditions for each VC will be included in the relevant VC assessment section.

In describing the biophysical environment, the Application must take an ecosystem approach that considers how the Project may affect the structure and functioning of biotic and abiotic components with the ecosystem using scientific, local, and Indigenous Knowledge regarding ecosystem health and integrity, as applicable. The Application must provide a description of the indicators and measures used to determine ecosystem health and integrity, identified during Early Planning. The presence of endangered ecosystems potentially affected by the Project will be included in the description of the biophysical baseline conditions.

The Application must consider the resilience of relevant species populations, communities, and associated habitats to the effects of the Project. Ecological processes will be evaluated for potential susceptibility to adverse effects from the Project.

## 7.2. Air Quality

This section of the Application must include the following headings and information. The approach will generally follow the methods outlined in Section 6, and any VC-specific deviations will be described.

The Application must identify which other VCs air quality is linked to and describe how the results of the assessment will be integrated into those of other VCs.

The Air Quality VC includes the following sub-components:

- Air quality; and
- Acid deposition.



### 7.2.1. Relevant Statutes, Policies and Frameworks

Statutes, policies, and frameworks that may be relevant to the air quality VC include:

- *Canadian Environmental Protection Act*, 1999 and regulations;
- *Environmental Management Act* and regulations;
- B.C. Air Quality Objectives;
- Canadian Ambient Air Quality Standards;
- B.C. Air Quality Dispersion Modelling Guideline (revised October 2021);
- Guidance for NO<sub>2</sub> Modelling Dispersion in British Columbia
- Metro Vancouver Air Quality Management Bylaw (Consolidated) 1082, & 1087, 2008 and 1308, 2020;
- Metro Vancouver Air Quality Objectives (Metro Vancouver 2020);
- Guidance within Metro Vancouver Dispersion Modelling Plan template (Version 2.1);
- Guidance for Evaluating Human Health Impacts in Environmental Assessment: Air Quality (Health Canada 2017b);
- World Health Organization Global Air Quality Guidelines (WHO 2021);
- IAA (Government of Canada 2019a); and
- B.C. Field Sampling Manual. Part B: Air and Air Emission Testing (B.C. ENV 2020).

### 7.2.2. Assessment Boundaries

Assessment boundaries will be defined for the air quality VC, including spatial, temporal, and administrative and technical boundaries.

### 7.2.3. Existing Conditions

As applicable, the Application must:

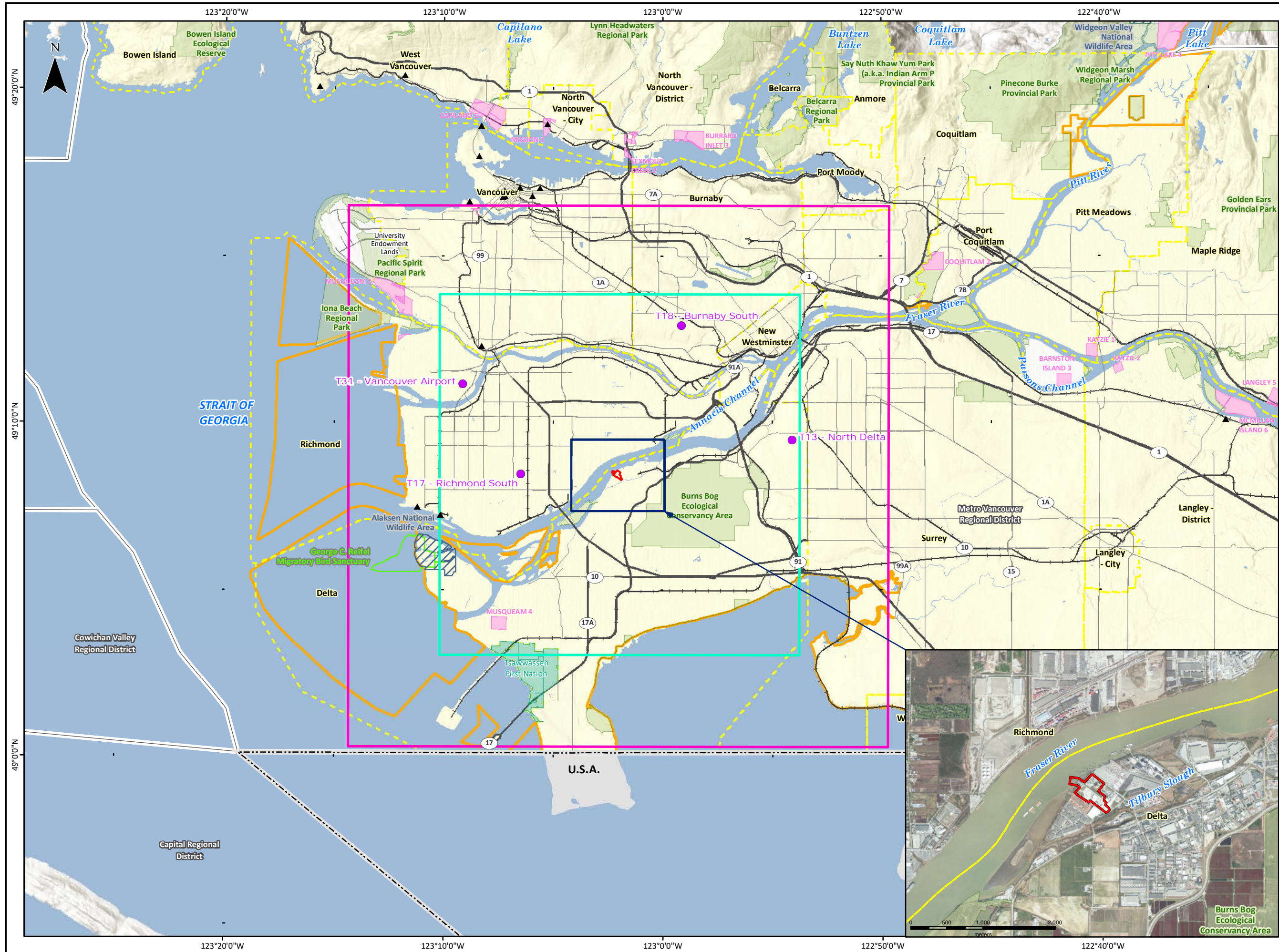
- Provide baseline information to characterize ambient air quality by identifying and quantifying emission sources of criteria/common air contaminants (for example, TSPs, PM<sub>2.5</sub>, PM<sub>10</sub>, carbon monoxide [CO], Sulphur oxides, nitrogen oxides, [non-methane] VOCs, hydrogen sulphide, and any other applicable hazardous air pollutants [mobile and stationary sources]), based on monitoring data that will be collected at the following four Metro Vancouver air quality monitoring stations (Figure 15):
  - T17 – Richmond South (Latitude: 49.1414; Longitude: -123.1082)
  - T13 – North Delta (Latitude: 49.1583; Longitude: -122.9017)
  - T18 – Burnaby South (Latitude: 49.2152; Longitude: -122.9857)
  - T31 – Vancouver Airport (Latitude: 49.1863; Longitude: -123.1524)
- Address seasonal variability in the baseline survey and include a determination of background or ambient contaminant concentrations, using monitoring data of appropriate duration, representativeness, data completeness, data validation, and quality control;
- Describe existing radon gas conditions;
- A description of the current and projected climate effects on air quality;

- Describe available Indigenous Knowledge or local knowledge related to current air quality conditions;
- Describe sources of nuisance odour in the study area; and
- If applicable, provide air dispersion models of a base case, developed in accordance with Provincial or Federal standards, to account for existing pollutant sources and to determine the spatial distribution of pollutants in the study area.

Note that fugitive methane emissions are addressed in the GHG section, Section 8.

The description of existing conditions for the Air Quality VC will explain if and how other past and present projects and activities (existing and historical context) in the study area have affected or are affecting linked VCs, the assessments of effects to Indigenous nations, as well as sections that assess the Section 25 requirements of the 2018 B.C. *EAA* and Section 22 requirements of the *IAA*, to support the consideration of Project effects and cumulative effects.





**FIGURE 7.2-1**

**PROPOSED AIR QUALITY  
MONITORING STATIONS**

**TILBURY PHASE 2 LNG  
EXPANSION PROJECT**

- Proposed Air Quality Monitoring Station
- Proposed Project Footprint
- Air Quality Local Assessment Area
- Air Quality Regional Assessment Area
- National Historic Site
- Highway
- Road
- Railway
- National Border
- First Nations Reserve
- First Nations Treaty Lands
- Municipality
- Regional District
- Migratory Bird Sanctuary
- National Wildlife Area
- Park/Protected Area
- Waterbody
- Wildlife Management Area

49° 8' 27.4" N 123° 2' 4.8" W  
NTS Grid: 092G03

Scale: 1:200,000  
0 2 4 6 8 km  
(All Locations Approximate)

**Jacobs**

Project Number CE778100

NAD1983 UTM Zone 10 North.  
Proposed Project, Local/Regional Assessment Area: Jacobs 2022; National Historic Site: Government of Canada 2018; First Nation Reserves: Government of Canada 2021; First Nations Treaty Lands: BC MFLNRO 2009; Roads: NRCAN 2015; Hydrography: BC Forests, Lands and Natural Resource Operations 2011; Municipal Boundaries, Regional District: BC MFLNRO 2016; Railway: BC Forests, Lands, Natural Resource Operations and Rural Development 2015; Parks: NRCAN 2017; Metro Vancouver 2020; BC MFLNRO 2008; Migratory Bird Sanctuaries and National Wildlife Areas: Canadian Wildlife Service 2020; Wildlife Management Areas: BC MFLNRO 2010; Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community  
Sources: Esri, Airbus DS, USGS, NGA, NASA, CIA, N Robinson, NCEAS, NLS, OS, NMA, Geodatasysteisen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS User community

Although there is no reason to believe that there are any errors associated with the data used to generate this product or in the product itself, users of these data are advised that errors in the data may be present.

Mapped By: SL      Checked By: DJN





#### 7.2.4. Potential Effects

The Application must define potential effects to air quality, identify interactions between the Project and these effects, and outline indicators that will be used to measure these effects.

The assessment of Air Quality must follow the process outlined as follows:

- Provide a quantitative assessment of criteria air contaminants (total particulate matter, PM<sub>10</sub>, PM<sub>2.5</sub>, Sulphur oxides, nitrogen oxides, VOCs, and CO) as well as any air contaminants potentially associated with the Project;
- Provide an assessment of Project emissions potentially contributing or adding to existing ground ozone levels;
- Impacts will be assessed using the appropriate standard-specific averaging periods and metrics. Canadian Ambient Air Quality Standards (CAAQS)-2020 and CAAQS-2025 will be referred to as appropriate for the timing of each phase;
- Emissions associated with mobile equipment operated during the construction phase will be considered at the screening level (including Polycyclic aromatic hydrocarbon [PAH] and Diesel particulate matter [DPM]), as well as Project-related fugitive PAH emissions from the Project's LNG operation;
- Include an atmospheric dispersion model of the criteria air contaminants in order to estimate the contaminant concentrations present in the entire area that could potentially be affected by atmospheric emissions resulting from various Project-related activities (sources), including the use of heavy machinery during construction, the facility operation, and road, rail, and marine transportation (provide appropriately scaled contour map(s) plotting the predicted emissions). The choice of air quality model must be appropriate for the complexity of sources, terrain, and meteorology;
- Provide details of all air quality model configuration, including meteorology, land use, gridded and sensitive receptors, and chemical and physical transformation settings;
- Assess the potential for emissions from the Project to contribute to acid deposition and exceedances of critical loads for terrestrial and aquatic ecosystems;
- Describe the source characteristics (such as, point emissions, area sources, flaring emissions, and fugitive sources);
- Provide emission rates for all Project and regional sources within the study area, including emission factors (with methodology, uncertainty assessment, and references) and all assumptions and related parameters that would enable calculations to be reproduced;
- Use established methods for estimating emissions from on- road and off-road activities;
- Provide a comparison of predicted air quality concentration against the CAAQS for PM<sub>2.5</sub>, SO<sub>2</sub>, and NO<sub>2</sub>. (e.g., CAAQS-2020 and CAAQS-2025 will be referred to as appropriate for the timing of each phase). Predicted concentrations for other air pollutants relevant to the Project will be compared with appropriate B.C. and Metro Vancouver guidelines. The assessment against CAAQS will be based on the principles of “keeping clean areas clean” and “continuous improvement”, and in the context of air sheds and air zones with the Air Quality Management System;
- Describe participation in National or Regional air emission tracking and reporting programs or provide rationale why participation is not required;
- Provide a description of all methods and practices (such as, control equipment, heat, or gas recovery systems) to be implemented to reduce and control emissions;

- Provide details of the achievement of emission standards for all mobile and stationary engines used in the Project;
- Provide justification for all control efficiencies used to reduce emission rates of sources within the model, including details of all assumptions associated with the related mitigation measures, and their achievability; and
- Assess air quality in scenarios including baseline, project alone, baseline + project, cumulative, and abnormal operating scenarios, as may be applicable.

#### **7.2.5. Effects Management**

The Application must describe effects management approaches for the Air Quality VC, including approaches to avoid, reduce, or otherwise address potential negative effects and enhance positive effects, as appropriate, following information requirements described in subsection 6.5.

##### **7.2.5.1. Assessing Positive Effects**

The Application must describe any positive effects to the Air Quality VC that are anticipated as a result of the Project and its associated effects management approaches, following information requirements described in subsection 6.5.1.

##### **7.2.5.2. Assessing Negative Effects**

The Application must provide a detailed description of the methods used to assess negative effects to the Air Quality VC that are anticipated as a result of the Project and present the results of this assessment, after taking mitigation into account, following information requirements described in subsection 6.5.2.

#### **7.2.6. Characterization of Residual Effects**

The Application must provide a brief characterization of negative residual effects of the Project to the Air Quality VC, including the criteria outlined in subsection 6.6.

#### **7.2.7. Cumulative Effects**

The Application must include an assessment of cumulative effects on air quality following the methods outlined in subsection 6.7 and identify any additional mitigation measures. The Application must describe the likelihood of any adverse residual cumulative effects and provide a summary of the results of the CEA.

#### **7.2.8. Follow-up Strategy**

The Application must describe proposed monitoring and follow-up programs applicable to the Air Quality VC following the approach outlined in subsection 6.8.

### **7.3. Acoustic**

This section of the Application must include the following headings and information. The approach will generally follow the methods outlined in Section 6 and subsection 7.1, and any VC-specific deviations will be described.

The Application must identify which other VCs acoustic is linked to and describe how the results of the assessment will be integrated into those of other VCs.

The Acoustic VC includes the following sub-components:

- Noise; and
- Vibration.

### 7.3.1. Relevant Statutes, Policies and Frameworks

Statutes, policies, and frameworks that may be relevant to the acoustic VC include:

- Municipal bylaws;
- Guidance for Evaluating Human Health Impacts in Environmental Assessment: Noise (Health Canada 2017c);
- B.C. Noise Control Best Practices Guideline (B.C. OGC 2021a);
- Demonstration of compliance with the above guidelines will satisfy noise objectives laid out in B.C.'s *Oil and Gas Activities Act – Liquefied Natural Gas Facility Regulation* 48/2021 (B.C. OGC 2021b) and B.C. OGC's *Liquefied Natural Gas Facility Permit Application and Operations Manual* (B.C. OGC 2022); and
- Federal noise guidance including World Health Organization guidelines.

### 7.3.2. Assessment Boundaries

The Application must define assessment boundaries for the acoustic VC, including spatial, temporal, and administrative and technical boundaries.

### 7.3.3. Existing Conditions

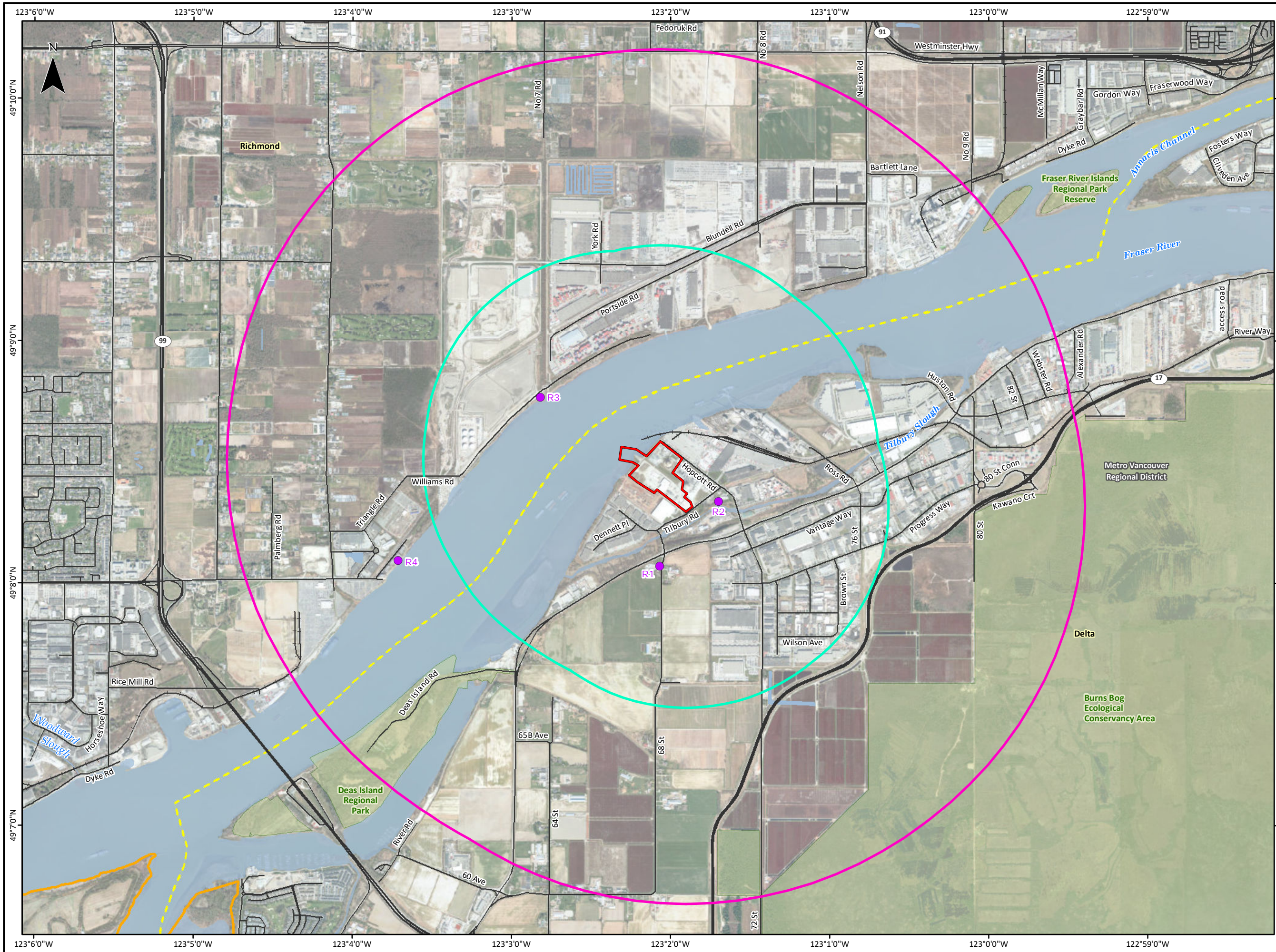
As applicable, the Application must:

- Describe current ambient noise levels at the following four receptor points where access is possible (see Figure 16):
  - Residence located south of the intersection of River Road and 68 Street (Receptor 1)
  - Animal shelter located across from Tilbury Road from the Project Footprint, approximately 150 m southeast of the Project boundary (Receptor 2)
  - Indigenous Village (Northwest Shore of Fraser River) (Receptor 3)
  - Waterstone Pier (14100 Riverport Way, Richmond, B.C.) (Receptor 4)
- The noise measurement results will include baseline ambient noise levels at each location with measurements taken for a minimum span of 24 hours to capture day and night baseline sound levels (Ld, Ln, and Ldn) when conditions are favourable for sound propagation (see Health Canada 2017c for details or an alternate methodology). These noise levels should then be compared to permissible sound levels based on HC (2017) and the B.C. OGC Noise Control Best Practices Guideline for each receptor (whichever is most conservative). World Health Organization guidelines should also be considered. The baseline description must include a summary of all dominant noise sources that contribute to the measurements and a detailed rationale as to why the measurements are considered representative;
- Describe typical sound sources, geographic extent, and temporal variations;
- Describe noise-sensitive receptors in the study area, including any foreseeable future receptors, and locations and distances of receptors from the Project;
- Describe available Indigenous Knowledge or local knowledge related to current noise conditions; and
- Qualitative description of existing vibration, including potential sources at the facility.

The description of existing conditions for the Acoustic VC will explain if and how other past and present projects and activities (existing and historical context) in the study area have affected or are affecting linked VCs, the Indigenous

effects assessments, as well as sections that assess the Section 25 requirements of the 2018 B.C. *EAA* and Section 22 requirements of the 2019 *IAA*, to support the consideration of Project effects and cumulative effects.





June 2022

FIGURE 7.3-1

PROPOSED ACOUSTIC  
RECEPTOR SITES

TILBURY PHASE 2 LNG  
EXPANSION PROJECT

- Proposed Receptor Site
- Proposed Project Footprint
- Acoustic Local Assessment Area
- Acoustic Regional Assessment Area
- Highway
- Road
- Railway
- Municipality
- Park/Protected
- Waterbody
- Wildlife Management

49° 8' 27.4" N 123° 2' 4.8" W  
NTS Grid: 092G03

Scale: 1:27,500



(All Locations Approximate)

Jacobs

Project Number CE778100

NAD1983 UTM Zone 10 North.  
Proposed Project, Local/Regional Assessment Area: Jacobs 2022; Roads: NRCAN 2015; Hydrography: BC Forests, Lands and Natural Resource Operations 2011; Municipal Boundaries, Regional District: BC MFLNRO 2016; Railway: BC Forests, Lands, Natural Resource Operations and Rural Development 2015; Parks: NRCAN 2017; Metro Vancouver 2020; BC MFLNRO 2008; Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

Although there is no reason to believe that there are any errors associated with the data used to generate this product or in the product itself, users of these data are advised that errors in the data may be present.

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### 7.3.4. Potential Effects

The Application must define potential effects to the Acoustic VC, identify interactions between the Project, and the effects and outline indicators that will be used to measure these effects. The assessment must follow the process outlined as follows:

- Describe changes in ambient vibration and sound levels resulting from the Project; and
- Provide a noise assessment for the construction and operation phases, including an overview of any concerns raised by the public.

For projects that result or may result in an increase in sound emissions during any phase of the Project, the assessment will follow the process outlined as follows:

- Quantify the baseline and predicted future sound levels at appropriate distances from any Project-related activities to all nearby human receptor locations and describe the timing, frequency, duration, and character of sound (such as, tonal, impulsive, highly impulsive etc.);
- Describe if low-frequency noise may be an issue from Project-related activities and evaluate if applicable (Health Canada 2017c);
- Describe the locations and characteristics of the most sensitive receptors including human receptors, traditional land use sites, species at risk (also see subsection 7.8 Wildlife and Wildlife Habitat);
- Describe consultation with regulators, stakeholders, community groups, landowners, and Indigenous nations about current noise concerns and future potential impacts on the acoustic environment from Project-related activities. When a community receives information about expected changes in sound levels through a consultation process, and feels that concerns with respect to noise may be addressed and resolved, the incidence of noise-related complaints is frequently reduced (Health Canada 2017c);
- Identify and justify the approach to determine the extent to which sound effects resulting from the Project are adverse and describe any changes in night-time noise levels as a result of the Project;
- Consider expectations of peace and quiet for receptors (such as, Traditional Land Use by Indigenous Peoples) and noise management procedures (such as, processes for resolving and dealing with public complaints); and
- Describe any positive changes.

### 7.3.5. Effects Management

The Application must describe effects management approaches for the Acoustic VC, including approaches to avoid, reduce, or otherwise address potential negative effects and enhance positive effects, as appropriate, following information requirements described in subsection 6.5.

#### 7.3.5.1. Assessing Positive Effects

The Application must describe any positive effects to the Acoustic VC that are anticipated as a result of the Project and its associated effects management approaches, following information requirements described in subsection 6.5.1.

#### 7.3.5.2. Assessing Negative Effects

The Application must provide a detailed description of the methods used to assess negative effects to the Acoustic VC that are anticipated as a result of the Project and present the results of this assessment, after taking mitigation into account, following information requirements described in subsection 6.5.2.

### 7.3.6. Characterization of Residual Effects

The Application must provide a brief characterization of negative residual effects of the Project to the Acoustic VC, including the criteria outlined in subsection 6.6.

### 7.3.7. Cumulative Effects

The Application must include an assessment of cumulative effects on the Acoustic VC following the methods outlined in subsection 6.7 and identify any additional mitigation measures. The Application must describe the likelihood of any adverse residual cumulative effects and provide a summary of the results of the CEA.

### 7.3.8. Follow-up Strategy

The Application must describe proposed monitoring and follow-up programs applicable to the Acoustic VC following the approach outlined in subsection 6.8.

## 7.4. Surface Water

This section of the Application must include the following headings and information. The approach will generally follow the methods outlined in Section 6 and subsection 7.1, and any VC-specific deviations will be described.

The Application must identify which other VCs surface water is linked to and describe how the results of the assessment will be integrated into those of other VCs.

The Surface Water VC includes the following sub-components:

- Surface water quality;
- Surface water quantity (hydrology); and
- Sediment quality.

### 7.4.1. Relevant Statutes, Policies and Frameworks

Statutes, policies, and frameworks that may be relevant to the surface water VC include:

- *Water Sustainability Act*;
- *Environmental Management Act*;
- *Fisheries Act*;
- *Drinking Water Protection Act*;
- B.C. Water Quality Guidelines;
- B.C. Sediment Quality Guidelines;
- Government Actions Regulation under the *Forest and Range Practices Act*;
- Canadian Environmental Quality Guidelines (CCME 2007);
- B.C. Recreational Water Quality Guidelines (2019);
- Recommended Environmental Quality Guidelines for the Protection of Southern Resident Killer Whales and Their Prey (Government of Canada 2020); and

- Guidance for Evaluating Human Health Impacts in Environmental Assessment: Water Quality (Health Canada 2017d).

#### 7.4.2. Assessment Boundaries

The Application must define assessment boundaries for the surface water VC, including spatial, temporal, and administrative and technical boundaries.

#### 7.4.3. Existing Conditions

As applicable, the Application must:

- Describe the regional and local surface water quantity and quality conditions, including a description of the watersheds and sub-watershed, drainage basins, waterbodies, and watercourses (including intermittent streams), flood risk areas and wetlands, in relation to key Project components;
- Describe any baseline surveys completed, including Project-specific surveys, conducted in the surface water local and regional study areas, include a detailed description, where possible, of the methods used and how the results helped to characterize existing conditions (for example, filled an information gap; confirmed or refuted older information);
- Provide surface water quantity and quality data used to develop or inform water balance and water quality models, if required for the assessment;
- Provide regional and local hydrologic and climatologic data (hydrometric data collection is to adhere to standardized practices and procedures - refer to the most recent version of the Manual of British Columbia Hydrometric Standards [RISC 2018]) including temperature, precipitation, and evapotranspiration information based on data from nearby weather stations or from a weather station on-site;
- Describe the local and regional climate projections for the area with the rationale of the climate model chosen and including a description of the current and projected climate effects on hydrology;
- Provide for each waterbody potentially affected by the Project, the total surface area, local bathymetry, maximum and mean depths, and type of substrate (sediments);
- Describe seasonal and inter-annual patterns in streamflow, tidal patterns, and storm surges for surface waterbodies in the Project area;
- Provide local water quality data (water quality data collection is to adhere to standardized practices and procedures - refer to Cavanaugh et al. 1998; B.C. MWLAP 2003; B.C. MELP 1998; B.C. MOE 2010; CCME 2011; CCME 2015); data for water quality will include sampling site selection, monitoring duration and frequency, sampling methodology, and analytical protocol, including field and laboratory quality assurance and quality control measures, methods for evaluation and analysis of baseline data.
- Describe the incorporation of any applicable historical data or existing information. Sample site selection characterization should include sampling locations within the Project area, the local study area, and the regional study area (i.e., all locations that could be potentially affected by the proposed Project). Baseline samples should also be collected from reference locations that are unlikely to be impacted by the Project;
- Describe seasonal and inter-annual trends in water quality parameters including physicochemical parameters (temperature, pH, electrical conductivity, DO, turbidity, TSS, and salinity) and relevant chemical constituents (major and minor ions, trace metals, hydrocarbons, nutrients, and organic compounds, including those of potential concern), where this information is available. The description will include possible changes due to groundwater/surface water interactions;

- Describe water quality relative to B.C. Water Quality Guidelines, Fraser River Water Quality Objectives, and Canadian Environmental Quality Guidelines, and Environmental Quality Guidelines for the Protection of Southern Resident Killer Whales and their Prey;
- Identify all springs and any other potable, as well as recreational, surface water resources within the LAA and RAA and describe their current use, potential for future use, and whether their consumption has cultural importance for Indigenous nations;
- Describe available Indigenous Knowledge or local knowledge related to surface water;
- Describe local sediment quality data including sampling site selection, monitoring duration and frequency, sampling protocol, and analytical protocol, including quality assurance and quality control measures; and
- Describe the historical river use and the potential for contamination of sediments and describe any known or suspected sediment contamination within the study area that could be re-suspended, released or otherwise disturbed as a result of the Project.

The description of existing conditions for the Surface Water VC will explain if and how other past and present projects and activities (existing and historical context) in the study area have affected or are affecting linked VCs, the Indigenous effects assessments, as well as sections that assess the Section 25 requirements of the 2018 B.C. *EAA* and Section 22 requirements of the *IAA*, to support the consideration of Project effects and cumulative effects.

#### 7.4.4. Potential Effects

The Application must define potential effects to surface water, identify interactions between the Project and these effects, and outline indicators that will be used to measure these effects. The assessment must follow the process outlined as follows:

- Provide a Project-specific water use assessment identifying and describing the quantity and quality of water resources potentially affected by the Project, including water withdrawn from local waterbodies used as a supply source, the flow or volume of water available in the waterbodies, and how and where waste waters would be discharged;
- Describe changes to surface water quality due to effluents from the Project including changes to physicochemical parameters (temperature, pH, salinity, DO, turbidity, TSS and electrical conductivity) and chemical constituents (major and minor ions, trace metals, radionuclides, nutrients, organic compounds);
- Describe changes to sediment quality due to project interactions with Fraser River sediments. Include changes to physical parameters (e.g., grain size, total organic carbon [TOC]) and chemical constituents (e.g., major and minor ions, trace metals, radionuclides, nutrients, organic compounds). Sediment sample collection and analyses should use appropriately sensitive detection limits.
- Describe any hydrological or drainage changes that may impact surface water or sediment and how that may affect vegetation and fish habitat or other aquatic receptors; and
- Describe any contaminants of concern potentially associated with the Project that may affect sediment or water.

#### 7.4.5. Effects Management

The Application must describe effects management approaches for the Surface Water VC, including approaches to avoid, reduce, or otherwise address potential negative effects, and enhance positive effects, as appropriate, following information requirements described in subsection 6.5.

#### 7.4.5.1. Assessing Positive Effects

The Application must describe any positive effects to the Surface Water VC that are anticipated as a result of the Project and its associated effects management approaches, following information requirements described in subsection 6.5.1.

#### 7.4.5.2. Assessing Negative Effects

The Application must provide a detailed description of the methods used to assess negative effects to the Surface Water VC that are anticipated as a result of the Project and present the results of this assessment, after taking mitigation into account, following information requirements described in subsection 6.5.2.

#### 7.4.6. Characterization of Residual Effects

The Application must provide a brief characterization of negative residual effects of the Project to the Surface Water VC, including the criteria outlined in subsection 6.6.

#### 7.4.7. Cumulative Effects

The Application must include an assessment of cumulative effects on surface water following the methods outlined in subsection 6.7 and identify any additional mitigation measures. The Application must describe the likelihood of any adverse residual cumulative effects and provide a summary of the results of the CEA.

#### 7.4.8. Follow-up Strategy

The Application must describe proposed monitoring and follow-up programs applicable to the Surface Water VC following the approach outlined in subsection 6.8.

### 7.5. Groundwater

This section of the Application must include the following headings and information. The approach will generally follow the methods outlined in Section 6 and subsection 7.1, and any VC-specific deviations will be described.

The Application must identify which other VCs groundwater is linked to and describe how the results of the assessment will be integrated into those of other VCs.

The Groundwater VC includes the following sub-components:

- Groundwater quality; and
- Groundwater quantity.

#### 7.5.1. Relevant Statutes, Policies and Frameworks

Statutes, policies, and frameworks that may be relevant to the groundwater VC include:

- B.C. Guidelines for Groundwater Modelling to Assess Impacts of Proposed Natural Development Activities;
- *Water Sustainability Act*;
- *Environmental Management Act*;
- *Drinking Water Protection Act*;
- B.C. Contaminated Site Regulation;

- Guidance for Evaluating Human Health Impacts in Environmental Assessment: Drinking and Recreational Water Quality;
- Guidelines for Canadian Drinking Water Quality;
- Government Actions Regulation under the *Forest and Range Practices Act*; and
- Canadian Environmental Quality Guidelines.

### 7.5.2. Assessment Boundaries

The Application must define assessment boundaries for the groundwater VC, including spatial, temporal, and administrative and technical boundaries.

### 7.5.3. Existing Conditions

As applicable, the Application must:

- Describe the regional and local groundwater quantity and quality conditions;
- Describe any Project-specific baseline surveys completed, including a detailed description of the methods used and how the results helped to characterize existing conditions (for example, filled an information gap; confirmed or refuted older information);
- Provide groundwater quantity and quality data used to develop or inform water balance and water quality models, if required for the assessment;
- Describe seasonal trends in groundwater quality, including relevant physicochemical parameters and chemical constituents; illustrate the seasonal and inter-annual variability in baseline groundwater quality; describe possible changes due to groundwater/surface water interactions;
- Describe the groundwater quality baseline characterization program, including sampling site selection, monitoring duration and frequency, sampling protocol, and analytical protocol including quality assurance and quality control measures;
- Describe seasonal trends in groundwater quantity;
- Describe possible groundwater/surface water interactions, including an identification of groundwater-dependent ecosystems, wetlands, discharge, and recharge areas;
- Describe baseline groundwater quality relative to B.C. Contaminated Site Regulation and Canadian Environmental Quality Guidelines;
- Describe available Indigenous Knowledge or local knowledge related to groundwater;
- Identify all domestic, communal, or municipal water wells within the LAA and RAA, including their screened hydrostratigraphic unit and piezometric level; describe their current use, potential for future use, and whether their consumption has any Indigenous nation cultural importance;
- Identify all groundwater monitoring wells within the Project area, including their location, completion details (diameter, screen depth), geological log, screened hydrostratigraphic unit, piezometric level, and monitoring frequency; and
- Provide hydrogeological maps and cross-sections of the study area showing water table elevations, potentiometric contours, interpreted groundwater flow directions, groundwater divides, and areas of recharge and discharge.

The description of existing conditions for the Groundwater VC will explain if and how other past and present projects and activities (existing and historical context) in the study area have affected or are affecting linked VCs, the Indigenous effects assessments, as well as sections that assess the Section 25 requirements of the 2018 B.C. EAA and Section 22 requirements of the IAA, to support the consideration of Project effects and cumulative effects.

#### **7.5.4. Potential Effects**

The Application must define potential effects to groundwater, identify interactions between the Project and these effects, and outline indicators that will be used to measure these effects.

With respect to potential Project effects on the physical hydrogeological system, the assessment must follow the process outlined as follows:

- Describe changes to groundwater quality due to effluents from the Project, including changes to relevant physicochemical parameters and chemical constituents;
- Describe any changes to groundwater quality that could affect surface water quality; and
- Provide an assessment for off-site migration pathways for impacted groundwater.

#### **7.5.5. Effects Management**

The Application must describe effects management approaches for the Groundwater VC, including approaches to avoid, reduce, or otherwise address potential negative effects and enhance positive effects, as appropriate, following information requirements described in subsection 6.5.

##### **7.5.5.1. Assessing Positive Effects**

The Application must describe any positive effects to the Groundwater VC that are anticipated as a result of the Project and its associated effects management approaches, following information requirements described in subsection 6.5.1.

##### **7.5.5.2. Assessing Negative Effects**

The Application must provide a detailed description of the methods used to assess negative effects to the Groundwater VC that are anticipated as a result of the Project and present the results of this assessment, after taking mitigation into account following information requirements described in subsection 6.5.2.

#### **7.5.6. Characterization of Residual Effects**

The Application must provide a brief characterization of negative residual effects of the Project to the Groundwater VC, including the criteria outlined in subsection 6.6.

#### **7.5.7. Cumulative Effects**

The Application must include an assessment of cumulative effects on groundwater following the methods outlined in subsection 6.7 and identify any additional mitigation measures. The Application must describe the likelihood of any adverse residual cumulative effects and provide a summary of the results of the CEA.

#### **7.5.8. Follow-up Strategy**

The Application must describe proposed monitoring and follow-up programs applicable to the Groundwater VC following the approach outlined in subsection 6.8.

## 7.6. Soil

This section of the Application must include the following headings and information. The approach will generally follow the methods outlined in Section 6 and subsection 7.1, and any VC-specific deviations will be described.

The Application must identify which other VCs soil is linked to and describe how the results of the assessment will be integrated into those of other VCs.

The Soil VC includes the following sub-components:

- Terrain;
- Soil quality; and
- Soil quantity.

### 7.6.1. Relevant Statutes, Policies and Frameworks

Statutes, policies, and frameworks that may be relevant to the Soil VC include:

- B.C. Contaminated Sites Regulation under the *Environmental Management Act*;
- Agricultural Land Commission Act and Agricultural Land Reserve Regulations;
- *Forest Range and Practices Act*; and
- Health Canada's Risk Assessment Guidance Parts I through VII.

### 7.6.2. Assessment Boundaries

The Application must include assessment boundaries for the Soil VC, including spatial, temporal, and administrative and technical boundaries.

### 7.6.3. Existing Conditions

The Application must:

- Describe general information about baseline physiography, including landforms, soils, and sediments within the local and regional Project areas, sediment stratigraphy;
- Provide baseline soil map units and data (soil series distribution and extent);
- Identify any areas of ground instability;
- Provide maps depicting soil depth by horizon and soil order within the Project Footprint area to support soil salvage and reclamation efforts;
- Provide baseline maps and data for soil erosion potential;
- Describe the suitability of topsoil and overburden for use in the reclamation of disturbed areas including a desktop study on the acid-generating potential and associated metal leaching potential as part of the assessment of the suitability of the site topsoil and overburden;
- Provide baseline maps and data for land or agricultural capability, as relevant;
- Characterize topsoil and subsoil for suitability as growth media for reclamation;
- Characterize land or agricultural capability, as relevant;



- Describe available Indigenous Knowledge or local knowledge related to soil;
- Describe the historical land use and the potential for contamination of soils and sediments and describe any known or suspected soil contamination with the study area that could be re-suspended, released, or otherwise disturbed as a result of the Project;
- Identify ecosystems that are sensitive or vulnerable to acidification resulting from the deposition of atmospheric contaminants;
- Describe all geological material disturbed through quarrying, trenching, excavating, and rock cuts across the length of the Project;
- Describe the geomorphology, topography, and geotechnical characteristics of areas proposed for construction of major Project components, including the presence and distribution of permafrost, if applicable;
- Describe the potential for soil liquefaction and associated potential permanent ground displacement;
- Identify any areas with potential for acid-generating rock, and predict metal leaching and acid rock drainage, including oxidation of primary sulphides and secondary soluble sulphate minerals;
- Describe baseline concentrations of contaminants of concern (these may include but are not limited to selenium, sulphate, cadmium, nitrate and calcite, heavy metals) within the local, regional, and downstream receiving environments; and
- Provide a geochemical characterization of leaching potential.

The description of existing conditions for the Soil VC will explain if and how other past and present projects and activities (existing and historical context) in the study area have affected or are affecting linked VCs, the Indigenous effects assessments, as well as sections that assess the Section 25 requirements of the 2018 B.C. EAA and Section 22 requirements of the IAA, to support the consideration of Project effects and cumulative effects.

#### 7.6.4. Potential Effects

The Application must define potential effects to soil, identify interactions between the Project and these effects, and outline indicators that will be used to measure these effects. The assessment must follow the process outlined as follows:

- Provide an overall description of changes related to landscape disturbance including Project effects on areas of ground instability;
- Describe any contaminants of concern potentially associated with the Project that may affect soil, sediment, or water; and
- Describe the historical land use, and the potential for contamination of soils and sediments, and potential for loss of soil fertility. Describe any known or suspected soil contamination within the location that could be re-suspended, released or otherwise disturbed as a result of the Project.

#### 7.6.5. Effects Management

The Application must describe effects management approaches for the Soil VC, including approaches to avoid, reduce, or otherwise address potential negative effects and enhance positive effects, as appropriate, following information requirements described in subsection 6.5.

##### 7.6.5.1. Assessing Positive Effects

The Application must describe any positive effects to the Soil VC that are anticipated as a result of the Project and its associated effects management approaches, following information requirements described in subsection 6.5.1.

#### **7.6.5.2. Assessing Negative Effects**

The Application must provide a detailed description of the methods used to assess negative effects to the Soil VC that are anticipated as a result of the Project and present the results of this assessment, after taking mitigation into account, following information requirements described in subsection 6.5.2.

#### **7.6.6. Characterization of Residual Effects**

The Application must provide a brief characterization of negative residual effects of the Project to the Soil VC, including the criteria outlined in subsection 6.6.

#### **7.6.7. Cumulative Effects**

The Application must include an assessment of cumulative effects on soil following the methods outlined in subsection 6.7 and identify any additional mitigation measures. The Application must describe the likelihood of any adverse residual cumulative effects and provide a summary of the results of the CEA.

#### **7.6.8. Follow-up Strategy**

The Application must describe proposed monitoring and follow-up programs applicable to the Soil VC following the approach outlined in subsection 6.8.

### **7.7. Vegetation**

This section of the Application must include the following headings and information. The approach will generally follow the methods outlined in Section 6 and subsection 7.1, and any VC-specific deviations will be described.

The Application must identify which other VCs vegetation is linked to and describe how the results of the assessment will be integrated into those of other VCs.

The Vegetation VC includes the following sub-components:

- Plant Species of Interest;
- Ecological communities of interest, including wetland ecosystems; and
- Riparian Ecosystems.

#### **7.7.1. Relevant Statutes, Policies and Frameworks**

Statutes, policies, and frameworks that may be relevant to the Vegetation VC include:

- *Oil and Gas Activities Act* and associated regulations and guidelines;
- *Forest and Range Practices Act*;
- *Forest Act*;
- Weed Control Act and Regulation;
- Water Sustainability Act and Regulations;
- B.C. Conservation Framework;
- SARA;

- Evaluating the Health of Wetlands: Wetland Management Routine Effectives Evaluation (B.C. Wildlife Federation and British Columbia Ministry of Forests, Lands, Natural Resource Operations and Rural Development B.C. [MFLNRORD] 2021);
- Federal Policy on Wetland Conservation (Government of Canada 1991);
- Canadian Wetland Classification System (National Wetlands Working Group 1997); and
- Wetland Ecological Functions Assessment: An Overview of Approaches (Hanson et al. 2008).

### 7.7.2. Assessment Boundaries

The Application must define assessment boundaries for the Vegetation VC, including spatial, temporal, and administrative and technical boundaries.

### 7.7.3. Existing Conditions

As applicable, the Application must:

- Identify and classify terrestrial ecosystems in the LAA according to the Biogeoclimatic Ecosystem Classification (BEC) system and the applicable field guide(s) to site identification;
- Provide ecosystem mapping used to identify and classify terrestrial ecosystems using appropriate Provincial standards (for example, Terrestrial Ecosystem Mapping or Sensitive Ecosystem Mapping) with appropriate field verification;
- Provide applicable mapping of species at risk critical habitat;
- Describe the local and regional climate projections for the area with rationale of the climate model chosen and include a description of the current and projected climate effects on vegetation;
- Identify the location and abundance of rare plant species, including SARA listed plant species at risk, and ecological communities of conservation concern based on targeted field surveys;
- Identify and classify wetland associations following Wetlands of British Columbia: A Guide to Identification (Mackenzie and Moran 2004) and within the scope of Federal permits, authorizations, or other approvals;
- Identify the location and abundance of rare plant species, based on targeted field surveys as applicable;
- Describe species at risk critical habitat as described in final or draft recovery strategies or action plans;
- Describe the current level of disturbance associated with vegetation, including a description of level of habitat fragmentation;
- Identify the biodiversity metrics, biotic, and abiotic indicators that are used to characterize the baseline vegetation biodiversity and discuss the rationale for their selection;
- Provide data files of mapped features depicting vegetation presence within the study area;
- Describe the natural disturbance regime (such as, fire, floods, droughts);
- Describe the presence and abundance of invasive and non-native species in the Project area;
- Provide information on the use (current and desired future) of local vegetation as a source of country foods (traditional foods), and the presence and abundance of culturally important traditional use species in the Project area, integrating available Indigenous Knowledge and local knowledge as applicable
- Describe available Indigenous Knowledge or local knowledge related to vegetation; and

- For riparian and wetland environments:
  - Provide pre-Project characterization of the shoreline, banks, current and future flood risk areas, wetland catchment boundaries
  - Quantify, delineate, and describe wetlands (such as fens, marshes, peat lands, bogs) within the potentially directly, indirectly and/or cumulatively affected by the Project in the context of:
    - Wetland class, ecological community type, and conservation status
    - Biodiversity
    - Abundance at Local, Regional, and Provincial scales
    - Distribution
    - Current level of disturbance
  - Determine whether these wetlands are within a geographic area of Canada where wetland loss or degradation has reached critical levels, or considered ecologically or socially or economically important to a region;
  - Identify and describe wetland capacities to perform hydrological and water quality functions, provide for wildlife and wildlife habitat or other ecological functions; and
  - Provide a wetland functions assessment in accordance with the guiding principles of Wetland Ecological Functions Assessment: An Overview of Approaches or any subsequent approved guidelines by which to determine the most appropriate functions assessment methodology to use.

The description of existing conditions for the Vegetation VC will explain if and how other past and present projects and activities (existing and historical context) in the study area have affected or are affecting linked VCs, the Indigenous effects assessments, as well as sections that assess the Section 25 requirements of the 2018 B.C. EAA and Section 22 requirements of the IAA, to support the consideration of Project effects and cumulative effects.

#### 7.7.4. Potential Effects

The Application must define potential effects to vegetation, identify interactions between the Project and these effects, and outline indicators that will be used to measure these effects. The assessment must follow the process outlined as follows:

- Provide an overall description of changes related to landscape disturbance including fragmentation of habitats;
- Describe any hydrological or drainage changes that may impact surface water and how that may affect vegetation;
- Describe effects to riparian, wetland, and terrestrial biodiversity considering biodiversity metrics, effects of fragmentation, changes to regional biodiversity; and
- Describe any positive changes (such as, from offsets that result in revegetation, new wetlands).

#### 7.7.5. Effects Management

The Application must describe effects management approaches for the Vegetation VC, including approaches to avoid, reduce, or otherwise address potential negative effects and enhance positive effects, as appropriate, following information requirements described in subsection 6.5. The Application must:

- Describe the vegetation standards and controls to be implemented while constructing and operating the Project. Describe any integrated vegetation management programs, including:
  - The criteria and circumstances for applying chemical, biological, or mechanical control methods;
  - The methods to be used to prevent the introduction and spread of non-native, invasive species; and
  - The selection of plant species to be kept and planted to promote naturally low-growing plant communities.
- Describe any revegetation procedures to be implemented as part of the Project, including:
  - Revegetation techniques and the locations where they would be implemented;
  - Seed mixes to be used, application rates, and location of application;
  - Fertilizers to be used, application rates and locations, and criteria for determining these specifications; and
  - Contingency planting and seeding plans that include a description of species to be replanted, the locations for replanting and criteria for determining these specifications.

#### **7.7.5.1. Assessing Positive Effects**

The Application must describe any positive effects to the Vegetation VC that are anticipated as a result of the Project and its associated effects management approaches, following information requirements described in subsection 6.5.1.

#### **7.7.5.2. Assessing Negative Effects**

The Application must provide a detailed description of the methods used to assess negative effects to the Vegetation VC that are anticipated as a result of the Project and present the results of this assessment, after taking mitigation into account, following information requirements described in subsection 6.5.2.

#### **7.7.6. Characterization of Residual Effects**

The Application must provide a brief characterization of negative residual effects of the Project to the Vegetation VC, including the criteria outlined in subsection 6.6.

#### **7.7.7. Cumulative Effects**

The Application must include an assessment of cumulative effects on vegetation following the methods outlined in subsection 6.7 and identify any additional mitigation measures. The Application must describe the likelihood of any adverse residual cumulative effects and provide a summary of the results of the CEA.

#### **7.7.8. Follow-up Strategy**

The Application must describe proposed monitoring and follow-up programs applicable to the Vegetation VC following the approach outlined in subsection 6.8.

### **7.8. Wildlife and Wildlife Habitat**

This section of the Application must include the following headings and information. The approach will generally follow the methods outlined in Section 6 and subsection 7.1, and any VC-specific deviations will be described.

The Application must identify which other VCs wildlife and wildlife habitat is linked to and describe how the results of the assessment will be integrated into those of other VCs.

The Wildlife and Wildlife Habitat VC includes the following sub-components:

- Birds (resident and migratory forest birds, waterbirds, wading birds, and shorebirds, and species adapted to human infrastructure);
- Mammals (terrestrial; and
- Amphibians and reptiles.
  - Sub-components include species at risk and culturally important Traditional Use species).

### 7.8.1. Relevant Statutes, Policies and Frameworks

Statutes, policies, and frameworks that may be relevant to the Wildlife and Wildlife Habitat VC include:

- *B.C. Wildlife Act*;
- *SARA*;
- *Migratory Birds Convention Act* (MBCA) and regulation;
- B.C. Conservation Framework;
- *Oil and Gas Activities Act* and associated regulations and guidelines;
- Government Actions Regulation under the *Forest and Range Practices Act*;
- A Framework for the Scientific Assessment of Potential Project Impact on Birds. (Hanson et al. 2009);
- Bird Survey Inventories in Canada;
- Breeding Bird Atlases (Birds Canada 2020);
- COSEWIC status reports;
- *Environmental Management Act* (B.C. 2003);
- Guidelines for Raptor Conservation during Urban and Rural Land Development in British Columbia (B.C. MFLNRO 2013);
- Develop with Care 2014: Environmental Guidelines for Urban and Rural Land Development in British Columbia (B.C. MFLNRO 2014b);
- Guidelines for Amphibian and Reptile Conservation during Urban and Rural Land Development in British Columbia (B.C. MFLNRO 2014a);
- Best Management Practices for Amphibians and Reptiles in Urban and Rural Environments in British Columbia (B.C. MWLAP 2004a);
- General Nesting Periods of Migratory Birds (ECCC 2018);
- British Columbia Wildlife Habitat Rating Standards (Version 2.0) (B.C. MELP 1999); and
- Land Management Handbook 25- Field Manual for Describing Terrestrial Ecosystems, 2nd Ed. (B.C. MOFR and B.C. MOE 2010).

### 7.8.2. Assessment Boundaries

The Application must define assessment boundaries for the Wildlife and Wildlife Habitat VC, including spatial, temporal, and administrative and technical boundaries.

### 7.8.3. Existing Conditions

As applicable, the Application must describe the existing conditions for each sub-component of Wildlife and Wildlife Habitat VC in a manner consistent with subsection 6.3 and will include the following:

- Include a current list of wildlife species expected to occur in the largest spatial boundary for the VC;
  - For each species, provide Federal (COSEWIC and SARA) and Provincial (B.C. Conservation Data Centre [B.C. CDC] List and Conservation Framework Rank) conservation status;
  - Describe the occurrence (for example, months; seasons), distribution (for example, extent of Project interaction), population status, life cycle (for example, breeding and foraging), seasonal ranges, migration and movements, general habitat associations/requirements (for example, wetlands), and sensitive time periods, threats, and conservation goals of each VC sub-component;
- Describe any locations within the largest spatial boundaries for the VC that might constitute sensitive habitat areas for wildlife (including residences, seasonal movements, movement corridors) and describe and/or map the extent to which these overlap with the spatial boundaries. Key habitat areas may include:
  - Critical Habitat and/or recovery habitat for wildlife species at risk, that is designated or under consideration, as defined in a recovery strategy, conservation plan, or similar document;
  - Ecological reserves and protected areas, in proximity to the Project location or that could be affected by routine Project operations;
  - Ungulate Winter Ranges, Wildlife Habitat Areas, Wildlife Management Areas, Important Bird Areas (IBA), Bird Conservation Regions (BCR), or established or proposed sanctuaries; or
  - Nearby environmentally significant areas such as; National Parks, Areas of Natural or Scientific Interest, Indigenous Protected and Conserved Areas (IPCA), Migratory Bird Sanctuaries or other priority areas or sanctuaries for birds, National Wildlife Areas, World Biosphere Reserves, offshore Marine Protected Areas, Ecologically and Biologically Marine Areas, or United Nations Educational, Scientific and Cultural Organization (UNESCO) Natural World Heritage Sites.
- Use existing data and literature, as well as surveys, to provide current field data that reflects the natural inter-annual and seasonal variability. Data must be supplemented by surveys;
- Describe and provide any Project-specific baseline surveys completed, including a detailed description of the methods used and how the results helped to characterize existing conditions (for example, filled an information gap; confirmed or refuted older information);
- Survey protocols should optimize detectability and survey effort should provide for comprehensive coverage at the appropriate time of year (such as, survey breeding bird habitat during breeding season);
- Identify the biodiversity metrics, or biotic and abiotic indicators, that are used to characterize the baseline biodiversity for wildlife and discuss the rationale for their selection;
- Describe the location, distribution, condition, and amount of suitable habitat that provides the seasonal and/or annual life requisites for a VC sub-component (including species at risk and migratory birds) that are likely to be directly or indirectly affected by the Project;
- Provide the habitat mapping used to describe baseline conditions, which should be Terrestrial Ecosystem Mapping (RISC 1998, 1999), Predictive Ecosystem Mapping (RISC 2000), or other well supported and appropriate habitat mapping methods (for example, habitat suitability index model using vegetation resources inventory data);

- Describe the location and relative importance of wildlife habitat features within the VC spatial boundaries (for example, breeding colonies, travel corridors, mineral licks, bat hibernacula, protected nests, dens, roosts);
- Describe and quantify the habitat type that may be directly or indirectly affected by the Project, including its: function; location; suitability; structure; diversity; relative use, natural inter-annual and seasonal variability, and; abundance as it existed before Project construction;
- Describe the local and regional climate projections for the area with rationale of the climate model chosen and including a description of the current and projected climate effects on wildlife and suitable habitat and/or migration patterns of each VC sub-component species;
- Provide a list or description of wildlife and wildlife habitat management objectives as defined in Land and Resource Management Plans or Sustainable Resource Management Plans;
- Describe any established conservation thresholds (for example, as defined in a recovery strategy, conservation plan, or similar document) and whether these are exceeded at baseline (for example, linear feature density, core security habitat, critical habitat);
- Describe the levels of disturbance currently affecting wildlife and wildlife habitat, such as habitat fragmentation, and the extent of human access and use (outline any relevant current conditions from B.C. Cumulative Effects Framework reports);
- Reference species of Indigenous cultural use and value; and
- Describe available Indigenous Knowledge or local knowledge related to each VC sub-component species. If applicable, describe the use of wildlife species as a source of county foods (traditional foods) and/or harvesting of fur-bearing species within the VC spatial boundaries and whether consumption has Indigenous cultural importance.

As applicable to birds (forest birds, and water/shore birds/migratory birds), including species at risk and culturally important traditional use species, the Application must:

- Describe the biodiversity of bird species and their habitats that are likely to be found in the largest spatial boundary for the VC, including identification of BCRs and BCR strategies;
- Provide estimates of the abundance and distribution, and information on the life history of migratory and non-migratory birds in the study area. Estimates may be based on existing information, or additional surveys, to provide current data sufficient for reliable estimates;
- Provide a characterization of habitat features found in the Project area that are associated with the presence of migratory and non-migratory bird species that are likely to be affected, based on the best available existing information (such as, land cover types, vegetation, marine elements), including habitat fragmentation;
- Identify areas of concentration of migratory birds, including sites used for migration, staging, breeding, feeding, and resting;
- Describe food webs and trophic linkages to summarize biotic interactions; and
- Provide an estimate of year-round bird use of the area (such as, winter, spring migration, breeding season, fall migration), based on data from existing sources and surveys to provide current field data if required to generate reliable estimates.

The description of existing conditions for the Wildlife and Wildlife Habitat VC will explain if and how other past and present projects and activities (existing and historical context) in the study area have affected or are affecting linked VCs,



the Indigenous effects assessments, as well as sections that assess the Section 25 requirements of the 2018 B.C. *EAA* and Section 22 requirements of the *IAA*, to support the consideration of Project effects and cumulative effects.

#### 7.8.4. Potential Effects

The Application must define potential effects to wildlife and wildlife habitat (including species at risk), identify interactions between the Project and these effects, and outline indicators that will be used to measure these effects.

As applicable, for each sub-component of Wildlife and Wildlife Habitat VC, the assessment must follow the process outlined as follows:

- Describe the potential direct or incidental adverse effects of the Project to wildlife species and their habitat, critical habitat, migratory birds and non-migratory birds, including population level effects that could be caused by all Project activities and, where, appropriate, effects to the extent, availability and presence of biophysical attributes within critical habitat;
- Describe effects to wildlife biodiversity considering biodiversity metrics, effects of fragmentation, changes to regional biodiversity;
- Describe the potential adverse effects of the Project on species noted as important to Indigenous nations and local communities and their habitat that are not currently listed under the *SARA* or Provincial statutes; provide an evaluation of the effect of the Project on wildlife mortality risk and movement patterns;
- Describe changes to key habitat for species important to current use of lands and resources for traditional purposes;
- Identify critical timing windows (such as, denning, rutting, spawning, calving, breeding, roosting), setback distances, or other restrictions related to wildlife species;
- Identify Provincial, Territorial, or Federal permits or authorizations that may be required in relation to the species at risk;
- Describe short- and long-term changes to habitats and food sources of migratory and non-migratory birds (types of cover, ecological unit of the area in terms of quality, quantity, distribution and functions), with a distinction made between these two bird categories, including losses, structural changes and fragmentation of riparian habitat (aquatic grass beds, intertidal marshes), terrestrial environments (such as, limited vegetated areas) and wetlands frequented by birds;
- Describe the changes to the bird-habitat relationships; the change in biodiversity, abundance, and density of the avian community that utilize the various habitat types or ecosystems; and
- Describe the change in mortality risk, including as a result of collision of migratory birds with flaring gas, any Project infrastructure, vessels and vehicles, sensory disturbance, and attraction to lighting; and
- Describe the effects to wildlife health, in particular effects to migratory birds and species at risk if elevated concentrations of bioaccumulative substances are predicted in areas where wildlife could be exposed

#### 7.8.5. Effects Management

The Application must describe effects management approaches for the Wildlife and Wildlife Habitat VC, including approaches to avoid, reduce, or otherwise address potential negative effects and enhance positive effects, as appropriate, following information requirements described in subsection 6.5.

- As applicable, describe all feasible measures that will be taken to avoid or lessen the impact of the Project on wildlife and wildlife habitat, including wildlife species at risk and their critical habitat;
- Identify measures to prevent the harm, harassment, mortality, or injury of migratory birds, their nests and eggs, as defined under the MBCA. The Application will describe measures to and mitigate the risk of engaging in harmful, destructive or disruptive activities, including deposition of harmful substances, in key sensitive periods and locations (such as, migration and nesting) to migratory birds, their nests and eggs, in water or areas frequented by migratory birds;
- Identify measures to avoid the deposit of substances harmful to migratory birds in water or areas frequented by migratory birds;
- Provide an account of how the Project and mitigation measures are consistent with the recovery strategy, action plan, or management plan for wildlife species; and
- Describe all reasonable alternatives to the Project that would avoid the potential effect on species and their habitat, with particular attention to critical habitat.

#### **7.8.5.1. Assessing Positive Effects**

The Application must describe any positive effects to the Wildlife and Wildlife Habitat VC that are anticipated as a result of the Project and its associated effects management approaches, following information requirements described in subsection 6.5.1.

#### **7.8.5.2. Assessing Negative Effects**

The Application must provide a detailed description of the methods used to assess negative effects to the Wildlife and Wildlife Habitat VC that are anticipated as a result of the Project and present the results of this assessment, after taking mitigation into account, following information requirements described in subsection 6.5.2.

#### **7.8.6. Characterization of Residual Effects**

The Application must provide a brief characterization of negative residual effects of the Project to the Wildlife and Wildlife Habitat VC, including the criteria outlined in subsection 6.6. The Application must:

- Describe the residual effects that are likely to result from the Project after avoidance and minimization measures have been applied, including the extent, duration, and magnitude of the effects on:
  - The number of individuals killed, harmed, harassed;
  - The number of residences damaged or destroyed; and
  - Change in movement or habitat use.

#### **7.8.7. Cumulative Effects**

The Application must include an assessment of cumulative effects on wildlife following the methods outlined in [subsection 6.7](#) and identify any additional mitigation measures. The Application must describe the likelihood of any adverse residual cumulative effects and provide a summary of the results of the CEA.

#### **7.8.8. Follow-up Strategy**

The Application must describe proposed monitoring and follow-up programs applicable to the Wildlife and Wildlife Habitat VC following the approach outlined in subsection 6.8.

## 7.9. Fish and Fish Habitat

This section of the Application must include the following headings and information. The approach will generally follow the methods outlined in [Section 6](#) and [Section 7.1](#) and any VC-specific deviations will be described.

The Application must identify which other VCs fish and fish habitat is linked to and describe how the results of the assessment will be integrated into those of other VCs.

The Fish and Fish Habitat VC includes the following sub-components:

- Fish habitat; and
- Fish (freshwater and estuarine fish, including migratory and resident species, marine mammals<sup>2</sup>).

### 7.9.1. Relevant Statutes, Policies and Frameworks

Statutes, policies, and frameworks that may be relevant to the Fish and Fish Habitat VC include:

- *Fisheries Act* and regulations;
- *SARA*;
- *Canadian Environmental Protection Act*, 1999
- *B.C. Environmental Management Act*
- *Water Sustainability Act* and associated regulations;
- *Oil and Gas Activities Act* and associated regulations and guidelines;
- *Riparian Areas Protection Act* and Riparian Areas Protection Regulation;
- Fisheries and Oceans Canada (DFO) Fish and Fish Habitat Protection Policy Statement (DFO 2019);
- DFO policies (such as, The Policy for Applying Measures to Offset Impacts to Fish and Fish Habitat Under the *Fisheries Act* [Government of Canada 2019b]);
- Procedures for Mitigating Effects on Environmental Values (Environmental Mitigation Procedures) (B.C. MOE 2014b)
- DFO Standards and Codes of Practice (DFO 2021);
- Canadian Water Quality Guidelines for the Protection of Aquatic Life (CCME, multiple);
- Canadian Sediment Quality Guidelines for the Protection of Aquatic Life (CCME, multiple);
- Recommended Environmental Quality Guidelines for the Protection of Southern Resident Killer Whales and Their Prey (Government of Canada 2020);
- B.C.'s Approved Water Quality Guidelines (B.C. ENV 2021a);
- B.C.'s Working Water (and Sediment) Quality Guidelines (B.C. ENV 2021b);
- B.C. Ambient Water Quality Guidelines for Turbidity, Suspended and Benthic Sediments;
- Burrard Inlet Environmental Action Program and Fraser River Estuary Management Program Atlas (FREMP and BIEAP 2016); and

<sup>2</sup> Marine mammals are considered fish under the *Fisheries Act*.

- B.C.'s Standards and Best Practices for Instream Works (B.C. MWLAP 2004).

### 7.9.2. Assessment Boundaries

The Application must define assessment boundaries for the Fish and Fish Habitat VC, including spatial, temporal, and administrative and technical boundaries.

### 7.9.3. Existing Conditions

As applicable, the Application must:

- Provide maps of the watershed(s) in the vicinity of the Project showing key watercourses and waterbodies;
- Describe and provide maps of relevant fish habitats, including characteristics that directly and indirectly support fish in carrying out their life processes, including critical habitat or sensitive habitat areas. Habitat information includes water depths (bathymetry) and the littoral, sublittoral, bathyal, epipelagic, mesopelagic, bathypelagic zones;
- Describe habitat by mesohabitat (such as, pool, riffle, run), including the length of the section, width of the channel from the high-water mark (bankfull width), water depths, type of substrate (sediments), aquatic and riparian vegetation, and photos;
- Provide a characterization of fish habitat features that may demonstrate the presence of fish species in terms of appropriate habitats—water quality and quantity characteristics, sediment type characteristics, seafloor terrain features, prey, shelter, refuge, feeding, spawning habitats, nursery habitats, rearing habitats, overwintering, migration routes, and the sensitive times for these activities;
- Describe the historical occurrence, distribution, and conservation status of fish and/or aquatic species in the watercourses and waterbodies;
- Provide a description of the biodiversity within the freshwater and marine environment, including trophic state, periphyton, phytoplankton, zooplankton, fish, and the interactions and relative importance of each species with the identified food chains;
- Identify the biodiversity metrics, biotic and abiotic indicators that are used to characterize the baseline biodiversity for fish, and/or aquatic species, including the rationale for their selection;
- Describe and provide any baseline surveys, including Project-specific surveys, conducted in the local and regional study areas for water quality, including the methods used (for example, location of sampling stations, catch methods, date of catches, species, catch-per-unit effort) and how the results helped to characterize existing conditions (for example, the source of data available, filled an information gap; confirmed or refuted older information);
- Describe the fish species present and an estimate of the abundance of those species;
- Describe the location of important fish habitats and their relative importance;
- Describe habitat use, including describing primary and secondary productivity in affected water bodies with a characterization of biotic interaction processes (such as, food web and trophic levels, nutrient cycling), season variability, ranges, and sensitive periods;
- Identify natural obstacles (such as, falls, beaver dams) or existing structures (such as, water crossings) that hinder the free passage of fish;
- Describe the local and regional climate projections for the area with rationale of the climate model chosen and including a description of the current and projected climate effects on fish, habitat and habitat use;



- Provide information on the use of fish and/or aquatic species as country foods and reference to species of Indigenous cultural use and value; and
- Describe available Indigenous Knowledge or local knowledge related to fish and fish habitat.

As applicable to marine fish and fish habitat, the Application must:

- Provide maps of the marine environment in the vicinity of the Project showing proximity to marine protected areas and important watercourses supporting fisheries; and
- Describe any existing, designated or proposed special marine areas such as: marine refuges, marine conservation areas, species at risk critical habitat (as defined in a recovery strategy, conservation plan, or similar document), ecological reserves and marine protected areas, in proximity to the Project location or that could be affected by routine Project operations.

The description of existing conditions for the Fish and Fish Habitat VC will explain if and how other past and present projects and activities (existing and historical context) in the study area have affected or are affecting linked VCs, the Indigenous effects assessments, as well as sections that assess the Section 25 requirements of the 2018 B.C. *EAA* and Section 22 requirements of the *IAA*, to support the consideration of Project effects and cumulative effects.

#### 7.9.4. Potential Effects

The Application must define potential effects to fish and fish habitat (marine and freshwater), identify interactions between the Project and these effects, and outline indicators that will be used to measure these effects.

The assessment of Fish and Fish Habitat must follow the process outlined as follows:

- Describe any direct, or incidental predicted positive and/or adverse effects to fish and fish habitat as defined in subsection 2(1) of the *Fisheries Act*, including the calculations of any potential habitat loss (temporary or permanent) including spawning grounds, nursery, rearing, food supply, and migration areas, or death of fish. The assessment must include a consideration of:
  - The geomorphological changes and their effects to hydrodynamic conditions and fish habitats (such as, modification of substrates, dynamic imbalance, silting of spawning beds);
  - The modifications of hydrological, hydrometric, and oceanographic conditions on fish habitat, critical habitat for aquatic species at risk, and on the fish species' life cycle activities (such as, reproduction, fry-rearing, movements);
  - Potential effects to riparian areas that could affect aquatic biological resources and productivity taking into account any anticipated modifications to fish habitat (such as, structure, cover);
  - Changes to water quality both at the discharge point and in the receiving environment;
  - Describe effects to fish biodiversity considering identified biodiversity metrics;
  - Any potential imbalances in the food web and trophic levels in relation to baseline conditions;
  - Effects to the primary and secondary productivity of water bodies and how Project-related effects may affect fish food sources; and
  - Potential direct and incidental effects on fish behaviour, distribution, abundance, migration patterns.
- Describe potential losses of individuals and relationship to population density and the resiliency of a population.
- Describe the effects of changes to the aquatic environment on fish and their habitat, including:

- The anticipated changes in the composition and characteristics of the populations of various fish species and Provincially or Federally listed aquatic species at risk;
- Describe any modifications in migration, local movements (such as, upstream and downstream migration, and lateral movements), or stranding of fish, following the construction, operation, or closure of works (such as, physical, chemical, and hydraulic barriers); and
- Describe any modifications and use of habitats, including the ability to access the habitat.
- Include a discussion of how Project construction timing correlates to key fisheries windows for freshwater and anadromous/catadromous species, and any potential effects resulting from overlapping periods;
- Describe potential effects from impingement and entrainment of fish and other aquatic biota through water withdrawal and discharge associated with hydrostatic testing;
- Describe any need for a *Fisheries Act* authorization and/or a SARA permit and describe any consideration of DFO guidance documents, including the potential for habitat offsetting;
- Describe effects from changes in light level;
- Describe any positive changes, such as habitat creation;
- Describe changes to the marine ecosystem, including effects to biodiversity;
- Describe any Project effects to other marine organisms, including but not limited to, sea turtles, benthic organisms, shellfish, coral;
- Describe any changes to the marine resources and habitat, including marine plants, benthic and detached algae, marine flowering plants, brown algae, red algae, green algae, and phytoplankton; and
- Describe changes in marine animals' behaviour, including migration, feeding, and breeding patterns due to an increase in noise, destruction of habitat.

If in water works are necessary, the Application must:

- Include a discussion of how vibration and/or underwater noise caused by Project activities (such as, installation of piles, removal of piles) may affect fish habitat and behaviour (such as, spawning or migrations), including marine mammals;
- Describe the potential for direct effects from contaminants on fish and also bioaccumulation of contaminants (such as, selenium, mercury) in fish adjacent to and downstream of the Project. If interactions between legacy contaminants and proposed Project activities are identified and if subsequent changes in water and sediment quality are anticipated, an assessment of potential direct effects to fish and fish habitat (e.g., bioaccumulation effects on fish health and fish-eating marine mammal health, including southern resident killer whales) will be conducted.
- Describe the anticipated changes in the composition and characteristics of the populations of fish, following modifications to the aquatic environment, including but not limited to:
  - Disruption of life stages or habitat with regard to their productivity, life cycles, migration, or local movements, including a consideration of feeding, calving, nursing, overwintering, resting;
  - Disruption of feeding activities of fish;
  - Distribution and abundance of fish;
  - Contaminant levels in harvested species and their prey;

- Consideration of a change in behaviour or change in risk of injury or mortality of echolocation or communication calls; and
- A consideration of a change in behaviour, displacement, access to habitat, habitat structure, species composition, ecosystem structure and function and habitat quality; and marine animal health and condition.

### 7.9.5. Effects Management

The Application must describe effects management approaches for the Fish and Fish Habitat VC, including approaches to avoid, reduce, or otherwise address potential negative effects and enhance positive effects, as appropriate, following information requirements described in subsection 6.5.

- Identify measures to prevent and mitigate the risk of engaging in harmful, destructive, or disruptive activities in key sensitive periods and locations (such as, spawning and migration) to fish, and in water or areas frequented by fish; and
- Identify measures to avoid the deposit of substances harmful to fish and in water or areas frequented by fish.

#### 7.9.5.1. Assessing Positive Effects

The Application must describe any positive effects to the Fish and Fish Habitat VC that are anticipated as a result of the Project and its associated effects management approaches, following information requirements described in subsection 6.5.1.

#### 7.9.5.2. Assessing Negative Effects

The Application must provide a detailed description of the methods used to assess negative effects to the Fish and Fish Habitat VC that are anticipated as a result of the Project and present the results of this assessment, after taking mitigation into account, following information requirements described in subsection 6.5.2.

### 7.9.6. Characterization of Residual Effects

The Application must provide a brief characterization of negative residual effects of the Project to the Fish and Fish Habitat VC, including the criteria outlined in subsection 6.6.

### 7.9.7. Cumulative Effects

The Application must include an assessment of cumulative effects on fish and fish habitat following the methods outlined in subsection 6.7 and identify any additional mitigation measures. The Application must describe the likelihood of any adverse residual cumulative effects and provide a summary of the results of the CEA.

### 7.9.8. Follow-up Strategy

The Application must describe proposed monitoring and follow-up programs applicable to the Fish and Fish Habitat VC following the approach outlined in subsection 6.8.

## 7.10. Employment and Economy

This section of the Application must include the following headings and information. The approach will generally follow the methods outlined in Section 6, and any VC-specific deviations will be described.

The Application must identify which other VCs which employment and economy are linked to and describe how the results of the assessment will be integrated into those of other VCs.

The Employment and Economy VC includes the following sub-components:

- Employment, and
- Economy.

### 7.10.1. Relevant Statutes, Policies and Frameworks

Statutes, policies, and frameworks that may be relevant to the Employment and Economy VC include national, provincial, regional, and/or local economic development plans, strategies, and action plans.

Relevant statutes, policies, and frameworks include:

- Regional Growth Strategies;
- *Coasting Trade Act* (Government of Canada 1992);
- *Labour Mobility Act* (Government of B.C. 2009);
- *Trade, Investment and Labour Mobility Agreement Implementation Act* (Government of B.C. 2008);
- *New West Partnership Trade Agreement Implementation Act* (Government of B.C. 2016);
- *Industry Training Authority Act* (Government of B.C. 2012);
- The Canadian Free Trade Agreement (Internal Trade Secretariat 2017);
- Community Charter (Government of B.C. 2003a);
- Resources from the First Nations Information Governance Centre;
- Human and Community Well-being (Version 1.0): Guidelines for Assessing Social, Economic, Cultural and Health Effects in Environmental Assessments in British Columbia (B.C. EAO 2020a);
- *Local Government Grants Act* (Government of B.C.1996a); and
- *Local Government Act* (Government of B.C.1996b).

### 7.10.2. Assessment Boundaries

The Application must define assessment boundaries for the Employment and Economy VC, including spatial, temporal, administrative, and technical boundaries.

### 7.10.3. Existing Conditions

As applicable, the Application must:

- Describe the local and regional economy, including the main economic activities in the LAA and RAA;
- Describe the demographic features of the local and regional population, including educational levels as well as any prevalent economic concerns and economic aspirations of residents, families, and workers in the study areas;
- Provide an overview of the economic well-being in the study areas and impacted communities;
- Describe trends in labour force and employment statistics for residents in the LAA and RAA, including the availability of skilled and unskilled workers, existing working conditions, existing employment rates, full-time and part-time employment, and training;



- Describe wage and income information, including average salary range;
- Characterize the economic conditions to support the assessment of Project-related effects, including the differences of experiences by diverse subgroups, including Indigenous nation populations, as appropriate (such as, women, youth, Elders);
- Describe local labour market conditions for other underrepresented groups such as, groups defined by gender identity and expression, sexual orientation, age, mental and physical ability, race, religion, immigrant status, language, and socio-economic status;
- Describe tax revenues and government expenditures;
- Discuss trends and factors influencing cost of living (for example, housing, food, goods and services);
- Describe and quantify, where possible, land and resource valuations;
- Describe available Indigenous or Knowledge or local knowledge related to employment and economy;
- Describe trends in general skills and training for residents in the LAA and RAA; and
- Describe businesses or industry relevant to the Project in the LAA and RAA, including availability of businesses that may provide supplies and services required for the Project.

As applicable, information will be disaggregated and analyzed to support the analysis of potential effects to distinct human populations, including GBA+. Where the available information presents a limitation on the ability to describe differential effects to distinct populations, this limitation will be articulated, and its implications for analysis described.

The Application must describe how local and Indigenous Knowledge was used to collect baseline data.

The description of existing conditions for the Employment and Economy VC will explain if and how other past and present projects and activities (existing and historical context) in the study area have affected or are affecting linked VCs, the Indigenous effects assessments, as well as sections that assess the Section 25 requirements of the 2018 B.C. *EAA* and Section 22 requirements of the *IAA*, to support the consideration of Project effects and cumulative effects.

#### 7.10.4. Potential Effects

The Application must define potential effects to employment and economy, identify interactions between the Project and these effects, and outline indicators that will be used to measure these effects.

The Application must apply GBA+ and document how potential effects of changes to economic conditions could be different for particular subgroups, including Indigenous nation populations, or other community- relevant subgroups (such as, women, youth, Elders, visible minorities, immigrants, and persons with disabilities). Where gaps in available data present limitations on the possibility of understanding differential effects, the Application must specify these limitations and their possible implications to understanding of effects.

The Application must describe potential positive and adverse effects to the local, regional, and provincial economies, including whether and how local benefits can be maximized.

- The assessment must follow the process outlined below:
- An estimate of the anticipated levels of local and regional economic participation in the project in comparison to the total project requirements (such as, number of workers and total value of local and regional contracts). The proponent will also:
  - Provide the information in the context of existing employment rates and economic well-being in the community;

- Include a discussion of skilled versus non-skilled labour requirements of the project including availability and capacity of local workforce and potential for worker shortages in certain sectors within the community;
  - If applicable, describe plans and rationale for hiring short- term workers to address labour and skill shortages;
  - Describe plans to encourage local employment, procurement and contracting opportunities and discuss the potential ability of local businesses to compete for project-related contracting; and
  - Describe any training or education programs or scholarships the proponent is supporting to enhance employment opportunities for local residents.
- An estimate of direct, indirect, and induced economic impact of the project including income and/or wages, and the distribution of that income and/or wages, resulting from project expenditures during construction operation, and decommissioning;
- The sources and methodologies used for developing multipliers and estimates;
  - Where a generic multiplier may not accurately reflect the specific situation of the project being assessed, evidence will be provided of specific economic activity that will result from the project going ahead;
- A description of potential effects of changes to economic conditions in affected communities including, but not limited to:
  - Commercial, recreational, and sport fishing;
  - Commercial, recreation, and tourism; and
  - Agriculture, including predicted effects to livestock health and productivity.
- Predicted effects of the project on the quality and quantity of ground or surface water used for commercial uses;
- An evaluation of the net economic benefits to the economy as a whole, including:
  - An estimate of impacts on Local, Regional, Provincial, Federal government, or Indigenous nation revenues from tax levies, royalties, revenue sharing, and other means during construction and operation, including a quantitative assessment of these impacts;
  - A discussion of how the project would impact gross domestic product at the Federal and Provincial levels;
- Please describe the methodologies and assumptions used to estimate the economic benefits of the project including:
  - Relevant sources of uncertainty in the estimate; and
  - Sensitivity analysis of how changes in capital and operating costs or other relevant sources of uncertainty may affect the estimated economic benefits;
- Describe any environmental, social, and governance risks to project economics;;
- Describe any financial liability and compensation in place, as required by regulation or by the proponent's commitments, in relation to decommissioning or abandonment;
- An estimate of potential effects of the project on the traditional economy, including the potential loss of traditional economies and jobs;
- An analysis of potential changes to property values;
- An analysis of potential changes to the cost of living as a result of the project; and

- An estimate of project-related spending during each phase of the project (construction, operation, decommissioning) and a geographic breakdown (Canada, B.C., local area).

#### **7.10.5. Effects Management**

The Application must describe effects management approaches for the Employment and Economy VC, including approaches to avoid, reduce, or otherwise address potential negative effects and enhance positive effects, as appropriate, following information requirements described in subsection 6.5.

##### **7.10.5.1. Assessing Positive Effects**

The Application must describe any positive effects to the Employment and Economy VC that are anticipated as a result of the Project and its associated effects management approaches, following information requirements described in subsection 6.5.1.

##### **7.10.5.2. Assessing Negative Effects**

The Application must provide a detailed description of the methods used to assess negative effects to the Employment and Economy VC that are anticipated as a result of the Project and present the results of this assessment, after taking mitigation into account, following information requirements described in subsection 6.5.2.

#### **7.10.6. Characterization of Residual Effects**

The Application must provide a brief characterization of negative residual effects of the Project to the Employment and Economy VC, including the criteria outlined in subsection 6.6.

#### **7.10.7. Cumulative Effects**

The Application must include an assessment of cumulative effects on employment and economy following the methods outlined in subsection 6.7 and identify any additional mitigation measures. The Application must describe the likelihood of any adverse residual cumulative effects and provide a summary of the results of the CEA.

#### **7.10.8. Follow-up Strategy**

The Application must describe proposed monitoring and follow-up programs applicable to Employment and Economy VC following the approach outlined in subsection 6.8. Monitoring and evaluation approaches will be informed by the GBA+ analysis.

### **7.11. Land and Resource Use**

This section of the Application must include the following headings and information. The approach will generally follow the methods outlined in Section 6, and any VC-specific deviations will be described.

The Application must identify which other VCs land and resource use is linked to and describe how the results of the assessment will be integrated into those of other VCs.

The Land and Resource Use VC includes the following sub-components:

- Private property;
- Tenured land and resource use;
- Public land and resource use;
- Parks and protected areas;
- Visual quality; and
- Navigation.

#### 7.11.1. Relevant Statutes, Policies and Frameworks

Statutes, policies, and frameworks that may be relevant to the Land and Resource Use VC include:

- Crown land policies;
- B.C. OGC LNG Facility Regulation (B.C. OGC 2021b);
- B.C. OGC LNG Permit Application and Operations Manual (B.C. OGC 2022);
- Land use plans;
- Official Community Plans;
- Regional Growth Strategies;
- Municipal, Regional District and Indigenous bylaws;
- Streamside Protection and Enhancement, Development Permit Area Bylaw No. 6349, 2005;
- Resources from the First Nations Information Governance Centre;
- Noxious Weeds Destruction Bylaw No. 141;
- Soil Deposit and Removal Bylaw No. 7221, 2014;
- Visual Landscape Inventory, Procedures and Standards Manual (B.C. MFLNRO 1997)
- B.C. OGC Light Control Best Practices Guideline Version 1.0 (B.C. OGC 2021c)
- Guide on the Limitation of Effects on Obtrusive Light from Outdoor Lighting Installations (CIE 2017)
- Delta Tree Protection and Regulation Bylaw No. 7969, 2021
- Waterways Protection Bylaw No. 1615, 1969;
- *Agricultural Land Commission Act*;
- *Water Sustainability Act*;
- *Land Act*;
- *Oil and Gas Activities Act* and Associated Guidelines and Regulations;
- *Environmental Management Act*;
- *Canadian Navigable Waters Act*;
- *Parks Act*;
- *Wildlife Act*;



- *Fisheries Act; and*
- *Local Government Act.*

### 7.11.2. Assessment Boundaries

The Application must define assessment boundaries for the Land and Resource Use VC, including spatial, temporal, and administrative and technical boundaries.

### 7.11.3. Existing Conditions

As applicable, the Application must:

- Describe any Regional Land and Resource Management Plans and Official Community Plans, as well as associated zoning or land use policies;
- Describe any Indigenous land use or resource plans;
- Identify subgroups within the study areas and their vulnerability to land and resource use effects (for example, Indigenous Peoples, farmers);
- Describe the current use of land in the study areas, including:
  - Private property and residential areas;
  - Industrial land uses (for example, mining, oil and gas);
  - Other tenured, permitted or licensed land uses, as appropriate;
  - Consumptive land uses (for example, hunting, fishing, vegetation gathering);
  - Outdoor recreation areas (for example, boating);
  - Agricultural land uses;
  - Tourism;
  - Parks and protected areas; and
  - Institutional use.
- Describe current conditions with respect to air quality, surface water quality and its implications for recreational uses, noise, vibration, odour or night-time light nuisance for occupants or resource users;
- Describe the local and regional climate projections for the area with rationale of the climate model chosen and including a description of the current and projected climate effects on land and resource use;
- Describe the visual landscape from key use areas; and
- Describe available Indigenous Knowledge or local knowledge related to land and resource use.

Information will be sufficiently disaggregated and analyzed to support the analysis of potential effects to distinct human populations, including GBA+.

The description of existing conditions for the Land and Resources VC will explain if and how other past and present projects and activities (existing and historical context) in the study area have affected or are affecting linked VCs, the Indigenous effects assessments, as well as sections that assess the Section 25 requirements of the 2018 B.C. *EAA* and Section 22 requirements of the *IAA*, to support the consideration of Project effects and cumulative effects.

#### 7.11.4. Potential Effects

The Application must define potential effects to land and resource use, identify interactions between the Project and these effects, and outline indicators that will be used to measure these effects.

The Application must apply GBA+ and document how potential effects of changes to land and resource use could be different for particular subgroups, including Indigenous Peoples or other community relevant subgroups (such as, women, youth, Elders).

Where gaps in available data present limitations on the possibility of understanding differential effects, the Application must specify these limitations and their possible implications to understanding of effects.

The assessment must follow the process outlined as follows:

- Describe the potential Project interactions with local and regional land use and resource activities, including adverse and positive effects to:
  - Transportation and utilities corridors;
  - Residential land use;
  - Commercial outfitters;
  - Tenured permitted or licensed marine uses (such as commercial fishing and moorage)
  - Agriculture, including predicted effects to livestock health and productivity; and
  - Other land uses.
- Describe predicted effects to recreation (such as, boating, fishing, estuary ecotours, kayak lessons, hiking, biking, dog walking, wildlife viewing, aesthetic enjoyment) by the community and Indigenous nations, including effects to:
  - Access to the resources;
  - Quantity and quality of the resources; and
  - Overall experience when undertaking recreational activities, including noise effects.
- Describe changes to views as a result of the Project; and
- Identify predicted effects of the Project on the quality and quantity of ground or surface water and implications for recreational uses.

#### 7.11.5. Effects Management

The Application must describe effects management approaches for the Land and Resource Use VC, including approaches to avoid, reduce, or otherwise address potential negative effects and enhance positive effects, as appropriate, following information requirements described in subsection 6.5.

##### 7.11.5.1. Assessing Positive Effects

The Application must describe any positive effects to the Land and Resource Use VC that are anticipated as a result of the Project and its associated effects management approaches, following information requirements described in subsection 6.5.1.

### 7.11.5.2. Assessing Negative Effects

The Application must provide a detailed description of the methods used to assess negative effects to the Land and Resource Use VC that are anticipated as a result of the Project and present the results of this assessment, after taking mitigation into account, following information requirements described in subsection 6.5.2.

### 7.11.6. Characterization of Residual Effects

The Application must provide a brief characterization of negative residual effects of the Project to the Land and Resource Use VC, including the criteria outlined in subsection 6.6.

### 7.11.7. Cumulative Effects

The Application must include an assessment of cumulative effects on land and resource use following the methods outlined in subsection 6.7 and identify any additional mitigation measures. The Application must describe the likelihood of any adverse residual cumulative effects and provide a summary of the results of the CEA.

### 7.11.8. Follow-up Strategy

The Application must describe proposed monitoring and follow-up programs applicable to the Land and Resource Use VC following the approach outlined in subsection 6.8. Monitoring and evaluation approaches will be informed by the GBA+ analysis.

## 7.12. Infrastructure and Services

This section of the Application must include the following headings and information. The approach will generally follow the methods outlined in Section 6, and any VC-specific deviations will be described.

The Application must identify which other VCs infrastructure and services are linked to and describe how the results of the assessment will be integrated into those of other VCs.

The Infrastructure and Services VC includes the following sub-components:

- Community infrastructure and services; and
- Transportation infrastructure.

### 7.12.1. Relevant Statutes, Policies and Frameworks

Statutes, policies, and frameworks that may be relevant to the Infrastructure and Services VC include:

- Official Community Plans;
- Regional Growth Strategies;
- Municipal and Regional District bylaws;
- Streamside Protection and Enhancement, Development Permit Area Bylaw No. 6349, 2005;
- Noxious Weeds Destruction Bylaw No. 141;
- Soil Deposit and Removal Bylaw No. 7221, 2014;
- Tree Protection and Regulation Bylaw No. 7415, 2015;

- Human and Community Well-being (Version 1.0): Guidelines for Assessing Social, Economic, Cultural and Health Effects in Environmental Assessments in British Columbia (B.C. EAO 2020a).
- Waterways Protection Bylaw No. 1615, 1969;
- Service provider management/development plans and strategies;
- Metro Vancouver Proximal Work Requirements;
- Resources from the First Nations Information Governance Centre;
- Community Charter;
- *Transportation Act*;
- *Local Government Act*;
- *Canada Health Act*;
- *Fire Services Act*;
- *Health Act*;
- *School Act*;
- *Teachers Act*;
- *First Nations Education Act*;
- *Community Care and Assisted Living Act*;
- *Emergency Health Services Act*; and
- *Police Act*.

### 7.12.2. Assessment Boundaries

The Application must define assessment boundaries for the Infrastructure and Services VC, including spatial, temporal, and administrative and technical boundaries.

### 7.12.3. Existing Conditions

As applicable, the Application must:

- Describe relevant population demographics and trends (for example, birth rates, death rates, health status, community safety and crime, education, and training);
- Describe the capacity and availability of the following:
  - Health care and social services and facilities;
  - Emergency response services;
  - Domestic water infrastructure and supply;
  - Sewage and water treatment facilities;
  - Solid waste collection services, landfills and recycling facilities;
  - Community recreational infrastructure, facilities and services;
  - Educational services and facilities including day care; and
  - Any other relevant public or private sector infrastructure and services;



- Describe the potential hydrotesting scenarios and required resources in the Application, including the potential to source water from the municipal potable water system;
- Describe the capacity of local and regional transportation infrastructure;
- Describe the capacity of housing and accommodation; and
- Describe available Indigenous Knowledge or local knowledge related to infrastructure and services.

As applicable, information will be disaggregated and analyzed to support the analysis of potential effects to distinct human populations, as per GBA+. Where available information presents a limitation on the ability to describe differential effects to distinct populations, this limitation will be articulated, and its implications for analysis described.

The description of existing conditions for the Infrastructure and Services VC will explain if and how other past and present projects and activities (existing and historical context) in the study area have affected or are affecting linked VCs, the Indigenous effects assessments, as well as sections that assess the Section 25 requirements of the 2018 B.C. *EAA* and Section 22 requirements of the *IAA*, to support the consideration of Project effects and cumulative effects.

#### 7.12.4. Potential Effects

The Application must define potential effects to infrastructure and services, identify interactions between the Project and these effects, and outline indicators that will be used to measure these effects.

The Application must apply GBA+ and document how potential effects of changes to Infrastructure and Services could be different for particular subgroups, including Indigenous Peoples or other community relevant subgroups (such as, women, youth, Elders).

Where gaps in available data present limitations on the possibility of understanding differential effects, the Application must specify these limitations and their possible implications to understanding of effects.

The assessment must follow the process outlined as follows:

- Describe the predicted effects to the local and regional infrastructure facilities and services in the study area, including adverse and positive effects to:
  - Accommodation/lodging (such as, affordability, availability, appropriateness), including camping facilities;
  - Recreation and parks;
  - Waste disposal;
  - Road infrastructure and traffic safety;
  - Dikes;
  - Police and firefighting;
  - Educational services, facilities and day care;
  - Ambulance and health care services; and
  - Project Utilities.
- Describe any need for government and/or proponent expenditures for new or expanded services, facilities, or infrastructure, arising out of Project-related effects.

### 7.12.5. Effects Management

The Application must describe effects management approaches for the Infrastructure and Services VC, including approaches to avoid, reduce, or otherwise address potential negative effects and enhance positive effects, as appropriate, following information requirements described in subsection 6.5.

#### 7.12.5.1. Assessing Positive Effects

The Application must describe any positive effects to the Infrastructure and Services VC that are anticipated as a result of the Project and its associated effects management approaches, following information requirements described in subsection 6.5.1.

#### 7.12.5.2. Assessing Negative Effects

The Application must provide a detailed description of the methods used to assess negative effects to the Infrastructure and Services VC that are anticipated as a result of the Project and present the results of this assessment, after taking mitigation into account, following information requirements described in subsection 6.5.2.

### 7.12.6. Characterization of Residual Effects

The Application must provide a brief characterization of negative residual effects of the Project to the Infrastructure and Services VC, including the criteria outlined in subsection 6.6.

### 7.12.7. Cumulative Effects

The Application will include an assessment of cumulative effects on marine resources following the methods outlined in [Section 6.9](#) and identify any additional mitigation measures. The Application will describe the likelihood of any adverse residual cumulative effects and provide a summary of the results of the cumulative effects assessment.

### 7.12.8. Follow-up Strategy

The Application must describe proposed monitoring and follow-up programs applicable to the Infrastructure and Services VC following the approach outlined in [subsection 6.8](#). Monitoring and evaluation approaches will be informed by the GBA+ analysis.

## 7.13. Archaeological and Heritage Resources

This section of the Application must include the following headings and information. The approach will generally follow the methods outlined in [Section 6](#), and any VC-specific deviations will be described.

The Application must identify which other VCs archaeological and heritage resources are linked to and describe how the results of the assessment will be integrated into those of other VCs.

### 7.13.1. Relevant Statutes, Policies and Frameworks

Statutes, policies, and frameworks that may be relevant to the Archaeological and Heritage Resources VC include:

- *Heritage Conservation Act*;
- Fossil Management Framework;
- Fossil Management Policy including Fossil Impact Assessment Guidelines;
- *Oil and Gas Activities Act* and Associated Guidelines and Regulations;
- The Corporation of Delta Official Community Plan;
- The Delta Heritage Strategy (2017); and
- Applicable Indigenous Heritage Policies.

### 7.13.2. Assessment Boundaries

The Application must define assessment boundaries for the Archaeological and Heritage Resources VC, including spatial, temporal, and administrative and technical boundaries.

### 7.13.3. Existing Conditions

As applicable, the Application must:

- Describe and provide archaeological studies completed in the local and regional study area and any sites found within the Project Footprint;
- Describe the archaeological potential in the Project area;
- Describe any heritage or historical sites identified in the Project area;
- Describe the paleontological potential in the Project area;
- Describe available Indigenous Knowledge or local knowledge related to archaeological and heritage resources; and
- Describe the natural and cultural heritage, and provide maps for buildings, sites, and things of historical, archaeological, paleontological, or architectural value in the assessment. Natural and cultural heritage, as well as structures, sites, or things of importance to communities, includes land, natural features, and resources considered to be heritage, or a structure, site, or thing that is distinguished by its archaeological, paleontological, historical, or architectural value.

Information must be sufficiently disaggregated and analysed to support the analysis of potential effects to distinct human populations.

The physical and cultural heritage as well as any structure, site or thing that is of historical, archaeological, paleontological, or architectural value for each Indigenous nation is described in Section 11.

The description of existing conditions for the Archaeological and Heritage Resources VC will explain if and how other past and present projects and activities (existing and historical context) in the study area have affected or are affecting linked VCs, the Indigenous effects assessments, as well as sections that assess the Section 25 requirements of the 2018 B.C. *EAA* and Section 22 requirements of the *IAA*, to support the consideration of Project effects and cumulative effects.

#### 7.13.4. Potential Effects

The Application must define potential effects to archaeology and heritage resources, identify interactions between the Project and these effects, and outline indicators that will be used to measure these effects.

The assessment must follow the process outlined as follows:

- Assess potential effects to changes to structures, sites or things of historical, archaeological, paleontological, or architectural value and associated effects on other social and economic conditions.

#### 7.13.5. Effects Management

The Application must describe effects management approaches for the Archaeological and Heritage Resources VC, including approaches to avoid, reduce, or otherwise address potential negative effects and enhance positive effects, as appropriate, following information requirements described in subsection 6.5.

##### 7.13.5.1. Assessing Positive Effects

The Application must describe any positive effects to the Archaeological and Heritage Resources VC that are anticipated as a result of the Project and its associated effects management approaches, following information requirements described in subsection 6.5.1.

##### 7.13.5.2. Assessing Negative Effects

The Application must provide a detailed description of the methods used to assess negative effects to the Archaeological and Heritage Resources VC that are anticipated as a result of the Project and present the results of this assessment, after taking mitigation into account, following information requirements described in subsection 6.5.2.

#### 7.13.6. Characterization of Residual Effects

The Application must provide a brief characterization of negative residual effects of the Project to the Archaeological and Heritage Resources VC, including the criteria outlined in subsection 6.6.

#### 7.13.7. Cumulative Effects

The Application must include an assessment of cumulative effects on archaeology and heritage resources following the methods outlined in [subsection 6.7](#) and identify any additional mitigation measures. The Application must describe the likelihood of any adverse residual cumulative effects and provide a summary of the results of the CEA.

#### 7.13.8. Follow-up Strategy

The Application must describe proposed monitoring and follow-up programs applicable to the Archaeological and Heritage Resources VC following the approach outlined in [subsection 6.8](#).

### 7.14. Culture

This section of the Application must include the following headings and information. The approach will generally follow the methods outlined in [Section 6](#), and any VC-specific deviations will be described.

The Application must identify which other VCs culture is linked to and describe how the results of the assessment will be integrated into those of other VCs.



### 7.14.1. Relevant Statutes, Policies and Frameworks

Statutes, policies, and frameworks that may be relevant to the Culture VC include Indigenous and non-Indigenous community and land use plans that overlap the Project Footprint. Where plans are presented specific to one Indigenous nation, they will be included in the chapters specific to that Indigenous nation.

Relevant Non-Indigenous community and/or land use plans that overlap the Project Footprint include the Corporation of Delta Official Community Plan.

### 7.14.2. Assessment Boundaries

The Application must define assessment boundaries for the Culture VC, including spatial, temporal, and administrative and technical boundaries.

### 7.14.3. Existing Conditions

As applicable, the Application must:

- Describe the cultural history and identity in the Project area including governance and stewardship systems, customs, beliefs, and values;
- Describe language and intergenerational knowledge transfer;
- Describe the socio-cultural environment, identifying Indigenous nations and predominant cultural communities; demographic characteristics and major socio-cultural concerns of the population;
- Describe community and cultural cohesion, including factors such as community or neighbourhood engagement, support, and social networks and other social activities; and
- Describe available Indigenous Knowledge or local knowledge related to culture.

Information will be disaggregated and analyzed to support the analysis of potential effects to distinct human populations, including GBA+. Where available information presents a limitation on the ability to describe differential effects to distinct populations, this limitation will be articulated, and its implications for analysis described.

The description of existing conditions for the Culture VC will explain if and how other past and present projects and activities (existing and historical context) in the study area have affected or are affecting linked VCs, the Indigenous effects assessments, as well as sections that assess the Section 25 requirements of the 2018 B.C. *EAA* and Section 22 requirements of the *IAA*, to support the consideration of Project effects and cumulative effects.

### 7.14.4. Potential Effects

The Application must define potential effects to culture, identify interactions between the Project and these effects, and outline indicators that will be used to measure these effects.

The Application must apply GBA+ and document how potential effects of changes to culture could be different for particular subgroups, including Indigenous Peoples or other community relevant subgroups (such as, women, youth, Elders).

Where gaps in available data present limitations on the possibility of understanding differential effects, the Application must specify these limitations and their possible implications to understanding of effects.

### 7.14.5. Effects Management

The Application must describe effects management approaches for the Culture VC, including approaches to avoid, reduce, or otherwise address potential negative effects and enhance positive effects, as appropriate, following information requirements described in subsection 6.5.

#### 7.14.5.1. Assessing Positive Effects

The Application must describe any positive effects to the Culture VC that are anticipated as a result of the Project and its associated effects management approaches, following information requirements described in subsection 6.5.1.

#### 7.14.5.2. Assessing Negative Effects

The Application must provide a detailed description of the methods used to assess negative effects to the Culture VC that are anticipated as a result of the Project and present the results of this assessment, after taking mitigation into account, following information requirements described in subsection 6.5.2.

### 7.14.6. Characterization of Residual Effects

The Application must provide a brief characterization of negative residual effects of the Project to the Culture VC, including the criteria outlined in subsection 6.6.

### 7.14.7. Cumulative Effects

The Application must include an assessment of cumulative effects on culture following the methods outlined in [subsection 6.7](#) and identify any additional mitigation measures. The Application must describe the likelihood of any adverse residual cumulative effects and provide a summary of the results of the CEA.

### 7.14.8. Follow-up Strategy

The Application must describe proposed monitoring and follow-up programs applicable to the Culture VC following the approach outlined in [subsection 6.8](#). Monitoring and evaluation approaches will be informed by the GBA+ analysis.

## 7.15. Human Health

This section of the Application must include the following headings and information. The approach will generally follow the methods outlined in [Section 6](#), and any VC-specific deviations will be described.

The Application must identify which other VCs human health is linked to and describe how the results of the assessment will be integrated into those of other VCs.

### 7.15.1. Relevant Statutes, Policies and Frameworks

Statutes, policies, and frameworks that may be relevant to the human health VC include:

- *Public Health Act* and Regulations;
- B.C. Contaminated Sites Regulation under the *Environmental Management Act*;
- *Drinking Water Protection Act*;
- Health Canada Guidance for Evaluating Human Health Impacts in Environmental Assessments: Human Health Risk Assessment (Health Canada 2019a);
- Ministry of Health Guidance document for Prospective Human Health Risk Assessment;

- Federal Contaminated Site Risk Assessment in Canada, Guidance on Human Health Preliminary Quantitative Risk Assessment. Version 3.0 (Health Canada 2021a)
- Federal Contaminated Site Risk Assessment in Canada, Toxicological Reference Values. Version 3.0 (Health Canada 2021b)
- Guidance for Evaluating Human Health Impacts in Environmental Assessment: Drinking and Recreational Water Quality (Health Canada 2016b)
- Version 1.0. (B.C. Ministry of Health 2021)
- Relevant statutes, policies and frameworks for the Air Quality, Surface Water, Groundwater, and Noise VCs;
- Indigenous Services Canada Community Well-Being Index (2019);
- Guidance for Evaluating Human Health Impacts in Environmental Assessment: Air Quality (Health Canada 2017b);
- Guidance for Evaluating Human Health Impacts in Environmental Assessment: Noise (Health Canada 2017c);
- Guidance for Evaluating Human Health Impacts in Environmental Assessments: Country Foods (Health Canada 2018);
- Guidance for Evaluating Human Health Impacts in Environmental Assessment: Water Quality (Health Canada 2016c);
- Social determinants of health and health inequalities (Public Health Agency of Canada, 2020);
- *Canada Health Act*;
- Guidelines for Canadian Drinking Water Quality – Summary Table (Health Canada 2020);
- Guidance available from the B.C. First Nations Health Authority (such as, First Nations Health Human Resources Tripartite Strategic Approach);
- Guidelines for Canadian Recreational Water Quality (Health Canada, 2012);
- Federal Contaminated Site Risk Assessment in Canada: Guidance on Human Health Preliminary Quantitative Risk Assessment, Version 3.0 (Health Canada 2021a);
- Useful Information for Environmental Assessments (Health Canada 2010a);
- Federal Contaminated Site Risk Assessment in Canada: Toxicological Reference Values, Version 3 (Health Canada 2021b);
- Federal Contaminated Site Risk Assessment in Canada: Supplemental guidance on Human Health Risk Assessment for Country Foods (Health Canada, 2010b);
- Federal Contaminated Site Risk Assessment in Canada: Supplemental guidance on Human Health risk assessment of Air Quality, Version 2.0 (Health Canada, 2017b);
- Federal Contaminated Site Risk Assessment in Canada: Overview of Health Canada Guidance Documents Related to Human Health Risk Assessments of Federal Contaminated Sites (Health Canada, 2021c); and
- Federal Contaminated Site Risk Assessment in Canada. Part V. Guidance on Human Health Detailed Quantitative Risk Assessment for Chemicals (Health Canada 2010c).

### 7.15.2. Assessment Boundaries

The Application must define assessment boundaries for the Human Health VC, including spatial, temporal, and administrative and technical boundaries.

### 7.15.3. Existing Conditions

As applicable, the Application must:

- Describe baseline conditions for VCs that are linked to human health, which may include:
  - Air quality;
  - Acoustic;
  - Surface Water;
  - Groundwater;
  - Soil;
  - Vegetation;
  - Wildlife and Wildlife Habitat;
  - Fish and Fish Habitat;
  - Employment and Economy;
  - Infrastructure and Services;
  - Land and Resource Use;
  - Culture;
  - Malfunctions and Accidents;
  - Summary of Human and Community Well-being; and
  - Indigenous Interests
- Where appropriate and where data exists, baseline conditions will be considered in the problem formulation stage of the Human Health Risk Assessment to support the selection of Objectives and Chemicals of Potential Concerns, or pathways that require assessment. The Problem Formulation will also consider stakeholder consultation.
- Describe which country foods<sup>3</sup> (traditional foods) are consumed by which Indigenous nations, how much, how frequently, and where these country foods (traditional foods) are harvested;
- Describe baseline conditions for quality and quantity of country foods, including baseline contaminant concentrations in the tissues of country foods (traditional foods) consumed by Indigenous nations and local communities. Information can be pulled from relevant VCs, such as:
  - Vegetation;
  - Wildlife and Wildlife Habitat; and
  - Fish and Fish Habitat.
- Describe the consumption of country foods (traditional foods) outside of the commercial food chain, including food that is trapped, fished, hunted, harvested or grown for subsistence, medicinal purposes, or has Indigenous nation cultural value;

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<sup>3</sup> As per draft provincial guidance dated August 2020, country foods are defined as all foods sourced outside of commercial food systems, also referred to as environmental livelihoods. This includes any food that is trapped, fished, hunted, harvested, or grown for subsistence or medicinal purposes outside of the commercial food chain.



- Describe baseline conditions for personal health practices (for example, substance use, diet, exercise);
- Describe available Indigenous Knowledge or local knowledge related to human health, and how local and Indigenous Knowledge from relevant populations was used in establishing health baseline conditions, including input from diverse subgroups;
  - Identify traditional foods, including species and parts of species (such as, tissues) that are consumed and used, harvesting locations, relevant consumption information including consumption patterns (that is, serving sizes, frequency of consumption, if traditional foods are consumed seasonally or year-round) and how the data were collected (such as, site-specific consumption surveys, community-led assessments on impacts to Treaty and harvesting rights). If site-specific consumption data are not provided, then provide an acceptable rationale why the surrogate consumption data provided is appropriate.
- Apply a social determinants of health approach, recognizing that health is more than the absence of disease but includes broad factors that support well-being;
- Describe baseline health conditions and existing health inequalities using available disaggregated data for diverse groups and subgroups and their differential access to resources, opportunities, and services within the community where that data is available. Where gaps in the data exist, or when potential disproportionate effects on subgroups are not anticipated, the Application will discuss impacts to health for the broader population. Where available information presents a limitation on the ability to describe differential effects to distinct populations, articulate this limitation and describe its implications for analysis; and
- Provided information on interested parties, those likely to be affected directly and indirectly by the Project, with a consideration of those in the community who are considered particularly vulnerable to changes brought about by the Project.

To understand the community and Indigenous context and baseline health profile, the Application must, to the extent feasible:

- Describe any context-specific definitions of health and well-being, including from the perspective of the relevant Indigenous nation cultures;
- Describe relevant community and Indigenous nation history or context, including historical effects on health;
- Relevant social determinants of health will be selected to reflect the setting and circumstances of the affected communities and will be selected from the suite of determinants commonly recommended by the Public Health Agency of Canada, including the following (Public Health Agency of Canada 2020):
  - Physical environments;
  - Employment and working conditions;
  - Social environments;
  - Health services;
  - Income and social status;
  - Education and literacy; and
  - Gender.
- Describe and characterize the existing health services and programs, including health care provider capacity; and
- Describe drinking water sources, both surface and/or groundwater (permanent, seasonal, periodic, or temporary), including approximate wellhead capture zones.

The Application must describe how local and Indigenous Knowledge was used to collect baseline data. The Application must disaggregate the source of local knowledge by representation by sex, age, and other community relevant identity factors, as per GBA+ to the extent feasible.

The description of existing conditions for the Human Health VC will explain if and how other past and present projects and activities (existing and historical context) in the study area have affected or are affecting linked VCs, the Indigenous effects assessments, as well as sections that assess the Section 25 requirements of the 2018 B.C. *EAA* and Section 22 requirements of the *IAA*, to support the consideration of Project effects and cumulative effects.

#### 7.15.4. Potential Effects

The Application must define potential effects to human health, identify interactions between the Project and these effects, and outline indicators that will be used to measure these effects.

The Application must apply GBA+ and document how potential effects of changes to human health conditions could be different for particular subgroups, including Indigenous Peoples or other community relevant subgroups (such as, women, youth and Elders). Where gaps in available data present limitations on the possibility of understanding differential effects, the Application must specify these limitations and their possible implications to understanding of effects.

As applicable, the assessment must follow the processes:

- Describe how Indigenous Knowledge and local knowledge was used to assess human health effects;
- Illustrate linkages and effect pathways, so that when a change in one domain is predicted, there is an understanding of what other effects or consequences may be felt across the other domains;
- Describe interconnections between human health and other VCs and interactions between effects;
- Describe baseline health conditions and existing health inequalities using available disaggregated data for diverse groups and subgroups and their differential access to resources, opportunities, and services within the community where that data is available. Where gaps in the data exist, or when potential disproportionate effects on subgroups are not anticipated, the Application will discuss impacts to health for the broader population;
- Provide an assessment of adverse and positive effects on human health or changes to the baseline community health profile based on changes to the environment, health, social and economic conditions, focusing on effects to health outcomes, risks, or social determinants of health in consideration of, but not limited to, potential changes in:
  - Air quality;
  - Noise and vibration;
  - Current and future availability (including contamination/quality) of country foods (traditional foods);
    - Evaluate information related to fish and game, plant tissue, and produce harvested as a source of exposure and potential impacts to Indigenous nations health using human health risk assessment methods.
  - Current and future availability (including contamination/quality) of water for drinking, recreational, and cultural uses.
- Conduct a problem formulation exercise including a preliminary model prediction (i.e., a conceptual site model or conceptual exposure model) to determine whether a Human Health Risk Assessment is required. The proponent

must provide a rationale/explanation if problem formulation/preliminary model predictions indicate that a Human Health Risk Assessment is not warranted;

- If a Human Health Risk Assessment is conducted, the assessment must examine all exposure pathways for contaminants of concern to adequately characterize potential biophysical risks to human health. A multimedia Human Health Risk Assessment may need to be considered and conducted for any contaminant of potential concern (COPC) with an identified risk and multiple pathways. The Human Health Risk Assessment should evaluate potential health effects related to secondary exposure through the deposition of air contaminants into soil or plants and consider secondary sources through country foods and food chain effects when air contaminant uptake into plants occurs from foliar deposition or uptake from soil;
- If a determination is made to exclude a COPC or an exposure pathway for a COPC from the assessment, an acceptable rationale will be provided to support the determination;
- Describe and quantify potential effects to mental and social well-being (such as, stress, depression, anxiety, sense of safety);
- Identify human receptors that may be potentially affected by Project-related activities. Describe and quantify the Project-related activities, contaminants of potential concern, nuisances and environmental, social and economic changes that could potentially cause adverse health effects to the identified human receptors;
- Describe and quantify specific thresholds and document if different thresholds were considered for vulnerable populations, including by sex and age; provide rationale and justification if specific thresholds not used;
- In situations where Project-related air, water or noise emissions meet Local, Provincial, Territorial, or Federal guidelines, and yet public concerns were raised regarding human health effects, provide a description of the public concerns and how they were or are to be addressed;
- Identify predicted effects of the Project on the quality and quantity of ground or surface water used for domestic uses including drinking, recreational, and cultural uses;
- If the human health Problem Formulation identifies DPM and associated PAH constituents as a COPC, the human health risk assessment will address Project-related issues. If an assessment is required, it will be quantitative if suitable data is available. If there is insufficient data, provide a qualitative analysis of the carcinogenic risk from diesel exhaust from the Project.
- Identify predicted visual or other aesthetic effects of the Project on existing land use in the study area;
- Document potential effects on access to health services, including increased use of health and related health-social services in relevant communities;
- For food security: describe effects to use and consumption of country foods (traditional foods) and health impacts of this effect; and
- Describe any positive health effects (such as, resulting from improved economic opportunities, increased access to services).

#### 7.15.5. Effects Management

The Application must describe effects management approaches for the Human Health VC, including approaches to avoid, reduce, or otherwise address potential negative effects and enhance positive effects, as appropriate, following information requirements described in subsection 6.5.

#### 7.15.5.1. Assessing Positive Effects

The Application must describe any positive effects to the Human Health VC that are anticipated as a result of the Project and its associated effects management approaches, following information requirements described in subsection 6.5.1.

#### 7.15.5.2. Assessing Negative Effects

The Application must provide a detailed description of the methods used to assess negative effects to the Human Health VC that are anticipated as a result of the Project and present the results of this assessment, after taking mitigation into account, following information requirements described in subsection 6.5.2.

#### 7.15.6. Characterization of Residual Effects

The Application must provide a brief characterization of negative residual effects of the Project to the Human Health VC, including the criteria outlined in subsection 6.6.

#### 7.15.7. Cumulative Effects

The Application must include an assessment of cumulative effects on human health following the methods outlined in subsection 6.7 and identify any additional mitigation measures. The Application must describe the likelihood of any adverse residual cumulative effects and provide a summary of the results of the CEA.

#### 7.15.8. Follow-up Strategy

The Application must describe proposed monitoring and follow-up programs applicable to the Human Health VC following the approach outlined in subsection 6.8. Monitoring and evaluation approaches will be informed by the GBA+ analysis.

## 8.0 CLIMATE CHANGE AND GREENHOUSE GAS EMISSIONS

The Application must provide the results of an assessment of the GHG emissions of the Project conducted in accordance with Section 8 of these AIR. The assessment must be conducted in accordance with the Strategic Assessment of Climate Change (SACC) (ECCC 2020). More details are provided in the draft Technical Guide Related to the SACC: Guidance on quantification of net GHG emissions, impact on carbon sinks, mitigation measures, net-zero plan, and upstream GHG assessment (hereafter 'the draft Technical Guide') published in August 2021.

This section provides information on baseline and future conditions of the meteorological environment; GHG emissions; impact of the Project on carbon sinks; impact of the Project on Provincial and Federal emissions reduction efforts and on global GHG emissions; mitigation measures; and climate change resilience, following guidelines outlined in the SACC (ECCC 2020).

The Application must use available Environment and Climate Change Canada (ECCC) technical guidance in providing the information required in this section. Should ECCC guidance not be available prior to the Process Planning Phase, alternative applicable guidance from other jurisdictions will be used.

For meteorological environment, the Application must:

- Describe the local and regional climate, including historical records of relevant meteorological information (such as, total precipitation [rain and snow]);
- Provide mean, maximum and minimum temperatures;
- Provide typical wind speed and direction;



- Identify the potential for extreme weather events such as, wind, precipitation, and temperature extremes;
- Provide hourly meteorological data (wind speed and direction, air temperature, net radiation, turbulence, and precipitation data) from a minimum of 1 year to support dispersion modelling that captures the normal variability of meteorological conditions;
- Provide pan evaporation measurements or estimates of monthly (or daily) evapotranspiration; and
- Describe the local and regional climate projections for the area with the rationale of the climate model chosen.

## 8.1. Effects on Climate Change

As per the SACC Section 5.5.1 (GHG Emissions) the Application must provide:

- A description of each of the Project's main sources of GHG emissions and their estimated annual GHG emissions by GHG type over the lifetime of the Project;
- Net GHG emissions by year for each phase of the Project based on the Project's additional throughput or capacity, not maximum additional throughput or capacity (i.e., this should be quantified for only the additional emissions associated with the Phase 2 expansion; refer to Section 3.1.1 of the SACC), including an uncertainty assessment;
- Each term of Equation 1 (direct GHG emissions, acquired energy GHG emissions, carbon dioxide captured and stored, avoided domestic GHG emissions and offset credits, if applicable), per year for each phase of the Project (refer to Section 3.1.1 of the SACC);
- Emission intensity for each year of the operation phase of the Project (refer to Section 3.1.2 of the SACC), including an uncertainty assessment;
- The quantity and a description of the "units produced" per Equation 2 for each year of the operation phase of the Project (refer to Section 3.1.2 of the SACC);
- Methodology, data, emission factors, and assumptions used to quantify each element of the net GHG emissions (refer to Section 3.1.1 of the SACC);
- A discussion on the development of emissions estimates and uncertainty assessment (refer to Section 3.3 of the SACC), including the source and level of uncertainty or a range of values or different possible emissions scenarios; and
- A description of large sources of GHG emissions that may be the consequence of accidents or malfunctions (such as, emergency flaring).

In the provision of the information above, the Application will follow specific guidance provided in the Technical Guide Related to the SACC, particularly in the methodology Section 2.1.

To the extent that reliable information, such as regulatory and contractual requirements and commitments is available, consideration will also be given to fuel source and characteristics which can include but is not limited to the percentage of renewable natural gas, hydrogen, and carbon dioxide and liquid natural gas contents.

## 8.2. Impact of the Project on Carbon Sinks

The calculation of a Project's net GHG emissions accounts for emissions resulting any change in the use of land at the Project Footprint. The proponent will also provide a qualitative description of the Project's positive or negative impact on carbon sinks because the Project may improve or reduce the ability of an ecosystem, land area, or ocean to absorb

carbon dioxide from the atmosphere. An impact on a carbon sink implies the interruption or alteration of a natural continual process that removes carbon from the atmosphere.

This information will include:

- Description of Project activities in relation to significant landscape features such as topography, hydrology, and regionally dominant ecosystems;
- Land areas directly impacted by the Project, by ecosystem type (forests, cropland, grassland, wetlands, built-up land) over the course of the Project lifetime; this includes the areas of restored or reclaimed ecosystem(s);
- Initial carbon stocks in living biomass, dead biomass, and soils (by ecosystem type) on land directly impacted by the Project over the course of the Project lifetime;
- Fate of carbon stocks on directly impacted land, by ecosystem type: immediate emissions, delayed emissions (timeframe), storage (such as, in wood products); and
- Anticipated land cover on the impacted land areas after the Project is in place.

The proponent will also quantify the project's impact on carbon sinks following ECCC technical guidance from Section 4 of the draft Technical Guide on the quantification of losses or gains to carbon sinks in providing the information required above.

### 8.3. Impact of the Project on Emissions Reduction Efforts and on Global Greenhouse Gas Emissions

The Project proponent must provide:

- An explanation of how the Project may impact Canada's efforts to reduce GHG emissions. For example, the Project might result in GHG emission reductions in Canada (such as, by replacing higher emitting activities);
- A discussion on how the Project could impact Global GHG emissions. A description of how the Project might displace emissions internationally. The Application will describe how the Project is likely to result in global emission reductions;
- A description of the potential effects of the Project on the Province being able to meet its targets under the *Greenhouse Gas Reduction Targets Act*, now the *Climate Change Accountability Act*; and
- A description of other relevant emissions targets, including those of a Local, Federal, or Indigenous nation government and how the Project would affect those targets (including Metro Vancouver targets).

### 8.4. Greenhouse Gas Mitigation Measures

The Application must:

- Describe the mitigation measures to be taken to reduce GHG emissions throughout all phases of the Project. These could include a description of the selected low-emitting technologies, the use of low carbon or renewable fuel, electrification or carbon capture and storage; and
- Describe practices that will be taken to mitigate the Project's GHG emissions, such as anti-idling practices for mobile equipment, leak detection and repair systems, or continuous monitoring systems.

The Application must describe:

- A BAT/Best Environmental Practices (BEP) determination to identify feasible technologies with the potential to reduce the Project's GHG emissions (refer to Section 5.1.4.1 of the SACC);
- A description of any additional mitigation measures that will be taken to mitigate remaining GHG emissions, if applicable;
- A description of any offset credits that have been or will be obtained to mitigate remaining GHG emissions, if applicable. The proponent may also provide information on their intent to acquire or generate international offset credits, which will comply with the criteria in Section 3.1.1 of the SACC. Offset credits will be considered as the last option in terms of GHG mitigation measures;
- Information on any offset credits that have been or will be obtained, including the offset regime that issued the credits, Project type, Project start date, and vintage year;
- A description of measures taken to mitigate the Project's impact on carbon sinks, including measures to restore disturbed carbon sinks, if applicable;
- Subject to the public availability of information, a comparison of the Project's projected GHG emission intensity to the emission intensity of similar high-performing, energy-efficient LNG developments in Canada and internationally. If applicable, the comparison will explain why the emission intensity of the Project is different; and
- A list of relevant GHG legislation, policies, or regulations that will apply to the Project.

#### 8.4.1. Best Available Technologies/Best Environmental Practices Assessment

The Application must describe BAT and BEP standards that may be applicable to the proposed LNG storage tank and the liquefaction facilities and whether those facilities would meet those standards.

The BAT/BEP Determination process is outlined in Table 4 as per the SACC. Detailed requirements are described in Section 3.2 of the draft Technical Guide. The BAT/BET that will support the Application will refer to BAT/BEP Determination process as applicable.

Table 4. Best Available Technologies/Best Environmental Practices Determination

Process Step	Information Requirement
Listing	Proponent establishes a list of all technologies and practices, including emerging technologies, based on the identified sources of emissions for the Project during its lifetime.
Technical Feasibility Assessment	Proponent eliminates options determined to not be technically feasible, providing rationale. Proponent describes the timing and circumstances in which the eliminated options could become technically feasible.
GHG Reduction Potential Assessment	Proponent ranks remaining options based on GHG reduction potential.
Economic Feasibility Assessment and Additional Considerations	Proponent eliminates options determined to not be economically feasible, providing rationale. Proponent describes the timing and circumstances in which the eliminated options could become economically feasible. Proponent outlines additional environmental, social, or other considerations, providing rationale.
Selection of BAT/BEP	Proponent describes the technologies and practices to be used in the Project and provides a justification for selecting any technology or practice that is not a BAT/BEP. Proponent provides information on how the options eliminated because of technical and economical unfeasibility could be phased in during the Project lifetime, including how they could be considered during periods of Project maintenance and facility upgrades.
Review	IAAC or the relevant lifecycle regulator, with support from expert Federal authorities, reviews the BAT/BEP Determination and requests additional information if required.

The conclusion of the BAT/BEP Determination will be provided in the Application following the requirements described in Section 3.5 of the draft Technical Guide

ECCC has published a technical guide to help Project proponents conduct their BAT/BEP Determination by providing additional information on technical, economic, social, and environmental considerations.

#### 8.4.2. Climate Change Resilience

Per the Federal SACC (October 2020) Section 5.1.5 “Climate Change Resilience” provides guidance as to how the proponent will provide descriptions of:

- The scope and timescale of the climate change resilience assessment (CCRA) and of the methods used to identify, evaluate, and manage the climate risks that could affect the Project itself and thereby the surrounding environment.
  - The CCRA is being undertaken to meet the objectives outlined in the Infrastructure Canada (INFC) Climate Lens General Guidance v.1.1 (INFC 2018). The CCRA process being utilized is aligned with industry standard practices for CCRA's, including the PIEVC Protocol, ISO 31000 (Risk Management), and ISO 1409x series of standards on Adaption to Climate Change. The CCRA will evaluate the current and future climate impacts on the Project's proposed assets and identify the potential risks associated with future changes in climate and extreme weather events. In particular, the assessment will:
    - Define the boundary conditions of the assessment;
    - Collect relevant asset-related data and establish the impact criteria that will be used to assess the vulnerability (severity of impacts) of the assets to the climate (criteria based on the Enterprise Risk Management system);
    - Establish the time horizon of the assessment (current and future climate);
    - Define the hazards and establish current and future climate probabilities for the parameters selected (utilizing the Intergovernmental Panel on Climate Change (IPCC) GHG emission scenarios (Concentration Pathways RCP 8.5) for future climate projections);
    - Conduct an assessment of the risks (Risk = [Exposure x Vulnerability (severity of Impact)] x [Probability of occurrence of climate event]); and
    - Prioritize risks (based on enterprise risk management criteria) and identify risk treatment solutions.
- The Project's vulnerabilities to climate change both in mean conditions and extremes over the full Project lifetime from Project construction to decommissioning. This could include the effects of extreme weather events on Project infrastructure, effects to water quality and availability, and so forth.

Further, the SACC also provides a guidance related to the use of INFC's Climate Lens approach to conducting climate change resiliency assessments. The proponent will follow the Climate Lens methodology in addressing the resiliency of the Project to climate change.

#### 8.4.3. Plan to Achieve Net-Zero Emissions by 2050

The Project has a lifetime beyond 2050, therefore the proponent will provide a credible plan that describes how the Project plans to achieve net-zero emissions by 2050. The net-zero plan will include the requirements described in Section 3.5.2 of the draft Technical Guide. The plan will complement and be informed by the GHG mitigation measures planned by the proponent (refer to Section 5.1.4 of the SACC).



## 8.5. Canada's Ability to Meet its Environmental Obligations and its Climate Change Commitments

In accordance with paragraph 22(1)(i) of the *IAA*, the Application must describe the effects of the Project in the context of environmental obligations and commitments in respect of climate change, with a focus on Government of Canada obligations and commitments relevant to decision-making.

The Application must consider federal policy measures and commitments outlined in the Federal Government's Strengthened Climate Plan; and commitments to be outlined in Canada's 2030 Emissions Reduction Plan as required under the *Canadian Net-Zero Emissions Accountability Act*, including consideration of a cap on emissions from the oil and gas sector, in the assessment.

The following federal environmental obligations will be included as applicable:

- The Convention on Biological Diversity and Canada's supporting national framework (e.g., the Canadian Biodiversity Strategy, Canada's Biodiversity Outcomes Framework and the current biodiversity goals and objectives in Canada) and legislation that supports the implementation of Canada's biodiversity commitments, including the *SARA*; 2002) and the *Canada Wildlife Act* (1985), as well as supporting policies and guidance documents. For further information, the proponent is encouraged to consult the publications and resources available on the biodivcanada website (<https://biodivcanada.chm-cbd.net/>)
- Recovery strategies and action plans developed under *SARA* for all species at risk potentially affected by the Project;
- The Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar), as implemented in part under the Federal Policy on Wetland Conservation and supporting guidance documents such as the North American Waterfowl Management Plan; and
- The Convention for the Protection of Migratory Birds in the United States and Canada, as implemented in part under the *Migratory Birds Convention Act* (1994), and supporting guidance documents on conservation objectives derived from bird conservation regions and strategies; and
- More information regarding the above federal environmental obligations is available at the following websites:
  - Ramsar: <https://www.canada.ca/en/environment-climate-change/corporate/international-affairs/partnerships-organizations/important-wetlands-ramsar-convention.html>
  - Federal Policy on Wetland Conservation: <https://nawcc.wetlandnetwork.ca/Federal%20Policy%20on%20Wetland%20Conservation.pdf>
  - The North American Waterfowl Management Plan: <http://nawmp.wetlandnetwork.ca/what-is-nawmp/>

The Application must evaluate the need for mitigation and follow-up measures related to Canada's environmental obligations and its commitment in respect of climate change. Measures proposed to mitigate the adverse effects of a Project may reduce the Project's hindrance of an environmental obligation or climate change commitment.

The implementation of mitigation or complementary measures may also result in the project contributing to the Government of Canada's ability to meet its environmental obligations or its commitments in respect of climate change. The Application will describe the proponent's views on the extent to which project effects would contribute to the Government of Canada's ability to meet its environmental obligations for all relevant VCs, including international benefits, taking into consideration proposed mitigation measures, and requirements of any follow-up program that may be warranted, and climate change resilience. As outlined in Section 6 of the *SACC*, the Government of Canada will provide

supplemental analysis on the Project's (net and upstream) GHG emissions provided in the Impact Statement, in the context of Canada's emissions targets and forecasts, including Canada's commitments under the Paris agreement, the goal for Canada to achieve net-zero emissions by 2050 and Canada's 2030 emission targets.

## 8.6. Upstream GHG Emissions Assessment

An assessment of upstream GHG emissions associated with the Project's natural gas consumption will be performed following the detailed methodology of Section 5 in the Tech Guide (ECCC, 2021: Draft Technical Guide Related to the SACC: Guidance on quantification of net GHG emissions, impact on carbon sinks, mitigation measures, net-zero plan and upstream GHG assessment. August 2021. Accessible at: <https://www.strategicassessmentclimatechange.ca/>) and presented in a stand-alone report. The Upstream GHG Assessment will be publicly available as part of the EA documents during the Application Development & Review phase, which includes a public engagement and comment period.

To the extent that defensible information such as regulatory and contractual requirements is available, consideration will also be given to the percentage of renewable natural gas in the fuel gas stream.

## 9.0 MALFUNCTIONS AND ACCIDENTS

The Application must provide a risk-based approach for the assessment of malfunctions and accidents that could impact VCs and Indigenous interests identified for the Project.

The assessment approach will evaluate the risk of malfunctions and accidents (including scenarios) by examining the likelihood of an incident (for example, malfunction or accident) and the consequences of the incident to each relevant VC and Indigenous interests. The results of the risk-based assessment will be used to develop plans to reduce or eliminate the likelihood of an incident or reduce the consequence of incidents. All phases of the Project will be considered. The Application must:

- Describe the potential incidents that may occur in all phases of the project, including:
  - An explanation of how those potential incidents were identified;
  - The circumstances under which the incidents could occur; and
  - A summary of mitigation measures that are assumed to apply to potential incidents and would be considered in their risk ratings;
- Describe the methods for assessing the potential risk of each incident, including magnitude and duration, definitions for classifications of likelihood, consequence and risk, and identification of threshold for incidents that will be carried forward for detailed analysis (for example, incidents determined to be moderate or high-risk);
- Provide an assessment of the likelihood of each incident occurring, based on, for example, historical trends and predictive models;
- Provide a high-level assessment of the consequence of each incident (consider potential environmental, economic, social, culture, and health effects including effects to urban areas and businesses and effects to Indigenous interests);
- Provide a classification of the risk of each incident based on its likelihood and consequence;
- Identify all the incidents that will be carried forward for further assessment based on the criteria identified in the methods;

- Provide detailed information on the potential effects of each incident carried forward including:
  - Most likely and worst-case scenarios of the effects of incidents on VCs and Indigenous interests within spatial and temporal boundaries described for the assessment area;
  - Identify and justify the spatial and temporal boundaries that may be impacted by accidents and malfunctions;
  - Information from historical incidents from similar operations and conditions, where applicable; and
  - If applicable, the quantity and characteristics of the contaminants and other materials likely to be released into the environment from an incident.
- Describe the role of the proponent in the case of spill, collision, grounding, or other accidents or malfunctions associated with the Project;
- Describe mutual aid agreements in place in the event that the incident exceeds company resources and how these resources would be accessed;
- Describe or provide for a waste management plan as it pertains to waste generated during an emergency response;
- Where appropriate, provide details regarding financial liability and compensation in place as required by regulation or company commitment;
- Provide detailed information on proposed mitigation measures to reduce the likelihood and consequence to VCs and Indigenous interests for incidents carried forward including:
  - Safety protocols and mitigation measures to reduce the likelihood of incidents;
  - Contingency and emergency response procedures if such events do occur, including exercise and training plans for emergency response;
  - Communication and public notification plans, and public notification protocols;
  - Monitoring, evaluation, and adaptive management system to identify, proactively avoid, and rectify any malfunction and/or accident; and
  - Likelihood of mitigation being successful and the time lag for mitigation to become effective.
- Provide conclusions on the potential risks of the incidents carried forward; and
- Consider the interaction between the Project and other projects in the vicinity (such as, the proximity to the Vancouver Airport Fuel Delivery project; Project located in a flight path).

The specific malfunctions or accidents to be considered in the Application include, but are not limited to the following:

- Develop an Accidents and Malfunctions Response Plan outlining mitigation measures for potential adverse environmental effects including effects on wildlife;
- Fire or explosion;
- Events involving hazardous material spills (such as, hydrocarbon fuels, lubricants, and concrete) and the potential for a spill to travel into an environmentally sensitive habitat;
- Terrestrial vehicle collision;
- Loss of containment of LNG;
- Flammable liquids, solvents, or pressurized gas from ruptured piping or equipment during commissioning or operation resulting in the risk of overpressure, fire, toxic gas release, and injury to personnel;

- Unplanned facility shutdown including emergency flaring, process upset, or power outage; and
- Construction-related river/marine vessel collision with ground, other vessels, marine/river facilities, marine mammals, aquatic organisms, with potential loss of cargo.

FortisBC actively manages the security and integrity of its utility assets through a defense in depth strategy, aligned with Canadian Standards Association Z246.1-17 (security management for petroleum and natural gas industry systems). This includes, but is not limited to, incorporating physical security elements in design, and monitoring the security environment. FortisBC's preliminary risk assessment, in combination with an assessment of the security environment in the lower mainland has assessed the risk of terrorism as negligible. Therefore, accidents and malfunctions from intentional acts of terrorism or force majeure are beyond the scope of this assessment.

## 10.0 EFFECTS OF THE ENVIRONMENT ON THE PROJECT

The Application must:

- Describe the environmental factors deemed to have possible consequences on the Project, including, but not necessarily limited to, natural hazards and influences of nature such as flooding (storm surge and freshet), earthquakes, tsunamis, windstorms, drought, wildfires, and pandemics;
- Identify any geological hazards that exist in the areas planned for the Project facilities and infrastructure, including:
  - History of seismic activity in the area, including induced earthquakes, and secondary effects such as the risk of seismic generated tsunamis, landslides, and liquefaction;
  - Evidence of active faults;
  - Isostatic rise or subsidence;
  - History of landslides, slope erosion, and the potential for ground and rock instability/landslides, and subsidence during and following Project activities;
  - History of landslide-generated tsunamis if near a shoreline;
  - History or and potential of submarine landslides; and
  - History and potential of volcanic related hazards.
- Describe how climate change might increase the likelihood and severity of the above-mentioned environmental factors;
- Describe any changes or effects on the Project that may be caused by the above-mentioned environmental factors;
- Provide the likelihood (based on future climate change projections) and consequence of the changes or effects to relevant VCs;
- Provide practical mitigation measures, including design strategies, environmental contingency plans, and climate risk plans to avoid or minimize the likelihood and consequence of the negative effects of the environment on the Project;
- Provide a conclusion about the potential risk of an effect of the environment on the Project and to relevant VCs; and
- Describe how climate change has been incorporated into the Project design and planning over the lifetime of the Project and a description of the climate data and projections used.



The Application must describe how environmental conditions, including natural hazards such as severe and/or extreme weather conditions and external events (such as, earthquakes, flooding, drought, ice jams, iceberg impacts, permafrost conditions, landslides/submarine landslides, tsunamis, volcanoes, avalanches, erosion, subsidence, fire, heatwave, outflow conditions), could adversely affect the Project and how this in turn could result in effects to the environmental, economic, social, culture, and health conditions. These events are to be considered in different probability patterns (for example, 5-year flood vs. 100-year flood). The focus should be on credible external events that have a reasonable probability of occurrence and for which the resulting environmental effects could be major without careful management. The Application must describe how effects of the environment on the Project could have positive effects to the environmental, economic, social, culture, and health conditions.

The Application must:

- Provide details of planning, design, and construction strategies intended to minimize the potential adverse effects of the environment on the Project;
- Identify any areas of potential wind or water erosion;
- Describe any mitigation measures that can be implemented in anticipation or in preparation for effects of the environment on the Project;
- Describe possible mitigation measures to deal with adverse environmental, economic, social, cultural, and health effects resulting from effects of the environment on the Project;
- Describe climate resilience of the Project and how climate change impacts have been incorporated into the Project design and planning over the lifetime of the Project and describe the climate data and projections used; and
- Describe measures to enhance positive environmental, economic, social, cultural, and health effects resulting from effects of the environment on the Project.

## 11.0 INDIGENOUS NATIONS EFFECTS ASSESSMENT

This section of the Application must describe the information and analysis used to identify Indigenous nations that may be affected by the Project, as identified in the Process Order. Assessment for Indigenous nations will be completed in subsections 11.2 to 11.18 and will describe where there are any deviations from the methodology described in subsection 11.1 based on engagement with Indigenous nations.

### 11.1. Methodology Overview

This section will describe the methods used to identify and assess Indigenous interests. The proponent uses the term Indigenous interests in accordance with Section 2(2)(b) of the *Environmental Assessment Act*, 2018, which is defined as “those interests related to an Indigenous nation and their rights recognized and affirmed by Section 35 of the *Constitution Act*, 1982, including Treaty rights and Aboriginal Rights and Title, that may be impacted by a proposed Project.” (B.C. EAO 2020b, p. 48)

The proponent’s use of the term Indigenous interests also accords with Section 22 (1)(c) of the *IAA*, 2019, which requires an assessment of the impact that the Project may have “on any Indigenous group and any adverse impact that the Project may have on the rights of the Indigenous Peoples of Canada recognized and affirmed by Section 35 of the *Constitution Act*, 1982.” (Government of Canada 2019a). Additional details for each Indigenous nation will be described in subsections 11.2 to 11.18 as required.

The detail in each Indigenous nation's Effects Assessment in subsections 11.2 to 11.18 will meet the requirements of the B.C. EAO and IAAC, will be responsive to input received from Indigenous nations, and will reflect the level of available information for each Indigenous nation or that has been approved for use by each Indigenous nation. The proponent understands that some Indigenous nations may experience more Project effects than others and the Effects Assessment for each Indigenous nation will reflect these differences.

Subsections 11.2 to 11.18 will be informed by engagement with Indigenous nations, as required in the Assessment Plan.

### **11.1.1. Indigenous Nations Potentially Impacted by the Project**

This section will provide an overview of how Indigenous nations were identified as being potentially impacted by the Project and how they will be grouped in the subsequent Effects Assessment sections.

### **11.1.2. Context**

#### **11.1.2.1. Understanding of Indigenous Interests and Current Context**

The Application must include background information on Indigenous nations including health, social, and economic conditions, ethnography, language, governance, population (including contextual information about the members such as women, men, Elders, and youth), communities, Reserves, and Indigenous land use plans (as required under subsection 2.3). The Indigenous nation-specific sections will include contextual information the Indigenous nation views as important to understanding the effects of the Project.

The assessment of the effect to Indigenous nations will include an overview of the understanding of Indigenous interests in the area that could be affected by the Project. Information in this section will be developed through engagement with Indigenous nations. The Application must:

- Provide an overview of the Indigenous nation's context of the area affected by the Project including information regarding, where that is available:
  - How any Indigenous laws, governance, philosophies, or customs have historically applied and currently apply to this area, including how those may have evolved over time, how those processes should be used to review the potential effects of the Project on Indigenous interests and what information the Indigenous nation may need or processes that are required to support its decision-making in the area;
  - Any laws, customs, or requirements for the area including any existing Indigenous land use plans; and
  - Any agreements with other Nations regarding governance of areas of territory overlap, as relevant to the Project;
- Describe the context in which effects of the Project on an Indigenous nation and its rights would occur, including:
  - Identify the environmental and socio-economic conditions that support the community's meaningful exercise of their rights
  - How historic, existing, and reasonably foreseeable future activities have cumulatively affected or could affect the conditions that support or limit the Indigenous community's meaningful exercise of their rights
  - Identify the importance of specific areas or locations that important to the community and may be impacted by the project
- Provide a list of the Indigenous interests that may be impacted by the Project. Interests identified by Indigenous nations during Early Engagement that will be described in the Application are identified in Table 6 and will be further addressed in each Indigenous nation subsection.

- Summarize how the identified Indigenous interests have been affected by cumulative effects to-date; and
- Summarize past, present, and anticipated future use of the Project Area by Indigenous nations over time and practices in the Project Footprint regarding the Indigenous interests identified. This summary will include Project Footprint -specific use values present in the Project's LAA and RAA, which are areas identified and/or mapped by Indigenous nations as having environmental, cultural, spiritual, transportation, subsistence, and habitation value.

### 11.1.3. Summary of Engagement

The Application must:

- Provide a summary of past and planned engagement activities that describe the efforts taken to seek the views of the Indigenous nations with respect to the Project including:
  - The engagement activities undertaken with Indigenous nations, including the timeframe, means, and results of engagement and any impediments to conducting engagement and actions to address those impediments;
  - Efforts to engage diverse populations in culturally appropriate ways, including groups identified by gender, age, or other community relevant factors, at the direction of the Nation, to support the collection of information needed to complete the GBA+;
  - How engagement activities by the proponent support Indigenous nations' understanding of the Project and its effects on the Indigenous nations and their Indigenous interests;
  - The engagement with Indigenous nations regarding potential effects of the Project on Indigenous interests. Where an Indigenous nation has not provided this information to the proponent, or both parties agree that it is better to provide information related to the effects on Indigenous interests directly to the Governments of B.C. or Canada, the Application must describe a rationale for the approach taken; and
  - Indigenous nations' views on the proponent's engagement approach and resolution of issues raised.
- Provide an analysis of the input received from Indigenous nations with respect to the Project including:
  - Description of how the proponent responded to questions, comments, and issues raised by Indigenous nations, Indigenous nations' perspectives on the resolution of issues, how unresolved input has been addressed in the Application, and/or how unresolved input will be addressed through the EA or another regulatory process or government initiative; and
  - Where and how Indigenous nations' perspectives were integrated into or contributed to decisions regarding the Project, including:
    - Development and collection of baseline information;
    - Plans for construction, operation, or decommissioning; and
    - Identification of VCs.
- Describe any arrangement or agreement between the proponent and Indigenous nations for collaboration on the development of the Application or delivery of the Project. This includes agreements related to the delivery of studies and capacity funding agreements.

#### 11.1.4. Information Sources

The Application must clearly identify sources of all information used in preparing the assessment of effects on Indigenous nations, noting where information represents the views of Indigenous nations, the proponent or otherwise. Information sources that include Indigenous Knowledge will be clearly labeled as such.

The proponent will be providing the Indigenous nations a list of secondary sources that will be used to inform the context and existing conditions. The Indigenous nations will be provided an opportunity to discuss, give feedback, and suggest additional secondary sources that they would like the proponent to consider.

##### 11.1.4.1. Indigenous Knowledge

Regarding the collection and use of Indigenous Knowledge, the Application must:

- Provide an outline of the steps taken by the proponent to work with Indigenous nations to incorporate Indigenous Knowledge including a summary of any arrangements with the Indigenous nation regarding the use and application of Indigenous Knowledge in accordance the principles of ownership, control, access, and possession or Indigenous nation-specific protocols; Provide a statement indicating that each Indigenous nation supports the characterization and application of any Indigenous Knowledge contained within the Application and gives permission for its public disclosure;
- Describe how Indigenous Knowledge informed Project design, the assessment, and proposed mitigation measures, including the assessment of environmental, economic, social, culture, and health effects to Indigenous Peoples, Indigenous nations, and communities (Section 7 Valued Components Effects Assessment); and
- If applicable, provide a plan for future cooperation between the proponent and Indigenous nations to further incorporate Indigenous Knowledge into Project implementation (for example, monitoring and management plans).

#### 11.1.5. Assessing Effects on Indigenous Interests

This section will provide a comprehensive description of the effects of the Project on Indigenous nations' Indigenous interests. A subsection will be drafted for each Indigenous interest. Appropriate information from the analysis of any VCs, assessed in Section 7, in the context relevant for the Indigenous nations will be summarized and presented in this section. Subsections 11.1.5.1 to 11.1.5.11 will be completed for each Indigenous interest that is not directly assessed through a VC, but the assessment of one or more VCs provides relevant input.

##### 11.1.5.1. Introduction

The Application must:

- Describe how Indigenous nations' Indigenous interests were identified, through engagement with Indigenous nations or otherwise;
- Summarize the VCs used in the assessment of effects on Indigenous interests and whether they were carried forward from the assessment of Section 25(2) assessment matters presented in Section 7, or developed specifically for the assessment of Indigenous interests;
- Describe any other assessment methods and analysis used to undertake the assessment of effects on Indigenous nations; and
- Describe linkages with other Indigenous interests.



### 11.1.5.2. Assessment Boundaries

The Application must define the assessment boundaries for the effects on each Indigenous interest including spatial and temporal boundaries. Where relevant, administrative, and technical boundaries will also be identified.

### 11.1.5.3. Spatial Boundaries

For each Indigenous nation, the assessment will consider the following areas: the Project Footprint, the LAA, and the RAA in Table 5.

Table 5. Indigenous Nation's Interests Study Area Boundaries

Study Area	Definition
Project footprint	The Project Footprint is the area directly disturbed by construction activities, including associated physical works and activities.
LAA	The LAA will combine the LAAs of VCs which are linked to the assessment of each Indigenous nation's Indigenous interests.
RAA	Each Indigenous nation's RAA will combine RAAs established for VCs which are linked to the assessment of Indigenous interests.

It is anticipated that some Indigenous nations will have reserves or community locations which are not located within the LAA or RAA. Members of the Indigenous nations engaged on the Project, whose communities are not within the Indigenous interest LAA or RAA, may choose to live and work within the LAA and RAA or travel to areas within the LAA or RAA to access services, temporary employment, or to exercise Indigenous interests. The assessment of Indigenous interests will apply to all Indigenous Peoples living, working, or exercising Indigenous interests within the LAA and RAA.

### 11.1.5.4. Temporal Boundaries

The potential effects specific to the Project are based on the three main phases of the Project as described in the DPD.

### 11.1.5.5. Existing Conditions

As applicable, the Application must:

- Provide a summary of the baseline conditions associated with Indigenous cultures. This description will give consideration to understanding historical baseline conditions associated with ability to transmit culture (such as, through language, ceremonies, harvesting, teaching of Sacred Laws, Traditional Laws, Stewardship Laws, Traditional Knowledge);
- Describe the nature and extent of known Indigenous interests, including but not limited to:
  - The historic and current use of the Project Footprint by Indigenous nations over time, including the current use of lands and resources for traditional purposes, and practices in the Project Footprint regarding Indigenous interests (including reference to specific sites and species of interests, where applicable);
  - The health conditions of each Indigenous nation, including physical, mental, and social health and well-being;

- The physical and cultural heritage of each Indigenous nation, including any site, structure, or thing of archaeological, paleontological, historical, or architectural value; and
- Nature and extent of the exercise of the rights of the Indigenous nation.
- Describe the relative importance of the Project Footprint and its surroundings, including any special characteristics or unique features, to the Indigenous interests; and
- Describe how the Indigenous interest has been affected by cumulative effects to-date.

#### **11.1.5.6. Potential Effects on Indigenous Interests**

The Application must provide information on how the Project may affect Indigenous nations, as informed by the Indigenous nations involved, and assess the effects to Indigenous interests. The Application must:

- Describe potential pathways by which Project components and activities could affect Indigenous interests;
- Identify effects to be carried forward from pathways determined to be consequential or requiring mitigation; and
- Describe the VCs and indicators used to assess effects carried forward.

Drawing on B.C. EAO guidelines and engagement with Indigenous nations, the Application must examine the Project's potential effects on Indigenous interests, including the current use of land and resources for traditional purposes, physical and cultural heritage, and environmental, economic, social, culture, and health conditions of Indigenous nations (Section 7, Valued Components Effects Assessment). As identified in subsection 11.1, Methodology Overview the Application's assessment of Indigenous interests will include the assessment of the impact that the Project may have on Indigenous nations' Indigenous interests. Table 7 includes six Indigenous interests which the Project may affect. The Application must include the following four Indigenous interests in all cases: Harvesting and Subsistence Activities; Cultural Use Sites and Areas; Social and Economic Conditions; and Indigenous Health and Well-being.

Two of the Indigenous interests, Cultural Continuation and Indigenous Governance Systems will only be assessed when Indigenous Knowledge relating to cultural continuation and Indigenous governance has been provided, or when feedback has been received from an Indigenous nation regarding the proposed information sources (subsection 11.1.4) and preliminary potential effects identified in the Table 6 of this draft AIR. Where the Indigenous nation has provided minimal knowledge and feedback relating to Cultural Continuation and Indigenous Governance Systems, the proponent will note the limitations of information. Cultural continuation and the opportunities for intergenerational knowledge transmission, and spiritual connections represent intangible values, which reflect the beliefs, perceptions, values, and qualitative experience of Indigenous Peoples and can not be assessed by the proponent without input from an Indigenous nation. Similarly, information is needed from Indigenous nations regarding conditions relating to their ability to meaningfully exercise Indigenous Governance Systems in order for the proponent to assess these effects. When Cultural Continuation and Indigenous Governance Systems are not being assessed, a rationale will be provided as to why they have not been included.

The proponent acknowledges that Indigenous interests are not always mutually exclusive, and that the Indigenous interests outlined in Table 7 may not reflect the intersections of interests and issues identified by the Indigenous nations. The proponent will engage with the Indigenous nations to determine the alignment of their Indigenous interests with the preliminary Indigenous interests and potential effects outlined in this draft AIR.

Table 6. Proposed Preliminary List of Indigenous Interests

Preliminary Indigenous Interests	Preliminary Potential Effects	Potential Linkages to other Valued Components or Indigenous Interests
Harvesting and Subsistence Activities	<ul style="list-style-type: none"> <li>Effects on Indigenous Rights to fish, harvest, and hunt for food, ceremonial, and social purposes:               <ul style="list-style-type: none"> <li>Changes to harvesting methods and practices (such as, timing, seasonality)</li> <li>Changes to the current use of lands and resources for traditional purposes</li> <li>Alteration of harvesting-based livelihoods</li> </ul> </li> <li>Changes to the experience and preferences around the practice of harvesting rights and effects on the quality, quantity, and availability of resources               <ul style="list-style-type: none"> <li>Loss or alteration of habitat supporting harvested wildlife, fish, bird, or plant species including species of cultural and medicinal importance</li> <li>Change in surface water quality or quantity (turbidity, hydraulic changes)</li> <li>Sensory disturbances (such as, noise, odour, dust, visual landscape)</li> </ul> </li> <li>Effects to the accessibility and availability of traditional lands and resources:               <ul style="list-style-type: none"> <li>Changes in the ability to travel to or through current use areas</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Air Quality</li> <li>Acoustics</li> <li>Surface Water</li> <li>Ground Water</li> <li>Soil</li> <li>Vegetation</li> <li>Wildlife and Wildlife Habitat</li> <li>Fish and Fish Habitat</li> <li>Land and Resource Use</li> </ul>
Cultural Use Sites and Areas	<ul style="list-style-type: none"> <li>Effects on cultural heritage, and structures, sites or things of historical, archaeological, paleontological, or architectural value:               <ul style="list-style-type: none"> <li>Effects to cultural sites including Storied Places, habitation sites, Place Names, and archaeological sites along the south arm of the Fraser River, Tilbury Island, Lulu Island, and Tl'uqtnus Village site</li> <li>Effects of Project activities on cultural/archaeological resources</li> <li>Changes to the experience using cultural sites and areas</li> </ul> </li> <li>Loss of access to and disenfranchisement from cultural sites including:               <ul style="list-style-type: none"> <li>Changes to physical and cultural or spiritual sites or areas</li> <li>Disruption or alteration of trails, travelways, navigable waterways and waterbodies</li> <li>Sensory disturbance (such as, noise, odour, dust, visual landscape)</li> </ul> </li> <li>Effects to cultural and spiritual practices caused by damage or loss of access to cultural sites and areas</li> </ul>	<ul style="list-style-type: none"> <li>Land and Resource Use</li> <li>Archaeological and Heritage Resources</li> <li>Culture</li> <li>Air Quality</li> <li>Acoustics</li> </ul>
Social and Economic Conditions	<ul style="list-style-type: none"> <li>Effects on Indigenous nations' ability to improve social and economic conditions</li> <li>Effects on Indigenous nations' future aspirations for sites or area surrounding the Project</li> <li>Changes to employment opportunities, Indigenous businesses, procurement opportunities, and Indigenous Government's revenue</li> <li>Effect on intercommunity relations and trade</li> <li>Effects on commercial and non-commercial fishing, hunting, trapping, and gathering and cultural or ceremonial activities and practices</li> <li>Effects on infrastructure and services</li> </ul>	<ul style="list-style-type: none"> <li>Culture</li> <li>Employment and Economy</li> <li>Infrastructure and Services</li> <li>Fish and Fish Habitat</li> <li>Wildlife</li> <li>Vegetation</li> </ul>
Indigenous Health and Well-being	<ul style="list-style-type: none"> <li>Effects on the quality, quantity, and availability of harvested country foods</li> <li>Effects on the value and perceived quality of country foods</li> <li>Effects on air quality, noise, water quality</li> <li>Effects on health and well-being from the effects to traditional ways of life and to cultural sites</li> </ul>	<ul style="list-style-type: none"> <li>Harvesting and Subsistence Activities</li> <li>Cultural Use Sites and Areas</li> <li>Human Health</li> </ul>

Table 6. Proposed Preliminary List of Indigenous Interests

Preliminary Indigenous Interests	Preliminary Potential Effects	Potential Linkages to other Valued Components or Indigenous Interests
		<ul style="list-style-type: none"> <li>• Air Quality</li> <li>• Acoustics</li> <li>• Surface Water</li> <li>• Groundwater</li> <li>• Fish and Fish Habitat</li> </ul>
Cultural Continuation*	<ul style="list-style-type: none"> <li>• Effects on ability to revitalize, develop, and participate in intergenerational cultural transmission               <ul style="list-style-type: none"> <li>○ Experiences of being on the land (such as, changes in air quality, noise exposure, effects of vibrations from blasting or other activities)</li> <li>○ Current and future availability and quality of country foods (traditional foods)</li> </ul> </li> <li>• Disconnection from cultural heritage due to:               <ul style="list-style-type: none"> <li>○ Changes to sense of place and identity due to changes in accessibility and real and perceived disturbance of the environment</li> <li>○ Interruption of the use of travel ways, navigable waterways, and waterbodies</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Harvesting and Subsistence Activities</li> <li>• Cultural Use Sites and Areas</li> <li>• Indigenous Health and Well-being</li> <li>• Economic Activities</li> </ul>
Indigenous Governance Systems*	<ul style="list-style-type: none"> <li>• Change to an Indigenous nation's cultural traditions, laws, and governance systems that inform how they exercise their Aboriginal Rights               <ul style="list-style-type: none"> <li>○ Effects on the ability to use, develop, and control Traditional Land, Territories, and resources</li> <li>○ Effects on the ability to implement Indigenous laws, customs, and protocols</li> <li>○ Participation in decision-making in matters which affect Aboriginal Rights in the Project Footprint</li> <li>○ Changes to ongoing conservation efforts to restore important fish species and habitat</li> <li>○ Ability to engage in stewardship of lands and resources</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Harvesting and Subsistence Activities</li> <li>• Cultural Use Sites and Areas</li> <li>• Indigenous Health and Well-being</li> <li>• Economic Activities</li> <li>• Cultural Continuation</li> </ul>

Notes:

\* As identified above, Cultural Continuation and Indigenous Governance Systems will only be assessed when feedback has been received from an Indigenous nation on the proposed information sources (subsection 11.1.4) and potential effects listed in the draft AIR.

### 11.1.5.7. Effects Management

The Application must describe measures identified in an attempt to avoid, minimize, offset, or otherwise address potential adverse effects of the Project on the Interests of Indigenous nations, and describe how the proponent worked towards the goal of identifying mutually agreeable mitigation and effects management approaches with Indigenous nations, especially for those concerns raised relating to the exercise of their Indigenous interests.

The Application must provide:

- Project design and mitigations identified for the relevant VCs that are proposed to mitigate effects on Indigenous interests;
- Perspectives of Indigenous nations on the effectiveness of mitigation measures, as well as the relative level of certainty associated with the mitigation option;
- Additional mitigations that are specific to the Indigenous nation or Indigenous interests;



- A response to measures proposed by Indigenous nations, including the proponent’s intent to implement them, as appropriate; and
- Proposed initiatives or processes related to monitoring effects on Indigenous interests.

#### **11.1.5.8. Assessing Negative Effects**

The Application must provide a detailed description of the methods used to assess the negative effects to Indigenous interests that are anticipated as a result of the Project, and present the results of this assessment, after taking mitigation into account.

If an Indigenous nation identifies that there are residual effects to the Nation or its rights, those effects will be carried through for residual effects analysis.

#### **11.1.5.9. Characterization of Residual Effects**

The Application must provide a characterization of negative residual effects of the Project to Indigenous interests, including magnitude, extent, duration, reversibility, frequency, risk, and uncertainty. This section of the Application will follow the methodology as described in Section 6.6.

#### **11.1.5.10. Cumulative Effects**

The Application must include an assessment of cumulative effects on Indigenous interests as they relate to the Project and identify any additional mitigation measures. This section of the Application will follow the methodology as described in Section 6.7. The Application must describe the likelihood of any adverse residual cumulative effects on Indigenous interests and provide a summary of the results of the CEA.

#### **11.1.5.11. Views of Indigenous Nation**

The Application must describe how the proponent engaged with Indigenous nations, including any collaboration with Indigenous nations, or integrated Indigenous nations’ perspectives into the assessment of effects on Indigenous interests. The Application must clearly state any views of Indigenous nations on the potential effects identified, approach to effects management, residual effects, and conclusions.

#### **11.1.6. Positive Effects**

The Application must describe any positive effects to Indigenous interests or to Indigenous nations overall that are anticipated as a result of the Project and its associated effects management approaches. The Application must describe how the proponent engaged with Indigenous nations, including any collaboration with participating Indigenous nations and engagement activities with other potentially affected Indigenous nations, or integrated Indigenous nations’ perspectives into the assessment of positive effects on Indigenous interests. The Application must clearly state any views of Indigenous nations on the potential positive effects identified.

#### **11.1.7. Summary**

The Application must include a summary of the assessment for Indigenous nations outlining:

- The residual effects on Indigenous interests for B.C. EAO/IAAC to consider when determining the overall seriousness of the effects to the Indigenous interests;
- Any major points of agreement or disagreement with Indigenous nations; and
- Efforts taken to address any points of disagreement.

## **11.2. Chawathil First Nation**

### **11.2.1. Methodology Overview**

The Application must include a stand-alone assessment for Chawathil First Nation that will follow the methodology described in subsection 11.1. Although Chawathil First Nation is a member of the S'ólh Téméxw Stewardship Alliance, Chawathil First Nation independently submitted a notice to engage as a participating Indigenous nation to the B.C. EAO. Through engagement, Chawathil First Nation has directed the proponent to conduct a separate, stand-alone Indigenous Nations Effects Assessment for Chawathil First Nation.

### **11.2.2. Context**

#### **11.2.2.1. Understanding of Indigenous Interests and Current Context**

The Application must meet the information requirements outlined in subsection 11.1.2.1 Understanding of Indigenous Interests and Current Context.

### **11.2.3. Summary of Engagement**

The Application must meet the information requirements outlined in subsection 11.1.3 Summary of Engagement.

### **11.2.4. Information Sources**

The Application must meet the information requirements outlined in subsection 11.1.4 Information Sources.

#### **11.2.4.1. Indigenous Knowledge**

The Application must meet the information requirements outlined in subsection 11.1.4.1 Indigenous Knowledge.

### **11.2.5. Assessing Effects on Indigenous Nations**

#### **11.2.5.1. Introduction**

The Application must meet the information requirements outlined in subsection 11.1.5.1 Introduction.

#### **11.2.5.2. Assessment Boundaries**

The Application must meet the information requirements outlined in subsection 11.1.5.2 Assessment Boundaries.

#### **11.2.5.3. Spatial Boundaries**

The Application must meet the information requirements outlined in subsection 11.1.5.3 Spatial Boundaries.

#### **11.2.5.4. Temporal Boundaries**

The Application must meet the information requirements outlined in subsection 11.1.5.4 Temporal Boundaries.

#### **11.2.5.5. Existing Conditions**

The Application must meet the information requirements outlined in subsection 11.1.5.5 Existing Conditions.

#### **11.2.5.6. Potential Effects on Indigenous Interests**

The Application must meet the information requirements outlined in subsection 11.1.5.6 Potential Effects on Indigenous Interests.

The Application must address the potential effects to Indigenous interests identified by Chawathil First Nation during Early Engagement. These concerns are summarized in Table 7. The proponent is continuing to engage with Chawathil First Nation to understand their Indigenous interests in the Project and the areas influenced by the Project.

Table 7. Proposed Preliminary List of Chawathil First Nation Indigenous Interests

Preliminary Indigenous Interests	Preliminary Potential Effects
Harvesting and Subsistence Activities	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Harvesting and Subsistence Activities, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to interests relating to Harvesting and Subsistence Activities identified by Chawathil First Nation: <ul style="list-style-type: none"> <li>Effects to Chawathil First Nation's right to harvest fish in the Fraser River for food, trade, social, health, and ceremonial purposes</li> <li>Effects to Chawathil First Nation's rights to conservation of medicinal plants, animals, and minerals</li> <li>Effects to Chawathil First Nation's Gathering rights and rights to food security</li> </ul> </li> </ul>
Cultural Use Sites and Areas	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Cultural Use Sites and Areas, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to Interests relating to Cultural Use Sites and Areas identified by Chawathil First Nation: <ul style="list-style-type: none"> <li>Effects on cultural and spiritual rights, including protection and access areas of cultural and spiritual importance</li> </ul> </li> </ul>
Social and Economic Conditions	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Social and Economic Conditions, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to interests relating to Social Economic Conditions identified by Chawathil First Nation: <ul style="list-style-type: none"> <li>Effects on economic development and socio-economic rights and the ability to improve current conditions</li> </ul> </li> </ul>
Indigenous Health and Well-being	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Indigenous Health and Well-being, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to interests relating to Indigenous Health and Well-being identified by Chawathil First Nation: <ul style="list-style-type: none"> <li>Effects to Chawathil First Nation's right to have clean air, water, and lands and resources</li> </ul> </li> </ul>
Cultural Continuation	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Cultural Continuation, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to interests relating to Cultural Continuation identified by Chawathil First Nation: <ul style="list-style-type: none"> <li>Rights to the transmission of Traditional Knowledge, histories, place names and oral traditions to future generations</li> </ul> </li> </ul>
Indigenous Governance Systems	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Indigenous Governance Systems, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to interests relating to Indigenous Governance Systems identified by Chawathil First Nation identified: <ul style="list-style-type: none"> <li>Effects to Chawathil First Nation's rights to self-governance and self-determination</li> <li>Effects to Chawathil First Nation's rights to implement Indigenous Laws, customs, and protocols</li> <li>Effects to Chawathil First Nation's stewardship rights and responsibilities</li> <li>Effects to Chawathil First Nation's rights to determine and develop strategies for the development or use of Chawathil First Nation territory</li> </ul> </li> </ul>

**11.2.5.7. Effects Management**

The Application must meet the information requirements outlined in subsection 11.1.5.7 Effects Management.

**11.2.5.8. Assessing Negative Effects**

The Application must meet the information requirements outlined in subsection 11.1.5.8 Assessing Negative Effects.

**11.2.5.9. Characterization of Residual Effects**

The Application must meet the information requirements outlined in subsection 11.1.5.9 Characterization of Residual Effects.

**11.2.5.10. Cumulative Effects**

The Application must meet the information requirements outlined in subsection 11.1.5.10 Cumulative Effects.

**11.2.5.11. Views of Indigenous Nation**

The Application must meet the information requirements outlined in subsection 11.1.5.11 Views of Indigenous Nation.

**11.2.6. Positive Effects**

The Application must meet the information requirements outlined in subsection 11.1.6 Positive Effects.

**11.2.7. Summary**

The Application must meet the information requirements outlined in subsection 11.1.7 Summary.

**11.3. Cheam First Nation****11.3.1. Methodology Overview**

The Application must include a stand-alone assessment for Cheam First Nation that will follow the methodology described in subsection 11.1. Although Cheam First Nation is a member of the S'ólh Téméxw Stewardship Alliance, Cheam First Nation independently submitted a notice to engage as a participating Indigenous nation to the B.C. EAO. The proponent proposes to conduct a separate Indigenous Nations Effects Assessment for Cheam First Nation. The proponent will engage with Cheam First Nation to determine the appropriateness of this approach.

**11.3.2. Context****11.3.2.1. Understanding of Indigenous Interests and Current Context**

The Application must meet the information requirements outlined in subsection 11.1.2.1 Understanding of Indigenous Interests and Current Context.

**11.3.3. Summary of Engagement**

The Application must meet the information requirements outlined in subsection 11.1.3 Summary of Engagement.

**11.3.4. Information Sources**

The Application must meet the information requirements outlined in subsection 11.1.4 Information Sources.

**11.3.4.1. Indigenous Knowledge**

The Application must meet the information requirements outlined in subsection 11.1.4.1 Indigenous Knowledge.

### 11.3.5. Assessing Effects on Indigenous Nations

#### 11.3.5.1. Introduction

The Application must meet the information requirements outlined in subsection 11.1.5.1 Introduction.

#### 11.3.5.2. Assessment Boundaries

The Application must meet the information requirements outlined in subsection 11.1.5.2 Assessment Boundaries.

#### 11.3.5.3. Spatial Boundaries

The Application must meet the information requirements outlined in subsection 11.1.5.3 Spatial Boundaries.

#### 11.3.5.4. Temporal Boundaries

The Application must meet the information requirements outlined in subsection 11.1.5.4 Temporal Boundaries.

#### 11.3.5.5. Existing Conditions

The Application must meet the information requirements outlined in subsection 11.1.5.5 Existing Conditions.

#### 11.3.5.6. Potential Effects on Indigenous Interests

The Application must meet the information requirements outlined in subsection 11.1.5.6 Potential Effects on Indigenous Interests.

The Application must address the potential effects to Indigenous interests identified by Cheam First Nation during Early Engagement. These concerns are summarized in Table 8. The proponent is continuing to engage with Cheam First Nation to understand their Indigenous interests in the Project and the areas influenced by the Project.

Table 8. Proposed Preliminary List of Cheam First Nation Indigenous Interests

Preliminary Indigenous Interests	Preliminary Potential Effects
Harvesting and Subsistence Activities	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Harvesting and Subsistence Activities, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to Indigenous interests relating to Harvesting and Subsistence Activities identified by Cheam First Nation:               <ul style="list-style-type: none"> <li>Effects on rights to harvest fish in the Fraser River for food, social, and ceremonial purposes</li> <li>Effects to salmon and salmon habitat and Cheam First Nation's way of life</li> </ul> </li> </ul>
Cultural Use Sites and Areas	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Cultural Use Sites and Areas, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to Indigenous interests relating to Cultural Use Sites and Areas identified by Cheam First Nation:               <ul style="list-style-type: none"> <li>Effects to rights in the Fraser River</li> </ul> </li> </ul>
Social and Economic Conditions	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Social and Economic Conditions, see Table 6 in subsection 11.1.5.6.</li> </ul>
Indigenous Health and Well-being	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Indigenous Health and Well-being, see Table 6 in subsection 11.1.5.6.</li> </ul>
Cultural Continuation	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Cultural Continuation, see Table 6 in subsection 11.1.5.6.</li> </ul>
Indigenous Governance Systems	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Indigenous Governance Systems, see Table 6 in subsection 11.1.5.6.</li> </ul>



**11.3.5.7. Effects Management**

The Application must meet the information requirements outlined in subsection 11.1.5.7 Effects Management.

**11.3.5.8. Assessing Negative Effects**

The Application must meet the information requirements outlined in subsection 11.1.5.8 Assessing Negative Effects.

**11.3.5.9. Characterization of Residual Effects**

The Application must meet the information requirements outlined in subsection 11.1.5.9 Characterization of Residual Effects.

**11.3.5.10. Cumulative Effects**

The Application must meet the information requirements outlined in subsection 11.1.5.10 Cumulative Effects.

**11.3.5.11. Views of Indigenous Nation**

The Application must meet the information requirements outlined in subsection 11.1.5.11 Views of Indigenous Nation.

**11.3.6. Positive Effects**

The Application must meet the information requirements outlined in subsection 11.1.6 Positive Effects.

**11.3.7. Summary**

The Application must meet the information requirements outlined in subsection 11.1.7 Summary.

**11.4. Quw'utsun Nation****11.4.1. Methodology Overview**

The Application must include a partially aggregated assessment for Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe, and Stz'uminus First Nation titled Quw'utsun Nation. The Indigenous Nations Effects Assessment for the members of the Quw'utsun will include individual residual effects assessments for each Indigenous nation. Through engagement, the proponent has discussed this approach with Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe, and Stz'uminus First Nation and the Indigenous nations have agreed to this partially aggregated assessment.

Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe, and Stz'uminus First Nation are all members of the Quw'utsun Nation. In their separate notices to participate in the Project, each stated that their interests are shared as "descendant communities of the historic Cowichan Nation".

Similarly, each notice of participating Indigenous nations stated that their governance roles in the Project Footprint were the same. Further to this, the Quw'utsun Nation has facilitated engagement on behalf of its members, with comments on regulatory documents provided as a group. The Quw'utsun Nation has also provided FortisBC with information sources including a Traditional Use Study (TUS) which encompasses Cowichan Tribes, Halalt First Nation, Penelakut Tribe, and Stz'uminus First Nation.

Subsection 11.4 provides further information on how methodology proposed within subsection 11.1 would be adapted to support this partially aggregated approach.

## **11.4.2. Context**

### **11.4.2.1. Understanding of Indigenous Interests and Current Context**

The Application must meet the information requirements outlined in subsection 11.1.2.1 Understanding of Indigenous Interests and Current Context. The Application must include one section which aggregates the proponent's understanding of Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe, and Stz'uminus First Nation's Indigenous interests and current context. Where Indigenous interests and current context of Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe, and Stz'uminus First Nation are unique, those distinctions will be identified.

## **11.4.3. Summary of Engagement**

### **11.4.3.1. Cowichan Tribes**

The Application must meet the information requirements outlined in subsection 11.1.3 Summary of Engagement.

### **11.4.3.2. Halalt First Nation**

The Application must meet the information requirements outlined in subsection 11.1.3 Summary of Engagement.

### **11.4.3.3. Lyackson First Nation**

The Application must meet the information requirements outlined in subsection 11.1.3 Summary of Engagement.

### **11.4.3.4. Penelakut Tribe**

The Application must meet the information requirements outlined in subsection 11.1.3 Summary of Engagement.

### **11.4.3.5. Stz'uminus First Nation**

The Application must meet the information requirements outlined in subsection 11.1.3 Summary of Engagement.

## **11.4.4. Information Sources**

The Application must meet the information requirements outlined in subsection 11.1.4 Information Sources. The Application must include one section which aggregates information sources for Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe, and Stz'uminus First Nation. Where information sources relevant to the assessment of Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe, and Stz'uminus First Nation's Indigenous interests are unique those distinctions will be identified.

### **11.4.4.1. Indigenous Knowledge**

The Application must meet the information requirements outlined in subsection 11.1.4.1 Indigenous Knowledge. The Application must include one section which aggregates information regarding the collection and use of Indigenous Knowledge for Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe, and Stz'uminus First Nation. The Application must identify where the collection and use of Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe, and Stz'uminus First Nation's Indigenous Knowledge is unique.

The Application must be informed by Indigenous Knowledge and western science and ongoing engagement with the Quw'utsun Nation members. The Application must describe how the proponent addressed the Quw'utsun Nation's request that the proponent engage Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe, and Stz'uminus First Nation directly for the production of Indigenous Knowledge studies as the Quw'utsun Nation is currently producing Indigenous Knowledge studies for three different projects.

The Application must describe how the proponent engaged with the Quw’utsun Nation on integrating Indigenous nations’ perspectives into the assessment of effects on Indigenous interests to address concerns raised by the Quw’utsun Nation regarding how the proponent will incorporate Indigenous Knowledge information in the Application, and to verify there are no outstanding concerns related to the data collection or the information provided.

The proponent welcomes Quw’utsun Nation’s support in identifying Indigenous Knowledge and other sources of information, including material related to lands of Tl’uq̓tinus. The proponent is looking forward to working with the Quw’utsun Nation and the individual member Indigenous nations to determine how to appropriately consider and integrate Cowichan Indigenous Knowledge.

The Application must incorporate Indigenous Knowledge information from two Quw’utsun Nation Indigenous Knowledge studies for the Tilbury Marine Jetty Project: Culturally Significant Vegetation of Tilbury Island by Dr. Nancy Turner (2020) and Stlulnup: A Cowichan Nation Use and Occupancy Study for Tilbury Island by Candace Charlie (2019).

#### **11.4.5. Assessing Effects on Indigenous Interests**

##### **11.4.5.1. Introduction**

The Application must meet the information requirements outlined in subsection 11.1.5.1 Introduction. The Application must include one aggregate introduction for Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe, and Stz’uminus First Nations.

##### **11.4.5.2. Assessment Boundaries**

The Application must meet the information requirements outlined in subsection 11.1.5.2 Assessment Boundaries. The Application must include one set of assessment boundaries for the effects on Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe, and Stz’uminus First Nations’ Indigenous interests.

##### **11.4.5.3. Spatial Boundaries**

The Application must meet the information requirements outlined in subsection 11.1.5.3 Spatial Boundaries. The Application must include one set of spatial boundaries for the effects on Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe, and Stz’uminus First Nations’ Indigenous interests.

As per the request of the Quw’utsun Nation to ensure that the assessment of Indigenous interests includes Indigenous nation use areas, the proponent will use approved Indigenous Knowledge sources to determine Quw’utsun Nation areas of use to include in the LAA.

##### **11.4.5.4. Temporal Boundaries**

The Application must meet the information requirements outlined in subsection 11.1.5.4 Temporal Boundaries. The Application must include one set of assessment boundaries for the effects on Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe, and Stz’uminus First Nations’ Indigenous interests.

##### **11.4.5.5. Existing Conditions**

The Application must meet the information requirements outlined in subsection 11.1.5.5 Existing Conditions. The Application must include one section which aggregates existing conditions for Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe, and Stz’uminus First Nations. Where the existing condition of Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe, and Stz’uminus First Nation are unique, those distinctions will be identified.

#### 11.4.5.6. Potential Effects on Indigenous Interests

The Application must meet the information requirements outlined in subsection 11.1.5.6 Potential Effects on Indigenous Interests. The Application must include one section which aggregates potential effects on Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe, and Stz'uminus First Nation's Indigenous interests. If there are unique pathways through which Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe, or Stz'uminus First Nation's Indigenous interests could be affected by Project components and activities, the Application will identify those distinctions. The Application must describe the VCs and indicators used to assess potential effects that are unique to Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe, or Stz'uminus First Nation.

The Application must address the potential effects to Indigenous interests identified by Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe, and Stz'uminus First Nation during Early Engagement. These concerns are summarized in Table 9. The proponent is continuing to engage with Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe, and Stz'uminus First Nation to understand their Indigenous interests in the Project and the areas influenced by the Project.

Table 9. Proposed Preliminary List of Quw'utsun Nation Indigenous Interests

Preliminary Indigenous Interests	Preliminary Potential Effects
Harvesting and Subsistence Activities	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Harvesting and Subsistence Activities, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to Indigenous interests relating to Harvesting and Subsistence Activities identified by Quw'utsun Nation members: <ul style="list-style-type: none"> <li>Effects to Indigenous and Aboriginal rights as recognized by the United Nations Declaration on the Rights of Indigenous Peoples and Section 35 of the <i>Constitution Act</i>, including in relation to: <ul style="list-style-type: none"> <li>Subsistence, including the right to be secure in enjoyment of Quw'utsun Nation's own means of subsistence</li> <li>The harvest of medicinal plants, animals, and minerals for traditional medicines and health practices</li> <li>The harvest of wildlife, waterfowl, vegetation, and other resources</li> <li>The right to fish for food, social, and ceremonial purposes</li> </ul> </li> </ul> </li> </ul>
Cultural Use Sites and Areas	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Cultural Use Sites and Areas, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to Indigenous interests relating to Cultural Use Sites and Areas identified by Quw'utsun Nation members: <ul style="list-style-type: none"> <li>Effects to Indigenous and Aboriginal rights as recognized by the United Nations Declaration on the Rights of Indigenous Peoples and Section 35 of the <i>Constitution Act</i>, including in relation to: <ul style="list-style-type: none"> <li>The protection, maintenance, and access to archaeological, historical, and cultural sites, including the Quw'utsun Nation's historic village site of Tl'uqtnus</li> <li>Quw'utsun Nation members spiritual relationship with traditional lands, territories, water, and other resources</li> </ul> </li> </ul> </li> </ul>
Social and Economic Conditions	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Social and Economic Conditions, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to Indigenous interests relating to Social and Economic Conditions identified by Quw'utsun Nation members:</li> </ul>

Table 9. Proposed Preliminary List of Quw'utsun Nation Indigenous Interests

Preliminary Indigenous Interests	Preliminary Potential Effects
	<ul style="list-style-type: none"> <li>○ Effects to Indigenous and Aboriginal rights as recognized by the United Nations Declaration on the Rights of Indigenous Peoples and Section 35 of the <i>Constitution Act</i>, including in relation to:               <ul style="list-style-type: none"> <li>▪ Free engagement in all its traditional and other economic activities</li> <li>▪ Improvement of social and economic conditions</li> </ul> </li> </ul>
Indigenous Health and Well-being	<ul style="list-style-type: none"> <li>• For the list of preliminary potential effects on Health and Well-being, see Table 6 in subsection 11.1.5.6.</li> <li>• The Application must address the following potential effects to Indigenous interests relating to Health and Well-being identified by Quw'utsun Nation members:               <ul style="list-style-type: none"> <li>○ Improvement of social conditions</li> <li>○ Effects to Indigenous and Aboriginal rights as recognized by the United Nations Declaration on the Rights of Indigenous Peoples and Section 35 of the <i>Constitution Act</i>, including in relation to the enjoyment of the highest attainable standard of physical and mental health, and rights to traditional medicines and health practices including conservation of all medicinal resources.</li> </ul> </li> </ul>
Cultural Continuation	<ul style="list-style-type: none"> <li>• For the list of preliminary potential effects on Cultural Continuation, see Table 6 in subsection 11.1.5.6.</li> <li>• The Application must address the following potential effects to Indigenous interests relating to Cultural Continuation identified by Quw'utsun Nation members:               <ul style="list-style-type: none"> <li>○ Effects to Indigenous and Aboriginal rights as recognized by the United Nations Declaration on the Rights of Indigenous Peoples and Section 35 of the <i>Constitution Act</i>, including in relation to:                   <ul style="list-style-type: none"> <li>▪ The revitalization, development and transmission of histories, oral traditions, and Place Names</li> <li>▪ The maintenance and strengthening of spiritual relationships with traditionally owned or otherwise used land, water, and resources and to uphold obligations to future generations in this regard.</li> </ul> </li> </ul> </li> </ul>
Indigenous Governance Systems	<ul style="list-style-type: none"> <li>• For the list of preliminary potential effects on Indigenous Governance Systems, see Table 6 in subsection 11.1.5.6.</li> <li>• The Application must address the following potential effects to Indigenous interests relating to Indigenous Governance Systems identified by Quw'utsun Nation members:               <ul style="list-style-type: none"> <li>○ Effects to Indigenous and Aboriginal rights as recognized by the United Nations Declaration on the Rights of Indigenous Peoples and Section 35 of the <i>Constitution Act</i>, including in relation to:                   <ul style="list-style-type: none"> <li>▪ The ability to participate in decision-making affecting its rights</li> <li>▪ Ownership, access, use, develop, and control of traditionally owned, occupied, used, or acquired lands, territories, and other resources</li> <li>▪ The Aboriginal Right to the land itself</li> <li>▪ The protection of the environment</li> </ul> </li> </ul> </li> </ul>

#### 11.4.5.7. Effects Management

The Application must meet the information requirements outlined in subsection 11.1.5.7 Effects Management. The Application must include one section which aggregates the discussion of measures identified in an attempt to avoid,



minimize, offset or otherwise address potential adverse effects of the Project on the rights of Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe, and Stz'uminus First Nation's Indigenous interests.

The Application must describe how the proponent worked towards the goal of identifying mutually agreeable mitigation and effects management approaches with Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe, and Stz'uminus First Nation, especially for those concerns raised relating to the exercise of their Indigenous interests.

#### **11.4.5.8. Assessing Negative Effects**

The Application must meet the information requirements outlined in subsection 11.1.5.8 Assessing Negative Effects.

#### **11.4.5.9. Characterization of Residual Effects**

##### **Cowichan Tribes**

The Application must provide a characterization of negative residual effects of the Project to Cowichan Tribes' Indigenous interests and will meet the information requirements outlined in subsection 11.1.5.9 Characterization of Residual Effects.

##### **Halalt First Nation**

The Application must provide a characterization of negative residual effects of the Project to Halalt First Nation's Indigenous interests and will meet the information requirements outlined in subsection 11.1.5.9 Characterization of Residual Effects.

##### **Lyackson First Nation**

The Application must provide a characterization of negative residual effects of the Project to Lyackson First Nation's Indigenous interests and will meet the information requirements outlined in subsection 11.1.5.9 Characterization of Residual Effects.

##### **Penelakut Tribe**

The Application must provide a characterization of negative residual effects of the Project to Penelakut Tribe's Indigenous interests and will meet the information requirements outlined in subsection 11.1.5.9 Characterization of Residual Effects.

##### **Stz'uminus First Nation**

The Application must provide a characterization of negative residual effects of the Project to Stz'uminus First Nation's Indigenous interests and will meet the information requirements outlined in subsection 11.1.5.9 Characterization of Residual Effects.

#### **11.4.5.10. Cumulative Effects**

The Application must meet the information requirements outlined in subsection 11.1.5.10 Cumulative Effects. The Application must include one section which aggregates the assessment of cumulative effects on Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe, and Stz'uminus First Nation's Indigenous interests.

If there are unique pathways through which Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe, or Stz'uminus First Nation's Indigenous interests could be cumulatively affected, the Application will identify those distinctions.

#### **11.4.5.11. Views of Cowichan Tribes**

The Application must meet the information requirements outlined in subsection 11.1.5.11 Views of Indigenous Nation.

**11.4.5.12. Views of Halalt First Nation**

The Application must meet the information requirements outlined in subsection 11.1.5.11 Views of Indigenous Nation.

**11.4.5.13. Views of Lyackson First Nation**

The Application must meet the information requirements outlined in subsection 11.1.5.11 Views of Indigenous Nation.

**11.4.5.14. Views of Penelakut Tribe**

The Application must meet the information requirements outlined in subsection 11.1.5.11 Views of Indigenous Nation.

**11.4.5.15. Views of Stz'uminus First Nation**

The Application must meet the information requirements outlined in subsection 11.1.5.11 Views of Indigenous Nation.

**11.4.6. Positive Effects**

The Application must meet the information requirements outlined in subsection 11.1.6 Positive Effects. The Application must include one section which aggregates the description of positive effects to Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe, and Stz'uminus First Nation's Indigenous interests. If there are unique pathways through which Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe, or Stz'uminus First Nation's Indigenous interests could be positive effected, the Application will identify those distinctions.

**11.4.7. Summary**

The Application must meet the information requirements outlined in subsection 11.1.7 Summary. The Application must include one summary of Cowichan Tribes, Halalt First Nation, Lyackson First Nation, Penelakut Tribe, and Stz'uminus First Nations' Indigenous interests.

**11.5. Katzie First Nation****11.5.1. Methodology Overview**

The Application must include a stand-alone assessment for Katzie First Nation that will follow the methodology described in subsection 11.1.

**11.5.2. Context****11.5.2.1. Understanding of Indigenous Interests and Current Context**

The Application must meet the information requirements outlined in subsection 11.1.2.1 Understanding of Indigenous Interests and Current Context.

**11.5.3. Summary of Engagement**

The Application must meet the information requirements outlined in subsection 11.1.3 Summary of Engagement.

**11.5.4. Information Sources**

The Application must meet the information requirements outlined in subsection 11.1.4 Information Sources.

**11.5.4.1. Indigenous Knowledge**

The Application must meet the information requirements outlined in subsection 11.1.4.1 Indigenous Knowledge.

### 11.5.5. Assessing Effects on Indigenous Interests

#### 11.5.5.1. Introduction

The Application must meet the information requirements outlined in subsection 11.1.5.1 Introduction.

#### 11.5.5.2. Assessment Boundaries

The Application must meet the information requirements outlined in subsection 11.1.5.2 Assessment Boundaries.

#### 11.5.5.3. Spatial Boundaries

The Application must meet the information requirements outlined in subsection 11.1.5.3 Spatial Boundaries.

#### 11.5.5.4. Temporal Boundaries

The Application must meet the information requirements outlined in subsection 11.1.5.4 Temporal Boundaries.

#### 11.5.5.5. Existing Conditions

The Application must meet the information requirements outlined in subsection 11.1.5.5 Existing Conditions.

#### 11.5.5.6. Potential Effects on Indigenous Interests

The Application must meet the information requirements outlined in subsection 11.1.5.6 Potential Effects on Indigenous interests.

The Application must address the potential effects to Indigenous interests identified by Katzie First Nation during Early Engagement. These concerns are summarized in Table 10. The proponent is continuing to engage with Katzie First Nation to understand their Indigenous interests in the Project and the areas influenced by the Project.

Table 10. Proposed Preliminary List of Katzie First Nation Indigenous Interests

Preliminary Indigenous Interests	Preliminary Potential Effects
Harvesting and Subsistence Activities	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Harvesting and Subsistence Activities, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to Indigenous interests relating to Harvesting and Subsistence Activities identified by Katzie First Nation:               <ul style="list-style-type: none"> <li>Changes in water quality in the Fraser River and Tilbury Slough, and associated effects on fisheries, particularly as a result of discharge from hydrostatic testing into the Fraser River</li> <li>Effects on Pacific salmon species in the Fraser River as they are important cultural and environmental resources to the Katzie First Nation</li> <li>Effects to Katzie First Nation's rights to use the Fraser River for travel and fishing activities</li> <li>Effects on White sturgeon rearing areas along Tilbury Island shoreline and Tilbury Slough</li> <li>Effects on active eulachon spawning grounds in the lower Fraser River</li> <li>Effects on amphibians that may be present in Tilbury Slough</li> <li>Effects on marine mammals due to underwater noise</li> <li>Changes to fisheries resources where some species are classified as species at risk of extinction</li> </ul> </li> </ul>

Table 10. Proposed Preliminary List of Katzie First Nation Indigenous Interests

Preliminary Indigenous Interests	Preliminary Potential Effects
Cultural Use Sites and Areas	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Cultural Use Sites and Areas, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to Indigenous interests relating to Cultural Use Sites and Areas identified by Katzie First Nation: <ul style="list-style-type: none"> <li>Disturbance of, damage to, or loss of cultural and archaeologically significant sites important to Katzie First Nation that are within the Project vicinity. Significant sites include St. Mungo Cannery Site, Glenrose, and Nottingham Farm, as well as Burns Bog with its proximity to the Project given that Indigenous Peoples, including Katzie people, have used Burns Bog for thousands of years</li> <li>Disturbance of cultural and archaeological resources present on the existing industrial site due to no stringent previous requirements to document, implement guidelines and best management practices when the existing site was developed. The existing bund wall/berm at the site likely the location of where originally excavated materials were placed, thus there is potential for resources to be present here and damaged during Project-related activities</li> <li>Wave effects on cultural and archaeological resources that are or may be present along the Fraser River</li> </ul> </li> </ul>
Social and Economic Conditions	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Social and Economic Conditions, see Table 6 in subsection 11.1.5.6.</li> </ul>
Indigenous Health and Well-being	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Indigenous Health and Well-being, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to Indigenous interests relating to Health and Well-being identified by Katzie First Nation: <ul style="list-style-type: none"> <li>Effects to water quality and water quantity</li> </ul> </li> </ul>
Cultural Continuation	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Cultural Continuation, see Table 6 in subsection 11.1.5.6.</li> </ul>
Indigenous Governance Systems	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Indigenous Governance Systems, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to Indigenous interests relating to Indigenous Governance Systems identified by Katzie First Nation: <ul style="list-style-type: none"> <li>Effects on stewardship rights and responsibilities</li> </ul> </li> </ul>

#### 11.5.5.7. Effects Management

The Application must meet the information requirements outlined in subsection 11.1.5.7 Effects Management.

#### 11.5.5.8. Assessing Negative Effects

The Application must meet the information requirements outlined in subsection 11.1.5.8 Assessing Negative Effects.

#### 11.5.5.9. Characterization of Residual Effects

The Application must meet the information requirements outlined in subsection 11.1.5.9 Characterization of Residual Effects.

#### 11.5.5.10. Cumulative Effects

The Application must meet the information requirements outlined in subsection 11.1.5.10 Cumulative Effects.

**11.5.5.11. Views of Indigenous nation**

The Application must meet the information requirements outlined in subsection 11.1.5.11 Views of Indigenous Nation.

**11.5.6. Positive Effects**

The Application must meet the information requirements outlined in subsection 11.1.6 Positive Effects.

**11.5.7. Summary**

The Application must meet the information requirements outlined in subsection 11.1.7 Summary.

**11.6. Kwantlen First Nation****11.6.1. Methodology Overview**

The Application must include a stand-alone assessment for Kwantlen First Nation that will follow the methodology described in subsection 11.1.

**11.6.2. Context****11.6.2.1. Understanding of Indigenous Interests and Current Context**

The Application must meet the information requirements outlined in subsection 11.1.2.1 Understanding of Indigenous Interests and Current Context.

**11.6.3. Summary of Engagement**

The Application must meet the information requirements outlined in subsection 11.1.3 Summary of Engagement.

**11.6.4. Information Sources**

The Application must meet the information requirements outlined in subsection 11.1.4 Information Sources.

**11.6.4.1. Indigenous Knowledge**

The Application must meet the information requirements outlined in subsection 11.1.4.1 Indigenous Knowledge.

**11.6.5. Assessing Effects on Indigenous Interests****11.6.5.1. Introduction**

The Application must meet the information requirements outlined in subsection 11.1.5.1 Introduction.

**11.6.5.2. Assessment Boundaries**

The Application must meet the information requirements outlined in subsection 11.1.5.2 Assessment Boundaries.

**11.6.5.3. Spatial Boundaries**

The Application must meet the information requirements outlined in subsection 11.1.5.3 Spatial Boundaries.

**11.6.5.4. Temporal Boundaries**

The Application must meet the information requirements outlined in subsection 11.1.5.4 Temporal Boundaries.

**11.6.5.5. Existing Conditions**

The Application must meet the information requirements outlined in subsection 11.1.5.5 Existing Conditions.



#### 11.6.5.6. Potential Effects on Indigenous Interests

The Application must meet the information requirements outlined in subsection 11.1.5.6 Potential Effects on Indigenous Interests.

The Application must address the potential effects to Indigenous interests identified by Kwantlen First Nation during Early Engagement. These concerns are summarized in Table 11. The proponent is continuing to engage with Kwantlen First Nation to understand their Indigenous interests in the Project and the areas influenced by the Project.

Table 11. Proposed Preliminary List of Kwantlen First Nation Indigenous Interests

Preliminary Indigenous Interests	Preliminary Potential Effects
Harvesting and Subsistence Activities	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Harvesting and Subsistence Activities, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to Indigenous interests relating to Harvesting and Subsistence Activities identified by Kwantlen First Nation: <ul style="list-style-type: none"> <li>Changes to ecosystem health particularly for medicinal plants, migratory bird habitats</li> </ul> </li> </ul>
Cultural Use Sites and Areas	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Cultural Use Sites and Areas, see Table 6 in subsection 11.1.5.6.</li> </ul>
Social and Economic Conditions	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Social and Economic Conditions, see Table 6 in subsection 11.1.5.6.</li> </ul>
Indigenous Health and Well-being	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Indigenous Health and Well-being, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to Indigenous interests relating to Health and Well-being identified by Kwantlen First Nation: <ul style="list-style-type: none"> <li>Water discharge quality</li> <li>GHG emissions and cumulative effects due to infrastructure development</li> </ul> </li> </ul>
Cultural Continuation	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Cultural Continuation, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to Indigenous interests relating to Cultural Continuation identified by Kwantlen First Nation: <ul style="list-style-type: none"> <li>Effects to Kwantlen First Nation's right to knowledge transmission</li> <li>Changes to Kwantlen culture, food, and knowledge translation due to adverse effects to fish populations in the Fraser River Concern for further disenfranchisement from the site (Tilbury and Lulu Island)</li> </ul> </li> </ul>
Indigenous Governance Systems	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Indigenous Governance Systems, see Table 6 in subsection 11.1.5.6.</li> </ul>

#### 11.6.5.7. Effects Management

The Application must meet the information requirements outlined in subsection 11.1.5.7 Effects Management.

#### 11.6.5.8. Assessing Negative Effects

The Application must meet the information requirements outlined in subsection 11.1.5.8 Assessing Negative Effects.

#### 11.6.5.9. Characterization of Residual Effects

The Application must meet the information requirements outlined in subsection 11.1.5.9 Characterization of Residual Effects.

**11.6.5.10. Cumulative Effects**

The Application must meet the information requirements outlined in subsection 11.1.5.10 Cumulative Effects.

**11.6.5.11. Views of Indigenous nation**

The Application must meet the information requirements outlined in subsection 11.1.5.11 Views of Indigenous Nation.

**11.6.6. Positive Effects**

The Application must meet the information requirements outlined in subsection 11.1.6 Positive Effects.

**11.6.7. Summary**

The Application must meet the information requirements outlined in subsection 11.1.7 Summary.

**11.7. Musqueam Indian Band****11.7.1. Methodology Overview**

The Application must include a stand-alone assessment for Musqueam Indian Band that will follow the methodology described in subsection 11.1.

**11.7.2. Context****11.7.2.1. Understanding of Indigenous Interests and Current Context**

The Application must meet the information requirements outlined in subsection 11.1.2.1 Understanding of Indigenous Interests and Current Context.

**11.7.3. Summary of Engagement**

The Application must meet the information requirements outlined in subsection 11.1.3 Summary of Engagement.

**11.7.4. Information Sources**

The Application must meet the information requirements outlined in subsection 11.1.4 Information Sources.

**11.7.4.1. Indigenous Knowledge**

The Application must meet the information requirements outlined in subsection 11.1.4.1 Indigenous Knowledge.

**11.7.5. Assessing Effects on Indigenous Interests****11.7.5.1. Introduction**

The Application must meet the information requirements outlined in subsection 11.1.5.1 Introduction.

**11.7.5.2. Assessment Boundaries**

The Application must meet the information requirements outlined in subsection 11.1.5.2 Assessment Boundaries.

**11.7.5.3. Spatial Boundaries**

The Application must meet the information requirements outlined in subsection 11.1.5.3 Spatial Boundaries.

**11.7.5.4. Temporal Boundaries**

The Application must meet the information requirements outlined in subsection 11.1.5.4 Temporal Boundaries.

### 11.7.5.5. Existing Conditions

The Application must meet the information requirements outlined in subsection 11.1.5.5 Existing Conditions.

### 11.7.5.6. Potential Effects on Indigenous Interests

The Application must meet the information requirements outlined in subsection 11.1.5.6 Potential Effects on Indigenous interests.

The Application must address the potential effects to Indigenous interests identified by Musqueam Indian Band during Early Engagement. These concerns are summarized in Table 12. The proponent is continuing to engage with Musqueam Indian Band to understand their Indigenous interests in the Project and the areas influenced by the Project.

Table 12. Proposed Preliminary List of Musqueam Indian Band Indigenous Interests

Preliminary Indigenous Interests	Preliminary Potential Effects
Harvesting and Subsistence Activities	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Harvesting and Subsistence Activities, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to Indigenous interests relating to Harvesting and Subsistence Activities identified by Musqueam Indian Band: <ul style="list-style-type: none"> <li>Effects to Musqueam Indian Band's right to fish for food, social, ceremonial, and communal purposes</li> <li>Effects to Musqueam Indian Band's Right to freely access preferred resources and waters</li> <li>Effects to members of Musqueam Indian Band's ability and desire to engage in traditional fishing practices due to safety-related concerns associated with increased marine traffic</li> </ul> </li> </ul>
Cultural Use Sites and Areas	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Cultural Use Sites and Areas, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to Indigenous interests relating to Cultural Use Sites and Areas identified by Musqueam Indian Band: <ul style="list-style-type: none"> <li>Permanent loss of cultural heritage sites due to Project construction operation</li> <li>Effects to Tilbury Island - a historical and contemporary preferred fishing area which cannot be substituted with a location elsewhere on the Fraser River</li> <li>Changes to Musqueam Indian Band's sense of place and identity including in relation to: <ul style="list-style-type: none"> <li>cultural heritage sites and access restrictions</li> <li>sacred, spiritually relevant, and culturally significant sites</li> </ul> </li> <li>Changes to culturally importance places, which impact sensory experiences and cultural understanding and negatively affect Musqueam place-based knowledge</li> <li>Effects to Musqueam Indian Band's Exercise of rights, including associated use and occupancy</li> </ul> </li> </ul>
Social and Economic Conditions	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Social and Economic Conditions, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to Indigenous interests relating to Social and Economic Conditions identified by Musqueam Indian Band: <ul style="list-style-type: none"> <li>Effects to Musqueam Indian Band's right to economic development due to impact on accessibility and/or fish</li> </ul> </li> </ul>

Table 12. Proposed Preliminary List of Musqueam Indian Band Indigenous Interests

Preliminary Indigenous Interests	Preliminary Potential Effects
Indigenous Health and Well-being	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Indigenous Health and Well-being, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to Indigenous interests relating to Health and Well-being identified by Musqueam Indian Band: <ul style="list-style-type: none"> <li>Effects to Musqueam Indian Band's rights to clean air, water, land, and safety</li> <li>Changes to culturally important foods which can have an effect on Musqueam Indian Band's health</li> <li>Changes to Musqueam Indian Band's sense of place and identity, including in relation to: <ul style="list-style-type: none"> <li>psychological and emotional stress</li> <li>air emissions, sensory disturbances, and safety risks</li> </ul> </li> </ul> </li> </ul>
Cultural Continuation	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Cultural Continuation, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to Indigenous interests relating to Cultural Continuation identified by Musqueam Indian Band: <ul style="list-style-type: none"> <li>Effects to Musqueam Indian Band's knowledge continuation due to effects on right ability to fish which may persist over generations</li> <li>Disruption to the protection, persistence, and living of Musqueam šx̣ẉtəhírm (that is, ways, manners, and customs) and snəwəyət (that is, teachings received since childhood, including identity and responsibilities)</li> <li>Changes to Musqueam Indian Band's tangible and intangible values and activities</li> <li>Effects to Musqueam Indian Band's Exercise of rights, including associated knowledge</li> <li>Changes to knowledge transmission</li> <li>Changes to Musqueam Indian Band's sense of place and identity, including in relation to: <ul style="list-style-type: none"> <li>identities and connection to cultural heritage</li> </ul> </li> </ul> </li> </ul>
Indigenous Governance Systems	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Indigenous Governance Systems, see Table 6 in subsection 11.1.5.6.</li> </ul>

### 11.7.5.7. Effects Management

The Application must meet the information requirements outlined in subsection 11.1.5.7 Effects Management.

### 11.7.5.8. Assessing Negative Effects

The Application must meet the information requirements outlined in subsection 11.1.5.8 Assessing Negative Effects.

### 11.7.5.9. Characterization of Residual Effects

The Application must meet the information requirements outlined in subsection 11.1.5.9 Characterization of Residual Effects.

### 11.7.5.10. Cumulative Effects

The Application must meet the information requirements outlined in subsection 11.1.5.10 Cumulative Effects.

### 11.7.5.11. Views of Indigenous nation

The Application must meet the information requirements outlined in subsection 11.1.5.11 Views of Indigenous Nation.

### 11.7.6. Positive Effects

The Application must meet the information requirements outlined in subsection 11.1.6 Positive Effects.

### 11.7.7. Summary

The Application must meet the information requirements outlined in subsection 11.1.7 Summary.

## 11.8. S'ólh Téméxw Stewardship Alliance

### 11.8.1. Methodology Overview

The S'ólh Téméxw Stewardship Alliance submitted a notice to engage as a participating Indigenous nation to the B.C. EAO. The proponent proposes that the Indigenous nations' Effects Assessment for Aitchelitz First Nation, Shxwhá:y Village, Skowkale First Nation, Soowahlie First Nation, Squiala First Nation, Tzeachten First Nation, Yakweakwioose First Nation, Kwaw-kwaw-Apilt First Nation, Scowlitz First Nation, Skawahlook (Sq'ewá:lxw) First Nation, Skwah First Nation, Sumas First Nation, and Yale First Nation be conducted in one partially aggregated assessment subsection titled S'ólh Téméxw Stewardship Alliance. The assessment will include individual residual effects assessments for each Indigenous nation. The proposed approach for the S'ólh Téméxw Stewardship Alliance assessment aligns with the shared interests identified by these 13 Indigenous nations.

Aitchelitz First Nation, Shxwhá:y Village, Skowkale First Nation, Soowahlie First Nation, Squiala First Nation, Tzeachten First Nation, Yakweakwioose First Nation, Kwaw-kwaw-Apilt First Nation, Scowlitz First Nation, Skawahlook (Sq'ewá:lxw) First Nation, Skwah First Nation, Sumas First Nation, and Yale First Nation are all members of the S'ólh Téméxw Stewardship Alliance. Chawathil First Nation and Cheam First Nation are also members of the S'ólh Téméxw Stewardship Alliance, however, those two Indigenous nations independently submitted notices to engage as a participating Indigenous nation to the B.C. EAO. The proponent will conduct stand-alone Indigenous Nations Effects Assessments for Chawathil First Nation (subsection 11.2) and Cheam First Nation (subsection 11.3) to reflect the separate participation of these two Indigenous nations.

The S'ólh Téméxw Stewardship Alliance is an umbrella organization representing 15 of the 30 Stó:lō Nation bands. The proponent has communicated with the S'ólh Téméxw Stewardship Alliance directly and via the People of the River Referrals Office, an operational arm of the S'ólh Téméxw Stewardship Alliance, which facilitates and supports the S'ólh Téméxw Stewardship Alliance with engagement by providing technical support, administrative support, and managing the review of referrals.

Subsection 11.8 provides further information on how methodology proposed within Section 11 would be adapted to support this partially aggregated approach.

### 11.8.2. Context

#### 11.8.2.1. Understanding of Indigenous Interests and Current Context

The Application must meet the information requirements outlined in subsection 11.1.2.1 Understanding of Indigenous Interests and Current Context. The Application must include one section which aggregates the proponent's understanding of the Aitchelitz First Nation, Shxwhá:y Village, Skowkale First Nation, Soowahlie First Nation, Squiala First Nation, Tzeachten First Nation, Yakweakwioose First Nation, Kwaw-kwaw-Apilt First Nation, Scowlitz First Nation, Skawahlook (Sq'ewá:lxw) First Nation, Skwah First Nation, Sumas First Nation, and Yale First Nation's Indigenous interests and current context.



### 11.8.3. Summary of Engagement

The Application must meet the information requirements outlined in subsection 11.1.3 Summary of Engagement.

### 11.8.4. Information Sources

The Application must meet the information requirements outlined in subsection 11.1.4 Information Sources.

#### 11.8.4.1. Indigenous Knowledge

The Application must meet the information requirements outlined in subsection 11.1.4.1 Indigenous Knowledge.

The Application must incorporate findings from the Indigenous Knowledge report provided to the proponent: Integrated Cultural Assessment for Roberts Bank Terminal 2 by the Stó:lō Research and Resource Management Centre (Stó:lō Research and Resource Management Centre 2020).

### 11.8.5. Assessing Effects on Indigenous Interests

#### 11.8.5.1. Introduction

The Application must meet the information requirements outlined in subsection 11.1.5.1 Introduction. The Application must include one section which aggregates the assessment of effects on Indigenous interests as per the S'ólh Téméxw Stewardship Alliance's participating Indigenous nation notice.

#### 11.8.5.2. Assessment Boundaries

The Application must meet the information requirements outlined in subsection 11.1.5.2 Assessment Boundaries.

#### 11.8.5.3. Spatial Boundaries

The Application must meet the information requirements outlined in subsection 11.1.5.3 Spatial Boundaries. The Application must include one set of spatial boundaries encompassing the combined areas of use of Aitchelitz First Nation, Shxwhá:y Village, Skowkale First Nation, Soowahlie First Nation, Squiala First Nation, Tzeachten First Nation, Yakwekwioose First Nation, Kwaw-kwaw-Apilt First Nation, Scowlitz First Nation, Skawahlook (Sq'ewá:lxw) First Nation, Skwah First Nation, Sumas First Nation, and Yale First Nation for the effects on S'ólh Téméxw Stewardship Alliance's Indigenous interest.

#### 11.8.5.4. Temporal Boundaries

The Application must meet the information requirements outlined in subsection 11.1.5.4 Temporal Boundaries.

#### 11.8.5.5. Existing Conditions

The Application must meet the information requirements outlined in subsection 11.1.5.5 Existing Conditions.

#### 11.8.5.6. Potential Effects on Indigenous Interests

The Application must meet the information requirements outlined in subsection 11.1.5.6 Potential Effects on Indigenous Interests.

The Application must address the potential effects to Indigenous interests identified by the S'ólh Téméxw Stewardship Alliance during Early Engagement. These concerns are summarized in Table 13. The proponent is continuing to engage with the S'ólh Téméxw Stewardship Alliance to understand their Indigenous interests in the Project and the areas influenced by the Project.

Table 13. Proposed Preliminary List of S'ólh Téméxw Stewardship Alliance Indigenous Interests

Preliminary Indigenous Interests	Preliminary Potential Effects
Harvesting and Subsistence Activities	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Harvesting and Subsistence Activities, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to Indigenous interests relating to Harvesting and Subsistence Activities identified by the S'ólh Téméxw Stewardship Alliance: <ul style="list-style-type: none"> <li>Additional effects on Fraser River salmon and the S'ólh Téméxw Stewardship Alliance's right to fish for salmon in the Fraser River</li> <li>Effects on the cultural practice of wind-drying salmon caused by the potential adverse effects on air quality and the concentration of pollution in the Fraser Valley</li> </ul> </li> </ul>
Cultural Use Sites and Areas	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Cultural Use Sites and Areas, see Table 6 in subsection 11.1.5.6.</li> </ul>
Social and Economic Conditions	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Social and Economic Conditions, see Table 6 in subsection 11.1.5.6.</li> </ul>
Indigenous Health and Well-being	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Indigenous Health and Well-being, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to Indigenous interests relating to Indigenous Health and Well-being identified by the S'ólh Téméxw Stewardship Alliance: <ul style="list-style-type: none"> <li>Effects to cultural and spiritual practices and related effects on health and well-being</li> </ul> </li> </ul>
Cultural Continuation	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Cultural Continuation, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to Indigenous interests relating to Cultural Continuation identified by the S'ólh Téméxw Stewardship Alliance: <ul style="list-style-type: none"> <li>Changes in air and water quality, and the maintenance of places relied on by non-human people. The integrity of these components is essential to the continuation of cultural and spiritual practices</li> </ul> </li> </ul>
Indigenous Governance Systems	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Indigenous Governance Systems, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to Indigenous interests relating to Indigenous Governance Systems identified by the S'ólh Téméxw Stewardship Alliance: <ul style="list-style-type: none"> <li>Changes to the S'ólh Téméxw ecosystem resulting in effects on the protection of the ecosystem as an integrated system</li> </ul> </li> </ul>

#### 11.8.5.7. Effects Management

The Application must meet the information requirements outlined in subsection 11.1.5.7 Effects Management.

#### 11.8.5.8. Assessing Negative Effects

The Application must meet the information requirements outlined in subsection 11.1.5.8 Assessing Negative Effects.

#### 11.8.5.9. Characterization of Residual Effects

The Application must meet the information requirements outlined in subsection 11.1.5.9 Characterization of Residual Effects.

#### 11.8.5.10. Cumulative Effects

The Application must meet the information requirements outlined in subsection 11.1.5.10 Cumulative Effects.

**11.8.5.11. Views of Indigenous Nation**

The Application must meet the information requirements outlined in subsection 11.1.5.11 Views of Indigenous Nation. The Application must include one section which will aggregate the views of the S'ólh Téméxw Stewardship Alliance and its Indigenous nation members.

**11.8.6. Positive Effects**

The Application must meet the information requirements outlined in subsection 11.1.6 Positive Effects. The Application must include one section which aggregates the description of positive effects to the S'ólh Téméxw Stewardship Alliance and its member's Indigenous interests.

**11.8.7. Summary**

The Application must meet the information requirements outlined in subsection 11.1.7 Summary. The Application must include one summary of the S'ólh Téméxw Stewardship Alliance and its member's Indigenous interests.

**11.9. Tsawwassen First Nation****11.9.1. Methodology Overview**

The Application must include a stand-alone assessment for Tsawwassen First Nation that will follow the methodology described in subsection 11.1. The assessment will also consider Tsawwassen First Nation's Rights Assessment Approach. The proponent will engage with Tsawwassen First Nation to understand their methodology for assessing effects of the Project on their Indigenous interests, which includes Tsawwassen Treaty and Harvesting rights.

**11.9.2. Context****11.9.2.1. Understanding of Indigenous Interests and Current Context**

The Application must meet the information requirements outlined in subsection 11.1.2.1 Understanding of Indigenous Interests and Current Context.

**11.9.3. Summary of Engagement**

The Application must meet the information requirements outlined in subsection 11.1.3 Summary of Engagement.

**11.9.4. Information Sources**

The Application must meet the information requirements outlined in subsection 11.1.4 Information Sources.

**11.9.4.1. Indigenous Knowledge**

The Application must meet the information requirements outlined in subsection 11.1.4.1 Indigenous Knowledge.

The Application must be informed by Indigenous Knowledge and western science and ongoing engagement with Tsawwassen First Nation. The Application must describe how the proponent addressed Tsawwassen First Nation's concern regarding the incorporation of Indigenous Knowledge and the assessment and integration of Tsawwassen First Nation views within the Application.

### 11.9.5. Assessing Effects on Indigenous Interests

#### 11.9.5.1. Introduction

The Application must meet the information requirements outlined in subsection 11.1.5.1 Introduction.

#### 11.9.5.2. Assessment Boundaries

The Application must meet the information requirements outlined in subsection 11.1.5.2 Assessment Boundaries.

#### 11.9.5.3. Spatial Boundaries

The Application must meet the information requirements outlined in subsection 11.1.5.3 Spatial Boundaries.

#### 11.9.5.4. Temporal Boundaries

The Application must meet the information requirements outlined in subsection 11.1.5.4 Temporal Boundaries.

#### 11.9.5.5. Existing Conditions

The Application must meet the information requirements outlined in subsection 11.1.5.5 Existing Conditions.

#### 11.9.5.6. Potential Effects on Indigenous Interests

The Application must meet the information requirements outlined in subsection 11.1.5.6 Potential Effects on Indigenous Interests.

The Application must address the potential effects to Indigenous interests identified by Tsawwassen First Nation during Early Engagement. These concerns are summarized in Table 14. The proponent is continuing to engage with Tsawwassen First Nation to understand their Indigenous interests in the Project and the areas influenced by the Project.

Table 14. Proposed Preliminary List of Tsawwassen First Nation Indigenous Interests

Preliminary Indigenous Interests	Preliminary Potential Effects
Harvesting and Subsistence Activities	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Harvesting and Subsistence Activities, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to Indigenous interests relating to Harvesting and Subsistence Activities identified by Tsawwassen First Nation: <ul style="list-style-type: none"> <li>Effects to Tsawwassen First Nation's rights to harvest in and around the Project Footprint, including the right to harvest plants and wildlife in the area, and the right to fish around and up the Fraser River</li> </ul> </li> </ul>
Cultural Use Sites and Areas	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Cultural Use Sites and Areas, see Table 6 in subsection 11.1.5.6.</li> </ul>
Social and Economic Conditions	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Social and Economic Conditions, see Table 6 in subsection 11.1.5.6.</li> </ul>
Indigenous Health and Well-being	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Health and Well-being, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to Indigenous interests relating to Health and Well-being identified by Tsawwassen First Nation: <ul style="list-style-type: none"> <li>Direct health effects as a result of pollution generated by the Project</li> </ul> </li> </ul>
Cultural Continuation	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Cultural Continuation, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to Indigenous interests relating to Cultural Continuation identified by Tsawwassen First Nation:</li> </ul>

Table 14. Proposed Preliminary List of Tsawwassen First Nation Indigenous Interests

Preliminary Indigenous Interests	Preliminary Potential Effects
	<ul style="list-style-type: none"> <li>○ Changes to the critical habitat of the Southern Resident Killer Whales and to the whale's access to prey through the alteration and destruction of fish habitat and fish mortality, resulting in irreparable cultural and spiritual harm to Tsawwassen First Nation members</li> <li>○ Potential interference with access to traditional territory and resources, along with the ability to share knowledge and culture with young and future generations</li> <li>○ Effects on Tsawwassen First Nation's identity as a result of effects to fish and fish habitat including alteration and loss of fish habitat</li> </ul>
Indigenous Governance Systems	<ul style="list-style-type: none"> <li>● For the list of preliminary potential effects on Indigenous Governance Systems, see Table 6 in subsection 11.1.5.6.</li> <li>● The Application must address the following potential effects to Indigenous interests relating to Indigenous Governance Systems identified by Tsawwassen First Nation: <ul style="list-style-type: none"> <li>○ Effects on Tsawwassen First Nation's identity as a result of changes in their ability to engage in stewardship over their lands</li> <li>○ Increased fish mortality resulting in changes to Tsawwassen First Nation's ability to engage in stewardship over their lands</li> </ul> </li> </ul>

### 11.9.5.7. Effects Management

The Application must meet the information requirements outlined in subsection 11.1.5.7 Effects Management.

### 11.9.5.8. Assessing Negative Effects

This section of the Application will meet the information requirements outlined in subsection 11.1.5.8 Assessing Negative Effects and will be in keeping with Chapter 15, Section 4 Assessment of the Tsawwassen First Nation Final Agreement.

### 11.9.5.9. Characterization of Residual Effects

The Application must meet the information requirements outlined in subsection 11.1.5.9 Characterization of Residual Effects.

### 11.9.5.10. Cumulative Effects

The Application must meet the information requirements outlined in subsection 11.1.5.10 Cumulative Effects.

### 11.9.6. Positive Effects

The Application must meet the information requirements outlined in subsection 11.1.6 Positive Effects.

### 11.9.7. Summary

The Application must meet the information requirements outlined in subsection 11.1.7 Summary.

## 11.10. Tsleil-Waututh Nation

### 11.10.1. Methodology Overview

The Application must include a stand-alone assessment for Tsleil-Waututh Nation that will follow the methodology described in subsection 11.1.



## 11.10.2. Context

### 11.10.2.1. Understanding of Indigenous Interests and Current Context

The Application must meet the information requirements outlined in subsection 11.1.2.1 Understanding of Indigenous Interests and Current Context.

### 11.10.3. Summary of Engagement

The Application must meet the information requirements outlined in subsection 11.1.3 Summary of Engagement.

### 11.10.4. Information Sources

The Application must meet the information requirements outlined in subsection 11.1.4 Information Sources.

#### 11.10.4.1. Indigenous Knowledge

The Application must meet the information requirements outlined in subsection 11.1.4.1 Indigenous Knowledge.

## 11.10.5. Assessing Effects on Indigenous Interests

### 11.10.5.1. Introduction

The Application must meet the information requirements outlined in subsection 11.1.5.1 Introduction.

### 11.10.5.2. Assessment Boundaries

The Application must meet the information requirements outlined in subsection 11.1.5.2 Assessment Boundaries.

### 11.10.5.3. Spatial Boundaries

The Application must meet the information requirements outlined in subsection 11.1.5.3 Spatial Boundaries.

### 11.10.5.4. Temporal Boundaries

The Application must meet the information requirements outlined in subsection 11.1.5.4 Temporal Boundaries.

### 11.10.5.5. Existing Conditions

The Application must meet the information requirements outlined in subsection 11.1.5.5 Existing Conditions.

### 11.10.5.6. Potential Effects on Indigenous Interests

The Application must meet the information requirements outlined in subsection 11.1.5.6 Potential Effects on Indigenous Interests.

The Application must address the potential effects to Indigenous interests identified by Tsleil-Waututh Nation during Early Engagement. These concerns are summarized in Table 15. The proponent is continuing to engage with Tsleil-Waututh Nation to understand their Indigenous interests in the Project and the areas influenced by the Project.

Table 15. Proposed Preliminary List of Tsleil-Waututh Nation Indigenous Interests

Preliminary Indigenous Interests	Preliminary Potential Effects
Harvesting and Subsistence Activities	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Harvesting and Subsistence Activities, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to Indigenous interests relating to Harvesting and Subsistence Activities identified by Tsleil-Waututh Nation:</li> </ul>

Table 15. Proposed Preliminary List of Tsleil-Waututh Nation Indigenous Interests

Preliminary Indigenous Interests	Preliminary Potential Effects
	<ul style="list-style-type: none"> <li>○ Effects on fishing rights, traditional use of the Fraser River, which would be affected by potential effects on fish (mortality) and fish habitat (alteration and loss), particularly migratory and shoreline habitats in the Fraser River</li> <li>○ Effects to salmonids and other aquatic species</li> <li>○ Effects to local vegetation and harvesting sites</li> <li>○ Effects on the sustainability of food sovereignty, including the protection of the salmon fishery of the Fraser River</li> </ul>
Cultural Use Sites and Areas	<ul style="list-style-type: none"> <li>● For the list of preliminary potential effects on Cultural Use Sites and Areas, see Table 6 in subsection 11.1.5.6.</li> <li>● The Application must address the following potential effects to Indigenous interests relating to Cultural Use Sites and Areas identified by Tsleil-Waututh Nation: <ul style="list-style-type: none"> <li>○ Effect of the Project on cultural sites and heritage resources</li> <li>○ Effect of the Project on the preservation of archaeological materials</li> </ul> </li> </ul>
Social and Economic Conditions	<ul style="list-style-type: none"> <li>● For the list of preliminary potential effects on Social and Economic Conditions, see Table 6 in subsection 11.1.5.6.</li> <li>● The Application must address the following potential effects to Indigenous interests relating to Economic Activities identified by Tsleil-Waututh Nation: <ul style="list-style-type: none"> <li>○ Effects on Tsleil-Waututh Nation's right to gain economic benefit from the lands and resources of their territory including from the Project location</li> </ul> </li> </ul>
Indigenous Health and Well-being	<ul style="list-style-type: none"> <li>● For the list of preliminary potential effects on Indigenous Health and Well-being, see Table 6 in subsection 11.1.5.6.</li> <li>● The Application must address the following potential effects to Indigenous interests relating to Health and Well-being identified by Tsleil-Waututh Nation: <ul style="list-style-type: none"> <li>○ Effects on river water quality and water management</li> <li>○ Human health risks, cultural risks, and contamination of traditional foods</li> <li>○ Effects of climate change on human and cultural health</li> <li>○ Effects of acoustics including the health effects of environmental noise, as they fear the noise can lead to disease burden</li> </ul> </li> </ul>
Cultural Continuation	<ul style="list-style-type: none"> <li>● For the list of preliminary potential effects on Cultural Continuation, see Table 6 in subsection 11.1.5.6.</li> <li>● The Application must address the following potential effects to Indigenous interests relating to Cultural Continuation identified by Tsleil-Waututh Nation: <ul style="list-style-type: none"> <li>○ Effects on Tsleil-Waututh Nation's cultural relationships with Southern Resident Killer Whales</li> <li>○ Effects on the Tsleil-Waututh Nation's right to practice and preserve their traditional culture</li> </ul> </li> </ul>
Indigenous Governance Systems	<ul style="list-style-type: none"> <li>● For the list of preliminary potential effects on Indigenous Governance Systems, see Table 6 in subsection 11.1.5.6.</li> <li>● The Application must address the following potential effects to Indigenous interests relating to Indigenous Governance Systems identified by Tsleil-Waututh Nation: <ul style="list-style-type: none"> <li>○ Effects on the Tsleil-Waututh Nation's right to practice and preserve their right to self-governance</li> </ul> </li> </ul>

**11.10.5.7. Effects Management**

The Application must meet the information requirements outlined in subsection 11.1.5.7 Effects Management.

**11.10.5.8. Assessing Negative Effects**

The Application must meet the information requirements outlined in subsection 11.1.5.8 Assessing Negative Effects.

**11.10.5.9. Characterizations of Residual Effects**

The Application must meet the information requirements outlined in subsection 11.1.5.9 Characterization of Residual Effects.

**11.10.5.10. Cumulative Effects**

The Application must meet the information requirements outlined in subsection 11.1.5.10 Cumulative Effects.

**11.10.5.11. Views of Indigenous Nation**

The Application must meet the information requirements outlined in subsection 11.1.5.11 Views of Indigenous Nation.

**11.10.6. Positive Effects**

The Application must meet the information requirements outlined in subsection 11.1.6 Positive Effects.

**11.10.7. Summary**

The Application must meet the information requirements outlined in subsection 11.1.7 Summary.

**11.11. Ts'uubaa-asatx (Lake Cowichan First Nation)****11.11.1. Methodology Overview**

The Application will include an assessment of Project effects on Ts'uubaa-asatx's Indigenous Interests that will be co-authored by Ts'uubaa-asatx and the Proponent. The assessment methodology will be developed collaboratively by Ts'uubaa-asatx and the Proponent according to a mutually agreed-upon Workplan.

The Proponent has been involved in early and ongoing engagement with Ts'uubaa-asatx regarding the draft Application Information Requirements (dAIR) for the Project.

Ts'uubaa-asatx has indicated its preference to assess potential effects on its Indigenous interests through the lens of a set of policy documents it has provided to the Proponent and the regulators. Further, the Proponent and Ts'uubaa-asatx are engaged in ongoing efforts to define Ts'uubaa-asatx's Indigenous interests, valued components, and potential Project effects that add to the incremental and ongoing changes in the exercise of Ts'uubaa-asatx's Indigenous interests.

**11.11.2. Context**

Historic and continuous development have ongoing and cumulative effects on the land within the Project area. While development and industrial use within the area has impacted the visible expression of its cultural landscape, it is important to note that the area is still of critical cultural value to Ts'uubaa-asatx.

### 11.11.2.1. Understanding of Indigenous Interests and Current Context

Based on engagement with Ts'uubaa-asatx, the Proponent has developed Application requirements and content that differ from those outlined in dAIR subsection "11.1.2.1 Understanding of Indigenous Nations' Interests and Current Context." The application will include background and context information outlined in the following documents:

1. Lake Cowichan First Nation: Archaeology Permit Requirement Checklist 2018 ("APRC") (Ts'uubaa-asatx Nation 2018a)
2. Lake Cowichan First Nation Policy: South Arm of the Fraser River and Approaches June 1, 2018 ("SARFA") (Ts'uubaa-asatx Nation 2018b)
3. Lake Cowichan First Nation: Vision, Goals and Objectives for the South Arm of the Fraser River and Approaches June 1, 2018 ("VGOSARFA") (Ts'uubaa-asatx Nation 2018c)

Based on these documents and input from Ts'uubaa-asatx, the Application will include background information on Ts'uubaa-asatx's:

- Ethnography
- Social and Economic Conditions
- Languages
- Governance
- Population
- Communities
- Reserves
- Land use

Information on Ts'uubaa-asatx's interests that could be affected by the proposed Project will be specified based on ongoing engagement and collaboration in co-authoring the assessment of Project effects that add to the incremental and ongoing changes in the exercise of Ts'uubaa-asatx's Indigenous interests. Ts'uubaa-asatx and the Proponent are collaboratively developing a Table of Interests for the EA. These interests may include, but are not limited to:

- Environmental management and harvesting;
- Cultural and archaeological sites;
- Social and economic conditions and opportunities, and
- Mitigation and monitoring of effects, as outlined in Section 11.11.5.5

### 11.11.3. Summary of Engagement

The Application will include a summary of past and planned engagement activities that describe the efforts taken to seek the views of Ts'uubaa-asatx with respect to the proposed Project. These activities include collaborative efforts to develop the Table of Contents for the co-authored assessment of Project effects on Ts'uubaa-asatx's Indigenous Interests, input into the dAIR, identification of primary and secondary sources, and the development of an interests and effects tracking table.

Where the content of this dAIR differs from the requirements currently set out in dAIR Section 11.1.3, this version will take precedence since it reflects the outcome of engagement and input from Ts'uubaa-asatx, including its own internal rationale and reasons for providing or not providing any information related to their views, rights, and interests. This extends to the analysis of input from Ts'uubaa-asatx, the description of how the Proponent responded to questions, comments, and issues, and to the incorporation of Ts'uubaa-asatx's perspectives in the EA.

Based on Ts'uubaa-asatx's role as co-author of Section 11.11, its perspectives will be included in the development and collection of baseline information, identification of Ts'uubaa-asatx-specific VC and description of collaboration on development and delivery of the Project, including any agreements related to the delivery of studies and capacity funding agreements.

#### **11.11.4. Information Sources**

Ts'uubaa-asatx has provided the Proponent with a list of approved primary and secondary sources that provide context for the co-authoring and co-development of the assessment of Project effects on Ts'uubaa-asatx's Indigenous Interests.

The co-authored EA will include an outline of the steps taken by the Proponent to work with Ts'uubaa-asatx to incorporate their Indigenous Knowledge, including a summary of any arrangements with the Ts'uubaa-asatx regarding the use and application of the Ts'uubaa-asatx's Indigenous Knowledge. The application will:

- Include a statement indicating that Ts'uubaa-asatx supports the characterization and application of any Ts'uubaa-asatx's Indigenous Knowledge contained within the Application and gives permission for its public disclosure, where appropriate;
- Describe how Ts'uubaa-asatx's Indigenous Knowledge informed the co-development of the assessment of Project effects on Ts'uubaa-asatx's Indigenous Interests, where appropriate; and
- Provide a plan for future cooperation between the Proponent and Ts'uubaa-asatx to further incorporate Ts'uubaa-asatx's Indigenous Knowledge into proposed Project implementation (for example, through monitoring and management plans), where appropriate.

#### **11.11.5. Assessing Effects on Indigenous Interests**

Ts'uubaa-asatx and the Proponent are collaboratively developing the Table of Interests for the co-authored assessment of Project effects on Ts'uubaa-asatx's Indigenous Interests. These interests are listed in Section 11.11.2.1 above.

##### **11.11.5.1. Introduction**

In the introduction to the effects assessment, the co-authors will:

- Describe how Ts'uubaa-asatx's Indigenous interests were identified, through collaborative engagement with Ts'uubaa-asatx;
- Summarize the VCs used in the assessment of effects on Ts'uubaa-asatx's interests and whether they were carried forward from the assessment of Section 25(2) assessment matters presented in Section 7, or developed specifically for the assessment of Ts'uubaa-asatx's interests; and
- Describe any other assessment methods and analysis used to undertake the assessment of Project effects that may contribute to incremental and ongoing effects to Ts'uubaa-asatx's Indigenous Interests.

##### **11.11.5.2. Assessment Boundaries**

The Application will meet Ts'uubaa-asatx's requirements subject to adjustments based on ongoing collaboration and co-authorship with Ts'uubaa-asatx.

##### **11.11.5.3. Spatial Boundaries**

The Application must meet the Ts'uubaa-asatx's requirements provided through ongoing collaboration and co-authorship with Ts'uubaa-asatx.



#### 11.11.5.4. Temporal Boundaries

The Application must meet the Ts'uubaa-asatx's requirements provided through ongoing collaboration and co-authorship with Ts'uubaa-asatx.

#### 11.11.5.5. Existing Conditions

The Application must meet the Ts'uubaa-asatx's requirements provided through ongoing collaboration and co-authorship with Ts'uubaa-asatx.

#### 11.11.5.6. Potential Negative Effects on Indigenous Interests

The Application must address the potential effects to Indigenous interests identified by Ts'uubaa-asatx during Early Engagement. The Proponent is continuing to engage with Ts'uubaa-asatx to understand their interests and how they may be affected by the proposed Project and the areas influenced by the proposed Project.

Table 16 below is a revised list of the potential negative Project effects which the Proponent proposes to collaboratively assess with Ts'uubaa-asatx. The list is informed by the Policy documents provided by Ts'uubaa-asatx and the interests Tracking table which the Proponent and Ts'uubaa-asatx are co-developing. Table 16 also includes linkages to the three Policy documents introduced in Section 11.1.2.1 above. This list of preliminary potential negative effects may be updated as Ts'uubaa-asatx and the Proponent's collaboration and authorship activities continue.

Table -16. Preliminary List of Potential Negative Effects to Ts'uubaa-asatx Indigenous Interests

Preliminary Indigenous Interests and linkage to Ts'uubaa-asatx Policy Components	Preliminary Potential Negative Effects
<b>Environmental Management and Harvesting – Linked to BC EAO Environment Pillar</b>	
Traditional plant habitat protection, enhancement, and increased opportunities to revegetate areas with traditional plants <ul style="list-style-type: none"> <li>• SARFA, S1</li> <li>• APRC, s. 4</li> </ul>	Effects of the Project, which contribute to ongoing and cumulative effects and changes to the exercise of Ts'uubaa-asatx's Rights including: <ul style="list-style-type: none"> <li>• plant harvesting,</li> <li>• harvesting-based livelihoods,</li> <li>• loss, alteration, interruption, fragmentation of habitat supporting harvested plant species,</li> <li>• sensory disturbances (such as, noise, odor, dust, visual landscape),</li> <li>• ability to access harvesting areas.</li> </ul>
Wildlife habitat protection, enhancement, and increased opportunities for traditional harvesting <ul style="list-style-type: none"> <li>• VGOSARFA</li> <li>• SARFA, s.6, - 7</li> <li>• APRC, s. 4</li> </ul>	Effects of the Project, which contribute to ongoing and cumulative effects and changes to the exercise of Ts'uubaa-asatx's Rights including: <ul style="list-style-type: none"> <li>• wildlife harvesting,</li> <li>• harvesting-based livelihoods,</li> <li>• loss, alteration, interruption, fragmentation of habitat supporting harvested wildlife,</li> <li>• sensory disturbances (such as noise, odor, dust, visual landscape),</li> <li>• ability to access harvesting areas.</li> </ul>
Fish, fisheries and fish habitat protection, restoration, and enhancement of opportunities to fish <ul style="list-style-type: none"> <li>• VGOSARFA</li> <li>• SARFA, s.2, 3,4, 6, &amp; 7</li> </ul>	Effects of the Project, which contribute to ongoing and cumulative effects and changes to the exercise of Ts'uubaa-asatx's Rights including: <ul style="list-style-type: none"> <li>• fish harvesting,</li> <li>• harvesting-based livelihoods,</li> <li>• protection, loss, alteration, interruption, fragmentation of habitat supporting harvested fish,</li> </ul>

Table -16. Preliminary List of Potential Negative Effects to Ts'uubaa-asatx Indigenous Interests

Preliminary Indigenous Interests and linkage to Ts'uubaa-asatx Policy Components	Preliminary Potential Negative Effects
<ul style="list-style-type: none"> <li>• APRC, s. 4</li> </ul>	<ul style="list-style-type: none"> <li>• sensory disturbances (such as noise, odor, dust, visual landscape),</li> <li>• ability to access fishing areas.</li> </ul>
<p>Address potential issues due to impacts from aging infrastructure and its installation that impact the ability to implement environmental management systems.</p> <ul style="list-style-type: none"> <li>• VGOSARFA</li> <li>• SARFA, s.3, 8</li> <li>• APRC, s. 12</li> </ul>	<p>Effects of the Project, which contribute to ongoing and cumulative effects on Ts'uubaa-asatx efforts to reduce effects of existing development on the south arm of the Fraser River.</p> <p>Effects of the Project, which contribute to ongoing and cumulative effects on Ts'uubaa-asatx's capacity to engage in local efforts to address historical and ongoing impacts of aging infrastructure and its installation.</p>
<b>Cultural and Archaeological Sites – Linked to BC EAO Culture and Environment Pillars</b>	
<p>Protection of archaeological sites, with no further loss of archaeological sites in these areas</p> <ul style="list-style-type: none"> <li>• SARFA, s.5</li> <li>• APRC, s. 4</li> </ul>	<p>Effects of the Project, which contribute to ongoing and cumulative effects on archaeological sites.</p>
<p>Protection of cultural sites, Activities, and Practices</p> <ul style="list-style-type: none"> <li>• SARFA, s.5</li> <li>• APRC, s. 4</li> </ul>	<p>Effects of the Project that contribute to ongoing and cumulative effects on the south arm of the Fraser River, which was a major pre-contact trade center and community gathering place.</p>
<b>Social and Economic Conditions and Opportunities – Linked to BC EAO Culture, Environment, and Social Pillars</b>	
<p>Infrastructure-related aspects of Indigenous Health and Well-being</p> <ul style="list-style-type: none"> <li>• VGOSARFA</li> <li>• SARFA, s.12-13</li> </ul>	<p>Effects of the Project that contribute to ongoing and cumulative effects on Ts'uubaa-asatx's efforts to address issues related to its members' human health and well-being:</p> <ul style="list-style-type: none"> <li>• lack of indigeneity in infrastructure.</li> <li>• increased homelessness, drug trade and trafficking, human trafficking.</li> </ul>
<p>Ts'uubaa-asatx economic opportunities, social and community well-being</p> <ul style="list-style-type: none"> <li>• VGOSARFA</li> <li>• SARFA, s.14-15</li> </ul>	<p>Effects of the Project that contribute to ongoing and cumulative effects on Ts'uubaa-asatx's capacity to improve economic conditions.</p> <p>Effects of the Project that contribute to ongoing and cumulative effects on Ts'uubaa-asatx's social and community wellbeing, including Ts'uubaa-asatx's efforts to re-establish a place of residence for Ts'uubaa-asatx members.</p> <p>Effects of the Project on Ts'uubaa-asatx's future aspirations for sites or area surrounding the proposed Project:</p> <ul style="list-style-type: none"> <li>• ongoing and cumulative barriers for Ts'uubaa-asatx to pursue its economic interests associated with this area.</li> </ul>

**11.11.5.7. Effects Management**

The Application will describe measures identified to avoid, minimize, offset, or otherwise address potential adverse effects of the proposed Project on the interests of Ts'uubaa-asatx and describe how the Proponent worked towards the goal of identifying mutually agreeable mitigation and effects management approaches, especially for those concerns raised relating to the exercise of Indigenous interests.

The Application will provide:

- Proposed Project design and mitigations identified for the relevant VCs that are proposed to mitigate effects on Ts'uubaa-asatx's interests;
- Perspectives of Ts'uubaa-asatx on the effectiveness of mitigation measures, as well as the relative level of certainty associated with the mitigation measures;
- Additional mitigations that are specific to Ts'uubaa-asatx as warranted; and
- Proposed initiatives or processes related to monitoring effects on Ts'uubaa-asatx's interests.

Ts'uubaa-asatx's policy, SARFA (June 2018) includes several priorities for the management of cumulative effects which can also be applied as Project-specific mitigation measures (Ts'uubaa-asatx Nation 2018b; 2018c). Ts'uubaa-asatx's priorities for the management of cumulative effects to environment management and harvesting, cultural and archaeological sites, and social and economic conditions and opportunities, are as follows:

- Institution of noise reduction measures in Project design and noise abatement measures during construction to reduce stressors on sea life, including mammals, wildlife and humans;
- Institution of measures to reduce light pollution to reduce stressors on aquatic life, wildlife, birds and humans;
- Incorporation of best management practices in diking, spill and accident prevention, ecosystem recovery and restoration;
- Address potential issues due to impacts from aging infrastructure and its installation;
- Address potential issues related to human health and well-being that can occur around infrastructure projects, for example, homelessness, drug trade, human trafficking; Ts'uubaa-asatx will advocate for responsible practices to improve human health and well-being around such infrastructure;
- Provide opportunities for Indigenous involvement in monitoring programs associated with the above matters;
- Increase opportunities for Ts'uubaa-asatx to pursue their economic interests associated with this area; and
- Re-establish a place of residence, within the Lower Mainland, for Ts'uubaa-asatx members.

**11.11.5.8. Assessing Negative Effects**

The Application will meet requirements for assessing negative effects on Ts'uubaa-asatx Interests that will be developed through ongoing collaboration and co-authorship with Ts'uubaa-asatx.

**11.11.5.9. Characterization of Residual Effects**

The Application will meet requirements for characterizing residual effects on Ts'uubaa-asatx Interests that will be developed through ongoing collaboration and co-authorship with Ts'uubaa-asatx.

**11.11.5.10. Cumulative Effects**

The Application must include an assessment of cumulative effects on Ts'uubaa-asatx's interests as they relate to the proposed Project and identify any additional mitigation measures. The Application must describe the likelihood of any adverse residual cumulative and ongoing effects on Indigenous interests and provide a summary of the results of the Cumulative Effects Assessment. The Application will meet requirements for assessing cumulative effects on Ts'uubaa-asatx Interests that will be developed through ongoing collaboration and co-authorship with Ts'uubaa-asatx.

### 11.11.5.11. Views of Ts'uubaa-asatx

The Application will describe how the Proponent engaged with Ts'uubaa-asatx including collaboration in authoring the assessment of Project effects on Ts'uubaa-asatx's Indigenous Interests. The Application will clearly state any views of Ts'uubaa-asatx on the potential effects identified, approach to effects management, residual effects, and conclusions.

### 11.11.6. Positive Effects

The Application will describe any positive effects to Ts'uubaa-asatx's interests that are anticipated as a result of the proposed Project and its effects management approaches. Table 1 below is a list of the potential positive Project effects which the Proponent proposes to collaboratively assess with Ts'uubaa-asatx. Similar to Table 11-12 above the list is informed by the Policy documents provided by Ts'uubaa-asatx and the interests Tracking table which the Proponent and Ts'uubaa-asatx are co-developing. This list of preliminary potential positive effects may be updated as Ts'uubaa-asatx and the Proponent's collaboration and authorship activities continue.

Table 17. Preliminary List of Potential Positive Effects to Ts'uubaa-asatx Indigenous Interests

Preliminary Indigenous Interests and linkage to Ts'uubaa-asatx Policy components	Preliminary Potential Positive Effects
<b>Environmental Management and Harvesting – Linked to BC EAO Environment Pillar</b>	
Traditional plant habitat protection, enhancement, and increased opportunities to revegetate areas with traditional plants <ul style="list-style-type: none"> <li>SARFA. S1</li> <li>APRC, s. 4</li> </ul>	Effects of the Project, which limit or reduce ongoing and cumulative effects and potentially support the exercise of Ts'uubaa-asatx's Rights including: <ul style="list-style-type: none"> <li>plant harvesting,</li> <li>harvesting-based livelihoods,</li> <li>protection of habitat supporting harvested plant species,</li> <li>sensory enhancement (such as noise, odor, dust, visual landscape),</li> <li>ability to access harvesting areas.</li> </ul>
Wildlife habitat protection, enhancement, and increased opportunities for traditional harvesting <ul style="list-style-type: none"> <li>VGOSARFA</li> <li>SARFA, s.6, - 7</li> <li>APRC, s. 4</li> </ul>	Effects of the Project, which limit or reduce ongoing and cumulative effects and potentially support the exercise of Ts'uubaa-asatx's Rights including: <ul style="list-style-type: none"> <li>wildlife harvesting,</li> <li>harvesting-based livelihoods,</li> <li>protection, of habitat supporting harvested wildlife,</li> <li>sensory enhancement s (such as noise, odor, dust, visual landscape),</li> <li>ability to access harvesting areas.</li> </ul>
Fish, fisheries and fish habitat protection, restoration, and enhancement of opportunities to fish <ul style="list-style-type: none"> <li>VGOSARFA</li> <li>SARFA, s.2, 3,4, 6, &amp; 7</li> <li>APRC, s. 4</li> </ul>	Effects of the Project, which limit or reduce ongoing and cumulative effects and potentially support the exercise of Ts'uubaa-asatx's Rights including: <ul style="list-style-type: none"> <li>fish harvesting,</li> <li>harvesting-based livelihoods,</li> <li>protection of habitat supporting harvested fish,</li> <li>sensory enhancement (such as noise, odor, dust, visual landscape),</li> <li>ability to access fishing areas.</li> </ul>
Address potential issues due to impacts from aging infrastructure and its installation that	Effects of the Project, which limit or reduces ongoing and cumulative effects and support Ts'uubaa-asatx efforts to reduce of existing development on south arm of the Fraser River.

Table 17. Preliminary List of Potential Positive Effects to Ts'uubaa-asatx Indigenous Interests

Preliminary Indigenous Interests and linkage to Ts'uubaa-asatx Policy components	Preliminary Potential Positive Effects
<p>impact the ability to implement environmental management systems.</p> <ul style="list-style-type: none"> <li>• VGOSARFA</li> <li>• SARFA, s.3, 8</li> <li>• APRC, s. 12</li> </ul>	<p>Effects of the Project, which limit or reduces ongoing and cumulative effects and support Ts'uubaa-asatx's capacity to engage in local efforts to address historical and ongoing impacts of aging infrastructure and its installation.</p>
<b>Cultural and Archaeological Sites – Linked to BC EAO Culture and Environment Pillars</b>	
<p>Protection of archaeological sites, with no further loss of archaeological sites in these areas</p> <ul style="list-style-type: none"> <li>• SARFA, s.5</li> <li>• APRC, s. 4</li> </ul>	<p>Effects of the Project, which limit or reduces ongoing and cumulative effects on archaeological sites.</p>
<p>Protection of cultural sites, Activities, and Practices</p> <ul style="list-style-type: none"> <li>• SARFA, s.5</li> <li>• APRC, s. 4</li> </ul>	<p>Effects of the Project that limit or reduces ongoing and cumulative effects on the south arm of the Fraser River, which was a major pre-contact trade center and community gathering place.</p>
<b>Social and Economic Conditions and Opportunities – Linked to BC EAO Culture, Environment, and Social Pillars</b>	
<p>Infrastructure-related aspects of Indigenous Health and Well-being</p> <ul style="list-style-type: none"> <li>• VGOSARFA</li> <li>• SARFA, s.12-13</li> </ul>	<p>Effects of Project that limit or reduce ongoing and cumulative effects on and potentially support Ts'uubaa-asatx's efforts to address issues related to its members' human health and well-being:</p> <ul style="list-style-type: none"> <li>• return of Indigeneity in infrastructure,</li> <li>• reduced homelessness, drug trade and trafficking, human trafficking.</li> </ul>
<p>Ts'uubaa-asatx economic opportunities, social and community well-being</p> <ul style="list-style-type: none"> <li>• VGOSARFA</li> <li>• SARFA, s.14-15</li> </ul>	<p>Effects of Project that limit or reduce ongoing and cumulative effects on Ts'uubaa-asatx's capacity to improve economic conditions.</p> <p>Effects of Project that limit or reduce ongoing and cumulative effects on Ts'uubaa-asatx's social and community wellbeing and potentially support Ts'uubaa-asatx's efforts to re-establish a place of residence for Ts'uubaa-asatx members.</p> <p>Effects of the Project on Ts'uubaa-asatx's future aspirations for sites or area surrounding the proposed Project:</p> <ul style="list-style-type: none"> <li>• increased Ts'uubaa-asatx's employment opportunities, businesses, revenue.</li> <li>• increased opportunities for Ts'uubaa-asatx to pursue its economic interests associated with this area.</li> </ul>



### 11.11.7. Summary

The Application must include a summary of the assessment for Ts'uubaa-asatx outlining:

- The residual, ongoing, and incremental effects on Ts'uubaa-asatx interests for B.C. EAO/IAAC to consider when determining the overall seriousness of the effects to those Indigenous interests;
- Any major points of agreement or disagreement with Ts'uubaa-asatx; and
- Efforts taken to address any points of disagreement.

## 11.12. Métis Nation British Columbia

### 11.12.1. Methodology Overview

The Application must include a stand-alone assessment for Métis Nation British Columbia that will follow the methodology described in subsection 11.1.

### 11.12.2. Context

#### 11.12.2.1. Understanding of Indigenous Interests and Current Context

The Application must meet the information requirements outlined in subsection 11.1.2.1 Understanding of Indigenous Interests and Current Context.

### 11.12.3. Summary of Engagement

The Application must meet the information requirements outlined in subsection 11.1.3 Summary of Engagement.

### 11.12.4. Information Sources

The Application must meet the information requirements outlined in subsection 11.1.4 Information Sources.

#### 11.12.4.1. Indigenous Knowledge

The Application must meet the information requirements outlined in subsection 11.1.4.1 Indigenous Knowledge.

### 11.12.5. Assessing Effects on Indigenous Interests

#### 11.12.5.1. Introduction

The Application must meet the information requirements outlined in subsection 11.1.5.1 Introduction.

#### 11.12.5.2. Assessment Boundaries

The Application must meet the information requirements outlined in subsection 11.1.5.2 Assessment Boundaries.

#### 11.12.5.3. Spatial Boundaries

The Application must meet the information requirements outlined in subsection 11.1.5.3 Spatial Boundaries.

#### 11.12.5.4. Temporal Boundaries

The Application must meet the information requirements outlined in subsection 11.1.5.4 Temporal Boundaries.

#### 11.12.5.5. Existing Conditions

The Application must meet the information requirements outlined in subsection 11.1.5.5 Existing Conditions.

**11.12.5.6. Potential Effects on Indigenous Interests**

The Application must meet the information requirements outlined in subsection 11.1.5.6 Potential Effects on Indigenous Interests. A proposed preliminary list of Métis Nation British Columbia Indigenous interests is provided in Table 18.

*Table 18. Proposed Preliminary List of Métis Nation British Columbia Indigenous Interests*

Preliminary Indigenous Interests	Preliminary Potential Effects
Harvesting and Subsistence Activities	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Harvesting and Subsistence Activities, see Table 6 in subsection 11.1.5.6.</li> </ul>
Cultural Use Sites and Areas	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Cultural Use Sites and Areas, see Table 6 in subsection 11.1.5.6.</li> </ul>
Social and Economic Conditions	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Social and Economic Conditions, see Table 6 in subsection 11.1.5.6.</li> </ul>
Indigenous Health and Well-being	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Indigenous Health and Well-being, see Table 6 in subsection 11.1.5.6.</li> </ul>
Cultural Continuation	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Cultural Continuation, see Table 6 in subsection 11.1.5.6.</li> </ul>
Indigenous Governance Systems	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Indigenous Governance Systems, see Table 6 in subsection 11.1.5.6.</li> </ul>

**11.12.5.7. Effects Management**

The Application must meet the information requirements outlined in subsection 11.1.5.7 Effects Management.

**11.12.5.8. Assessing Negative Effects**

The Application must meet the information requirements outlined in subsection 11.1.5.8 Assessing Negative Effects.

**11.12.5.9. Characterization of Residual Effects**

The Application must meet the information requirements outlined in subsection 11.1.5.9 Characterization of Residual Effects.

**11.12.5.10. Cumulative Effects**

The Application must meet the information requirements outlined in subsection 11.1.5.10 Cumulative Effects.

**11.12.5.11. Views of Indigenous Nation**

The Application must meet the information requirements outlined in subsection 11.1.5.11 Views of Indigenous Nation.

**11.12.6. Positive Effects**

The Application must meet the information requirements outlined in subsection 11.1.6 Positive Effects.

**11.12.7. Summary**

The Application must meet the information requirements outlined in subsection 11.1.7 Summary.

## 11.13. Semiahmoo First Nation

### 11.13.1. Methodology Overview

The Application must include a stand-alone assessment for Semiahmoo First Nation that will follow the methodology described in subsection 11.1.

### 11.13.2. Context

#### 11.13.2.1. Understanding of Indigenous Interests and Current Context

The Application must meet the information requirements outlined in subsection 11.1.2.1 Understanding of Indigenous Interests and Current Context.

### 11.13.3. Summary of Engagement

The Application must meet the information requirements outlined in subsection 11.1.3 Summary of Engagement.

### 11.13.4. Information Sources

The Application must meet the information requirements outlined in subsection 11.1.4 Information Sources.

#### 11.13.4.1. Indigenous Knowledge

The Application must meet the information requirements outlined in subsection 11.1.4.1 Indigenous Knowledge.

### 11.13.5. Assessing Effects on Indigenous Interests

#### 11.13.5.1. Introduction

The Application must meet the information requirements outlined in subsection 11.1.5.1 Introduction.

#### 11.13.5.2. Assessment Boundaries

The Application must meet the information requirements outlined in subsection 11.1.5.2 Assessment Boundaries.

#### 11.13.5.3. Spatial Boundaries

The Application must meet the information requirements outlined in subsection 11.1.5.3 Spatial Boundaries.

#### 11.13.5.4. Temporal Boundaries

The Application must meet the information requirements outlined in subsection 11.1.5.4 Temporal Boundaries.

#### 11.13.5.5. Existing Conditions

The Application must meet the information requirements outlined in subsection 11.1.5.5 Existing Conditions.

#### 11.13.5.6. Potential Effects on Indigenous Interests

The Application must meet the information requirements outlined in subsection 11.1.5.6 Potential Effects on Indigenous Interests. A proposed preliminary list of Semiahmoo First Nation Indigenous interests is in Table 19.

Table 19. Proposed Preliminary List of Semiahmoo First Nation Indigenous Interests

Preliminary Indigenous Interests	Preliminary Potential Effects
Harvesting and Subsistence Activities	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Harvesting and Subsistence Activities, see Table 6 in subsection 11.1.5.6.</li> </ul>

Table 19. Proposed Preliminary List of Semiahmoo First Nation Indigenous Interests

Preliminary Indigenous Interests	Preliminary Potential Effects
Cultural Use Sites and Areas	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Cultural Use Sites and Areas, see Table 7 in subsection 11.1.5.6.</li> </ul>
Social and Economic Conditions	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Social and Economic Conditions, see Table 6 in subsection 11.1.5.6.</li> </ul>
Indigenous Health and Well-being	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Indigenous Health and Well-being, see Table 6 in subsection 11.1.5.6.</li> </ul>
Cultural Continuation	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Cultural Continuation, see Table 6 in subsection 11.1.5.6.</li> </ul>
Indigenous Governance Systems	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Indigenous Governance Systems, see Table 6 in subsection 11.1.5.6.</li> </ul>

### 11.13.5.7. Effects Management

The Application must meet the information requirements outlined in subsection 11.1.5.7 Effects Management.

### 11.13.5.8. Assessing Negative Effects

The Application must meet the information requirements outlined in subsection 11.1.5.8 Assessing Negative Effects.

### 11.13.5.9. Characterization of Residual Effects

The Application must meet the information requirements outlined in subsection 11.1.5.9 Characterization of Residual Effects.

### 11.13.5.10. Cumulative Effects

The Application must meet the information requirements outlined in subsection 11.1.5.10 Cumulative Effects.

### 11.13.5.11. Views of Indigenous Nation

The Application must meet the information requirements outlined in subsection 11.1.5.11 Views of Indigenous Nation.

### 11.13.6. Positive Effects

The Application must meet the information requirements outlined in subsection 11.1.6 Positive Effects.

### 11.13.7. Summary

The Application must meet the information requirements outlined in subsection 11.1.7 Summary.

## 11.14. Snuneymuxw First Nation

### 11.14.1. Methodology Overview

The Application must include a stand-alone assessment for 11.14 Snuneymuxw First Nation that will follow the methodology described in subsection 11.1.

### 11.14.2. Context

#### 11.14.2.1. Understanding of Indigenous Interests and Current Context

The Application must meet the information requirements outlined in subsection 11.1.2.1 Understanding of Indigenous Interests and Current Context.

### 11.14.3. Summary of Engagement

The Application must meet the information requirements outlined in subsection 11.1.3 Summary of Engagement.

### 11.14.4. Information Sources

The Application must meet the information requirements outlined in subsection 11.1.4 Information Sources.

#### 11.14.4.1. Indigenous Knowledge

The Application must meet the information requirements outlined in subsection 11.1.4.1 Indigenous Knowledge.

### 11.14.5. Assessing Effects on Indigenous Interests

#### 11.14.5.1. Introduction

The Application must meet the information requirements outlined in subsection 11.1.5.1 Introduction.

#### 11.14.5.2. Assessment Boundaries

The Application must meet the information requirements outlined in subsection 11.1.5.2 Assessment Boundaries.

#### 11.14.5.3. Spatial Boundaries

The Application must meet the information requirements outlined in subsection 11.1.5.3 Spatial Boundaries.

#### 11.14.5.4. Temporal Boundaries

The Application must meet the information requirements outlined in subsection 11.1.5.4 Temporal Boundaries.

#### 11.14.5.5. Existing Conditions

The Application must meet the information requirements outlined in subsection 11.1.5.5 Existing Conditions.

#### 11.14.5.6. Potential Effects on Indigenous Interests

The Application must meet the information requirements outlined in subsection 11.1.5.6 Potential Effects on Indigenous Interests. A proposed preliminary list of Snuneymuxw First Nation Indigenous interests is in Table 20.

Table 20. Proposed Preliminary List of Snuneymuxw First Nation Indigenous Interests

Preliminary Indigenous Interests	Preliminary Potential Effects
Harvesting and Subsistence Activities	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Harvesting and Subsistence Activities, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to Indigenous interests relating to Harvesting and Subsistence Activities identified by Snuneymuxw First Nation:               <ul style="list-style-type: none"> <li>Effects to Snuneymuxw First Nation hunting, fishing, trapping, marine harvesting, and gathering rights in the Project area</li> <li>Effects to Snuneymuxw First Nation harvesting preferences and experiences.</li> <li>Effects to Snuneymuxw First Nation harvesting rights as a result of Project-related changes in fish, wildlife, and vegetation.</li> </ul> </li> </ul>



Table 20. Proposed Preliminary List of Snuneymuxw First Nation Indigenous Interests

Preliminary Indigenous Interests	Preliminary Potential Effects
Cultural Use Sites and Areas	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Cultural Use Sites and Areas, see Table 6 in subsection 11.1.5.6.</li> </ul>
Social and Economic Conditions	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Social and Economic Conditions, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to Indigenous interests relating to Social and Economic Conditions identified by Snuneymuxw First Nation: <ul style="list-style-type: none"> <li>Effects to Snuneymuxw First Nation fisheries and fishing villages.</li> <li>Effects to Snuneymuxw First Nation fishing rights as a result of Project-related changes to fishing.</li> </ul> </li> </ul>
Indigenous Health and Well-being	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Indigenous Health and Well-being, see Table 6 in subsection 11.1.5.6.</li> </ul>
Cultural Continuation	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Cultural Continuation, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to Indigenous interests relating to Cultural Continuation identified by Snuneymuxw First Nation: <ul style="list-style-type: none"> <li>Effects to harvesting site accessibility and availability to enable the transmission of Snuneymuxw traditional knowledge and culture.</li> <li>Effects to SRKW that will disrupt the deep cultural and spiritual connection of Snuneymuxw First Nation to SRKW.</li> <li>Effects to the transmission of Snuneymuxw First Nation language.</li> </ul> </li> </ul>
Indigenous Governance Systems	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Indigenous Governance Systems, see Table 6 in subsection 11.1.5.6.</li> <li>The Application must address the following potential effects to Indigenous interests relating to Indigenous Governance Systems identified by Snuneymuxw First Nation: <ul style="list-style-type: none"> <li>Effects to the exercise and practice of Snuneymuxw First Nation laws and customs.</li> <li>Effects to Snuneymuxw First Nation stewardship and decision-making with respect to the management of Snuneymuxw's traditional lands and waters.</li> </ul> </li> </ul>

**11.14.5.7. Effects Management**

The Application must meet the information requirements outlined in subsection 11.1.5.7 Effects Management.

**11.14.5.8. Assessing Negative Effects**

The Application must meet the information requirements outlined in subsection 11.1.5.8 Assessing Negative Effects.

**11.14.5.9. Characterization of Residual Effects**

The Application must meet the information requirements outlined in subsection 11.1.5.9 Characterization of Residual Effects.

**11.14.5.10. Cumulative Effects**

The Application must meet the information requirements outlined in subsection 11.1.5.10 Cumulative Effects.

**11.14.5.11. Views of Indigenous Nation**

The Application must meet the information requirements outlined in subsection 11.1.5.11 Views of Indigenous Nation.

**11.14.6. Positive Effects**

The Application must meet the information requirements outlined in subsection 11.1.6 Positive Effects.

**11.14.7. Summary**

The Application must meet the information requirements outlined in subsection 11.1.7 Summary.

**11.15. Squamish Nation****11.15.1. Methodology Overview**

The Application must include a stand-alone assessment for Squamish Nation that will follow the methodology described in subsection 11.1.

**11.15.2. Context****11.15.2.1. Understanding of Indigenous Interests and Current Context**

The Application must meet the information requirements outlined in subsection 11.1.2.1 Understanding of Indigenous Interests and Current Context.

**11.15.3. Summary of Engagement**

The Application must meet the information requirements outlined in subsection 11.1.3 Summary of Engagement.

**11.15.4. Information Sources**

The Application must meet the information requirements outlined in subsection 11.1.4 Information Sources.

**11.15.4.1. Indigenous Knowledge**

The Application must meet the information requirements outlined in subsection 11.1.4.1 Indigenous Knowledge.

**11.15.5. Assessing Effects on Indigenous Interests****11.15.5.1. Introduction**

The Application must meet the information requirements outlined in subsection 11.1.5.1 Introduction.

**11.15.5.2. Assessment Boundaries**

The Application must meet the information requirements outlined in subsection 11.1.5.2 Assessment Boundaries.

**11.15.5.3. Spatial Boundaries**

The Application must meet the information requirements outlined in subsection 11.1.5.3 Spatial Boundaries.

**11.15.5.4. Temporal Boundaries**

The Application must meet the information requirements outlined in subsection 11.1.5.4 Temporal Boundaries.

**11.15.5.5. Existing Conditions**

The Application must meet the information requirements outlined in subsection 11.1.5.5 Existing Conditions.

**11.15.5.6. Potential Effects on Indigenous Interests**

The Application must meet the information requirements outlined in subsection 11.1.5.6 Potential Effects on Indigenous Interests. A proposed preliminary list of Squamish Nation Indigenous interests is in Table 21.

*Table 21. Proposed Preliminary List of Squamish Nation Indigenous Interests*

Preliminary Indigenous Interests	Preliminary Potential Effects
Harvesting and Subsistence Activities	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Harvesting and Subsistence Activities, see Table 6 in subsection 11.1.5.6.</li> </ul>
Cultural Use Sites and Areas	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Cultural Use Sites and Areas, see Table 6 in subsection 11.1.5.6.</li> </ul>
Social and Economic Conditions	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Social and Economic Conditions, see Table 6 in subsection 11.1.5.6.</li> </ul>
Indigenous Health and Well-being	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Indigenous Health and Well-being, see Table 6 in subsection 11.1.5.6.</li> </ul>
Cultural Continuation	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Cultural Continuation, see Table 6 in subsection 11.1.5.6.</li> </ul>
Indigenous Governance Systems	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Indigenous Governance Systems, see Table 6 in subsection 11.1.5.6.</li> </ul>

**11.15.5.7. Effects Management**

The Application must meet the information requirements outlined in subsection 11.1.5.7 Effects Management.

**11.15.5.8. Assessing Negative Effects**

The Application must meet the information requirements outlined in subsection 11.1.5.8 Assessing Negative Effects.

**11.15.5.9. Characterization of Residual Effects**

The Application must meet the information requirements outlined in subsection 11.1.5.9 Characterization of Residual Effects.

**11.15.5.10. Cumulative Effects**

The Application must meet the information requirements outlined in subsection 11.1.5.10 Cumulative Effects.

**11.15.5.11. Views of Indigenous Nation**

The Application must meet the information requirements outlined in subsection 11.1.5.11 Views of Indigenous Nation.

**11.15.6. Positive Effects**

The Application must meet the information requirements outlined in subsection 11.1.6 Positive Effects.

**11.15.7. Summary**

The Application must meet the information requirements outlined in subsection 11.1.7 Summary.

## 11.16.Kwkwetlem First Nation

### 11.16.1. Methodology Overview

The Application must include a stand-alone assessment for Kwkwetlem First Nation that will follow the methodology described in subsection 11.1.

### 11.16.2. Context

#### 11.16.2.1. Understanding of Indigenous Interests and Current Context

The Application must meet the information requirements outlined in subsection 11.1.2.1 Understanding of Indigenous Interests and Current Context.

### 11.16.3. Summary of Engagement

The Application must meet the information requirements outlined in subsection 11.1.3 Summary of Engagement.

### 11.16.4. Information Sources

The Application must meet the information requirements outlined in subsection 11.1.4 Information Sources.

#### 11.16.4.1. Indigenous Knowledge

The Application must meet the information requirements outlined in subsection 11.1.4.1 Indigenous Knowledge.

### 11.16.5. Assessing Effects on Indigenous Interests

#### 11.16.5.1. Introduction

The Application must meet the information requirements outlined in subsection 11.1.5.1 Introduction.

#### 11.16.5.2. Assessment Boundaries

The Application must meet the information requirements outlined in subsection 11.1.5.2 Assessment Boundaries.

#### 11.16.5.3. Spatial Boundaries

The Application must meet the information requirements outlined in subsection 11.1.5.3 Spatial Boundaries.

#### 11.16.5.4. Temporal Boundaries

The Application must meet the information requirements outlined in subsection 11.1.5.4 Temporal Boundaries.

#### 11.16.5.5. Existing Conditions

The Application must meet the information requirements outlined in subsection 11.1.5.5 Existing Conditions.

#### 11.16.5.6. Potential Effects on Indigenous Interests

The Application must meet the information requirements outlined in subsection 11.1.5.6 Potential Effects on Indigenous Interests. A proposed preliminary list of Kwkwetlem First Nation Indigenous interests is in Table 22.

Table 22. Proposed Preliminary List of Kwkwetlem First Nation Indigenous Interests

Preliminary Indigenous Interests	Preliminary Potential Effects
Harvesting and Subsistence Activities	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Harvesting and Subsistence Activities, see Table 6 in subsection 11.1.5.6.</li> </ul>

Table 22. Proposed Preliminary List of Kwikwetlem First Nation Indigenous Interests

Preliminary Indigenous Interests	Preliminary Potential Effects
Cultural Use Sites and Areas	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Cultural Use Sites and Areas, see Table 6 in subsection 11.1.5.6.</li> </ul>
Social and Economic Conditions	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Social and Economic Conditions, see Table 6 in subsection 11.1.5.6.</li> </ul>
Indigenous Health and Well-being	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Indigenous Health and Well-being, see Table 6 in subsection 11.1.5.6.</li> </ul>
Cultural Continuation	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Cultural Continuation, see Table 6 in subsection 11.1.5.6.</li> </ul>
Indigenous Governance Systems	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Indigenous Governance Systems, see Table 6 in subsection 11.1.5.6.</li> </ul>

#### 11.16.5.7. Effects Management

The Application must meet the information requirements outlined in subsection 11.1.5.7 Effects Management.

#### 11.16.5.8. Assessing Negative Effects

The Application must meet the information requirements outlined in subsection 11.1.5.8 Assessing Negative Effects.

#### 11.16.5.9. Characterization of Residual Effects

The Application must meet the information requirements outlined in subsection 11.1.5.9 Characterization of Residual Effects.

#### 11.16.5.10. Cumulative Effects

The Application must meet the information requirements outlined in subsection 11.1.5.10 Cumulative Effects.

#### 11.16.5.11. Views of Indigenous Nation

The Application must meet the information requirements outlined in subsection 11.1.5.11 Views of Indigenous Nation.

#### 11.16.6. Positive Effects

The Application must meet the information requirements outlined in subsection 11.1.6 Positive Effects.

#### 11.16.7. Summary

The Application must meet the information requirements outlined in subsection 11.1.7 Summary.

### 11.17. Stó:lō Nations

#### 11.17.1. Methodology Overview

The proponent proposes that the Indigenous Nations Effects Assessment for Leq'á:mel First Nation, Popkum First Nation, Matsqui First Nation, Shxw'ōwhámél First Nation, and Seabird Island Band be conducted in one partially aggregated assessment subsection titled Stó:lō Nations. The assessment will include individual residual effects assessments for each



Indigenous nation. This proposed approach for a Stó:lō Nations assessment aligns with the shared interests identified by these five Indigenous nations.

Leq'á:mel First Nation, Matsqui First Nation, and Popkum First Nation were identified in B.C. EAO and IAAC's Joint Summary of Issues and Engagement as Indigenous nations whose Indigenous interests could reasonably be expected to be affected by the Project. Each are members of the Stó:lō Nation. The Stó:lō Nation Chiefs Council is the political partnership of 11 Stó:lō Nation bands. Eight of these Indigenous nations are members of the Sol'h Téméxw Stewardship Alliance, which is discussed in subsection 11.8.

As Leq'á:mel First Nation, Popkum First Nation, Matsqui First Nation, Shxw'ōwhámél First Nation, and Seabird Island Band did not submit notices to be participating Indigenous nations to the B.C. EAO and as these Indigenous nations are Stó:lō, the proponent is proposing an aggregated assessment be conducted for this subsection that will be informed and linked to the Sol'h Téméxw Stewardship Alliance assessment.

### 11.17.2. Context

#### 11.17.2.1. Understanding of Indigenous Interests and Current Context

The Application must meet the information requirements outlined in subsection 11.1.2.1 Understanding of Indigenous Interests and Current Context. The Application must include one section which aggregates the proponent's understanding of the Leq'á:mel First Nation, Popkum First Nation, Matsqui First Nation, Shxw'ōwhámél First Nation, and Seabird Island Band's Indigenous interests and current context. Where Indigenous interests and current context of Leq'á:mel First Nation, Popkum First Nation, Matsqui First Nation, Shxw'ōwhámél First Nation, and Seabird Island Band are unique, those distinctions will be identified.

### 11.17.3. Summary of Engagement

The Application must meet the information requirements outlined in subsection 11.1.3 Summary of Engagement.

#### 11.17.3.1. Leq'á:mel First Nation

The Application must meet the information requirements outlined in subsection 11.1.3 Summary of Engagement.

#### 11.17.3.2. Popkum First Nation

The Application must meet the information requirements outlined in subsection 11.1.3 Summary of Engagement.

#### 11.17.3.3. Matsqui First Nation

The Application must meet the information requirements outlined in subsection 11.1.3 Summary of Engagement.

#### 11.17.3.4. Shxw'ōwhámél First Nation

The Application must meet the information requirements outlined in subsection 11.1.3 Summary of Engagement.

#### 11.17.3.5. Seabird Island Band

The Application must meet the information requirements outlined in subsection 11.1.3 Summary of Engagement.

### 11.17.4. Information Sources

The Application must meet the information requirements outlined in subsection 11.1.4 Information Sources. The Application must include one section which aggregates information sources for the Leq'á:mel First Nation, Popkum First Nation, Matsqui First Nation, Shxw'ōwhámél First Nation, and Seabird Island Band. Where Indigenous

interests and current context of Leq'á:mel First Nation, Popkum First Nation, Matsqui First Nation, Shxw'ōwhámél First Nation, and Seabird Island Band are unique, those distinctions will be identified. Where information sources relevant to the assessment of these Indigenous nations Indigenous interests are unique, those distinctions will be identified.

#### **11.17.4.1. Indigenous Knowledge**

The Application must meet the information requirements outlined in subsection 11.1.4.1 Indigenous Knowledge.

### **11.17.5. Assessing Effects on Indigenous Interests**

#### **11.17.5.1. Introduction**

The Application must meet the information requirements outlined in subsection 11.1.5.1 Introduction.

#### **11.17.5.2. Assessment Boundaries**

The Application must meet the information requirements outlined in subsection 11.1.5.2 Assessment Boundaries.

#### **11.17.5.3. Spatial Boundaries**

The Application must meet the information requirements outlined in subsection 11.1.5.3 Spatial Boundaries.

#### **11.17.5.4. Temporal Boundaries**

The Application must meet the information requirements outlined in subsection 11.1.5.4 Temporal Boundaries.

#### **11.17.5.5. Existing Conditions**

The Application must meet the information requirements outlined in subsection 11.1.5.5 Existing Conditions.

#### **11.17.5.6. Potential Effects on Indigenous Interests**

The Application must meet the information requirements outlined in subsection 11.1.5.6 Potential Effects on Indigenous Interests. A proposed preliminary list of Stó:lō Nations Indigenous interests is in Table 23.

*Table 23. Proposed Preliminary List of Stó:lō Nations Indigenous Interests*

Preliminary Indigenous Interests	Preliminary Potential Effects
Harvesting and Subsistence Activities	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Harvesting and Subsistence Activities, see Table 6 in subsection 11.1.5.6.</li> </ul>
Cultural Use Sites and Areas	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Cultural Use Sites and Areas, see Table 6 in subsection 11.1.5.6.</li> </ul>
Social and Economic Conditions	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Social and Economic Conditions, see Table 6 in subsection 11.1.5.6.</li> </ul>
Indigenous Health and Well-being	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Indigenous Health and Well-being, see Table 7 in subsection 11.1.5.6.</li> </ul>
Cultural Continuation	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Cultural Continuation, see Table 6 in subsection 11.1.5.6.</li> </ul>
Indigenous Governance Systems	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Indigenous Governance Systems, see Table 6 in subsection 11.1.5.6.</li> </ul>

**11.17.5.7. Effects Management**

The Application must meet the information requirements outlined in subsection 11.1.5.7 Effects Management.

**11.17.5.8. Assessing Negative Effects**

The Application must meet the information requirements outlined in subsection 11.1.5.8 Assessing Negative Effects.

**11.17.5.9. Characterization of Residual Effects**

The Application must meet the information requirements outlined in subsection 11.1.5.9 Characterization of Residual Effects.

**11.17.5.10. Cumulative Effects**

The Application must meet the information requirements outlined in subsection 11.1.4.10 Cumulative Effects.

**11.17.5.11. Views of Indigenous Nation**

The Application must meet the information requirements outlined in subsection 11.1.5.11 Views of Indigenous Nation.

**11.17.6. Positive Effects**

The Application must meet the information requirements outlined in subsection 11.1.6 Positive Effects.

**11.17.7. Summary**

The Application must meet the information requirements outlined in subsection 11.1.7 Summary.

**11.18. W̱SÁNEĆ Nations****11.18.1. Methodology Overview**

The proponent proposes that the Indigenous Nations Effects Assessment be conducted for Malahat First Nation, Pauquachin First Nation, Tsartlip First Nation, Tsawout First Nation, and Tseycum First Nation in one partially aggregated assessment subsection titled W̱SÁNEĆ Nations.

Malahat First Nation, Pauquachin First Nation, Tsartlip First Nation, Tsawout First Nation, and Tseycum First Nation are the five Indigenous nations of the W̱SÁNEĆ Peoples, whose traditional territory encompasses the Saanich Peninsula, the Gulf Islands, and the San Juan Islands. Each were identified in B.C. EAO and IAAC's Joint Summary of Issues and Engagement as Indigenous nations whose Indigenous interests could reasonably be expected to be affected by the Project.

The proponent has communicated with Malahat First Nation, Pauquachin First Nation, Tsartlip First Nation, Tsawout First Nation, and Tseycum First Nation individually. As Malahat First Nation, Pauquachin First Nation, Tsartlip First Nation, Tsawout First Nation, and Tseycum First Nation did not submit notices to be participating Indigenous nations to the B.C. EAO and as these Indigenous nations are W̱SÁNEĆ, the proponent is proposing an aggregated assessment be conducted for this subsection.

**11.18.2. Context****11.18.2.1. Understanding of Indigenous Interests and Current Context**

The Application must meet the information requirements outlined in subsection 11.1.2.1 Understanding of Indigenous Interests and Current Context. The Application must include one section which aggregates the proponent's understanding

of Malahat First Nation, Pauquachin First Nation, Tsartlip First Nation, Tsawout First Nation, and Tseycum First Nation's Indigenous interests and current context. Where Indigenous interests and current context of Malahat First Nation, Pauquachin First Nation, Tsartlip First Nation, Tsawout First Nation, and Tseycum First Nation are unique, those distinctions will be identified.

### **11.18.3. Summary of Engagement**

The Application must meet the information requirements outlined in subsection 11.1.3 Summary of Engagement.

#### **11.18.3.1. Malahat First Nation**

The Application must meet the information requirements outlined in subsection 11.1.3 Summary of Engagement.

#### **11.18.3.2. Pauquachin First Nation**

The Application must meet the information requirements outlined in subsection 11.1.3 Summary of Engagement.

#### **11.18.3.3. Tsartlip First Nation**

The Application must meet the information requirements outlined in subsection 11.1.3 Summary of Engagement.

#### **11.18.3.4. Tsawout First Nation**

The Application must meet the information requirements outlined in subsection 11.1.3 Summary of Engagement.

#### **11.18.3.5. Tseycum First Nation**

The Application must meet the information requirements outlined in subsection 11.1.3 Summary of Engagement.

### **11.18.4. Information Sources**

The Application must meet the information requirements outlined in subsection 11.1.4 Information Sources.

#### **11.18.4.1. Indigenous Knowledge**

The Application must meet the information requirements outlined in subsection 11.1.4.1 Indigenous Knowledge.

### **11.18.5. Assessing Effects on Indigenous Interests**

#### **11.18.5.1. Introduction**

The Application must meet the information requirements outlined in subsection 11.1.5.1 Introduction.

#### **11.18.5.2. Assessment Boundaries**

The Application must meet the information requirements outlined in subsection 11.1.5.2 Assessment Boundaries.

#### **11.18.5.3. Spatial Boundaries**

The Application must meet the information requirements outlined in subsection 11.1.5.3 Spatial Boundaries.

#### **11.18.5.4. Temporal Boundaries**

The Application must meet the information requirements outlined in subsection 11.1.5.4 Temporal Boundaries.

#### **11.18.5.5. Existing Conditions**

The Application must meet the information requirements outlined in subsection 11.1.5.5 Existing Conditions.

**11.18.5.6. Potential Effects on Indigenous Interests**

The Application must meet the information requirements outlined in subsection 11.1.4.6 Potential Effects. A proposed preliminary list of WSÁNEĆ Nations Indigenous interests is in Table 24.

Table 24. Proposed Preliminary List of WSÁNEĆ Nations Indigenous Interests

Preliminary Indigenous Interests	Preliminary Potential Effects
Harvesting and Subsistence Activities	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Harvesting and Subsistence Activities, see Table 6 in subsection 11.1.5.6.</li> </ul>
Cultural Use Sites and Areas	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Cultural Use Sites and Areas, see Table 6 in subsection 11.1.5.6.</li> </ul>
Social and Economic Conditions	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Social and Economic Conditions, see Table 6 in subsection 11.1.5.6.</li> </ul>
Indigenous Health and Well-being	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Indigenous Health and Well-being see Table 6 in subsection 11.1.5.6.</li> </ul>
Cultural Continuation	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Cultural Continuation, see Table 6 in subsection 11.1.5.6.</li> </ul>
Indigenous Governance Systems	<ul style="list-style-type: none"> <li>For the list of preliminary potential effects on Indigenous Governance Systems, see Table 6 in subsection 11.1.5.6.</li> </ul>

**11.18.5.7. Effects Management**

The Application must meet the information requirements outlined in subsection 11.1.5.7 Effects Management.

**11.18.5.8. Assessing Negative Effects**

The Application must meet the information requirements outlined in subsection 11.1.5.8 Assessing Negative Effects.

**11.18.5.9. Characterization of Residual Effects**

The Application must meet the information requirements outlined in subsection 11.1.5.9 Characterization of Residual Effects.

**11.18.5.10. Cumulative Effects**

The Application must meet the information requirements outlined in subsection 11.1.5.10 Cumulative Effects.

**11.18.5.11. Views of Indigenous Nation**

The Application must meet the information requirements outlined in subsection 11.1.5.11 Views of Indigenous Nation.

**11.18.6. Positive Effects**

The Application must meet the information requirements outlined in subsection 11.1.6 Positive Effects.

**11.18.7. Summary**

The Application must meet the information requirements outlined in subsection 11.1.7 Summary.



## 12.0 SUMMARY OF BIOPHYSICAL FACTORS THAT SUPPORT ECOSYSTEM FUNCTION

The Application must consider project effects on biophysical factors that support ecosystem function based on the results of the VC assessments, including the cumulative effects assessments. The Application must follow the process as outlined as follows:

1. Provide an overview of the current ecosystem function in the vicinity of the project at a landscape-and watershed level;
2. Identify the key biophysical factors that support ecosystem function that the project effects may interact with;
3. Discuss how the VC assessments and cumulative effects assessments considered effects on these biophysical factors;
4. Summarize the positive and negative effects, including adverse cumulative effects, on biophysical factors that support ecosystem function based on appropriate information from the VC assessments;
5. Identify proposed measures required to manage potential effects on biophysical factors that support ecosystem function; and
6. Describe any predicted changes to ecosystem function as a result of the project.

## 13.0 SUMMARY OF HUMAN AND COMMUNITY WELL-BEING

The assessment must follow the process outlined as follows:

- Provide an overview of the current state of human and community well-being in the Project area from both a local and Indigenous nation perspective;
- Describe influences on community well-being (such as, disposable income, cost of living, lifestyle; language; rates of alcohol and substance abuse, and of illegal activities and violence; rates of sexually transmitted infections and gender-based violence; etc.), including indicators proposed by each Indigenous nation;
- Describe community cohesion, including factors such as community or neighbourhood engagement, support, and social networks and other social activities;
- Describe the psychosocial environment and its influence on community well-being;
- Describe the socio-cultural environment, identifying Indigenous nations and predominant cultural communities; demographic characteristics and major socio-cultural concerns of the population;
- Describe access, ownership and use of resources (such as, land tenure, minerals, food, water, social infrastructure);
- Describe the capacity (currently available or planned) of institutions to deliver public services and infrastructure;
- Describe relevant historical community background;
- Summarize potential positive and negative effects including residual adverse cumulative effects of the Project on human and community well-being based on the results of the VC assessments under economic, social, culture, and health, the assessment of other Section 25(2) matters, and the assessment of effects to Indigenous interests;
- Identify how the Project interacts differently with distinct human populations;
- Identify if the Project interacts with other factors that support human and community well-being that were not specifically assessed as part of a VC;
- Identify any key measures proposed to manage potential effects on human and community well-being;

- Describe any anticipated changes to human and community well-being more generally as a result of the Project;
- Assess potential adverse and positive effects of changes to social conditions including, but not limited to:
  - food security;
  - income inequity;
  - changes at the community-level that affect social conditions as result of increased population, workers camps, economic activity, cost of living, among other factors; and
  - non-commercial/trade economy.
- Describe in- and out-migration effects, including changes in social and cultural make-up of affected communities and changes in populations;
- Identify whether social divisions might be intensified as a result of the Project;
- Evaluate potential social effects associated with increased disposable income, including potential cost of living effects, adverse and positive lifestyle changes, distribution of benefits among affected people;
- Describe any anticipated effects to language;
- Describe changes to viewsapes as a result of the Project and potential effects to community well-being;
- Consider the potential for stresses on community, family and household cohesion, alcohol and substance abuse, or illegal or other potentially disruptive activities; and
- Apply GBA+ within the information related to community well-being and document how potential effects of changes to community well-being could be different for distinct populations, including Indigenous Peoples or groups identified by gender, age, or other community relevant factors.

## 14.0 SUMMARY OF IMPACTS TO CURRENT AND FUTURE GENERATIONS

The Application must summarize the analysis and conclusions for environmental, economic, social, cultural and health VCs and Indigenous interests that contribute to the project's positive or negative effects on current and future generations.

The Application must:

- Describe how input from engagement related to effects on current and future generations was incorporated and how the Project has changed as a result;
- Demonstrate how any strategic direction from the Province of B.C. regarding sustainable development was considered;
- Provide any mitigation measures proposed to distribute positive and negative effects more equitably over time (such as, across generations);
- Discuss the potential outcome that residual effects to VCs and Indigenous interests will have on both current and future generations;
- Discuss the type(s) of economic growth that would be generated by the Project and how this growth would be distributed, both within the population and over time; and
- Identify any relevant Regional, Provincial, or Indigenous growth strategies and describe how the Project is or is not aligned with them.

## 15.0 DESCRIPTION OF THE PROJECT'S CONTRIBUTION TO SUSTAINABILITY

The Application must characterize the Project's contribution to sustainability. The Application will describe the context of the Project, including the issues of importance to participants, the diversity of views expressed and the selection of VCs. Once the analysis on potential effects of the Project is conducted, the sustainability principles will be applied in an analysis for how the Project:

- Considers the interconnectedness and interdependence of human-ecological systems;
- Considers the well-being of present and future generations;
- Maximizes overall positive benefits and minimize adverse effects of the Project; and
- Applies the precautionary principle by considering uncertainty and risk of irreversible harm.

The Application must describe how sustainability principles were applied and identify conclusions drawn from this analysis. This summary must be qualitative in nature but may draw on quantitative data, as necessary. In addition, the Application must:

- Indicate how the planning and design of the Project, in all phases, considers the sustainability principles;
- Describe the process in selecting the preferred alternative means and alternatives to the Project and how the sustainability principles were considered;
- Indicate how monitoring, management and reporting systems consider the sustainability principles and attempt to ensure continuous progress towards sustainability;
- Describe the ecological, health, social and economic benefits of the Project to local communities within the study area, potentially affected Indigenous nations, Regional, Provincial, and/or Federal governments; and
- Describe engagement with potentially affected Indigenous nations and describe measures and commitments to ensuring the sustainability of Indigenous livelihood, Traditional Use, culture, and well being.

## 16.0 SUMMARY OF STATUTORY REQUIREMENTS UNDER THE FEDERAL *IMPACT ASSESSMENT ACT* FOR SUBSTITUTED PROJECTS

Given the approval of substitution for the Project, the Application must contain information that addresses the statutory requirements under the *IAA*. This section will contain the location within the Application of where Federal requirements have been addressed, namely the effects within Federal jurisdiction as defined in Section 2 (example layout in Table 25) and each of the factors set out in Section 22 of the *IAA* (example layout in Table 26). The Application must also contain the additional factors set out in the Notice of Substitution Approval under the *IAA* issued by the Minister of Environment and Climate Change. This section is not intended to reiterate the assessment or restate findings for each aspect of the *IAA*. Where specific requirements of the *IAA* have not been considered within the Application, they are marked as not applicable, and a rationale should be provided.

Table 25. Effects within Federal Jurisdiction – Section 2 of the Impact Assessment Act

Effects within Federal Jurisdiction (as defined in Section 2 of the /A4)	Section of AIR where the Requirements have been included	Section of Application Where the Effect is Assessed	Assessment Findings
Effects within Federal jurisdiction means, with respect to a physical activity or a designated Project, (a) a change to the following components of the environment that are within the legislative authority of Parliament: (i) fish and fish habitat, as defined in subsection 2(1) of the <i>Fisheries Act</i> , (ii) aquatic species, as defined in subsection 2(1) of the <i>SARA</i> , (iii) migratory birds, as defined in subsection 2(1) of the <i>MBCA</i> , 1994, and (iv) any other component of the environment that is set out in Schedule 3;	Subsection 7.9 describes the requirements to address effects within Federal Jurisdiction in relation to fish and fish habitat, as defined in subsection 2(1) of the <i>Fisheries Act</i> and aquatic species as defined in subsection 2(1) of the <i>SARA</i> . See subsection 7.9 for further details.  Subsection 7.8 describes the requirements to address effects within Federal jurisdiction for migratory birds as defined in subsection 2(1) of the <i>MBCA</i> , 1994. See subsection 7.8 for further details.	This column will provide a cross-reference to the section of the Application where a description of the assessment for effects within Federal jurisdiction are addressed.	This column will provide the assessment findings for effects within Federal jurisdiction.
(b) a change to the environment that would occur (i) on Federal lands, (ii) in a Province other than the one where the physical activity or the designated Project is being carried out, or (iii) outside Canada;	Any requirements to address changes to the environment within Federal jurisdiction are provided in Section 7 (Valued Components Effects Assessment).  There are no changes to the environment anticipated on Federal lands, in a Province other than the one where the physical activity or the designated Project is being carried out, or outside Canada.	This column will provide a cross-reference to the section of the Application where a description of the assessment for effects within Federal jurisdiction are addressed.	This column will provide the assessment findings for effects within Federal jurisdiction.
(c) with respect to the Indigenous Peoples of Canada, an impact — occurring in Canada and resulting from any change to the environment — on (i) physical and cultural heritage, (ii) the current use of lands and resources for traditional purposes, or (iii) any structure, site or thing that is of historical, archaeological, paleontological, or architectural value;	Section 11 describes the community-specific assessment for each of the 18 Indigenous nations. Subsections 7.13 and 7.14, Section 13 and Section 14 describe the requirements to address effects on physical and cultural heritage, the current use of lands and resources for traditional purposes, and any structure, site or thing that is of historical, archaeological, paleontological, or architectural value.	This column will provide a cross-reference to the section of the Application where a description of the assessment for effects within Federal jurisdiction are addressed.	This column will provide the assessment findings for effects within Federal jurisdiction.
(d) any change occurring in Canada to the health, social or economic	Subsections 7.10, 7.11, 7.12, 7.15 and Section 11 describe requirements to address any change occurring in Canada to the	This column will provide a cross-reference to the section of the Application where a description of	This column will provide the assessment findings for effects within Federal jurisdiction.

Table 25. Effects within Federal Jurisdiction – Section 2 of the Impact Assessment Act

Effects within Federal Jurisdiction (as defined in Section 2 of the /A4)	Section of AIR where the Requirements have been included	Section of Application Where the Effect is Assessed	Assessment Findings
conditions of the Indigenous Peoples of Canada; and	health, social, or economic conditions of the Indigenous Peoples in Canada.  Note that Section 11 describes the community-specific assessment for each of the 18 Indigenous nations.	the assessment for effects within Federal jurisdiction are addressed.	
(e) any change to a health, social, or economic matter that is within the legislative authority of Parliament that is set out in Schedule 3.	The legislative authority of Parliament that is set out in Schedule 3 is currently not available. This requirement is not applicable.	This column will provide a cross-reference to the section of the Application where a description of the assessment for effects within Federal jurisdiction are addressed.	This column will provide the assessment findings for effects within Federal jurisdiction.

Table 26. Factors to be Considered – Section 22 of the Impact Assessment Act

Factor to be considered (as defined in Section 22 of the /A4)	Section of AIR where the Requirements have been Included	Section of Application Where the Factor is Assessed	Assessment Findings
(a) The changes to the environment or to health, social or economic conditions and the positive and negative consequences of these changes that are likely to be caused by the carrying out of the designated Project, including:	Subsections 7.1 to 7.9 provides the changes to the environment and the positive and negative consequences of these changes that are likely to be caused by the Project.  Subsections 7.10 to 7.15 provides the changes to the social, health or economic conditions and the positive and negative consequences of these changes that are likely to be caused by the Project.	This column will provide a cross-reference to the section of the Application where a description of the assessment for effects within Federal jurisdiction are addressed.	This column will provide the assessment findings for effects within Federal jurisdiction.
(i) the effects of malfunctions or accidents that may occur in connection with the designated Project;	Section 9 will describe the effects of malfunctions or accidents that may occur in connection with the designated Project.	This column will provide a cross-reference to the section of the Application where a description of the assessment for effects within Federal jurisdiction are addressed.	This column will provide the assessment findings for effects within Federal jurisdiction.
(ii) any cumulative effects that are likely to result from the designated Project in combination with other physical activities that have been or will be carried out;	Section 7 and Section 11 of the AIR describes the requirements to address any cumulative effects that are likely to result from the designated Project in combination with other physical activities that have been or will be carried out.  The collection and use of Indigenous Knowledge on cumulative effects will follow the outline described in subsection 11.1.	This column will provide a cross-reference to the section of the Application where a description of the assessment for effects within Federal jurisdiction are addressed.	This column will provide the assessment findings for effects within Federal jurisdiction.



Table 26. Factors to be Considered – Section 22 of the Impact Assessment Act

Factor to be considered (as defined in Section 22 of the /A4)	Section of AIR where the Requirements have been Included	Section of Application Where the Factor is Assessed	Assessment Findings
	Note that Section 11 describes the community-specific assessment for each of the 18 Indigenous nations.		
(iii) the result of any interaction between those effects	Section 7 and Section 11 of the AIR describes the requirements to address the interaction between the effects from malfunctions or accidents and any cumulative effects from the Project.  The collection and use of Indigenous Knowledge on these interactions will follow the outline described in subsection 11.1.  Note that Section 11 describes the community-specific assessment for each of the 18 Indigenous nations.	This column will provide a cross-reference to the section of the Application where a description of the assessment for effects within Federal jurisdiction are addressed.	This column will provide the assessment findings for effects within Federal jurisdiction.
(b) mitigation measures that are technically and economically feasible and that would mitigate any adverse effects of the designated Project;	Subsections 7.2.5 to 7.3.15 and 11.2.5.7 to Section 11.18.5.7 of the AIR describes the requirements to address mitigation measures that are technically and economically feasible and that would mitigate any adverse effects of the designated Project.  The collection and use of Indigenous Knowledge on mitigation measures will follow the outline described in subsection 11.1.  Note that Section 11 describes the community-specific assessment for each of the 18 Indigenous nations.	This column will provide a cross-reference to the section of the Application where a description of the assessment for effects within Federal jurisdiction are addressed.	This column will provide the assessment findings for effects within Federal jurisdiction.
(c) the impact that the designated Project may have on any Indigenous nation and any adverse impact that the designated Project may have on the rights of the Indigenous Peoples of Canada recognized and affirmed by Section 35 of the <i>Constitution Act</i> , 1982;	Section 11 of the AIR describes the requirements to address the impact that the designated Project may have on any Indigenous nation and any adverse impact that the designated Project may have on the rights of the Indigenous Peoples in Canada recognized and affirmed by Section 35 of the <i>Constitution Act</i> , 1982.  The collection and use of Indigenous Knowledge on impacts to their nation or their rights will follow the outline described in subsection 11.1.  Note that Section 11 describes the community-specific assessment for each of the 18 Indigenous nations.	This column will provide a cross-reference to the section of the Application where a description of the assessment for effects within Federal jurisdiction are addressed.	This column will provide the assessment findings for effects within Federal jurisdiction.

Table 26. Factors to be Considered – Section 22 of the Impact Assessment Act

Factor to be considered (as defined in Section 22 of the /A4)	Section of AIR where the Requirements have been Included	Section of Application Where the Factor is Assessed	Assessment Findings
(d) the purpose of and need for the designated Project;	Subsection 1.7.1 and 1.7.2 of the AIR describes the requirements to address the purpose of and need for the designated Project, respectively.	This column will provide a cross-reference to the section of the Application where a description of the assessment for effects within Federal jurisdiction are addressed.	This column will provide the assessment findings for effects within Federal jurisdiction.
(e) alternative means of carrying out the designated Project that are technically and economically feasible, including through the use of BATs, and the effects of those means;	Subsection 1.7.4 of the AIR describes the requirements to address the alternative means of carrying out the designated Project that are technically and economically feasible, including through the use of BATs, and the effects, risks, and uncertainties of those alternatives.	This column will provide a cross-reference to the section of the Application where a description of the assessment for effects within Federal jurisdiction are addressed.	This column will provide the assessment findings for effects within Federal jurisdiction.
(f) any alternatives to the designated Project that are technically and economically feasible and are directly related to the designated Project;	Subsection 1.7.3 of the AIR describes the requirements to address any alternatives to the designated project that are technically and economically feasible and are directly related to the designated project. The analysis of alternatives to the project will validate that the preferred alternative is a reasonable approach.	This column will provide a cross-reference to the section of the Application where a description of the assessment for effects within Federal jurisdiction are addressed.	This column will provide the assessment findings for effects within Federal jurisdiction.
(g) Indigenous Knowledge provided with respect to the designated project;	The collection and use of Indigenous Knowledge will follow the outline described in subsection 11.1 and would be described in the community-specific assessment for each of the 18 Indigenous nations, as outlined in subsection 11.2.4.1 to 11.18.4.1 of the AIR. The existing conditions and potential effects in subsection 7.2.3 to 7.15.3 and 7.2.4 to 7.15.4 contain the requirements to describe available Indigenous or local knowledge related to the applicable valued components.	This column will provide a cross-reference to the section of the Application where a description of the assessment for effects within Federal jurisdiction are addressed.	This column will provide the assessment findings for effects within Federal jurisdiction.
(h) the extent to which the designated project contributes to sustainability;	Section 15 of the AIR describes the requirements to characterize the Project's contribution to sustainability and describes how sustainability principles were applied.	This column will provide a cross-reference to the section of the Application where a description of the assessment for effects within Federal jurisdiction are addressed.	This column will provide the assessment findings for effects within Federal jurisdiction.
(i) the extent to which the effects of the designated project hinder or contribute to the Government of	Section 8 of the AIR describes the requirements to describe the proponent's views on the extent to which the effects of the designated	This column will provide a cross-reference to the section of the Application where a description of	This column will provide the assessment findings for effects within Federal jurisdiction.

Table 26. Factors to be Considered – Section 22 of the Impact Assessment Act

Factor to be considered (as defined in Section 22 of the /A4)	Section of AIR where the Requirements have been Included	Section of Application Where the Factor is Assessed	Assessment Findings
Canada's ability to meet its environmental obligations;	Project hinder or contribute to the Government of Canada's ability to meet its environmental obligations for all relevant VCs, taking into consideration proposed mitigation and follow-up measures.	the assessment for effects within Federal jurisdiction are addressed.	
(j) any change to the designated Project that may be caused by the environment;	Section 10 of the AIR describes the requirements to address any change to the designated Project that may be caused by the environment, and how this in turn could result in negative and/or effects to the environmental, economic, social, culture, and health conditions.	This column will provide a cross-reference to the section of the Application where a description of the assessment for effects within Federal jurisdiction are addressed.	This column will provide the assessment findings for effects within Federal jurisdiction.
(k) the requirements of the follow-up program in respect of the designated Project	Subsection 6.8 outlines the VC Assessment Methods for the Project regarding follow-up program strategies. Subsection 6.8 of the AIR describes the requirements to address the follow-up program in respect to effects on each valued component of the designated Project.	This column will provide a cross-reference to the section of the Application where a description of the assessment for effects within Federal jurisdiction are addressed.	This column will provide the assessment findings for effects within Federal jurisdiction.
(l) considerations related to Indigenous cultures raised with respect to the designated Project;	Subsection 11.1.5.5 of the AIR describe the requirements to summarize considerations related to Indigenous cultures raised with respect to the designated Project, including providing a summary of the baseline conditions associated with Indigenous cultures. The collection and use of Indigenous Knowledge will follow the outline described in subsection 11.1. Note that Section 11 describes the community-specific assessment for each of the 18 Indigenous nations. Information collected will be integrated into Section 7 of the Application as required.	This column will provide a cross-reference to the section of the Application where a description of the assessment for effects within Federal jurisdiction are addressed.	This column will provide the assessment findings for effects within Federal jurisdiction.

Table 26. Factors to be Considered – Section 22 of the Impact Assessment Act

Factor to be considered (as defined in Section 22 of the IAA)	Section of AIR where the Requirements have been Included	Section of Application Where the Factor is Assessed	Assessment Findings
(m) community knowledge provided with respect to the designated Project;	Section 3, Section 4 and Section 7 of the AIR describe the requirements to summarize community knowledge provided with respect to the designated Project. Section 3 and 4 summarize feedback received from the public and local government on the Project and proposed activities during the development of the Application. Information collected will be integrated into Section 7 of the Application as required.	This column will provide a cross-reference to the section of the Application where a description of the assessment for effects within Federal jurisdiction are addressed.	This column will provide the assessment findings for effects within Federal jurisdiction.
(n) comments received from the public;	Section 3 of the AIR describe the requirements to summarize comments received from the public. Section 3 summarize feedback received from the public on the Project and proposed activities during the development of the Application. Information collected will be integrated into Section 7 of the Application as required.	This column will provide a cross-reference to the section of the Application where a description of the assessment for effects within Federal jurisdiction are addressed.	This column will provide the assessment findings for effects within Federal jurisdiction.
(o) comments from a jurisdiction that are received in the course of consultations conducted under Section 21;	Section 4 and Section 7 of the AIR describe the requirements to consider comments from a jurisdiction (as defined in Section 2 of the IAA) that are received in the course of consultations conducted under Section 21. Section 4 summarize feedback received from the jurisdictions of Local governments on the Project and proposed activities during the development of the Application. Information collected will be integrated into Section 7 of the Application as required.	This column will provide a cross-reference to the section of the Application where a description of the assessment for effects within Federal jurisdiction are addressed.	This column will provide the assessment findings for effects within Federal jurisdiction.
(p) any relevant assessment referred to in Section 92, 93 or 95;	Section 2 of the AIR describes the requirements to describe any relevant regional or strategic assessment referred to in Section 92, 93, or 95.	This column will provide a cross-reference to the section of the Application where a description of the assessment for effects within Federal jurisdiction are addressed.	This column will provide the assessment findings for effects within Federal jurisdiction.
(q) any assessment of the effects of the designated Project that is conducted by or on behalf of an	The AIR describes the requirements to address any assessment of the effects of the	This column will provide a cross-reference to the section of the Application where a description of	This column will provide the assessment findings for effects within Federal jurisdiction.

Table 26. Factors to be Considered – Section 22 of the Impact Assessment Act

Factor to be considered (as defined in Section 22 of the IAA)	Section of AIR where the Requirements have been Included	Section of Application Where the Factor is Assessed	Assessment Findings
Indigenous governing body and that is provided with respect to the designated Project;	designated Project, including for alternatives to the Project, alternative means, and authorizations and permits, that is conducted by or on behalf of an Indigenous governing body and that is provided with respect to the designated Project.	the assessment for effects within Federal jurisdiction are addressed.	
(r) any study or plan that is conducted or prepared by a jurisdiction — or an Indigenous governing body not referred to in paragraph (f) or (g) of the definition jurisdiction in Section 2 — that is in respect of a region related to the designated Project and that has been provided with respect to the Project;	Section 2 and Section 11 of the AIR describes the requirements to describe address any study or plan that is conducted or prepared by a jurisdiction — or an Indigenous governing body not referred to in paragraph (f) or (g) of the definition jurisdiction in Section 2 — that is in respect of a region related to the designated Project and that has been provided with respect to the Project. Section 2 describes the regulatory framework set out for the Project.	This column will provide a cross-reference to the section of the Application where a description of the assessment for effects within Federal jurisdiction are addressed.	This column will provide the assessment findings for effects within Federal jurisdiction.
(s) the intersection of sex and gender with other identity factors;	Subsections 7.10, 7.11, 7.12, 7.15, Section 11, Section 13 and Section 14 of the draft AIR describe the requirements to assess the intersection of sex and gender with other identity factors.	This column will provide a cross-reference to the section of the Application where a description of the assessment for effects within Federal jurisdiction are addressed.	This column will provide the assessment findings for effects within Federal jurisdiction.
(t) any other matter relevant to the impact assessment that the Agency requires to be taken into account	To be determined	This column will provide a cross-reference to the section of the Application where a description of the assessment for effects within Federal jurisdiction are addressed.	This column will provide the assessment findings for effects within Federal jurisdiction.

Table 27. Federal Minister's conditions for substitution

Federal Minister's conditions for substitution	Section of AIR where the Requirements have been Included	Section of Application Where the Condition is Assessed	Assessment Findings
As required under the IAA, B.C. will include the requirements of the SACC, prepared by Environment and Climate Change Canada, in the impact assessment, including information on the Project's greenhouse gas emissions, mitigation measures and requirements of any follow-up	Section 8 provides the information needed to meet the substitution conditions	This column will provide a cross-reference to the section of the Application where a description of the assessment for effects within Federal jurisdiction are addressed.	This column will provide the assessment findings for effects within Federal jurisdiction.



Table 27. Federal Minister's conditions for substitution

Federal Minister's conditions for substitution	Section of AIR where the Requirements have been Included	Section of Application Where the Condition is Assessed	Assessment Findings
program that may be warranted, and climate change resilience.			
Consideration of federal policy measures and commitments outlined in the Federal Government's Strengthened Climate Plan.	Section 8 provides the information needed to meet the substitution conditions	This column will provide a cross-reference to the section of the Application where a description of the assessment for effects within Federal jurisdiction are addressed.	This column will provide the assessment findings for effects within Federal jurisdiction.
Consideration of commitments to be outlined in Canada's 2030 Emissions Reduction Plan as required under the <i>Canadian Net-Zero Emissions Accountability Act</i> , including consideration of a cap on emissions from the oil and gas sector, in the impact assessment.	Section 8 provides the information needed to meet the substitution conditions	This column will provide a cross-reference to the section of the Application where a description of the assessment for effects within Federal jurisdiction are addressed.	This column will provide the assessment findings for effects within Federal jurisdiction.

The information is to be provided in machine-readable, accessible format.

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Resources Information Standards Committee (RISC). 1999. British Columbia Wildlife Habitat Rating Standards. Version 2.0. Prepared by Ministry of Environment, Lands and Parks Resources Inventory Branch for the Terrestrial Ecosystems Task Force. 97 pp.

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## 18.0 RESOURCES AND GUIDANCE

### Human and Community Well-Being and Gender-based Analysis Plus

[Human and Community Well-Being Guidelines for Assessing Social, Economic, Cultural and Health Effects in Environmental Assessments in B.C. available at https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/2018-act/hcwb\\_guidelines\\_v1\\_-\\_april\\_2020.pdf](https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/2018-act/hcwb_guidelines_v1_-_april_2020.pdf)

[Guidance: Gender-based Analysis Plus in Impact Assessment available at Guidance: Gender-based Analysis Plus in Impact Assessment - Canada.ca](#)

## Human Health

*Evaluating Human Health Impacts in Environmental Assessments: Air Quality* [available at http://www.canada.ca/en/health-canada/services/publications/healthy-living/guidance-evaluating-human-health-impacts-air-quality.html](http://www.canada.ca/en/health-canada/services/publications/healthy-living/guidance-evaluating-human-health-impacts-air-quality.html). Health Canada. 2017

*Evaluating Human Health Impacts in Environmental Assessments: Country Foods* [available at http://www.canada.ca/en/health-canada/services/publications/healthy-living/guidance-evaluating-human-health-impacts-country-foods.html](http://www.canada.ca/en/health-canada/services/publications/healthy-living/guidance-evaluating-human-health-impacts-country-foods.html). Health Canada. 2017.

*Evaluating Human Health Impacts in Environmental Assessments: Noise* [available at http://www.canada.ca/en/health-canada/services/publications/healthy-living/guidance-evaluating-human-health-impacts-noise.html](http://www.canada.ca/en/health-canada/services/publications/healthy-living/guidance-evaluating-human-health-impacts-noise.html). Health Canada. 2017.

*Evaluating Human Health Impacts in Environmental Assessments: Radiological Impacts* [available at http://www.canada.ca/en/health-canada/services/publications/healthy-living/guidance-evaluating-human-health-impacts-radiological.html](http://www.canada.ca/en/health-canada/services/publications/healthy-living/guidance-evaluating-human-health-impacts-radiological.html). Health Canada. 2017.

*Evaluating Human Health Impacts in Environmental Assessments: Water Quality* [available at http://www.canada.ca/en/health-canada/services/publications/healthy-living/guidance-evaluating-human-health-impacts-water-quality.html](http://www.canada.ca/en/health-canada/services/publications/healthy-living/guidance-evaluating-human-health-impacts-water-quality.html). Health Canada. 2017.

*Health Canada's Risk Assessment Guidance Parts I through VII* available at <https://www.canada.ca/en/health-canada/services/environmental-workplace-health/contaminated-sites/guidance-documents.html>. Health Canada. 2017.

*Social Determinants of Health and Health Inequalities* available at <https://www.canada.ca/en/public-health/services/health-promotion/population-health/what-determines-health.html>. Public Health Agency of Canada. 2019.

## Water Quality

*Guidelines for the Assessment of Alternatives for Mine Waste Disposal* available at <https://www.canada.ca/en/environment-climate-change/services/managing-pollution/publications/guidelines-alternatives-mine-waste-disposal.html>. Compiled by Environment and Climate Change Canada

*Mine Environment Neutral Drainage (MEND) Report 1.20.1 Prediction Manual for Drainage Chemistry from Sulphidic Geologic Materials*. Prepared by William A. Price. Natural Resources Canada. 2009.

## Birds, Migratory Birds, and their Habitat

*A Framework for the Scientific Assessment of Potential Project Impact on Birds*. Prepared by Alan Hanson et al. Available at [http://www.publications.gc.ca/collections/collection\\_2010/ec/CW69-5-508-eng.pdf](http://www.publications.gc.ca/collections/collection_2010/ec/CW69-5-508-eng.pdf). Environment and Climate Change Canada. Technical Report Series Number 508

*Bird Survey Inventories in Canada*. Available at <http://www.ec.gc.ca/reom-mbs/default.asp?lang=En&n=B944A67D-1>.  
*Compiled by Environment and Climate Change Canada Breeding Bird Atlases*. Available at <https://www.birdscanada.org/volunteer/atlas>. Compiled by Bird Studies Canada.

## Wetlands

*Canadian Wetland Classification System*. Developed by the National Wetlands Working Group. Available at <http://www.wetlandpolicy.ca>

*Wetland Ecological Functions Assessment: An Overview of Approaches*. Prepared by Alan Hanson et al. Available at <http://publications.gc.ca/site/eng/343283/publication.html>. Environment and Climate Change Canada. 2008.

## Species at Risk

*COSEWIC Status Reports*. Developed by the Committee on the Status of Endangered Wildlife in Canada. Available at: <https://www.cosewic.ca/index.php/en-ca/status-reports.html>.

## Climate Change and Greenhouse Gas Emissions

*Strategic Assessment of Climate Change* available at <https://www.canada.ca/en/services/environment/conservation/assessments/strategic-assessments/climate-change.html>

*Draft Technical Guide related to the strategic assessment of climate change: Guidance on quantification of net greenhouse gas (GHG) emissions, impact on carbon sinks, mitigation measures, net-zero plan and upstream GHG assessment* available at <https://www.strategicasessmentclimatechange.ca/>

# 19.0 APPENDICES

## 19.1. Assessment Summary

The proponent will prepare a stand-alone plain language summary of the Application in both of Canada's official languages (French and English). The summary will contain sufficient details for the reader to understand the Project, any potential environmental, economic, social, culture, and health effects, potential adverse effects on Indigenous nations, proposed mitigation measures, residual effects, and required follow-up programs.

The Assessment Summary provides an opportunity for the proponent to demonstrate correspondence between issues raised during the Early Planning phase and issues addressed in the assessment. This Assessment Summary will be presented by VC, which allows the proponent to demonstrate the completeness of the assessment and provide the results of the analysis. The summary will include key maps or figures illustrating the Project location and key Project components.

## 19.2. Summary of Mitigation Measures

The Application must include a summary table of mitigations for potential Project effects by Project phase and indicate where the mitigation would be housed including the proponent's proposed EA level commitments and requirements associated with permitting authorizations. The B.C. EAO will use this table during issues resolution, in updating the

Regulatory Coordination Plan to describe how issues are being addressed in the assessment or could be further addressed in permitting, and in the development of the draft EAC including proposed conditions or Federal Decision Statement.

The Application must also describe the Project's environmental protection plan and its environmental management system through which the proponent will deliver this plan. The plan must provide an overall perspective on how potentially adverse effects would be minimized and managed over time.

### 19.3. Requested Project for Certification

The Application must provide the proponent's requested project description for the EAC including maps and the requested duration of the EAC.

### 19.4. Authorship

The Application must identify key personnel responsible for preparing the Application including, their employers, qualifications, and the sections for which they were contributors.

The Application must identify key information, reports and data used to support the development of the Application and the associated contributing organization and relevant qualifications. The Application must demonstrate that a qualified individual has prepared the information or studies provided. A qualified individual would include someone who, through education, experience, or knowledge relevant to a matter, may be relied on by the proponent to provide advice within their area of expertise. Knowledge relevant to a matter may include Indigenous Knowledge and local knowledge.

### 19.5. Reviews of Information

The Application must provide a summary of the reviews of information from the Technical Advisory Committee that have supported the development of the Application, in a tracking table showing:

- The reviewer;
- The date information was provided to the reviewer;
- The information that was provided to the reviewer;
- The date comments were received from the reviewer;
- The comments received from the reviewer; and
- How comments were addressed.

The AIR must provide a plan for the review of information supporting the development of the Application that meets the following specifications:

- Information must be provided to reviewers for a review period that is a minimum of 4 weeks in duration;
- Reviewers and the EAO must be provided with 2 weeks of advance notice before the proponent sends information for review;
- Information for different VCs may be provided at different times; however, proponents should consider sending information in packages that make efficient use of reviewer's time and support their understanding of materials and the effects of the project;
- The proponent must track comments received from reviewers and its responses in a tracking table and provide this table to the EAO;



- The reviewers, by an organization, for information must be identified (see example table below), considering the following factors:
  - Reviewers will vary based on the composition of the Technical Advisory Committee for the project;
  - The EAO can provide guidance based on the organizations and specific participants to represent organizations for individual projects;
  - Information to be reviewed will depend on the VCs identified for the project; and
  - Indigenous nations reviewers should be identified based on their identified Indigenous interests and based on their interest in reviewing information;
- The expected timelines for providing information to reviewers must be identified.

Table 28 will be updated through further consultation with Indigenous nations, Technical Advisors, and stakeholders and finalized during the Process Planning Phase for the Project.

Table 28. Review of Information Supporting the Development of the Application

Supporting Technical Data Report (TDR) or Supporting Study [Preliminary list at this time]	Reviewers* [TBD through engagement initiatives]	2 Week Review Notice	4 Week Review Period (Start Date / End Date)**	Date Comments Received	Summary of Comments Received	FortisBC Response to Comments Received
Aquatic Biophysical TDR (Surface Water, Groundwater and Fish and Fish Habitat)	B.C. Ministry of Forests, Lands, Natural Resource Operations and Rural Development (B.C. MFLNRORD)					
	ECCC					
	B.C. OGC					
	Applicable Indigenous nations					
Terrestrial Biophysical TDR (Vegetation and Wildlife and Wildlife Habitat)	B.C. MFLNRORD					
	ECCC					
	B.C. OGC					
	Applicable Indigenous nations					
	Applicable Indigenous nations					
Human Health Risk Assessment TDR	Fraser Health Authority					
	Health Canada					
	Ministry of Health					

Table 28. Review of Information Supporting the Development of the Application

Supporting Technical Data Report (TDR) or Supporting Study [Preliminary list at this time]	Reviewers* [TBD through engagement initiatives]	2 Week Review Notice	4 Week Review Period (Start Date / End Date)**	Date Comments Received	Summary of Comments Received	FortisBC Response to Comments Received
	Applicable Indigenous nations					
Acoustic TDR	B.C. Ministry of Environment and Climate Change Strategy (B.C. ENV)					
	B.C. OGC					
	Fraser Health Authority					
	Health Canada					
	Applicable Indigenous nation					
	Metro Vancouver					
Air Quality TDR (including Air Quality Assessment)	B.C. ENV					
	B.C. OGC					
	Fraser Health Authority					
	Health Canada					
	Applicable Indigenous nation					
	Metro Vancouver					

Table 28. Review of Information Supporting the Development of the Application

Supporting Technical Data Report (TDR) or Supporting Study [Preliminary list at this time]	Reviewers* [TBD through engagement initiatives]	2 Week Review Notice	4 Week Review Period (Start Date / End Date)**	Date Comments Received	Summary of Comments Received	FortisBC Response to Comments Received
GHG Emissions and Climate Change TDR	ECCC					
	Climate Action Secretariat					
	Metro Vancouver					
	Applicable Indigenous nation					
Quantitative Risk Assessment for Accidents and Malfunctions	Richmond					
	Delta					
	B.C. OGC					
	Applicable Indigenous nation					
Socio-economic TDR (including Visual Impact Study results)	Richmond					
	Delta					
	B.C. OGC					
	Applicable Indigenous nation					
Economic Data Report	Richmond					
	Delta					
	B.C. EAO					
	Applicable Indigenous nations					

Table 28. Review of Information Supporting the Development of the Application

Supporting Technical Data Report (TDR) or Supporting Study [Preliminary list at this time]	Reviewers* [TBD through engagement initiatives]	2 Week Review Notice	4 Week Review Period (Start Date / End Date)**	Date Comments Received	Summary of Comments Received	FortisBC Response to Comments Received
TUS report from each of the participating Indigenous nations, if provided	Applicable Indigenous nation					
Climate Resilience Assessment	B.C. Ministry of Energy, Mines and Low Carbon Innovation					
	B.C. ENV					
	B.C. OGC					
	B.C. EAO+					
	Applicable Indigenous nations					

**Notes:**

\* Indigenous nations may be reviewers for any type of information, based on their identified interest.

+ Other ministries may also be identified.

\*\* Start date represents received date/end date represents end of comment period





**Attachment 121.1**

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28-Feb-22	Employment & Social Development Canada			7.30.4 - Employment and Economy - Potential Effects	Pages F-7-30 to F-7-32: A discussion of how a reduction or suspension of operations (either due to a decline in demand for natural gas or to supply disruptions) would affect employment at the new facility, and indirectly the regional labour market, is advisable.	As a regulated utility, FortiSBC is expected to operate infrastructure that provides necessary reliability and redundancy to the province's energy system. One of the purposes of the Project is to increase energy storage in the lower Mainland to withstand supply issues and enhance system resiliency and reliability. This need to improve security of supply will continue in the future as the supply of renewable gas increases to meet government climate action targets. As a result, in the event more or less employees are needed beyond the projected employment levels, this difference is expected to have a negligible effect on the regional labour market. FortiSBC does not propose to make changes to scope described in the dAR.			Inadequate: Since FortiSBC is not proposing to make any changes to scope, please consider including discussion on how a reduction or suspension of operations would affect employment at the new facility. Since business conditions could negatively affect employment, collecting and adding data for employees that are being employed and unemployed will support our analysis.	FortiSBC agrees that the requirement to speculate on future business conditions over multiple decades is outside the scope of the Application and not necessary for the purposes of the Assessment.	1-Mar-22	Further discussion required. The EAO will work with FortiSBC and ESDC on how to address this concern.	The oil and gas sector is characterized by pronounced cyclical variations in prices, sales, and production. The proponent should note how they may impact employment.	While the facility is regulated by the BC Oil & Gas Commission, characterizing FortiSBC and the Tilbury LNG Facility as part of the oil & gas industry. The existing Tilbury LNG Facility, as well as the proposed storage expansion, is (and will be) part of a regulated utility, regulated by the BC Utilities Commission, and as such it is not subject to the commodity price cycles and associated workforce changes. This makes it a different asset with different customers and a different business purpose than other British Columbia LNG projects.
28-Feb-22	Employment & Social Development Canada			7.30.4 - Employment and Economy - Potential Effects	Pages F-7-30 to F-7-32: To the extent possible, provide after-tax income estimates for job categories to be created as part of the Project, and estimation of number of Full-Time Equivalents (FTE) to be hired in each income category, for the construction, operation, and decommissioning stages.	FortiSBC appreciates this recommendation and will take it into consideration for inclusion in the Application to the extent that data is available.			Inadequate: We would appreciate how this information will be implemented in the Application, to the extent that data is available, as taking into consideration is not specific enough.	The Application will not contain after-tax income estimates for job categories to be created as part of the Project, but will contain an estimate of the number of FTEs to be created. FortiSBC does not anticipate that unskilled or semi-skilled jobs will be created by the Project, therefore FTE wages will not be below the poverty line.	10-Mar-22	Adequate: Project will contain an estimate of the number of FTEs to be created. Inadequate: No reason/rationale for project to exclude after-tax income estimates for job categories given.		It is difficult to provide future tax rates as they are uncertain; however, gross estimates will be provided in the Application.
28-Feb-22	Employment & Social Development Canada			7.30.7 - Employment and Economy - Cumulative Effects	If possible, provide a comparison of after-tax income estimates with the Project's FTEs. Associated project effects are missing: please indicate whether the Proponent expects the project to lead to upstream creation of jobs in the oil and gas sector.	FortiSBC does not have the data available to assess the impacts on upstream employment.			Inadequate: Please consider gathering data required to assess impacts on upstream employment and add to dAR.	FortiSBC suggests that upstream development is out of scope for this Project, and rejects this recommendation.	10-Mar-22	Adequate: EAO considers this information outside the scope. As such, additional information on upstream employment may be omitted.		
28-Feb-22	Employment & Social Development Canada			11.1.3 - Indigenous Nations Effects Assessment - Methodology Overview - Summary of Engagement	Pages F-11.2 to F-11.3: The Proponent identifies that there will be engagement with local indigenous communities on the existing and future conditions on the project, but it would be beneficial for the Proponent to meet with the local surrounding ISET service delivery organizations, so they are aware of potential impacts related to services and infrastructure. The links to the ISET Program First Nation and Metis service delivery organizations in British Columbia are available on the Government of Canada website: <a href="https://www.canada.ca/en/employment-social-development/programs/indigenous-skills-employment-training/service-delivery-organizations.html">https://www.canada.ca/en/employment-social-development/programs/indigenous-skills-employment-training/service-delivery-organizations.html</a>	FortiSBC acknowledges the programs that are available to support participation of Indigenous peoples in the labour market and is appreciative of the information provided by ESDC in this regard. FortiSBC will take into consideration the potential partnership opportunities with these service delivery organizations.			Inadequate: ESDC strongly recommends that more formal engagement take place with the ISET service delivery organizations related to this project.	FortiSBC is aware of the ISET service delivery organizations, and has interactions with them across FortiSBC's service area.	10-Mar-22	Adequate		
28-Feb-22	Employment & Social Development Canada			1.8 - Workforce Requirements	<b>Additional Information related to Employment and Social Development Canada's Indigenous Labour Market Programs:</b> Employment and Social Development Canada (ESDC) has two Indigenous Labour Market programs that support participation of First Nations, Metis and Inuit in the labour market: the Indigenous Skills and Employment Training (ISET) Program and the Skills and Partnership Fund (SPF). Indigenous Skills and Employment Training (ISET) Program ESDC's ISET Program reintroduces distinction-based funding streams and labour market strategies through a network of First Nations, Metis, Inuit and Urban/Non-affiliated Indigenous service delivery organization. The ISET Program provides funding to Indigenous service delivery organizations across Canada that design and deliver job training services to First Nations, Inuit, Metis and urban/non-affiliated Indigenous people in their communities. In British Columbia, there are currently 21 Indigenous service delivery organizations. There could be a potential partnership between one or more of the existing Indigenous service delivery organizations related to the project activities under the Tilbury Phase 2 LNG Expansion Project. Link to ISET service delivery organizations across the province of British Columbia: <a href="https://www.canada.ca/en/employment-social-development/programs/indigenous-skills-employment-training/service-delivery-organizations.html#">https://www.canada.ca/en/employment-social-development/programs/indigenous-skills-employment-training/service-delivery-organizations.html#</a> In addition, complimentary to the ISET Program, the Skills and Partnership Fund (SPF) is a demand-driven, project-based program that supports employers to partner with Indigenous organizations to increase Indigenous employment and	FortiSBC acknowledges the programs that are available to support participation of Indigenous peoples in the labour market and is appreciative of the information provided by ESDC in this regard. FortiSBC will take into consideration the potential partnership opportunities with these service delivery organizations.			Inadequate: ESDC strongly recommends that more formal engagement take place with the ISET service delivery organizations related to this project.	The EAO acknowledges that FortiSBC has and will continue to engage with the ISET Program service delivery network as the Project proceeds.	10-Mar-22	Adequate		
28-Feb-22	Employment & Social Development Canada			7.1 - Environmental and Community Context	Page F-7-1: The Proponent identifies there will be engagement with Indigenous communities on Indigenous economic development plans and strategies but there is no specific reference to engagement with the Indigenous Skills and Employment (ISET) Program service delivery network. The Proponent would benefit from engaging with the surrounding ISET service delivery organizations and with SPF projects underway to discuss their plans to encourage employment, procurement and contracting opportunities for Indigenous peoples and communities.	FortiSBC acknowledges the programs that are available to support participation of Indigenous peoples in the labour market and is appreciative of the information provided by ESDC in this regard. FortiSBC will take into consideration the potential partnership opportunities with these service delivery organizations.			Inadequate: ESDC strongly recommends that more formal engagement take place with the ISET service delivery organizations related to this project.			Adequate		The EAO notes FortiSBC's commitment to engage with the ISET service delivery organizations related to this project and ESDC's response. The EAO considers this comment resolved.
24-Sep-21	Environment and Climate Change Canada	Yes Ting Choy	F-7.4	7.2.4 Potential Effects	For further clarity, ECCC recommends the following revisions to page F-7.4 (in bold): Provide a comparison of predicted air quality concentration against the most stringent Canadian Ambient Air Quality Standards (CAAQS) for PM2.5, SO2, and NO2 (e.g., CAAQS that will come into effect in 2025). Predicted concentrations for other air pollutants relevant to the project will be compared with appropriate B.C. and Metro Vancouver guidelines. The assessment against	FortiSBC will reference the 2025 CAAQS in the draft Information Requirements (dAIR). CAAQS-2020 and CAAQS-2025 will be referred to as appropriate for the timing of each phase.	18-Jan-22	Resolved						
24-Sep-21	Environment and Climate Change Canada	Yes Ting Choy	F-1.3 to 1.4	Section 1.4 and 1.5	ECCC recommends that Section 1.4 and 1.5 of the dAR be updated to specify that the Application must include: <b>*A description of any in-water works required during construction and operation of the proposed Project.</b> <b>*Additional information (e.g., descriptions of location, footprint, and maps, figures, or site plans, where appropriate) regarding Project components and activities that may influence the effects assessment be included in the Application, with respect to all components and activities that have the potential to impact water quality and sediment quality, and aquatic resources in the receiving</b>	Section 1.5.1 of the (dAR) will be updated to include a description of any in-water works including descriptions of location, footprint, maps, figures, or site plans, where appropriate required during construction and operation of the proposed Project. Please note that dredging will not occur as part of the proposed project during construction or operation.	18-Jan-22	The Proponent's response confirms that the surface water assessment boundary for the RAA is limited to 500m upstream and 1000m downstream of the Project, along the Fraser River. ECCC notes hydro-testing will be required and "...will involve a significant volume of water and discharging of the water", and at a minimum, approximately 100,000 m3 will be required, although project design is not yet advanced sufficiently to estimate water volumes required (Section 6.2.1.3, p. 6-4. Final DPD, dated January 2022). The DPD identifies one option (if overall for best water disposal, which includes	The development of the surface water LAA and RAA boundaries considered all activities identified in the DPD including hydrotesting. The hydrotesting water, if discharged to the river, will be discharged under a waste discharge authorization, and will be uncontaminated water that will meet all water quality guidelines and/or objectives at the edge of the initial dilution zone (IDZ) in the river, including potential temperature impacts. For potential discharge of hydrostatic test water, the IDZ is expected to extend no more than 100m upstream and downstream of the point of discharge and is located within the	7-Mar-22	Acknowledged. ECCC recommends that details regarding hydrostatic testing be included in the Application.	Fortis looks forward to including details of hydrostatic testing and management of hydrostatic test water in the application.		
24-Sep-21	Environment and Climate Change Canada	Yes Ting Choy	F-6.1, 6.5, 7.9	Section 6.2 and Section 7.4.2	ECCC recommends the following for Sections 6.2 and 7.4.2 of the dAR: <b>Clearly whether the assessment boundaries for the Surface Water Quality VC used in Section 7.4.2 will match the assessment boundaries presented in Table 6 (Table 6-1); and, The assessment boundaries for the Surface Water and Fish and Fish Habitat VCs should be appropriately sized to consider all potential Project effects, including but not limited to, in-water works, discharges related to operation of the Natural Gas Recovery, processing, liquefaction, and storage facility or supporting infrastructure, and atmospheric deposition of contaminants associated with natural gas processing and liquefaction; and, The assessment boundaries for the Surface Water and Fish and Fish Habitat VC should consider potential effects of the Project to all relevant VCs (and VC subcomponents), including but not limited to Southern Resident Killer Whales (SRKW) and their critical habitat.</b> <b>Rationale:</b> Table 6-1 states that the Regional Assessment Area (RAA) for Surface Water and Fish and Fish Habitat encompasses the Fraser River for 100 m upstream and 1,000 m downstream of the proposed Project footprint. ECCC notes that Section 7.4.2 states, "[t]he Application must define assessment boundaries for the Surface Water VC, including spatial, temporal, administrative and technical boundaries" (p. 7-7 (b)). It is not clear to ECCC whether the assessment boundaries proposed in Section 7.4.2 will match those described in Table 6-1. Assuming the RAA described in Table 6-1 is proposed for the assessment (see ECCC-01, ECCC comments on the draft DPD, dated July 15, 2021), the proposed RAA boundary seems to assume impacts to the Project would be limited to land-based activities, and it is not	Further to ECCC-01, ECCC recommends that ECCC-01 from the department's draft DPD comments (dated July 15, 2021) be included in the dAR. Please see ECCC-01 below for recommendations regarding SRKW and their prey. The assessment boundaries for the Surface Water and Fish and Fish Habitat VCs will be appropriately sized to consider all potential Project effects, including potential effects associated with in-water Project activities. Given the distance of the proposed Project from SRKW critical habitat (11.6 km) and the implementation of best practices during construction, changes in sediment and water quality due to construction of the MOSF are unlikely to impact SRKW critical habitat. FortiSBC maintains that the proposed assessment boundaries are appropriate. In the dAR, FortiSBC will propose that the potential for construction activity to add sediment to surface water will be accounted for in the assessment of the potential effects of the proposed Project on Surface Water VC. Preliminary modelling of atmospheric deposition is currently being completed. If results show deposition occurs beyond the Surface Water RAA, the assessment boundaries will be revised accordingly.	18-Jan-22	Please refer to the response for PS-29-14. The proposed Project is expected to have limited interactions with Southern Resident Killer Whales (SRKW). An estimated 6 to 8 project barges will be received, and the modules delivered by a small number of barges during construction. Barges will use established navigation channels to travel to and from the proposed Project Site. Given the distance of the proposed Project from SRKW critical habitat (11.6 km) it is unlikely there will be any impacts to SRKW critical habitat features and attributes or SRKW health as a result of the Project.	7-Mar-22	Acknowledged. ECCC recommends that all potential impacts to SRKW critical habitat resulting from Project effects will be assessed, as appropriate, including effects from atmospheric deposition of contaminants. ECCC notes that Section 7.4.4 requires assessment of "any contaminants of concern potentially associated with the Project that may affect sediment or water"; however, the spatial boundaries for the surface water RAA (Figure 6.2-3) are much smaller than the air quality RAA (Figure 6.2-1).	All potential impacts to SRKW critical habitat resulting from proposed Project effects will be assessed, as appropriate and at the appropriate spatial scale, including effects from atmospheric deposition of contaminants. As stated previously, the proposed Project is expected to have limited, negligible interactions with SRKW and its critical habitat features and attributes.			
24-Sep-21	Environment and Climate Change Canada	Yes Ting Choy	7.9 to 7.10	Section 7.4.1 and 7.4.3	ECCC recommends adding Federal Environmental Quality Guidelines and guidelines for the protection of Southern Resident Killer Whales and their Prey (if applicable), to Sections 7.4.1 and 7.4.3 of the dAR. <b>References:</b> Government of Canada. 2020. Recommended Environmental Quality Guidelines for the Protection of Southern Resident Killer Whales and their Prey. Available online at: <a href="https://www.canada.ca/en/environment-climate-change/services/indigenous-habitat-conservation-funding-watersheds-reviews/environnementalecologiquequaliteetprotectiondeswhalesetdeleurproie.html">https://www.canada.ca/en/environment-climate-change/services/indigenous-habitat-conservation-funding-watersheds-reviews/environnementalecologiquequaliteetprotectiondeswhalesetdeleurproie.html</a> ECCC recommends that wording in Section 7.4.3 of the dAR be revised as follows (additions in bold, deletions in strike-out): "[d]escribe any project-specific baseline surveys, including project-specific surveys, conducted in the surface water local and regional study area completed, include a detailed description of the methods used and how the results helped to characterize existing conditions (for example, fill in information gaps, confirmed or refuted older information)"]	Section 7.4.1 and 7.4.3 of the dAR have been updated to include recent Federal Environmental Quality Guidelines and guidelines for the protection of Southern Resident Killer Whales and their Prey. Given the distance of the proposed Project from SRKW critical habitat (11.6 km) and the implementation of best practices during construction, changes in sediment and water quality due to construction of the MOSF are unlikely to impact SRKW critical habitat. FortiSBC maintains that the proposed assessment boundaries are appropriate. In the dAR, FortiSBC will propose that the potential for construction activity to add sediment to surface water will be accounted for in the assessment of the potential effects of the proposed Project on Surface Water VC. Preliminary modelling of atmospheric deposition is currently being completed. If results show deposition occurs beyond the Surface Water RAA, the assessment boundaries will be revised accordingly.	18-Jan-22	ECCC notes that Section 7.4.1 and 7.4.3 of the dAR v2 do not reflect the updates previously provided by the Proponent. ECCC recommends that the final AIR include these updates. Please see ECCC-015 for recommendations regarding SRKW and their prey.	FortiSBC believes this is best included in Section 7.4.1 and does think it fits into the existing conditions section (Section 7.4.3). FortiSBC will keep the wording in Section 7.4.1 and will consider in the assessment.	10-Mar-22	The EAO notes that Section 7.4.1 of the AIR does include the bullet "Recommended Environmental Quality Guidelines for the Protection of Southern Resident Killer Whales and their Prey".	Resolved.		
24-Sep-21	Environment and Climate Change Canada	Yes Ting Choy	7-10	Section 7.4.3	ECCC recommends that wording in Section 7.4.3 of the dAR be revised as follows (additions in bold, deletions in strike-out): "[d]escribe any project-specific baseline surveys, including project-specific surveys, conducted in the surface water local and regional study area completed, include a detailed description of the methods used and how the results helped to characterize existing conditions (for example, fill in information gaps, confirmed or refuted older information)"]	FortiSBC agrees with the proposed edits to bullet 2 of Section 7.4.3 and will revise the dAR.	18-Jan-22	Resolved						
24-Sep-21	Environment and Climate Change Canada	Yes Ting Choy	F-7-10 to 7-11	Section 7.4.3	ECCC recommends the following revisions to the text in Section 7.4.3 (additions in bold, deletions in strike-through): <b>*As applicable, the Application must:</b> <b>*Provide local water quality data (water quality data collection is to adhere to standardized practices and procedures - refer to Cawagang et al. 1998, MWAP 2003, MEU 1998, B.C. MCE 2005, CME 2011, CME 2015), data for water quality will include sampling site selection, monitoring duration and frequency, sampling protocol/methodology, and analytical protocol, including field and laboratory quality assurance and quality control measures, methods for</b>	FortiSBC agrees with the proposed edits and for inclusion of sampling locations within the project area and assessment areas (local and regional) and the addition of CME guidelines (CME 2011, 2015). However, any reference site beyond the RAA is considered highly impacted by anthropogenic activities and therefore would make it difficult to distinguish between natural changes and other anthropogenic impacts.	18-Jan-22	Resolved						
24-Sep-21	Environment and Climate Change Canada	Yes Ting Choy	General	Section 7	ECCC recommends that each VC-specific assessment in Section 7 be updated to include a list of specific Project VC interactions that the Proponent should consider in the Application. ECCC recommends identification of applicable Project interactions early in the Project, so that baseline studies for formulation of methods for effects assessment can be designed accordingly.	FortiSBC proposes the following wording in the dAR: Describe changes to sediment quality due to effluents from the project or other project interactions with Fraser River sediments. Include changes to physical parameters (e.g., grain size, TOC, chemical constituents (e.g., major and minor ions, trace metals, radionuclides, nutrients, organic compounds). Sediment sample collection and analyses should use appropriately sensitive detection limits. Describe any hydrological or drainage changes that may impact surface water or sediment and how that may affect vegetation or other aquatic receptors. Note: hydrological or drainage changes are not expected to interact with sediment as there is no direct discharge to the Fraser River. Runoff from the site is discharged to City of Delta's Storm sewer.	18-Jan-22	Resolved						
24-Sep-21	Environment and Climate Change Canada	Yes Ting Choy	F-7-11	Section 7.4.4	ECCC recommends the following revisions to the text in Section 7.4.4 to reflect that the surface water VC includes sediment quality as a Sub-Component (additions in bold): <b>*Describe changes to receiving environment sediment quality due to effluents from the project or other project interactions with sediments. Include changes to physical parameters (e.g., grain size, TOC, chemical constituents (e.g., major and minor ions, trace metals, radionuclides, nutrients, organic compounds). Sediment sample collection and analyses should use appropriately sensitive detection limits.</b> <b>*Describe any hydrological or drainage changes that may impact surface water or sediment and how that may affect vegetation or other aquatic receptors.</b>	FortiSBC proposes the following wording in the dAR: Describe changes to sediment quality due to effluents from the project or other project interactions with Fraser River sediments. Include changes to physical parameters (e.g., grain size, TOC, chemical constituents (e.g., major and minor ions, trace metals, radionuclides, nutrients, organic compounds). Sediment sample collection and analyses should use appropriately sensitive detection limits. Describe any hydrological or drainage changes that may impact surface water or sediment and how that may affect vegetation or other aquatic receptors. Note: hydrological or drainage changes are not expected to interact with sediment as there is no direct discharge to the Fraser River. Runoff from the site is discharged to City of Delta's Storm sewer.	18-Jan-22	ECCC notes that Section 7.4.4 of the dAR v2 does not reflect the recommended wording (i.e., bolded language not included). ECCC recommends the final AIR include these updates.	The missing bolded word of "sediment" has been added to the dAR. Other recommended changes have been previously made.	7-Mar-22	ECCC notes that the recommended wording "sediment sample collection and analyses should use appropriately sensitive detection limits" was not added to Section 7.4.4.	The EAO has updated Section 7.4.4 of the AIR to include "sediment sample collection and analyses should use appropriately sensitive detection limits".		
24-Sep-21	Environment and Climate Change Canada	Yes Ting Choy	F-7-11, 7-26 to 27	Section 7.3	ECCC recommends that wording in Section 7.3 be modified (additions in bold, deletions in strike-out): <b>*Describe and provide any project-specific baseline surveys, including project-specific surveys, conducted in the local and regional study areas for water quality completed, include the methods used for example, location of</b>	FortiSBC proposes to update the text in the dAR to reference project specific studies.	18-Jan-22	ECCC notes Section 7.6 of the dAR (Soil VC), considers soil contamination. However, Table 5-1 does not reflect the potential linkage between soil contamination and groundwater. ECCC recommends that "Soil" be included under "Anticipated Linkages to other Valued Components or Sections" for the groundwater VC.	Fortis has added Soil under Anticipated Linkages for the groundwater VC in Table 5-1 of the dAR.		Resolved.			





24-Sep-21	Environment and Climate Change Canada		Yee Ting Choy	F-9-2	9	ECCC recommends including the following text in bold: "The specific malfunctions or accidents to be considered in the Application include the following: •An Accidents and Malfunctions Response Plan that would outline the activities listed above, in the event of an accident or malfunction. The plan should outline mitigation measures for any adverse environmental effects (including wildlife and wetlands) that do occur as a result of accidents and malfunctions"	Text has been updated in Section 9 of the dAR to include the following: •Development and Accidents and Malfunctions Response Plan outlining mitigation measures for potential adverse environmental effects;	18-Jan-22				ECCC notes this revision does not ensure wildlife is considered and incorporated into the plan. ECCC recommends that wildlife be explicitly included in the assessment of Accidents and Malfunctions, including mitigation measures.	The following language has been added in the AR: "Develop and Accidents and Malfunctions Response Plan outlining mitigation measures for potential adverse environmental effects including effects on wildlife."	7-Mar-22		Resolved.				
24-Sep-21	Environment and Climate Change Canada		Yee Ting Choy	F-8-6, 16-5	16	The extent to which the effects of the designated project hinder or contribute to the Government of Canada's ability to meet its environmental obligations and its commitments in respect of climate change (a factor to be considered as defined in Section 22 of the IAA), applies more broadly, including effects to wildlife and their habitat (i.e., it is not limited to GHG and climate change).  ECCC recommends that all relevant sections of the dAR describe this requirement (i.e., not limited to Section 8), and that Table 16-2 (page F-16-5) reflect these sections.	FortisBC has proposed language in the dAR which will describe the need for, and methodology of, an assessment of how the Project will affect the ability for the Government of Canada's to meet its climate change commitments, consistent with Section 22 of the IAA. Section 7 of the dAR includes requirements for addressing climate change effects for the following VCs: Air; Surface Water; Vegetation; Wildlife and Wildlife habitat; Fish and Fish habitat; and Land and Resource Use. Section 8.5 will address these VCs in addition to GHG emissions. Section 8.5 has been updated to include the following revised text: "The assessment shall refer to the Government of Canada's ability to meet its environmental obligations and its commitments in respect of climate change (a factor to be considered as defined in Section 22 of the IAA, applies more broadly, including effects to wildlife and their habitat (i.e., it is not limited to GHG and climate change))."	18-Jan-22				ECCC clarifies that factor 22 (i) of the IAA is not limited to Canada's environmental obligations and climate commitments in respect of climate change, and includes environmental obligations more broadly, including effects to wildlife and their habitat (i.e., it is not limited to climate change and their effects on other VCs).  ECCC recommends that the dAR be updated to include the following federal environmental obligations: •The Convention on Biological Diversity and Canada's supporting national Framework (e.g., the Canadian Biodiversity Strategy, Canada's Biodiversity Outcomes Framework and the current biodiversity goals and objectives in Canada) and legislation that supports the implementation of Canada's biodiversity commitments, including the Species at Risk Act, the Access to Information Act, and the Canadian Environmental Protection Act, 1999.	Accepted. The updated text has been made to the AR.	7-Mar-22		Resolved.				
24-Sep-21	Environment and Climate Change Canada		Yee Ting Choy	F-9-1	9	ECCC recommends revising Section 9 to include the following text in bold: "Provide detailed information on the potential effects of each incident carried forward including: •Most likely and worst case scenarios of the effects of incidents on VCs and Indigenous interests within spatial and temporal boundaries described for the assessment area; •Identify and justify the spatial and temporal boundaries that may be impacted by accidents and malfunctions. The spatial boundaries identified for effects from potential accidents and malfunctions will generally be larger than the boundaries for the project effects alone;  Rationale: Due to the presence of hazardous materials, flammable liquids, pressurized gas on site, an accidental release can cause a toxic gas release to travel long distances or overpressure that could affect valued components that are beyond the boundaries of the project effects alone."	Text has been updated in Section 9 of the dAR to include the following: •Identify and justify the spatial and temporal boundaries that may be impacted by accidents and malfunctions;	18-Jan-22												
24-Sep-21	Environment and Climate Change Canada		Yee Ting Choy	F-9-2	9	ECCC recommends revising Section 9 to include the following in bold: "The specific malfunctions or accidents to be considered in the Application include, but not limited to, the following: •Fire or explosion; •Events involving hazardous material spills (such as, hydrocarbon fuels, lubricants, and concrete) in environmentally sensitive habitat; •Terrestrial vehicle collision; •Loss of assessment data."	Text has been updated in Section 9 of the dAR to include the following: •The specific malfunctions or accidents to be considered in the Application include, but not limited to, the following:	18-Jan-22				Resolved								
24-Sep-21	Environment and Climate Change Canada		Yee Ting Choy	F-8-1	Section 8	ECCC recommends including the following text (in bold) in the introduction for Section 8 after referencing the Strategic Assessment of Climate Change (SACC, page F-8-1), to ensure the SACC requirements are accurate and complete. "More details are provided in the draft Technical Guide Related to the Strategic Assessment of Climate Change."	FortisBC has included the recommended text in the introduction for Section 8	18-Jan-22				Resolved								
24-Sep-21	Environment and Climate Change Canada		Yee Ting Choy	F-8-1	Section 8.1	A complete upstream assessment is required for the Project. ECCC recommends the upstream assessment requirements in the dAR (page F-8-1) be supplemented with the following requirements in bold: "The assessment shall refer to the Government of Canada's ability to meet its environmental obligations and its commitments in respect of climate change (a factor to be considered as defined in Section 22 of the IAA, applies more broadly, including effects to wildlife and their habitat (i.e., it is not limited to GHG and climate change))."	The requested bulleted text, with the addition of "...draft Technical Guide (August 2021)," was added as a second sub-bulleted item under "Provide an upstream GHG assessment and related uncertainty assessment". FortisBC will produce	18-Jan-22				Resolved								
24-Sep-21	Environment and Climate Change Canada		Yee Ting Choy	F-8-2	Section 8.1	ECCC recommends the requirement presented for the Net GHG emissions (page F-8-2) be revised for clarity, with the following revisions in strikethrough and bold: "Net GHG emissions by year for each phase of the project based on the project's maximum additional throughput or capacity (i.e., this should be quantified for only the additional emissions associated with the Phase 2 expansion; refer to Section 3.1.1 of the SACC), including an uncertainty assessment;"  The net GHG emissions should be quantified for only the additional emissions that are associated with the Project expansion (Tibury Phase 2 only). This should not include a quantification of the emissions of the current operating facility (Tibury Phase 1).	The following text has been updated in the dAR: "Net GHG emissions by year, by scenario, for each phase of the project based on the project's maximum additional throughput or capacity (i.e., this should be quantified for only the additional emissions associated with the Phase 2 expansion; refer to Section 3.1.1 of the SACC), including an uncertainty assessment;"	18-Jan-22				ECCC recommends that the net GHG emissions by year for each phase of the project be based on the project's additional throughput or capacity, not just maximum throughput or capacity. ECCC recommends that the net GHG emissions be quantified for the additional emissions associated with the Phase 2 expansion.	Accepted. The updated text has been made to the AR.	7-Mar-22		Resolved.				
24-Sep-21	Environment and Climate Change Canada		Yee Ting Choy	F-8-2	Section 8.2	Proponents are required to provide a quantitative assessment as well as a qualitative assessment. ECCC recommends the following revisions (in bold and strikethrough below) be made to page F-8-2:  "The proponent will also quantify the project's impact on carbon sinks following Use available ECCC technical guidance from Section 4 of the draft Technical Guide on the quantification of losses or gains to carbon sinks in providing the information required above."  As outlined in Section 4 of the draft Technical Guide, Proponents are required	Text has been updated in the dAR as recommended.	18-Jan-22				Resolved								
24-Sep-21	Environment and Climate Change Canada		Yee Ting Choy	F-8-4	Section 8.4.1	ECCC recommends including the additional requirements for the BAT/REP Determination (in bold and strikethrough below, on page F-8-4).  "The BAT/REP Determination process is outlined in Table 8-1. Detailed requirements are described in Section 3.2 of the draft Technical Guide."  "The conclusion of the BAT/REP Determination will be provided in the Application, following the requirements described in Section 3.1 of the draft Technical Guide, and will include: •The technologies that will be used to mitigate the project's GHG emissions. These could include, for example, the use of low-emitting technologies, the use of low carbon or renewable fuel, electrification, or carbon capture and storage; •The practices that will be taken to mitigate the project's GHG emissions, such as anti-idling practices for mobile equipment, leak detection and repair systems, continuous monitoring systems, Predictive Emissions Monitoring, or fleet optimization; and •The additional technologies and practices that could be considered during periods of project maintenance and facility upgrades to further reduce the project's GHG emissions through the lifetime of the project, as well as the measures to ensure the effectiveness of these measures."  "The net-zero plan must include the requirements described in section 3.5.2 of the draft Technical Guide."	Text has been updated in the dAR as recommended and will reference the August 2021 Technical Guide.	18-Jan-22				Resolved								
24-Sep-21	Environment and Climate Change Canada		Yee Ting Choy	F-8-5	8.4.1	ECCC recommends including the following requirements in bold at the end of Section 8.4.1 (page F-8-5):  "The net-zero plan must include the requirements described in section 3.5.2 of the draft Technical Guide."  Throughout Sections 8.4 and 8.4.1, the dAR includes many of the information requirements for the Net-Zero Plan. A summarized list of the requirements is presented in Section 3.5.2 of the draft Technical Guide. The information requirements that were not already presented in the previous sections of the dAR are provided here in bold.	Text has not been updated in the dAR. Fortis has requested include the requirements in section 3.5.2 of the draft Technical Guide. ECCC notes that it has previously provided additional information on requirements of the SACC, the Net Zero plan. A workshop has been requested to work through these with ECCC.	18-Jan-22				ECCC recommends that the dAR be revised to indicate that the net-zero plan will include the requirements in section 3.5.2 of the draft Technical Guide. ECCC notes that it has previously provided additional information on requirements of the SACC, the Net Zero plan. A workshop has been requested to work through these with ECCC.	Accepted. Fortis notes that while the information provided on Feb 17 answered many of our questions related to the SACC, we have remaining questions and have sought a meeting with SACC staff for further clarification.	14-Mar-22		Resolved.				
24-Sep-21	Environment and Climate Change Canada		Yee Ting Choy	F-8-5, 16-5	Section 8.5, 16	ECCC recommends revising the last paragraph of Section 8.5 to include this reference of the SACC (emissions in bold and strikethrough below page F-8-5): "The implementation of mitigation or complementary measures may also result in the project contributing to the Government of Canada's ability to meet its environmental obligations or its commitments in respect of climate change. The Application will describe the proponent's views on the extent to which project effects would contribute to the Government of Canada's ability to meet its environmental obligations and its commitments in respect of climate change, taking into consideration proposed mitigation measures. As outlined in Section 6 of the SACC, the Government of Canada will provide supplemental analysis on the project's (net and upstream) GHG emissions provided in the Impact Statement, in the context of Canada's emissions targets and forecasts, including Canada's commitments under the Paris agreement, the goal for Canada to achieve net-zero emissions by 2050 and Canada's 2030 emission targets."  ECCC also recommends Section 16 (page F-16-5) be similarly revised to remove the above text in strikethrough.  The publication of the SACC provides the method for the assessment of GHGs emissions from the Project, which impact Canada's ability to meet its climate change targets. This should be reflected in the Proponent's Application.	Text following text is proposed to be updated in the dAR in Sections 8.5 and 16 (Table 16-2, line item (i)). •The implementation of mitigation or complementary measures may also result in the project contributing to the Government of Canada's ability to meet its environmental obligations or its commitments in respect of climate change. The Application will describe the proponent's views on the extent to which project effects would contribute to the Government of Canada's ability to meet its environmental obligations, including international benefits, taking into consideration proposed mitigation measures. As outlined in Section 6 of the SACC, the Government of Canada will provide supplemental analysis on the project's (net and upstream) GHG emissions provided in the Impact Statement, in the context of Canada's emissions targets and forecasts, including Canada's commitments under the Paris agreement, the goal for Canada to achieve net-zero emissions by 2050 and Canada's 2030 emission targets.	18-Jan-22				Resolved								
24-Sep-21	Environment and Climate Change Canada		Yee Ting Choy	F-18-1 to 18-2	Section 18	ECCC recommends including the SACC and the draft Technical Guide of the SACC in the list of Resources and Guidance. Below are the references to include: •Strategic Assessment of Climate Change available at: <a href="https://www.canada.ca/en/services/environment/conservation/assessments/strategic-assessments/climate-change.html">https://www.canada.ca/en/services/environment/conservation/assessments/strategic-assessments/climate-change.html</a> •Draft Technical Guide related to the strategic assessment of climate change: Guidance on quantification of net greenhouse gas (GHG) emissions, impact on carbon sinks, mitigation measures, net-zero plan and upstream GHG assessment available at: <a href="https://www.canada.ca/en/environment/climatechange/corporate/transparency/consultations/draft-technical-guide/strategic-assessment-climate-change.html">https://www.canada.ca/en/environment/climatechange/corporate/transparency/consultations/draft-technical-guide/strategic-assessment-climate-change.html</a>  The SACC and its draft Technical Guide are referenced in the dAR and should be used as a reference when developing the Project Application. They should therefore be included in the list of resources and guidance.	FortisBC added the SACC and the draft Technical Guide at the end of the list of Resources and Guidance under its own heading "Climate Change and Greenhouse Gas Emissions".	18-Jan-22				Resolved								
24-Sep-21	Environment and Climate Change Canada		Yee Ting Choy	F-8, E11 to E-12	E-3	Section E-3 states, "Surface Water VC will encompass both freshwater and marine water quality" (page E-9); however, Table E-2 does not clearly identify changes to freshwater and marine water quality as the indicator.  ECCC recommends that wording in Table E-2 be updated to specify that the indicator for surface water quality includes changes in freshwater and marine water quality relative to baseline conditions.	Sediment Quality is a subcomponent of the Surface Water VC and the indicator is the change in sediment quality relative to baseline conditions. Note: As per BC Ministry of Environment guidance, the site is considered transitional between marine and freshwater.	18-Jan-22				Resolved								
24-Sep-21	Environment and Climate Change Canada		Yee Ting Choy	F-8, E11-E-12	E-3	Section E-3 states, "Freshwater and Sediment Quality are being captured in the Surface Water VC due to the proposed Project's limited interaction with marine water" (page E-9); however, it is not clear whether changes to freshwater sediment quality are assessed under the Sediment Quality Sub-component.  ECCC recommends that wording in Table E-2 be updated to specify that the indicator for the Sediment Quality subcomponent includes changes in freshwater and marine sediment quality relative to baseline conditions.	Sediment Quality is a subcomponent of the Surface Water VC and the indicator is the change in sediment quality relative to baseline conditions.	18-Jan-22				Resolved								

	24-Sep-21	Environment and Climate Change Canada		Yee Ting Choy	E-9	E.3	<p>Section E.3 states, "[t]he marine mammal sub-component within the Wildlife and Wildlife Habitat VC has been moved to be part of the Fish subcomponent within the Fish and Fish Habitat VC" (page E-9). While "Species at risk" are included as an indicator for the Fish sub-component, ECCC notes that SRKW (listed as Endangered under Schedule 1 of SARA) have not been specifically identified as an indicator under the Fish sub-component.</p> <p>ECCC also notes that the comparison of "water quality relative to baseline conditions and guidelines" is proposed as the measurable parameter for the Fish sub-component. The Proponent should be aware that comparison to CCME/FREGS water and sediment guidelines may not be sufficient for the protection of some SARA-listed species, including SRKW. ECCC encourages the Proponent to review the recommended environmental quality guidelines for the protection of SRKW and their prey (Government of Canada 2020).</p> <p>References: Government of Canada. 2020. Recommended Environmental Quality Guidelines for the Protection of Southern Resident Killer Whales and Their Prey. Available online at: <a href="https://www.canada.ca/en/environnement-climate-change/services/wildlife-habitat/conservation-fund/guidelines-stories/reducing-contaminants-threat-southern-resident-killer-whales.html">https://www.canada.ca/en/environnement-climate-change/services/wildlife-habitat/conservation-fund/guidelines-stories/reducing-contaminants-threat-southern-resident-killer-whales.html</a></p>	<p>Even the distance of the proposed Project from SRKW critical habitat (11.6 km) is unlikely there will be any impacts to SRKW critical habitat features and attributes or SRKW health as a result of the Project. Therefore, FortBic has not proposed to identify SRKW as an indicator under the Fish sub-component.</p> <p>Section 7.41 and 7.4.3 of the dAIR have been updated to include recent Federal Environmental Quality Guidelines and guidelines for the protection of Southern Resident Killer Whales and their Prey.</p>	18-Jan-22		<p>ECCC notes that Section 7.4.1 and 7.4.3 of the dAIR v2 do not include the Proponent's update. ECCC recommends the final AIR include these updates.</p> <p>Please see ECCC-051 for recommendations regarding SRKW and their prey.</p>	<p>The VCSD (Table 3) and dAIR (Subsection 7.9.4) have been updated to reflect that should in-water work be necessary, interactions between legacy contaminants and proposed Project activities will be identified. If changes in water and sediment quality are anticipated, an assessment of potential direct effects to fish and fish habitat (e.g., bioaccumulation effects on fish health) will be conducted.</p>						
	24-Sep-21	Environment and Climate Change Canada		Yee Ting Choy	E-9, F-7-28	E.3	<p>Section E.3 (page E-9) states, "[t]he Fish and Fish Habitat VC, Bioaccumulation, Periphyton, and Fish Tissue have been removed as Topics to be captured by the Assessment. Rationale for removing the three topics includes:</p> <ul style="list-style-type: none"><li>• Bioaccumulation - there is no anticipated creation or introduction of bioaccumulative substances by the proposed Project. Potential disturbances in the aquatic environment are anticipated to be localized and consist primarily of physical disturbances or minor introductions of local sediments.</li><li>• Fish Tissue - there is no anticipated interaction with fish health that would justify consideration of fish tissue. There is not anticipated creation or introduction of persistent, bioaccumulative, or toxic substances from proposed Project activities.</li><li>• Periphyton - riverbed substrates consist mostly of sand and finer substrates in the proposed Project area, which is naturally depositional. Therefore, interactions with surface-colonizing organism are not expected to be of material concern."</li></ul> <p>ECCC notes that Section 7.9.4 of the dAIR indicates that if in-water works are necessary, "the Application must [provide] potential for direct effects from contaminants on fish and also bioaccumulation of contaminants (such as, selenium, mercury) in fish downstream of the Project" (F-7-28). ECCC notes that the above topics appear to have been removed prior to conducting an analysis of Project activities on water and sediment quality, and without considering previous contamination at the site from other industrial activities. ECCC also notes that many LNG plants utilize a mercury removal system as mercury can interfere with the liquefaction process, and it is unclear whether mercury may be a contaminant of concern for the proposed Project.</p> <p>ECCC recommends that the test regarding the assessment of bioaccumulation,</p>	<p>FortBic will update the test regarding the assessment of bioaccumulation, periphyton, and fish tissue in the VC document to indicate that should in-water works be necessary, interactions between legacy contaminants and proposed Project activities will be identified. If changes in water and sediment quality are anticipated, an assessment of potential direct effects to fish and fish habitat (e.g., bioaccumulation effects on fish health) will be conducted.</p>	18-Jan-22		<p>ECCC notes that the VCSD and the dAIR v2 do not include Proponent's updates. ECCC recommends the final VC document and AIR include these updates.</p> <p>Please see ECCC-051 for recommendations regarding SRKW and their prey.</p>	<p>The VCSD (Table 3) and dAIR (Subsection 7.9.4) have been updated to reflect that should in-water work be necessary, interactions between legacy contaminants and proposed Project activities will be identified. If changes in water and sediment quality are anticipated, an assessment of potential direct effects to fish and fish habitat (e.g., bioaccumulation effects on fish health) will be conducted.</p>						
	24-Sep-21	Environment and Climate Change Canada		Yee Ting Choy	E-11 to E-12	E.3	<p>Table E-2 identifies acid deposition as a sub-component for the Air Quality VC, and acidification and eutrophication is identified as an indicator for air quality. Table E-2 indicates that surface water quality is a sub-component of the Surface Water VC and that changes in water quality relative to baseline conditions will be assessed.</p> <p>It is not clear whether the Proponent will assess the potential for impacts of acidification and eutrophication to water quality and aquatic receptors in the Surface Water VC. For example, the spatial extent of the regional study area for Surface Water Quality does not appear to be related to the extent of acid or nutrient deposition, and it is not clear what water quality stations or dataset will be selected to monitor changes to water quality relative to baseline conditions with respect to Project-related atmospheric deposition. In addition, it is not clear that all parameters required to monitor acidification and eutrophication are being collected (e.g., acid neutralizing capacity would be required for monitoring freshwater).</p>	<p>FortBic proposes to conduct preliminary acid deposition model runs, which will be compared against sulfur and nitrogen deposition screening threshold values to provide information on the nature of subsequent follow-up studies, if any.</p>	18-Jan-22		Resolved							
	24-Sep-21	Environment and Climate Change Canada		Yee Ting Choy	E-15	E.3	<p>Table E-2 specifies that one of the measurable parameters for the Fish subcomponent (which includes marine mammals) is comparison of water quality relative to baseline conditions and guidelines. ECCC notes that comparison of sediment quality, benthic invertebrate tissue, and fish tissue are not included as measurable parameters for the Fish subcomponent. ECCC notes that if project components or activities result in changes to sediment quality, benthic invertebrate tissue, and/or fish tissue, these changes could affect the Fish Subcomponent in addition to changes in water quality.</p> <p>ECCC recommends that the Proponent expand the measurable parameters for the Fish subcomponent accordingly (i.e., include comparison of sediment quality, benthic invertebrate tissue, and fish tissue).</p>	<p>If changes in water and sediment quality are anticipated due to project components or activities, an assessment of potential direct effects to fish and fish habitat, including fish health, will be completed.</p>	18-Jan-22		Resolved							
	24-Sep-21	Environment and Climate Change Canada		Yee Ting Choy	E-13 to E-14	Appendix E	<p>ECCC notes Appendix E does not provide any information on how species or species groups will be assessed. For example, it is not clear whether the Proponent will assess migratory birds through the use of species, habitat, or foraging guilds, what species will be assessed under each proposed subcomponent, and how species at risk, with their unique life requisites, will be addressed. If proxies or indicators are used, it should be clear how those proxies are appropriate for the assessment of multiple species. ECCC recommends further consideration of these questions and additional detail on the surveys being proposed, the habitat mapping or suitability assessments that will be conducted, and how this will tie into the characterization of residual effects.</p>	<p>The broad groups listed as the subcomponents to the Wildlife and Wildlife Habitat VC will address various species and species groups with potential to interact with the proposed Project. The assessment will consider the different habitat preferences, seasonal ranges, migration, and movements of various species within each of the subcomponents. Migratory birds will be assessed in the Birds subcomponent. Differences in Project interactions and the potential effects on various species will be discussed in the assessment. Species or species group variation in ecological context and resilience to potential effects will be included in the assessment. As such, a range of effect characterizations will be provided where appropriate. Overall effect assessment conclusions will default to precautionary principle, whereby the effect assessment conclusion reflect the species/species groups most sensitive and likely to experience the highest risk of adverse effects. In this way, the assessment will be conservative, and representative of the broad wildlife community potentially affected by the Project and will provide the details needed to understand the variation in effects to different species/species groups.</p>	18-Jan-22		<p>ECCC notes that the following text was removed from the wildlife and wildlife habitat subcomponent list in Table 5.1, "Including species at risk and culturally important traditional use species".</p> <p>All provincially and federally listed species (including COSEWIC-identified species) with potential to occur in the Project area should be considered in the assessment of effects and each species at risk should be assessed separately. Due to the specific life requisites, threats, and objectives, a SARA-listed species should not be used as an indicator for other listed or non-listed species.</p> <p>ECCC recommends that each wildlife species at risk be listed as a distinct VC sub-component and assessed separately.</p>	<p>This descriptive text was removed from Table 5.1 of the dAIR for consistency with the other VCs identified in Table 5.1. However, Section 7.8 of the dAIR specific to the Wildlife and Wildlife Habitat VC still includes the more detailed descriptions of the sub-components as including species at risk and culturally important traditional species, as follows:</p> <p>The Wildlife and Wildlife Habitat VC includes the following sub-components:</p> <ul style="list-style-type: none"><li>• Birds (Forest birds and water/shore birds/migratory birds), including species at risk and culturally important traditional use species;</li><li>• Mammals (terrestrial), including species at risk and culturally important Traditional Use species; and</li><li>• Amphibians (pond-dwelling), including species at risk and culturally important Traditional Use species.</li></ul> <p>In addition, Section 7.8 of the dAIR explains that the assessment will evaluate species at risk, including species with Federal (COSEWIC and SARA) and Provincial (B.C. Conservation Data Centre (B.C. CDC) List and Conservation Framework Panel) conservation status. Please also refer to the Valued Component Selection Document - Tibury Phase 2 LNG Expansion, which provides further explanation and details of VC, subcomponent and indicator selection.</p> <p>The selection of VCs, Subcomponents and Topics mirrors the BC EAD's guidance provided in the Application Information Requirements Guidelines, Version 1.0. The assessment approach using wildlife species groups allows for evaluation of potential effects on species at risk, species of traditional importance, and species that may be common or</p>	10-Mar-22					
	24-Sep-21	Environment and Climate Change Canada		Yee Ting Choy	E-13 to E-14	Appendix E, Table E-2	<p>Please note the assessment of wetland functions (listed as a sub-component of the Vegetation VC) should include both direct and indirect effects. The Project has potential to affect wetlands through pathways that include, but are not limited to, direct and indirect loss or alteration of habitat during construction, aquatic contaminants from discharge and runoff, settlement of contaminants from emissions, and accidental spills.</p> <p>ECCC recommends the following:</p> <p>The Proponent conduct a wetland function assessment in consideration of the following documents referenced below and best available literature, as applicable. The wetland function assessment should inform the design of appropriate mitigation measures.</p> <p>Measurable parameters for wetlands in table E-2 include contaminant levels.</p> <p>References: B.C. Wildlife Federation and B.C. Ministry of Forests, Range, Natural Resource Operations and Rural Development. 2021. Technical Guidance Document for Evaluating the Health of Wetlands (Wetland Management Routine Effectiveness Evaluation). Forest and Range Evaluation Program, B.C. Ministry of Forests, Lands, Natural Resource Operations and Rural Development, Victoria, B.C.</p> <p>Hansen, A., et al. 2008. Wetland Ecological Functions Assessment, An overview of Approaches. Available at: <a href="https://publications.gc.ca/collections/collection_025/542283/publication.html">https://publications.gc.ca/collections/collection_025/542283/publication.html</a></p>	<p>Subsection 7.3.3 Existing Conditions of the dAIR states the following:</p> <ul style="list-style-type: none"><li>• Provide a wetland functions assessment in accordance with the guiding principles of Wetland Ecological Functions Assessment: An Overview of Approaches or any subsequent approved guidelines by which to determine the most appropriate functions assessment methodology to use (Appendix 1 of the TISG).</li></ul> <p>The assessment will take in consideration the references listed in the comment.</p> <p>The Surface Water and Groundwater VC both have "contaminant" as measurable parameter.</p>	18-Jan-22		<p>Given the known exceedances of applicable guidelines (i.e., Water Quality Guidelines, Fraser River Water Quality Objectives, and Canadian Environmental Quality Guidelines) for metals and PWS in baseline surface water and sediment quality surveys within the LAA (as communicated by the Proponent in a meeting with the Technical Advisory Committee on January 26, 2022), ECCC recommends that the dAIR confirm that the surface water and groundwater VC sampling locations overlap with wetland areas, as this will allow contaminant sampling results to be applied to the wetland function assessment. Furthermore, ECCC recommends that the linkages between the surface water, groundwater and wetland VCs be described in the dAIR.</p> <p>Please see ECCC-08 from the department's draft DPO comments (dated July 15, 2022) for recommendations related to wetland functions assessment</p>	<p>Water quality is included in the wetland functions assessment used during wetland field surveys for the Project. Water flow, surface connectivity and vegetation cover/condition comprise part of the water quality indicator. In situ water quality measurements are not used as a performance indicator of wetland function, as this information is not useful for a one-time survey. Since measurements are not taken during the exact same climatic conditions (e.g., wet year versus dry year), results would not indicate changes only due to Project activities.</p> <p>Linkages between the surface water, groundwater and wetland VCs will be described in the dAIR.</p>	14-May-22					
	24-Sep-21	Environment and Climate Change Canada		Yee Ting Choy	E-13 to E-14	Appendix E, Table E-2	<p>The dAIR identifies Birds, Mammals, and Amphibians as sub-components of the Wildlife and Wildlife Habitat VC. ECCC recommends that all Species at Risk also be assessed separately. This list should include the following species at risk:</p> <ul style="list-style-type: none"><li>• Band-tailed pigeon (Special Concern)</li><li>• Barn owl (Threatened)</li><li>• Bank swallow (Threatened)</li><li>• Barn swallow (Threatened)</li><li>• Black swift (Endangered)</li><li>• Common nighthawk (Threatened)</li><li>• Dun skipper (Threatened)</li><li>• Great blue heron, Tinnini subspecies (Special Concern)</li><li>• Horned grebe (Special Concern)</li><li>• Little brown myotis (Endangered)</li><li>• North red-legged frog (Special Concern)</li><li>• Pacific water shrew (Endangered)</li><li>• Peregrine falcon (Special Concern)</li><li>• Olive-sided flycatcher (Threatened)</li><li>• Red foot (Threatened)</li><li>• Short-eared owl (Special Concern)</li><li>• Streambank lupine (Endangered)</li><li>• Vancouver Island leucogastri (Special Concern)</li><li>• Western Grebe (Special Concern)</li><li>• Western toad (Special Concern)</li></ul>	<p>Potential effects for species at risk will be included in the applicable sub-component, as described in the response to Comment #42.</p>	18-Jan-22		<p>ECCC recommends that all species at risk also be assessed separately.</p> <p>Please see ECCC-042 as well as the species list in ECCC-044.</p>	<p>Please see response above (Row #126)</p>	10-Mar-22					
	24-Sep-21	Environment and Climate Change Canada		Yee Ting Choy	E-13 to E-14	Appendix E, Table E-2	<p>Pacific water shrew are known to use a variety of wetland, watercourse, and riparian habitats. Tibury Island has potential to provide suitable habitat and is located adjacent to Pacific water shrew critical habitat. Therefore, ECCC recommends that the Application assess effects of the Project on Pacific water shrew and Pacific water shrew habitat under the mammal sub-component of Wildlife and Wildlife Habitat.</p>	<p>Pacific water shrew is discussed in subsection 10.4.2. Pacific water shrew has been considered in the Terrestrial Biophysical TDR. Although Tibury Slough has riparian habitat and occurs within 2 km of Pacific water shrew observations, the tidally influenced brackish waters of the slough are expected to be too saline for their occurrence as they prefer freshwater habitat. The absence of contiguous aquatic or riparian habitat between the Critical habitat polygon outside of the LAA and Tibury Slough, and relatively poor-quality habitat within and around the brackish slough, suggests that occurrence of the species within the proposed Project Site is unlikely. Therefore, it was concluded that there is a low potential for an adverse interaction between the proposed Project and Pacific water shrew, and the species was determined to be an unsuitable sub-component.</p>	18-Jan-22		<p>Please see ECCC-042.</p> <p>ECCC considers biophysical attributes of critical habitat for Pacific Water Shrew (PWS), as described in recovery documents, to be present in the wetlands within the Project area and nearby Tibury Slough. These suitable habitat features, along with the proximity of the Project area to Tibury Slough and known PWS populations, suggests there is a high potential for this species to occur in the Project area. PWS are difficult to study, and as such, knowledge of this species and its use of habitat, including brackish water, is lacking. ECCC does not consider salt tolerance alone to exclude the possibility of PWS presence. The effects of habitat barriers and dispersal corridors are also poorly understood.</p> <p>ECCC maintains that PWS may occur in the project area and recommends that potential effects to these species are assessed, and appropriate mitigation measures (including a salvage if required) are designed according to best management practices and in consultation with the province. For more guidance on Pacific Water Shrew refer to the following BMP:</p> <p>Craig, V.J., R.G. Vennard and K.E. Weisbad. 2010. Best Management Practices for Pacific Water Shrew in Urban and Rural Areas. Version May 2010. Prepared for the Pacific Water Shrew Recovery Team. Pp. 41. Available at: <a href="http://www.srnp.ca/sites/default/files/species-habitat/documents/DRAFT%20best%20management%20practices%20document%20May%202010.pdf">http://www.srnp.ca/sites/default/files/species-habitat/documents/DRAFT%20best%20management%20practices%20document%20May%202010.pdf</a></p>	<p>Since receiving ECCC's previous comments related to Pacific water shrew, FortBic engaged with species experts at BC MCM/BCRD to discuss the site-specific habitat characteristics, proximity to known Pacific water shrew populations, and potential for Pacific water shrew occurrence in the Project area. Considering the feedback received, Pacific water shrew is being included in the EA for the Project, which will provide details supported by field investigations on the habitat characteristics and quality, connectivity, and potential for Project interactions with this species.</p>	10-May-22					

14-Sep-21	Environment and Climate Change Canada		Yee Ting Choy	E13 to E14	Appendix E, Table E-2	Marine/estuarine birds and potential effects due to construction and operation of the expansion facility, as well as shipping during construction (e.g., lighting, collisions, accidents and malfunctions, habitat alterations), do not appear to be captured by any of the proposed VCs. ECCC recommends that marine/estuarine birds and all potential effects be included in the assessment for the wildlife and wildlife habitat VCs, and that requirements be similarly incorporated into the draft.	Marine/estuarine birds will be captured within the Birds sub-component. Potential project impacts during construction and operation will be considered in the Wildlife and Wildlife Habitat effects assessment.  During construction, there will be between six and eight vessel movements to the site. Given the low number of vessel movements, and significant pre-existing vessel traffic in the Fraser River, FortisBC proposes that further assessment of the effects of Project-related vessel movements on marine and estuarine bird is not necessary.	18-Jan-22				ECCC notes that Table 5-1 was updated to include seabirds, waterfowl, wading birds and shorebirds in the Birds subcomponent list (p. 5-3).  ECCC agrees that effects to VCs from six to eight construction vessels may be low; however, these effects must still be described, and mitigation measures to avoid and reduce effects to marine, estuarine, and migratory birds must be included in the Application. Please also refer to ECCC-50 for recommendations regarding cumulative effects.  Please see ECCC-011 from the department's draft DPO comments (dated July 15, 2021) on the Project's potential effects of marine traffic on marine birds.	FortisBC will describe potential effects from vessels but notes that it does not have care and control of the vessels as third-party operators under the jurisdiction of Transport Canada. FortisBC will follow applicable laws when receiving the cargo, and inform the vessels of best management practices via the Port of Vancouver.	10-Mar-22	Resolved. Please also see response to ECCC-17.		
18-Feb-22	Environment and Climate Change Canada		Yee Ting Choy	F-8.1 to F-9.1	Section 8.1	As previously recommended in ECCC's comments on the draft Detailed Project Description (DPO), dated May 2021, ECCC recommends that the Proponent include descriptions of individual vehicles and engines (e.g., engine type, engine make/model, model year, power rating, fuel type, assumptions with activity data (e.g., hours per day), and transportation factors relevant to the emissions estimates for air pollutants for all phases of the Project.	As previously recommended in ECCC's comments on the draft Detailed Project Description (DPO), dated May 2021, ECCC advises the Proponent that a Transboundary Air Notification may be required as per the Canada-US Air Quality Agreement. The transboundary notification process is required for Projects located within 300 km of the Canada-US border when any of the following scenarios are applicable:  1. The Project entails a new pollution source that is expected to emit greater than 90 tonnes/year of any one of the common air pollutants (SO <sub>2</sub> , NO <sub>x</sub> , carbon monoxide, total suspended particulates and volatile organic compounds). 2. The Project involves modifications of existing facilities that result in an increase of 40 tonnes/year of an identified air pollutant noted above or; 3. The Project entails a release of greater than 1 tonne/year of any hazardous air pollutant for a new source or a modification of an existing source.  ECCC recommends the Proponent confirm the Project's emissions estimates and complete the form and notification prior to the submission of the Application/IS. Information on the Transboundary Air Notification process is available at: <a href="https://www.canada.ca/en/environment-climate-change/services/air-pollution/issues/transboundary/canada-united-states-air-quality-agreement/notification-form.html">https://www.canada.ca/en/environment-climate-change/services/air-pollution/issues/transboundary/canada-united-states-air-quality-agreement/notification-form.html</a>				ECCC recommends that the Proponent include descriptions of individual vehicles and engines (e.g., engine type, engine make/model, model year, power rating, fuel type, assumptions with activity data (e.g., hours per day), and the emissions factors referenced for the emissions estimates for all phases of the Project.  Please see ECCC-017 from the departmental draft DPO comments (dated July 15, 2021) regarding GHG emission recommendations.	Fortis does not know individual vehicles and engines that will be used by construction companies to complete their work. That is neither under Fortis's control, nor would a construction company be able to specify individual vehicles and engines they will be using for a project starting in several years. In the absence of this data, Fortis will estimate emissions based on vehicle type, generic engine characteristics, and activity data and make conservative assumptions about emission controls and fuel consumption to generate conservative estimates. During the operation phase, no substantial emissions from vehicles are expected and therefore, are not quantified.	14-Mar-22	ECCC requests that contractors be required to meet, at a minimum, the most stringent emission standards for the on-road and off-road fleet for the Project. This includes use of Tier 4 for off-road construction-engine engines.	Most, if not all of the on and off road fleet used by the Project will be provided by contractors during the construction phase. Fortis will require environmental management plans of its construction contractors that include the minimization of both GHG and AQ-related emissions. Proposed environmental management processes that reduce emissions during the construction/commissioning phase will be one of several key criteria used by Fortis in selecting its contractors. At a minimum, contractors will need to meet local AQ emission regulatory requirements set (e.g. by Metro Vancouver) for such equipment. We expect that contractors who propose enhancements beyond local regulatory requirements will score better in this regard, and therefore be more likely to be selected for the work.		
18-Feb-22	Environment and Climate Change Canada		Yee Ting Choy		N/A	As previously recommended in ECCC's comments on the draft Detailed Project Description (DPO), dated May 2021, ECCC advises the Proponent that a Transboundary Air Notification may be required as per the Canada-US Air Quality Agreement. The transboundary notification process is required for Projects located within 300 km of the Canada-US border when any of the following scenarios are applicable:  1. The Project entails a new pollution source that is expected to emit greater than 90 tonnes/year of any one of the common air pollutants (SO <sub>2</sub> , NO <sub>x</sub> , carbon monoxide, total suspended particulates and volatile organic compounds). 2. The Project involves modifications of existing facilities that result in an increase of 40 tonnes/year of an identified air pollutant noted above or; 3. The Project entails a release of greater than 1 tonne/year of any hazardous air pollutant for a new source or a modification of an existing source.  ECCC recommends the Proponent confirm the Project's emissions estimates and complete the form and notification prior to the submission of the Application/IS. Information on the Transboundary Air Notification process is available at: <a href="https://www.canada.ca/en/environment-climate-change/services/air-pollution/issues/transboundary/canada-united-states-air-quality-agreement/notification-form.html">https://www.canada.ca/en/environment-climate-change/services/air-pollution/issues/transboundary/canada-united-states-air-quality-agreement/notification-form.html</a>					ECCC advises that a transboundary notification form may be required for the Project as per the Canada-U.S. Air Quality Agreement.  ECCC will follow-up with the Proponent directly on fulfilling the requirements of the Transboundary notification form.  Unresolved - ECCC to follow-up directly with Proponent	FortisBC looks forward to the opportunity to discuss this issue with ECCC.	7-Mar-22	Resolved.			
18-Feb-22	Environment and Climate Change Canada		Yee Ting Choy	6-28	Section 6.5						ECCC notes in Section 6.5, on page 28, "Committee on the Status of Endangered Wildlife in Canada (COSEWIC) assessed" was replaced with "SARA-listed". ECCC recommends that mitigation measures to avoid or lessen adverse effects be described for both COSEWIC-assessed and SARA-listed species.  ECCC recommends that the geographic extent of the relevant VCs study areas be expanded so that they encompass all areas where Project environmental effects are likely to occur, and any cumulative effects that are likely to result from the Project, in concert with other physical activities that have been or will be carried out. This includes extending the geographic extent of the GHG assessment (for marine vessel emissions) and the wildlife and wildlife habitat VCs (for marine and estuarine birds) to capture the construction-related marine shipping. This will enable consistency with study areas for similar projects in the region, and allow effects (including cumulative effects) that are likely to result from the Project, to be assessed in the Application.	FortisBC agrees with the request to describe mitigation measures to avoid or avoid any adverse effects that may be identified for either SARA-listed or COSEWIC-assessed species.  FortisBC believes that the RAA and LAAs that have been defined are appropriate; this is supported by preliminary modeling.	7-Mar-22				
18-Feb-22	Environment and Climate Change Canada		Yee Ting Choy	7.12 to 7.15	Sections 7.4.1, 7.4.2, 7.4.3, E.3						Although the Project terminal may be over 11 km from SRKW critical habitat, SRKW may frequent near the Project area and be exposed to potentially harmful contaminants during construction and accidental spills. Further, SRKW may be exposed to contaminants through eating contaminated prey (i.e. Chinook Salmon).  Since SRKW and their prey may frequent near the Project area, ECCC recommends that the Proponent assess potential impacts to SRKW and their prey (i.e. Chinook Salmon) arising from project-related contamination.  Please see ECCC-04 and ECCC-38 for further recommendations regarding SRKW.  References: Government of Canada, 2020. Recommended Environmental Quality Guidelines for the Protection of Southern Resident Killer Whales and Their Prey. Available online at: <a href="https://www.canada.ca/en/environment-climate-change/services/wildlife-habitat/conservation-funding-success-stories/reducing-contaminants-threat-southern-resident-killer-whales.html">https://www.canada.ca/en/environment-climate-change/services/wildlife-habitat/conservation-funding-success-stories/reducing-contaminants-threat-southern-resident-killer-whales.html</a>	Please refer to the response for PP-SRW-14	7-Mar-22	Refer to response for PP-SRW-14. The EAO understands the assessment of fish includes effects to SRKW's prey populations. The EAO is recommending an addition to the ARI to add the linkage of the fish assessment to SRKW, should the fish assessment identify residual effects to SRKW prey populations. The EAO will continue to work with Indigenous Nations, ECCC and FortisBC to develop the requirements for the ARI re: SRKW.			
14-Apr-22	FLNRD	Undisputed													The ARI indicates that in water works may not be necessary, what point of the application will the proponent confirm that? We would want to flag this to our aquatic biologists at this time.	The final specifications for the Material Offloading Facility (MOF) will not be known until final engineering is completed and modular dimensions finalized. That will not occur until sometime post LAC.	
14-Apr-22	FLNRD	Undisputed													It sounds like the majority of any aquatic works is being connected with the TMI project - is this the case?	The majority of water works would take place to support either the priority of the T18 expansion, which are subject to separate regulatory processes. The only in water work which may be associated with the Phase 2 LMG Expansion would be confined to any necessary upgrades to the Material Offloading Facility.	
14-Apr-22	FLNRD	Undisputed													What happened to the "Temporary Jetty" construction - has this now changed to modifications of the existing earth Jetty instead?	The temporary Jetty is a referenced to a component of a different project. The T18 Phase 2 LMG Expansion has always contemplated a Material Offloading Facility.	
14-Apr-22	FLNRD	Undisputed													Regarding the Fish and Fish Habitat Section, LWIS wants to ensure surgeon and fishhook are included as a "fish" sub-component. Can the inclusion of surgeon and fishhook be specific in the dAR at this time?	While surgeon and fishhook are included in the Sub-Component of Fish Freshwater and estuarine including migratory and resident species, marine mammals". The Aquatics Biological Technical Data Report and fish and fish habitat section of the Application will consider each of these fish species in detail; therefore, it is not necessary to specify these species in the dAR.	
Draft ARI (Draft 2 August 2021)	GoC	WAGE	WAGE	15	1.6	Section 1.6 Workforce Requirements must also take Gender-Based Analysis Plus (GBA Plus) into consideration. The information must be presented in sufficient detail to analyze how systemized groups will be taken into account, including Indigenous communities and other relevant groups within the community.	FortisBC is conducting a GBA+ analysis for the Project which will consider subgroups of the population including marginalized and underrepresented groups that are anticipated to be disproportionately affected by the Project. The GBA+ analysis for the labour force is discussed in the Employment and Economy Section of the air. FortisBC proposes to focus its GBA+ analysis for the labour market primarily on gender and Indigenous communities given the nature of the proposed expansion Project and given that data is available for these sub-groups. If WAGE has knowledge of and specific data available for other marginalized or underrepresented groups in the study area, FortisBC would appreciate access to that information.	Rev D Draft 7 December 2021	None	Comment / Concern Addressed	Resolved	WAGE acknowledges that focusing on subgroups of Indigenous communities and their employment is important. However, analyzing the data based on other identity factors such as age and economic status will be important to the Project workforce requirements, rather than the requirements for assessments of effects on the local and regional labour force. These requirements are found in Section 7.10.3 and include a requirement to "Characterize the economic conditions to support the assessment of Project-related effects, including the differences of experiences by diverse subgroups, including Indigenous nation populations, as appropriate (such as, women, youth, Elders)" and that "If applicable, information will be disaggregated and analyzed to support the analysis of potential effects to distinct human populations, including GBA+. Where the available information presents a limitation on the ability to describe differential effects to distinct populations, this limitation will be articulated, and its implications for analysis be articulated."	Thank you for your response and for the links to additional resources on data collection standards. We note that Section 1.6 in the dAR requires the Proponent to provide information on the local and regional labour force. These requirements are found in Section 7.10.3 and include a requirement to "Characterize the economic conditions to support the assessment of Project-related effects, including the differences of experiences by diverse subgroups, including Indigenous nation populations, as appropriate (such as, women, youth, Elders)" and that "If applicable, information will be disaggregated and analyzed to support the analysis of potential effects to distinct human populations, including GBA+. Where the available information presents a limitation on the ability to describe differential effects to distinct populations, this limitation will be articulated, and its implications for analysis be articulated."	10-Mar-22	Based on the TIGD Practitioner's Guide ( <a href="https://www.canada.ca/en/impact-assessment/assessment-practitioner-guide/assessment-practitioners-guide-impact-assessment-en/10242000">https://www.canada.ca/en/impact-assessment/assessment-practitioner-guide/assessment-practitioners-guide-impact-assessment-en/10242000</a> ), section "3.3. Workforce requirements", all listed requirements are aligned with those included in the proposed draft ARI section 1.6 "Workforce Requirements". In addition, WAGE is comfortable with the draft ARI section "7.10.3 Existing Conditions" (under "7.10 Employment and Economy" as finding of the proponent's GBA Plus will be included by diverse population groups.	Thank you for your comment.	
Draft ARI (Draft 2 August 2021)	GoC	WAGE	WAGE	155	7.1	Section 7.1 Environmental and Community Context Should also apply GBA Plus to assess influences on community well-being (e.g. disposable income, cost of living, ethnicity, language), rates of alcohol and substance abuse, and of illegal activities and violence, gender-based violence, access, ownership and use of resources by Indigenous communities (e.g. land tenure, food, water, social infrastructure), food security, access to country foods (traditional foods) and baseline perceived quality community cohesion, including factors such as community or neighborhood engagement, support, and social networks and other social activities, the psychosocial environment and to influence on community well-being factors supporting mental health and community well-being (such as perceived stress, feelings of isolation, of remoteness, of concern for future generations), safety of Indigenous and non-Indigenous women and girls, identified LGBTQ+ and two-spirited people, relevant historical community background, and community leadership and governance structure.	Given the scope of the proposed expansion Project, FortisBC does not anticipate disproportionate effects on or all of the subgroups that WAGE has identified. FortisBC proposes to undertake an evaluation of the differential Project changes as a result of the expansion but disaggregating the proposed Project's contribution from other influences in this highly urban area, and in a population that is already seeing GBA+ effects from Covid-19 is challenging. FortisBC will apply this list of considerations as might be relevant to its proposed Project.	Rev D Draft 7 December 2021	None	Comment / Concern Addressed	Resolved	We agree that the proposed expansion of the project will not be solely responsible for well-being of Indigenous communities. However, each project has potential positive and negative effects on Indigenous communities, therefore, disaggregated data, which will be collected by FortisBC as per the dAR Section 6.4 Potential Effects, 7.10.3 Existing Conditions, 7.11.3 Existing Conditions, 7.13.3 Existing Conditions, 7.14.3 Existing Conditions, 7.15.3 Existing Conditions) will be important to identify problems, find solutions to reduce inequalities and address barriers faced by specific groups of people.	WAGE 21 - Line 151 Thank you for your response and for the links to additional resources on data collection standards. To address Section 7.10.3 of the dAR, information will be disaggregated, where existing information/data is available and plausible impact pathways are identified. Available disaggregated data will be analyzed to identify and highlight employment and economic conditions of distinct populations and vulnerable groups, including intergenerational between factors as data permit. Disaggregated data based on identity factors such as gender identity and expression, sexual orientation, age, mental and physical ability, race, religion, immigrant status, language, and socio-economic status, may be considered where available to understand inequalities experienced by diverse groups of people.	10-Mar-22	WAGE agrees with the proponent response and would like to acknowledge the possibility that the data is not available or limited, which is why consulting with various sources is essential. Potential data sources: government statistics, non-governmental organization reports and academic sources, including community consultations and engagement.	Thank you for your feedback.	Thank you for your comment.
17-Sep-21	Health Canada	Health Canada	Health Canada	Original: pp. F-5.4 to F-5.5	Table 5-1	HC suggests linking the Vegetation and Wildlife VCs (valued components) with Human Health, as may be applicable. This would be consistent with the current linkage between the Fish VC and Human Health (p. F-5.5 and F-5.1).  This comment also applies to the VCs document in Table E2, p. E-13 (under the Vegetation & Wildlife VCs).	FortisBC has updated the draft Application Information Requirements (AIR) and VC Selection to include the recommended linkages.	2-Jan-22	Table 5-1 p. 5-1			Health Canada (HC) acknowledges the edit, but notes that for the Vegetation VC, the linkage to Human Health appears to be missing in the December 2021 version of the dAR.	This linkage has been included.	7-Mar-22			
17-Sep-21	Health Canada	Health Canada	Health Canada	Original: p. F-5.3 p. F-7.4	Table 5-1 p. F-7.4	Section 7.2.4 indicates the air quality results will be compared with applicable municipal, provincial and federal standards. Consider also adding the following: *For air pollutants with standards, the proponent should use the averaging period and the statistical format associated with each numerical value. *The proponent must refer to the Canadian Ambient Air Quality Standards (CAAQS) established by the Canadian Council of Ministers of the Environment (CCME) for PM2.5, O3, SO2 and NO2 that will take effect at the time of project construction and/or operation*.	Impacts will be assessed using the appropriate standard-specific averaging periods and metrics. CAAQS 2020 and CAAQS 2021 will be referred to as appropriate for the timing of each phase. FortisBC has developed the following text from the draft "If standards are not exceeded, no further assessment to the risk of human or environmental health due to Air Quality will be completed"	2-Jan-22	Section 7.2.4 p. 7-4			HC acknowledges the response. HC continues to recommend that the Proponent add a specific commitment to carry forward non-threshold air pollutants in the cumulative effects assessment for the purpose of developing air quality mitigation and monitoring measures. HC reviewers will be seeking this information in the Application.	Fortis acknowledges HC's concern; however, we believe that assessing 172 impacts to both current non-threshold air pollutants as well as the significantly lower 2025 CAAQS addresses this concern. Therefore, Fortis proposes to assess changes to air quality within the LAA relative to current and 2025 standards only.	10-Mar-22			
17-Sep-21	Health Canada	Health Canada	Health Canada	Original: p. F-7.2 p. F-7.4	Section 7.2.3	Sections 7.2.3 and 7.2.4 of the dAR list air pollutants that will be considered in the assessment of ambient air quality (e.g., NO <sub>x</sub> , SO <sub>2</sub> , PM2.5, PM10, total particulate matter, VOCs, ground-level ozone and CO). HC recommends the consideration of additional parameters associated with vehicle exhaust (e.g., polycyclic aromatic compounds (PAHs), diesel particulate matter (DPM), and any other toxic air pollutants from mobile, stationary and fugitive sources related to the project.	Emissions associated with mobile equipment operated during Project construction phase will be considered (including PM10 and DPM), as well as Project-related fugitive PAH emissions from the Project's LNG operations.	2-Jan-22	Section 7.2.3 p. 7-3	Section 7.2.4 p. 7-4		HC was not able to locate edits in the December 2021 version of the dAR to reflect the Proponent's response. HC recommends that edits be made to the next version of the dAR to include the Proponent's specific commitments with respect to the assessment of additional air quality parameters (e.g., DPM and PAHs).	These edits have been made to the latest version of the draft ARI. Proponent's response to HC recommendations regarding the assessment of fugitive PAH emissions from the construction phase will be considered (including PM10 and DPM), as well as Project-related fugitive PAH emissions from the Project's LNG operations.	10-Mar-22			
17-Sep-21	Health Canada	Health Canada	Health Canada	Original: p. F-7.4	Section 7.2.4	This comment above also applies to [the first version off] the VCs document in Table E2, p. E-11 (under the Air Quality VCs).	FortisBC proposed the following language: * Assess air quality in scenarios including baseline, project alone, baseline + project, cumulative, and abnormal operating scenarios, as may be applicable.	2-Jan-22	Section 7.2.4 p. 7-4			HC suggests that a justification be provided as to why abnormal operating scenarios were not considered for an assessment of potential air quality health effects.	Abnormal operating scenarios are associated with upset conditions. Abnormal conditions are short duration and infrequent; therefore the impacts on human health are not considered significant.	7-Mar-22			

17-Sep-21	Health Canada	Health Canada	Health Canada	Original: p. F-7.6	Section 7.2.4	HC recommends including the location of key human receptors (including sensitive receptors) on isopleth maps which illustrate the predicted air pollutant emissions at local and regional scales. The chosen key human receptors/monitoring or modeling locations (in the air quality assessment) should be representative of land uses in/near the project area (e.g., residential, recreational, indigenous locations).	The location of key human/sensitive receptors (representative of land uses in/near the Project area such as residential, recreational, indigenous locations) will be indicated on the isopleth maps.	2-Jan-22	Section 7.2.4 p. 7.4 Also applies to Section 7.3.4 p. 7.7		HC acknowledges the response, but was not able to locate the accompanying text update in the December 2021 version of the dAIR (i.e., to provide isopleth maps showing the locations of key human/sensitive receptors).	Isopleth maps showing the locations of key human/sensitive receptors will be provided as part of the application.	7-Mar-22						
17-Sep-21	Health Canada	Health Canada	Health Canada	Original: p. F-6.2 p. F-7.6	Table 6-1 Section 7.3.3	In addition to the Oil and Gas Commission's (OGC) guidelines and HC's noise guidance, HC recommends that the guidelines and recommendations of the World Health Organization (WHO 1999, 2009) regarding sleep disturbance be taken into consideration in impact assessments. HC also suggests that the Proponent evaluate local people's existing annoyance levels toward current noise sources (e.g., road traffic, aircraft, other industrial sounds) through consultation with local residents.	The guidelines that FortiBAC proposes to utilize as the basis of assessment, the BC OGC Best Practices guideline (BC OGC 2021), are protective of normal sleep patterns. Because the potential for sleep disturbance is already considered by the BC OGC guideline, FortiBAC does not propose to reference the World Health Organization guidelines. Consultation on the Project is ongoing and FortiBAC will communicate any existing public noise concerns to the acoustic consultant.	2-Jan-22	Table 6-1 p. 6-2 Section 7.3		HC acknowledges that the OGC's guidelines set out Permissible Sound Levels (PSLs) for noise so that normal sleep patterns are generally not disturbed. However, HC continues to recommend that federal noise guidance (which includes the use of the WHO guidelines) be used in the noise assessment; the results of which could be compared against any relevant OGC results. HC recommends that this update be included in the next version of the dAIR (i.e., in Table 6-1 and Section 7.3, where applicable). HC reviewers will be seeking this information in the Application.	Noise assessment and comparison of the assessment results is cumulative. It includes existing ambient conditions as well as impacts from approved but not yet built development in the area. For effective evaluation of Project effects, using OGC guidance as the metric for evaluating impact will be kept as it provides consistency and comparability with approved but not yet built facilities in the area that also used the OGC thresholds.  For construction, OGC recommends the HC guidance be used so the Application construction assessment will reflect the HC "rule." For operations, OGC thresholds that consider ambient conditions will be used for the effects assessment as documentation from previous studies in the immediate area can provide for an appropriate cumulative assessment. However, for the purposes of HC review and reference, a HC "rule" based analysis will be provided in the supporting information. Additional guidance from WHO per the 2009 Night Noise Guidelines in Europe or the 1999 Community Noise Guidelines thresholds is not required as the existing provincial and federal guidance is sufficient to address changes in sound level due to the Project at dwelling/residential based receptors.  Suggested limits from HC on speech intelligibility for pathways or publicly accessible areas not under proponent control will be discussed along with local by-laws which also have similar aims.	HC: HC supports the use of NHA for both operations and long-term construction noise (3 years), but notes that this metric is only an aggregate indicator of assorted noise effects that may be present to varying degrees. Although the change in NHA for receptors exposed to long-term noise may not exceed the threshold (i.e., 6.5%), these receptors may still experience sleep disturbance due to an exceedance of the WHO sleep-disturbance threshold limits.  Therefore, in addition to using the OGC's guidance and thresholds, HC continues to recommend that the Proponent use the guidelines and recommendations of WHO (1999) to undertake a specific assessment of sleep disturbance. HC recommends that this update be included in the final AIR; otherwise, an assessment of noise as per federal noise guidance will be considered incomplete.  Health Canada notes that adverse impacts to sleep may occur when average sound levels inside sleeping quarters exceed 30 decibels (dBA) for continuous noise sources, or 45 dBA (max) for discrete noise events more than 10-15 times per night (WHO, 1999). With windows partially opened, these thresholds are equivalent to 45 dBA outdoors for continuous noise, and 50 dBA outdoors for discrete noise events.	A comparison of ambient and Project related sound level predictions to the HC outdoor equivalent sleep disturbance thresholds will be included for consideration in the health risk section of the assessment.  The potential for discrete noise events at night will be addressed.	FortiBAC has agreed to consider the WHO guidelines. The EAO has added reference to the WHO guidelines in section 7.3.3.				
17-Sep-21	Health Canada	Health Canada	Health Canada	Original: p. F-7.6	Section 7.3.3	HC suggests replacing the bullet point below (in <u>strike-through</u> ), with the text that follows (in <u>bold</u> ): "Where relevant, the survey results will include baseline ambient noise survey and resulting permissible sound levels according to the B.C. OGC Noise Control Best Practices Guideline for each receptor." The noise measurement results will include baseline ambient noise levels at each location with measurements taken for a minimum span of 24 hours to capture day and night baseline sound levels (LdN) when conditions are favourable for sound propagation (see HC, 2017 for details on an alternate methodology). These noise levels should then be compared to permissible sound levels based on HC (2017) and the B.C. OGC Noise Control Best Practices Guideline for each receptor (whichever is most conservative). The baseline description must include a summary of all dominant noise sources that contribute to the measurements and a detailed rationale as to why the measurements are considered representative;	The purpose of collecting the baseline data is not to compare the monitored levels to applicable guidelines. The baseline data is used to inform the applicable Permissible Sound Level (when applying BC OGC) and provide the existing condition for a change assessment (when applying HC Guidance).  FortiBAC suggests the following (in <u>strike-through</u> ): The noise measurement results will include baseline ambient noise levels at each location with measurements taken for a minimum span of 24 hours to capture day and night baseline sound levels (LdN, Ldn, and Ldn) when conditions are favourable for sound propagation (see BC OGC, 2021 measurement methodology, Section 4.3). These noise levels should then be compared to permissible sound levels based on HC (2017) and the B.C. OGC Noise Control Best Practices Guideline for each receptor (whichever is most conservative). The baseline description will must include a summary of all dominant noise sources that contribute to the baseline measurements and a detailed rationale as to why the measurements are considered representative."	2-Jan-22	Section 7.3.3 p. 7.6		For clarity, the purpose of comparing baseline noise data to applicable OGC and HC guidelines is to understand whether existing noise levels currently exceed any noise guidelines that may indicate existing impacts to humans (before the project). This was the rationale behind HC's suggested text addition. "These [baseline ambient] noise levels should then be compared to permissible sound levels based on HC (2017) and the B.C. OGC Noise Control Best Practices Guideline for each receptor (whichever is most conservative)."	Both the BC OGC and HC guidance for noise thresholds establish permissible sound levels (OGC) or degree of effect (NHA) using the baseline levels as the starting point. Comparing the resulting threshold to the data that establishes that threshold may not provide the desired information.  To aid HC in understanding how existing or expected sound level may be affecting people, the application will compare the resulting OGC permissible sound levels to the "standard" or assumed existing sound levels from the guidance so HC can compare how the existing environment compares to the expectation for the degree of local development. For the HC risk analysis, the difference between the measured ambient and expected baseline at the time the Project proceeds will be provided.	HC: The comparison of baseline noise level to applicable HC guidelines was not intended for NHA, but rather for other noise indicators (e.g., LdN, Ldn, Ldn). For example, HC seeks to understand how the existing sound environment may currently be impacting the sleep of human receptors who may also become further impacted by Project activities (e.g., during construction).  Therefore, HC continues to recommend that baseline noise levels in the Project area be compared to HC guidelines and the B.C. OGC Noise Control Best Practices Guideline for each receptor location.	Baseline sound levels and NHA are presented for each location.	The AIR includes comparison of baseline noise levels to HC guidelines and B.C. OGC Noise Control Best Practices Guideline for each receptor location.				
17-Sep-21	Health Canada	Health Canada	Health Canada	Original: p. F-7.43	Section 7.15.1	HC suggests the following edits / additions in bold and/or <u>strike-through</u> : *Guidance for Evaluating Human Health Effects in Environmental Assessment: Human Health Risk Assessment (Health Canada, 2019); *Guidance for Evaluating Human Health Effects in Environmental Assessment: Air Quality (Health Canada, 2016a, 2017a); *Guidance for Evaluating Human Health Effects in Environmental Assessment: Country Foods (Health Canada, 2018, 2017b); *Guidance for Evaluating Human Health Effects in Environmental Assessment: Water Quality (Health Canada, 2016b, 2017b); *Social determinants of health and health inequalities (Health Canada 2019 Public Health Agency of Canada, 2020); *Guidelines for Canadian Drinking Water Quality - Summary Table (Health Canada, 2021a, 2021); *Federal Contaminated Site Risk Assessment in Canada, Part 1: Guidance on Human Health Preliminary Quantitative Risk Assessment, Version 3.0 (Health Canada, 2021b, 2021); *Federal Contaminated Site Risk Assessment in Canada, Part II: Health Canada Toxicological Reference Values, Version 3 and Chemical-Specific Factors (Health Canada, 2021b, 2020a); *Federal Contaminated Site Risk Assessment in Canada; *Federal Contaminated Site Risk Assessment in Canada: Supplemental guidance on Human Health Risk Assessment for Country Foods (Health Canada, 2020); *Federal Contaminated Site Risk Assessment in Canada: Supplemental guidance on Human Health Risk Assessment of Air Quality, Version 2.0 (Health Canada, 2017); *Federal Contaminated Site Risk Assessment in Canada: Overview of Health	FortiBAC has updated the reference to Canadian Health Guidance documents in the dAIR and will use the same references in the Human Health Risk Assessment and Project Application.	2-Jan-22	Section 17 pp. 17-4 to 17-5		HC acknowledges the Proponent's edits to Section 7.15.1, however notes that the corresponding edits have not also been made to Section 17 References. The correct edits to HC documentation should be made in all sections/documents where they are appear.	Updates were now made to Section 17 References.	10-Mar-22	HC: The response is noted.					
17-Sep-21	Health Canada	Health Canada	Health Canada	Original: p. F-7.44	Section 7.15.3	HC recommends revising the following GBA sentences: "Disaggregate and analyze information to support the analysis of potential effects to distinct human populations, including GBA." "Describe baseline health conditions and existing health inequalities using disaggregated data for diverse groups and subgroups and their differential access to resources, opportunities and services within the community to support GBA."  To characterize the carcinogenic risk of diesel exhaust in a project, HC requests that the proponent choose from two options:  1) Conduct a quantitative assessment of risk, making use of the associated unit risk value published by the California EPA. While HC does not specifically endorse the California EPA unit risk value and recognizes its limitations, this approach provides insight as to the potential impacts a specific project would have in relation to risk associated with the diesel emissions; or  2) Provide a robust qualitative assessment of the carcinogenic risk of diesel exhaust associated with the project. This should include different elements to ensure transparency: i) identification of the main sources of diesel exhaust for the project and recognition of the relative importance of diesel exhaust as a source of air pollution for the project; i) recognition that diesel exhaust has been declared a human carcinogen by international agencies including HC, WHO (IARC), the US EPA and the California EPA; ii) the rationale for not undertaking a quantitative analysis of diesel exhaust carcinogenic risk for the project.	FortiBAC agrees with this recommendation and will provide these data and analysis to the extent that disaggregated data are available to support both baseline (existing conditions) and impacts for GBA+. Where gaps in data exist, FortiBAC will discuss impacts to health only for the broader population. We propose to revise the dAIR to follow: "Describe baseline health conditions and existing health inequalities using available disaggregated data for diverse groups and subgroups and their differential access to resources, opportunities and services within the community where that data is available. Where gaps in the data exist, or when potential disproportionate effects on subgroups are not anticipated, the Application will discuss impacts to health for the broader population."	2-Jan-22	Section 7.15.3 p. 7.45		HC acknowledges the response, but was not able to locate the relevant text update in the December 2021 version of the dAIR.	Text now included in Section 7.15.3.3 of the dAIR	10-Mar-22	HC: The addition is acknowledged.					
17-Sep-21	Health Canada	Health Canada	Health Canada	Original: p. F-7.45	Section 7.15.4	HC recommends adding the following bullet to address potential impacts of diesel exhaust from the project: "Provide an assessment of the carcinogenic and non-carcinogenic effects associated with chronic and/or acute exposure to diesel particulate matter (DPM)."  To characterize the carcinogenic risk of diesel exhaust in a project, HC requests that the proponent choose from two options:  1) Conduct a quantitative assessment of risk, making use of the associated unit risk value published by the California EPA. While HC does not specifically endorse the California EPA unit risk value and recognizes its limitations, this approach provides insight as to the potential impacts a specific project would have in relation to risk associated with the diesel emissions; or  2) Provide a robust qualitative assessment of the carcinogenic risk of diesel exhaust associated with the project. This should include different elements to ensure transparency: i) identification of the main sources of diesel exhaust for the project and recognition of the relative importance of diesel exhaust as a source of air pollution for the project; i) recognition that diesel exhaust has been declared a human carcinogen by international agencies including HC, WHO (IARC), the US EPA and the California EPA; ii) the rationale for not undertaking a quantitative analysis of diesel exhaust carcinogenic risk for the project.	FortiBAC proposes that if the human health problem formulation identifies DPM and associated PAH constituents as a COPC, the human health risk assessment will address project-related issues. If an assessment is required, it will be quantitative if suitable data is available. If there is insufficient data, FortiBAC will provide a qualitative analysis of the carcinogenic risk from diesel exhaust from the Project.	2-Jan-22	Section 7.15.4 pp. 7-46 to 7-47		HC was not able to locate edits in the December 2021 version of the dAIR to reflect the Proponent's response. HC recommends that edits be made to the next version of the dAIR to include the Proponent's specific commitments regarding the assessment of the carcinogenic risk of diesel exhaust from the Project.	FortiBAC's suggested wording added into Section 7.15.4.	10-Mar-22	HC: The addition is acknowledged.					
17-Sep-21	Health Canada	Health Canada	Health Canada	Original: p. F-7.45	Section 7.15.4	HC suggests that the bullet regarding problem formulation be revised to define 'preliminary model prediction.' This is a standard term that is used. Please confirm whether 'preliminary model prediction' is used to refer to a conceptual model. HC therefore suggests the following edits in <u>strike-through</u> and in <u>bold</u> : "Conduct a problem formulation exercise and/or including a preliminary model prediction (i.e., a conceptual site model or conceptual exposure model) to determine whether a Human Health Risk Assessment is required."	This text is taken directly from the Impact Assessment Agency of Canada (IAAC) Tabulated Impact Statement Guidelines Template (TISG) November 26, 2020. FortiBAC will incorporate the additional suggested text into the draft AIR for clarity.	2-Jan-22	Section 7.15.4 p. 7-47		HC was not able to locate edits in the December 2022 version of the dAIR to reflect the Proponent's response. Alternatively, HC is seeking confirmation as to whether the term 'preliminary model prediction' is referring to a conceptual site or exposure model.	Text updated	10-Mar-22	HC: The addition is acknowledged.					
17-Sep-21	Health Canada	Health Canada	Health Canada	Original: p. F-7.46	Section 7.15.4	HC recommends the following edits in <u>strike-through</u> and in <u>bold</u> to clarify current text: "Provide the rationale if a determination is made that an assessment of the potential for contamination of country foods (traditional foods) (or other exposure pathways, such as inhalation) is not required or if some contaminants are excluded from the assessment." "If a determination is made to include a contaminant of potential concern (COPC) or an exposure pathway for a COPC from the assessment, an acceptable rationale will be provided to support the determination."	FortiBAC accepts this recommendation.	2-Jan-22	Section 7.15.4 p. 7-47		HC was not able to locate edits in the December 2021 version of the dAIR to reflect the Proponent's response.	Text updated	10-Mar-22	HC: The addition is acknowledged on page 7-45; however, there appears to be a formatting error, and two requirements are currently combined (and need to be separated, as shown below): "• If a determination is made to exclude a contaminant of potential concern (COPC) or an exposure pathway for a COPC from the assessment, an acceptable rationale will be provided to support the determination." • Describe and quantify potential effects to mental and social well-being (such as, stress, depression, anxiety, sense of safety)?"	This error has been fixed in the AIR and mirrors the language you have proposed.				
17-Sep-21	Health Canada	Health Canada	Health Canada	Original: p. F-7.46	Section 7.15.4	HC recommends the following edits in <u>strike-through</u> and in <u>bold</u> to clarify current text: "Describe and quantify the project-related activities, contaminants of potential concern, nuisance and environmental, social and economic changes that could potentially be sources of adverse human health effects and the potential human receptors of these effects." "Identify human receptors that may be potentially affected by project-related activities. Describe and quantify the project-related activities, contaminants of potential concern, nuisance and environmental, social and economic changes that could potentially cause adverse health effects to the identified human receptors."	FortiBAC accepts this recommendation.	2-Jan-22	Section 7.15.4 p. 7-47		HC acknowledges the addition of our suggested text, but notices a possible duplication (since the original text is still largely present in the dAIR, along with the new text).	Text updated	10-Mar-22	HC: The edit is acknowledged.					
17-Sep-21	Health Canada	Health Canada	Health Canada	Original: p. F-17.2	Section 17	HC recommends the following edits in <u>bold</u> / <u>strike-through</u> : Health Canada, Public Health Agency of Canada, 2020. Social Determinants of Health and Health Inequalities. Accessed March 2021. <a href="https://www.canada.ca/en/public-health/services/health-promotion/population-health/what-determines-health.html">https://www.canada.ca/en/public-health/services/health-promotion/population-health/what-determines-health.html</a>	FortiBAC has corrected the inaccurate reference.	2-Jan-22	Section 17 p. 17-5		HC acknowledges that a new reference to PHAC's social determinants of health and health inequities has been added to the References section. However, the old (incorrect) reference to Health Canada still remains (fourth reference on p. 17-5) and should be deleted.	Reference removed	10-Mar-22	HC: The edit is acknowledged.					
8-Feb-22	IAAC	Katherine Zmuda			15 and 1.7.3			4-Mar-22			The sections on sustainability (Chapter 15) and Alternatives to (Chapter 1.7.3) in the AIR mostly contain language from the TISG template, yet the EAO flagged that the requirements are different provincially vs. federally. How are they different?	IAAC requires a description of the project's contribution to sustainability. The CDAO at the conclusion of the EA will make a recommendation to Ministers respecting whether the project is consistent with the promotion of sustainability by protecting the environment and fostering a sound economy and the well-being of British Columbia and their communities (per s.2(92)(b)(ii) of the Act and seek consensus with participating Indigenous nations on the recommendation). The EAO's recommendation will be based on the assessment results.							
8-Feb-22	IAAC	Katherine Zmuda			16 and 8			4-Mar-22			How will the EAO gather and assess the information needed to address the conditions for substitution set out by the Federal Minister in the Notice for Substitution (related to climate change)?	The EAO has captured federal information requirements in Section 8 and 16 of the AIR.							





	7 Mar-22	Qw'utsun Nation	Qw'utsun Nation	Qw'utsun Nation		1.7					Why are the constraints of the site a consideration here? Alternatives could occur in other locations, and this has the potential of artificially limiting alternatives	Alternative locations to carry out the Project are discussed in detail in the Detailed Project Description. Additional information will also be provided in the application. Sections 1.7.3 (Alternatives to the Project) and 1.7.4 (Alternative Means of Carrying out the Project) in the dAAR outline the requirements for the application.		QN would like to note that if an otherwise effective mitigation measure cannot be implemented due to site constraints, it is our expectation that FortisBC will provide equally effective mitigation alternatives.	It is FortisBC's intention, consistent with the hierarchy of mitigation described in the DPO and which will be further detailed in the Application, that the efficacy and effectiveness of proposed mitigations will be reviewed prior to implementation, monitored during and after implementation and if necessary augmented or altered.	The EAO will also work collaboratively with QN in the development of potential provincial and federal conditions, including adaptive management strategies in the event that mitigation proposed is not as effective as predicted.
BAIR-QN-3	7 Mar-22	Qw'utsun Nation	Qw'utsun Nation	Qw'utsun Nation		2.4					For Qw'utsun Nation, this would include the Qw'utsun Nation/BC Government to Government Agreement, and the Qw'utsun Nation/BC Fraser River Stewardship Initiative		Thank you for this comment. We have flagged for FortisBC for inclusion in the Application	We look forward to seeing this meaningfully included by FortisBC		Thank you for your comment. The EAO notes that Qw'utsun Nation/BC Fraser River Stewardship Initiative may need to be shared with FortisBC in order for them to include in the Application.
BAIR-QN-4	7 Mar-22	Qw'utsun Nation	Qw'utsun Nation	Qw'utsun Nation	35	5					Marine Water sediment quality has not been included in this draft table, though it is in the draft EA guidelines. Why?	Due to the limited scope of work occurring in the Fraser river (4.6 plots and no dredging) and the distance to the marine environment, FortisBC has decided not to specify impacts to Marine Water Sediment Quality. It should be noted that the Application Information Requirements Guidelines (April 2020) is there to provide the proponent guidance. FortisBC has adjusted Valued Components since originally referring to this guidance as that Valued Components are more suitable to the proposed Project.	The QN does not agree with this exclusion as the saltwater wedge extends to the project site. At minimum, please update the Surface Water Quality VC to reflect the marine component of the project area.	FortisBC has included salinity as a measurable parameter in the Surface Water Quality VC and suggests that the Surface Water Quality VC already considers this aspect (the salt water wedge) within the scope of the assessment.	The EAO is satisfied that including salinity as a measurable parameter in the Surface Water Quality VC (to consider the salt water wedge) addresses the concern. Once the Application is submitted, the EAO and Qw'utsun Nation will review to determine if the assessment is complete and adequate.	
BAIR-QN-5	7 Mar-22	Qw'utsun Nation	Qw'utsun Nation	Qw'utsun Nation	41	Table 5.1		Section 11.14			This VC needs to be completed for the QN based on the parameters of the QN's anticipated LAA (in reference to the Indigenous nation VC placeholder)	FortisBC proposes that the dAAR be amended to reflect the scope of the Qw'utsun Nation led assessment in Section 11.4, as per the EAO's requirements for Indigenous led assessments		The EAO commends Snenemaw, which appears to be an error. Please provide a response to the QN. Please provide any updates to section 11.4 as tracked changes for ease of review.	Apologies for this error.	
BAIR-QN-6	7 Mar-22	Qw'utsun Nation	Qw'utsun Nation	Qw'utsun Nation	43	6					This section should clarify that it is not just limited to information from TUS studies. It should include other studies and documents provided to the proponent/EAO by Participating Indigenous Nations.	The LAA and RAA do not preclude effects on Qw'utsun Nation members living in or using the areas in the assessment areas. In addition, FortisBC proposes that the assessment boundaries for the effects on Qw'utsun Nation's Indigenous interests be included in the Qw'utsun Nation's section of the AIR, Section 11.4	The QN requests that FortisBC engage with this comment to ensure that the Application is adequately informed by it beyond the limits of TUS.	FortisBC is interested in understanding any Indigenous knowledge that the Qw'utsun are prepared to share, and collaborating with the Qw'utsun to determine the appropriate manner of incorporating that Indigenous Knowledge in the Application.	The EAO notes that no LAA or RAAs in extent to Vancouver Island. The EAO understands that the QN LAA will assess project effects to QN and QN's rights and may extend to Vancouver Island. FortisBC is also required to engage QN on the draft chapter in the Application (QN section 11) and information could also be presented in that chapter.	
BAIR-QN-7	7 Mar-22	Qw'utsun Nation	Qw'utsun Nation	Qw'utsun Nation	46	Table 6.1					Limiting the LAA and RAA to just Metro Vancouver may be unduly restrictive, given that this potentially includes effects on QN communities on Vancouver Island, who have an interest in the project lands, but would be excluded here.	The LAA and RAA do not preclude effects on Qw'utsun Nation members living in or using the areas in the assessment areas. In addition, FortisBC proposes that the assessment boundaries for the effects on Qw'utsun Nation's Indigenous interests be included in the Qw'utsun Nation's section of the AIR, Section 11.4	QN will include this in the scope of the LAA, however further discussion with FortisBC and EAO to ensure clarity around the spatial scope of impacts is required.	FortisBC is interested in discussing the spatial scope of QN's LAA with QN. FortisBC is willing to answer questions QN may have with respect to the scope in the dAAR.		
BAIR-QN-8	7 Mar-22	Qw'utsun Nation	Qw'utsun Nation	Qw'utsun Nation	50	Table 6.1					QN specific VCs will need to be included for the LAA and RAAs once the scope of the s. 19(4) LAA is finalized.	FortisBC proposes that Qw'utsun Nation-specific VCs be included in the Qw'utsun Nation's section of the dAAR (Section 11.4) and that this section be amended according to the scope of the Qw'utsun Nation led assessment.		Flagging second erroneous reference to Snenemaw First Nation	Apologies for this error.	
BAIR-QN-9	7 Mar-22	Qw'utsun Nation	Qw'utsun Nation	Qw'utsun Nation	66	6.4					What is "Baseline" for the purposes of this section. Is it the site as it exists today, or the site undisturbed?	In this section, baseline reflects existing conditions. It should be noted that each Valued Component includes a section on Historical Context that outlines the conditions of the area as far back as can be determined and informs the existing conditions section of the EA.		Please clarify in this section that baseline conditions include current conditions and previous disturbance, and that the baseline conditions in this section do not account for the state of the land pre-disturbance.	For clarity, and detailed in the previous answer, yes, in this section the baseline conditions include the current conditions and previous disturbance.	
BAIR-QN-10	7 Mar-22	Qw'utsun Nation	Qw'utsun Nation	Qw'utsun Nation	100	7.9.3					The information should also include present Indigenous use of fish, not just for cultural use	FortisBC proposes that the Project Application provides information on the use of fish and/or aquatic species as country foods. Country foods are in the following sections of the dAAR: Fish and Fish Habitat Effects Assessment (7.9.3), and Human Health (7.10). FortisBC welcomes any information from Qw'utsun Nation's use of fish for inclusion in the Project Application.	This approach does not adequately capture the economic aspect of the present use of Indigenous fishing. Please update the socioeconomic section to include this component of present use.	FortisBC would like clarification as to whether the Qw'utsun are referring to commercial fishing, or the economic aspects of all Qw'utsun fisheries in the LAA and RAA.	The EAO notes that in Table 2 of the AIR, the Land and Resource Use VC includes the sub-component "tenured land and resource use, with the indicator "tenured permitted or licensed marine uses (for example, aquaculture, moorage, commercial fishing).	
BAIR-QN-11	7 Mar-22	Qw'utsun Nation	Qw'utsun Nation	Qw'utsun Nation	105	7.10.4					This should also describe the anticipated number of Indigenous employment and training opportunities expected as a result of the Project.	FortisBC proposes that the Project Application include information about hiring policies and hiring programs specific to Indigenous nation employment. FortisBC currently does not have enough information to estimate how many positions will be filled by Indigenous workers.		Policies and programs in the Application are not an adequate approach to Indigenous employment. Our expectation is that FortisBC proactively recruit Indigenous individuals who are interested in project work in order to provide any necessary training in advance of the Project. If an estimate is not feasible at this time, we expect FortisBC to provide clear targets for training individuals in advance of the project, as well as targets for Indigenous employment during construction and operations. The hiring policies and programs must include adaptive management plans outlining actions FortisBC will take if hiring falls short of these targets.	FortisBC can examine the economic aspects of Qw'utsun's fishing activities on the lower Fraser in the Application should the Qw'utsun provide economic data for review and incorporation in the Application. FortisBC would propose to discuss this in Section 11.4.	In addition, the EAO has also added the following bullet in Section 7.11.4, that the Application must describe the potential Project interactions with local and regional land use and resource activities, including adverse and positive effects (e.g., "Tenured permitted or licensed marine uses (such as commercial fishing and moorage)).
BAIR-QN-12	7 Mar-22	Qw'utsun Nation	Qw'utsun Nation	Qw'utsun Nation	beginning 149	11.4 (Generally)					This section should make reference to the fact that the QN is doing its own Indigenous led assessment. There should be coordination between the QN and Fortis during this process, so that Fortis' contribution in the application is informed where appropriate by the QN's LAA.	FortisBC proposes that Section 11.4 be amended according to the scope of the Qw'utsun Nation led assessment, as per the EAO's requirements for Indigenous led assessments. FortisBC welcomes information from Qw'utsun Nation that will help inform the Project Application, including information from a Qw'utsun Nation led assessment, and looks forward to discussions regarding the assessment and its results.	The EAO will work with QN to capture the LAA scope and process in the Assessment Plan. For the AIR, the EAO asks for feedback from QN on whether there is sufficient information requirements to be captured to inform QN's LAA. If QN anticipates information from the LAA to be included into the proponent's Application, then we would like to capture that in the AIR. Please advise.	QN looks forward to further discussions.		
BAIR-QN-13	7 Mar-22	Qw'utsun Nation	Qw'utsun Nation	Qw'utsun Nation	136	11.1.2.1					The 3rd to last subparagraph should state: "Provide a list of the Indigenous Nations that may be impacted by the project, including asserted or proven Aboriginal rights, and title."		The EAO defines Indigenous interests in Section 11.1 of the AIR, which are defined as "Those interests and related to an Indigenous nation and their rights recognized and affirmed by Section 35 of the Constitution Act 1982, including Treaty rights and Aboriginal Rights and Title, that may be impacted by a proposed Project". For these reasons, a change is not required.	Thank you for this clarification.		
BAIR-QN-14	7 Mar-22	Qw'utsun Nation	Qw'utsun Nation	Qw'utsun Nation	136	11.1.2.1					The last bullet in this section does not address Indigenous nation's economic interests in the project area. Such interests are an incident of aboriginal title and, at least in the case of the Qw'utsun Nation, must be included here	FortisBC proposes that Qw'utsun Nation-specific economic interests be included in the Qw'utsun Nation's section of the AIR (section 11.4) and that this section be amended according to the scope of the Qw'utsun Nation led assessment.	The EAO would like to continue discussions with QN about how to appropriately capture this in Section 11.4 of the AIR, as well as the scope of QN's LAA in the Assessment Plan.	QN looks forward to further discussions.		
BAIR-QN-15	7 Mar-22	Qw'utsun Nation	Qw'utsun Nation	Qw'utsun Nation	138	Table 11-5					As noted earlier, in the case of the QN, the RAA in some cases (particularly economic and socio-economic type VCs) need to be broader than what is proposed, and extend to Southern Vancouver Island and the Gulf Islands. It is not just a factor of traveling to the mainland that needs to be included here.	FortisBC proposes that Qw'utsun Nation-specific assessment areas be included in the Qw'utsun Nation's section of the AIR (Section 11.4), and that the section be amended according to the scope of the Qw'utsun Nation led assessment.	The EAO would like to continue discussions with QN about how to appropriately capture this in Section 11.4 of the AIR, as well as the scope of QN's LAA in the Assessment Plan.	QN looks forward to further discussions.		
BAIR-QN-16	7 Mar-22	Qw'utsun Nation	Qw'utsun Nation	Qw'utsun Nation	139	11.1.5.5					There needs to be clarity on what is meant by "baseline conditions". Is that just today, or pre-disturbance, or some combination thereof?	Baseline conditions in the context of this section includes both historical context, such as the past projects and activities that have/are affecting Indigenous interests, as well as existing conditions of today.		Please clarify in this section that baseline conditions include current conditions and previous disturbance, and that the baseline conditions in this section do not account for the state of the land pre-disturbance.	For clarity, and detailed in the previous answer, yes, in this section the baseline conditions include the current conditions and previous disturbance.	
BAIR-QN-17	7 Mar-22	Qw'utsun Nation	Qw'utsun Nation	Qw'utsun Nation	141	Table 11-2					Generally, this table needs to incorporate the right to benefit from the project lands, which is an incident of Aboriginal title	FortisBC proposes that Qw'utsun Nation-specific potential to benefit from development of lands and resources within the Project area be included in the Qw'utsun Nation's section of the AIR (Section 11.4) and that this section be amended according to the scope of the Qw'utsun Nation led assessment.	The EAO would like to continue discussions with QN about how to appropriately capture this in Section 11.4 of the AIR, as well as the scope of QN's LAA in the Assessment Plan.	FortisBC's comment related to the QN's <u>right</u> to benefit from the project, not the potential to benefit. These are two different discussions. This will be captured in the LAA, however it is important to the QN that Table 11.2 reflect the right to benefit from the project lands and that this concept be integrated into each subject line in Table 11.2	FortisBC proposes for Table 11.2, the Preliminary Potential Effects of the Indigenous Governance Systems Preliminary Indigenous Interest be amended on that "benefit" is added to the second bullet so that it reads: "Effects on the ability to use, develop, benefit and control traditional land, territories and resources"	
BAIR-QN-18	7 Mar-22	Qw'utsun Nation	Qw'utsun Nation	Qw'utsun Nation	151	11.4.4.1					The application should also be informed and incorporate knowledge from relevant evidence, documents and submissions from the ongoing Aboriginal title trial for the lands of Tl'upogus, adjacent to the Project Area. The QN will submit this to Fortis. This shouldn't be limited strictly to "Indigenous knowledge" as that term is defined here.	FortisBC welcomes Qw'utsun Nation's support in identifying Indigenous knowledge and other sources of information, including material related to lands of Tl'upogus, which the Project Application can consider		Please update the language in the Application Information Requirements to reflect FortisBC's response.	EAO has added FortisBC's language into Section 11.4.4. of the AIR.	
BAIR-QN-19	7 Mar-22	Qw'utsun Nation	Qw'utsun Nation	Qw'utsun Nation	152	11.4.5.2					Spill boundaries, where appropriate, should include reserve lands on Vancouver Island of the QNs (for example, in considering socio-economic factors).	FortisBC proposes that the assessment boundaries for the effects on Qw'utsun Nation's Indigenous interests be included in the Qw'utsun Nation's section of the AIR, Section 11.4.	The EAO would like to continue discussions with QN about how to appropriately capture this in Section 11.4 of the AIR.	QN looks forward to further discussions.		
BAIR-QN-20	7 Mar-22	Qw'utsun Nation	Qw'utsun Nation	Qw'utsun Nation	153-154	Table 11-5					The EAO has taken Qw'utsun Nation's submissions and have re-worded them in a way that is in some instances restrictive. This is concerning and should be corrected. <u>Please also track changes in this section</u>		Thank you for your comment. The EAO has updated this table to reflect your changes.	Thank you for these changes. They address our concerns in respect of the changed language in this table.		
BAIR-QN-21	7 Mar-22	Qw'utsun Nation	Qw'utsun Nation	Qw'utsun Nation	154	11.4.5.5					Qw'utsun Nation has raised the issue of its right to redress and compensation under the articles of UNDRIP. Please advise where in the application these will be addressed, since they do not appear to have made it into Table 11.5.		Thank you for your comment. Please advise how to best capture this in Table 11.5.	The provisions around rights to redress are included in QN's 2020 submissions to EAO and is a table in the QN LAA SDV. In accordance with those submissions, please add back the language around rights to redress in the row of table 11-5 dealing with Socio and Economic Conditions, and Indigenous Governance Systems.		The EAO is of the view that the combination of the Application, QN's LAA and the collaborative process between EAO and QN will address this request. The Application will provide the proponent's view on the effects to "The lands, territories and resources which (the Indigenous nation) has traditionally owned or otherwise occupied or used". The EAO will collaborate with QN during the Effects Assessment phase to develop appropriate mitigation and accommodation for Project effects to QN and QN's rights. At the end of this phase, the EAO will seek to hear from QN if it consents to the project. Any notice of consent or lack of consent is required to be considered by provincial decision makers. The EAO recognizes that this is a complex, nuanced issue, and the EAO looks forward to collaboratively working with QN to understand their perspectives on the above provisions.
	17-Sep-21	Transport Canada	Navigation Protection Program	Suman Atwal	40	5.1 - Table 5.1 - Valued Components Selection	Ref pg. F-5-7 (PDF pg. 31) - Under sub-component "Navigation" in Measurable Parameter: TC recommends to add bullet point after "Navigation obstacles" to include: "Impacts to navigation prior to construction, during construction, and during operation of the work"	FortisBC proposes to change "Navigation Obstacles" to "Changes in Navigation Obstacles". FortisBC does not propose to add "Impacts to navigation prior to construction, during construction, and during operation of the work" because this level of detail is too high for Table 5.1 and there are no anticipated obstacles to navigation prior to construction or during operation.	Nov 19 2021	pg 40 Table 5-1	TC recommends replacing "Changes in Navigation Obstacles" with "Impacts to Navigation". The replacement wording would encompass any new impacts as well as changes to any existing obstacles.	EAO does not recommend this change, as the current wording in the AIR "Changes in mooring locations, wake size, changes in navigation scheduling, changes in navigation obstructions" describes the measurable parameters to determine impacts to navigation. In other words, any changes to those four items listed above would result in an impact to navigation.	Transport Canada (TC) suggests "Impacts to navigation" would encompass all potential impacts. TC is concerned that the 4 parameters listed will not cover all impacts to navigation. CNA-SMPA-34864-34864-34864-34864-34864		As stated before, "Impacts to navigation" is too broad to be captured as a measurable parameter. A level of specificity is required here in order for the proponent to measure any changes from existing conditions. The EAO will continue to work with Transport Canada to review the Application, including its predicted effects to navigation.	
	3 Mar-22	Tsil'it Waathut Nation			6.7 - Cumulative Effects Assessment		This section only applies to VCs under Section 7, which misses the downstream effects of Marine Shipping encouraged by the Project, including impacts on Southern Resident killer whales, as well as upstream effects including upstream natural gas development.	There is no shipping proposed for nor incidental to the Project during operation, and the marine shipping required for construction is limited. During construction there will be between six and eight vessels movements to the site. LNG produced by the Project is likely to be loaded for shipping at the Tl'ibay Marine Jetty (TMJ). Potential effects of marine shipping on the lower Fraser River and the Salish Sea incidental to the construction and operation of the Tl'ibay Marine Jetty are being assessed by the BC EAO and RAA. That assessment has been underway since 2015 and is expected to be complete in 2022. The TMJ will be included in the cumulative effects assessment project for the Project. Given the minimal shipping requirements for the Project, FortisBC suggests that no further assessment beyond that proposed in the dAAR is required to determine the potential impacts of project related vessel movements on SRKW."		TWN is in the opinion that the assessment should not have been split. Rather, the assessment should have looked at the lifecycle of LNG from production to transport and analyzed its contribution to carbon emissions at every step of the process: production of natural gas, delivery to a liquefaction plant, liquefaction processing, shipment by vessel, re-gasification, end-use, and storage at several points along the way. Even though the shipping requirements may be considered minimal by the proponent for this project, these should be included in this assessment. As mentioned, these impacts should not rely on the assessment of another project (TMJ), which was deemed a separate EA and is still subject to approval. TWN requests that the scope of the assessment be expanded to include potential impacts from marine shipping as well as downstream and upstream GHG emissions.	The EAO acknowledges TWN's opinion regarding the two projects. Although Tl'ibay Phase 2 and TMJ are considered two separate projects, both are being assessed. TMJ under the EA Act (2003) and Tl'ibay Phase 2 under EA Act (2018). Marine shipping is being assessed for its TMJ project. Tl'ibay Phase 2 will consider the cumulative effects of how the projects will interact with foreseeable future projects and activities, including the activities of TMJ.	TWN requires clarification on how the "Tl'ibay Phase 2 project will consider cumulative effects of how the projects will interact with foreseeable future projects and activities, including the activities of TMJ". TWN reiterates their concern that the scope of the assessment does not include the potential impacts from marine shipping as well as downstream and upstream GHG emissions. TWN requests further discussion with the Proponent and the EAO on how TWN's outstanding concerns can be addressed in the Application Review & Development stage.	As was described in the 2nd workshop held for PHNs and TAC members, the Tl'ibay Marine Jetty's location and its operations have been identified as a "reasonably foreseeable project" for purposes of the cumulative effects assessment. Examples of VCs where the TMJ will be considered include, but are not limited to: Air Quality Noise Fish and fish habitat Wildlife and wildlife habitat	The EAO notes the examples of VCs identified by the proponent of how TMJ effects will be considered in the Tl'ibay Phase 2 cumulative effects assessment. The GHG emissions assessment, including direct, indirect, downstream and upstream emissions, in the dAAR is consistent with provincial and federal policy including the SAC. The EAO notes that downstream assessments are not part of EA due to uncertainties including those noted by the proponent (lack of a standardized assessment methodology and uncertainties with global displacement or incremental consumption). The EAO would like to continue discussing with TWN and FortisBC to understand what information could be provided to satisfy TWN's information needs.		
													Follow-up comment: TWN has outstanding concerns with project siting and cumulative effects, and the scope of the assessment does not include marine shipping (e.g., during construction). Downstream GHG emissions are also not being adequately assessed. Tl'ibay Phase 2 will have a lot of large cargo vessels moving from the Project site to Sand Heads bight during construction. TWN continues to be concerned about the cumulative effects of vessels from other proposed projects (for example, TMJ, Lushan Hanson, QN, and 8872). TWN is in the opinion that vessel movements must be assessed, any additional vessel traffic will impact TWN's cultural health and their rights (see TWN Round 1 comment - row 147).		The EAO also welcomes further discussion with TWN on how TWN's outstanding concerns can be addressed.	Follow-up response: The EAO understands TWN is concerned that construction of the MOF and associated vessel movements is not being assessed. The EAO notes that construction of upgrades to the existing materials offloading facility including large vessels moving modules to the Project site from Sand Heads lights is included as a project activity in the Process Order (addition made based on comments received during Process Planning) and is required to be assessed. This activity is included in the dAAR and will be considered in the assessment of project effects generally and to TWN and TWN's rights.
													TWN has noticed that the EAO has provided similar responses regarding methodological gaps and uncertainties. These do not adequately address some of our concerns. A lack of a standardized assessment methodology and the uncertainties with global displacement or incremental consumption.		The EAO will continue to work with TWN to address this concern.	

	5 Mar 22	Tsleil-Waututh Nation		7.15 – Human Health	TWN is working with the EAO (and will meet with Health Canada and BC MOH) to discuss the HMA guidance document, the Human Health VC and other subcomponents to address non-biophysical aspects of the health assessment. TWN requests to work with the proponent on a methodological framework to address gaps in the guideline to adequately address effects of the project on TWN health.  Although the scope for health has been expanded under the new federal IA Act, the role of the public health sector is not specified.	FortiSBC welcomes the opportunity to engage with Tsleil-Waututh Nation on a methodological framework to address Tsleil-Waututh Nation-identified gaps in the human health risk assessment guidelines to adequately address effects of the project on Tsleil-Waututh Nation health.					TWN would like to see cultural health included as an extension or subcomponent of the Health VC.		The existing considerations under the Human Health VC include air quality, drinking water quality, recreational water quality, noise, soil quality, quality and quantity of country foods and population. The existing considerations under the Culture VC include governance and stewardship systems, customs, beliefs and values, language and intergenerational knowledge transfer, and community, cultural cohesion and continuity. Table 5.1 of the AIR also demonstrates that the two VCs are linked in the assessment. The assessment of both of these VCs would also inform the assessment of effects to indigenous nations and their interests.  Section 25(2) of the Act requires considerations of disproportionate effects on distinct human populations. This is captured under sections 6.3, 6.4, 6.5 and 6.8 of the AIR – the Proponent must identify disproportionate residual effects for diverse groups.  The EAO would like to continue discussions with TWN on how the AIR and TWN's cultural health Indigenous Led Assessment can address their concern.	TWN looks forward to the ongoing consultation on the Cultural Health Indigenous Led Assessment assessment under Section 18(4).  TWN would like clarification on the following questions:  [1] How will TWN's ILA be incorporated in the development of the Application Development & Review and/or Effects Assessment stage?  [2] How will the ILA be used to inform the assessment of Human and Community Well-being effects? i.e. disproportionate effects on distinct human populations and effects on present and future generations, which are required assessment matters under Section 25(2) of the Act?  TWN continues to raise concerns about the EA methodology and limitations of the VC scoping process. This causes TWN to be uninformed in relation to assessing the potential Project effects on the environment and Tsleil-Waututh rights. The purpose of the Process Order is to establish the scope and timing of the EA of the Act. Stating that "the scope of the assessment does not include downstream GHG emissions per the draft Process Order" does not constitute meaningful consultation, as this information was requested by TWN but will not be set out in the Assessment Plan.  TWN requires a full assessment of downstream and upstream GHG emissions, and not a full assessment of GHG emissions. TWN cannot make an informed decision and ensure that the Project does not infringe on TWN's rights.  <b>Follow up comment:</b>  TWN has an outstanding concern that the Project is not adequately assessing downstream GHG emissions. A lack of a standardized assessment methodology and the uncertainties with global displacement is not a sufficient reason for not assessing downstream emissions. The SACC methodology has not yet been applied to any project and is still in question.  As presented now, downstream emissions are not adequately counted in the EA. In TWN's view, it is not acceptable to ignore these emissions simply because there is no standardized assessment methodology (and other reasons provided by the Proponent). First, the consumption of LNG as a fuel rather than coal or diesel is still uncertain. Second, if these emissions are not attributed directly to this specific Project, the Proponent should still include these in their assessment as these emissions will affect air reduction targets.	The EAO would like to continue discussions with TWN about how the ILA can inform and be incorporated into the different EA phases.  [1] The EAO encourages both TWN and FortiSBC to work together during the development of FortiSBC's Application to determine how FortiSBC can best approach the assessment of Human and Community Well-being, including Cultural health. During Application Review, the EAO will ask TWN's advice on the effects assessment of Human and Community Well-being to better understand the potential effects and identify any further mitigations if needed.  [2] Once TWN submits their ILA to the EAO at the beginning of the Effects Assessment phase, the EAO would like to work TWN how best the ILA can inform the EAO's Assessment Report. The ILA will also help inform discussions between TWN, EAO, IAC and FortiSBC regarding mitigation and accommodation measures and what could be captured in proposed provincial and federal legislation.  The EAO suggests that the details on how to incorporate TWN's ILA during the EA process could be captured in a collaboration workshop between EAO and TWN. The EAO looks forward to discussing the approach further with TWN.
	5 Mar 22	Tsleil-Waututh Nation		8 – Climate Change and Greenhouse Gas Emissions	In this version of the dAIR, a requirement to include an estimate of downstream greenhouse gas emissions is not included – please add it.  An assessment of the downstream greenhouse gas emissions from the project should be completed for decision-makers to understand the full impacts of the facility on both domestic and international emissions. The claim that Canadian LNG will offset emissions elsewhere in the world is not able to be verified without this information.	An estimate of downstream greenhouse gas emissions will be included in section 1.7.2 Purpose of the Project. The emissions estimate is tied to a comprehensive economic and technological assessment of the energy market and the potential for LNG to displace other energy sources, such as coal.  Second, in the DPS, the proponent claims that countries like China are shifting their fuel mix away from coal and oil to reduce their country's GHG emissions and improve their air quality and health outcomes. However, the current political and economic context is still uncertain, and Russia is still a primary supplier of gas pipeline LNG to China. LNG imports are not shifting but are supplementing energy full markets. Also, according to studies by the Canadian Energy Research Institute and the Oxford Institute for Energy Studies, LNG export projects in BC are not economically viable at current Asian prices [1]. Please update the scope of the assessment.					TWN is concerned with the proposed emissions estimate. First, the claim that Canadian LNG will offset emissions elsewhere in the world cannot be verified without an estimate of downstream GHG emissions, and Fortis has stated that such assessment would not be required. Please include this estimate in the dAIR so that decision-makers can make an informed decision regarding the full impacts of this proposed project (including domestic and international emissions).  Second, in the DPS, the proponent claims that countries like China are shifting their fuel mix away from coal and oil to reduce their country's GHG emissions and improve their air quality and health outcomes. However, the current political and economic context is still uncertain, and Russia is still a primary supplier of gas pipeline LNG to China. LNG imports are not shifting but are supplementing energy full markets. Also, according to studies by the Canadian Energy Research Institute and the Oxford Institute for Energy Studies, LNG export projects in BC are not economically viable at current Asian prices [1]. Please update the scope of the assessment.		The scope of the assessment does not include downstream GHG emissions per the draft Process Order, provincial and federal policy and requirements including the SACC.  TWN continues to raise concerns about the EA methodology and limitations of the VC scoping process. This causes TWN to be uninformed in relation to assessing the potential Project effects on the environment and Tsleil-Waututh rights. The purpose of the Process Order is to establish the scope and timing of the EA of the Act. Stating that "the scope of the assessment does not include downstream GHG emissions per the draft Process Order" does not constitute meaningful consultation, as this information was requested by TWN but will not be set out in the Assessment Plan.  TWN requires a full assessment of downstream and upstream GHG emissions, and not a full assessment of GHG emissions. TWN cannot make an informed decision and ensure that the Project does not infringe on TWN's rights.  <b>Follow up comment:</b>  TWN has an outstanding concern that the Project is not adequately assessing downstream GHG emissions. A lack of a standardized assessment methodology and the uncertainties with global displacement is not a sufficient reason for not assessing downstream emissions. The SACC methodology has not yet been applied to any project and is still in question.  As presented now, downstream emissions are not adequately counted in the EA. In TWN's view, it is not acceptable to ignore these emissions simply because there is no standardized assessment methodology (and other reasons provided by the Proponent). First, the consumption of LNG as a fuel rather than coal or diesel is still uncertain. Second, if these emissions are not attributed directly to this specific Project, the Proponent should still include these in their assessment as these emissions will affect air reduction targets.	During the 4th Technical Advisory Committee workshop (held on April 5, 2022), the project team presented details about the GHG assessment, including speaking to the downstream assessment that will be conducted and described in the Application. The downstream assessment will examine the reductions in GHG emissions that may be realized through the consumption of LNG as a fuel rather than coal or diesel.  There are several challenges associated with providing a downstream emissions analysis: • Contingent Nature of the Liquefaction (in terms of capacity & timing) • HMC Proportion of the Feedstock (the content of LNG is increasing, and is available to domestic customers) • Global Displacement or Incremental Consumption (how long will current trends in the increased demand for & consumption of coal and crude oil last? How does increased LNG availability reduce demand/growth/displace consumption?) • No Standardized Downstream Assessment Methodology (until the case for Upstream Assessment, no standardized assessment methodology exists. This results in increased likelihood of a lack of alignment.) These will be discussed in the downstream assessment included in the Application.	The GHG emissions assessment, including direct, indirect, downstream and upstream emissions, in the dAIR is consistent with provincial and federal policy including the SACC. The EAO notes that downstream assessments are not part of EA due to uncertainties associated with downstream emissions assessments. The EAO would like to continue discussing with TWN and FortiSBC to understand what information could be provided to satisfy TWN's information needs.  <b>Follow up response:</b>  The EAO understands TWN is concerned that the downstream emission assessment does not meet TWN's information needs to make an informed decision about the project. The EAO suggests a meeting with EAO, ECC, Fortis and TWN to better understand the federal government's information requirements (in the SACC) related to downstream emissions and what information FortiSBC could provide to satisfy TWN's information needs.  The EAO will continue to work with TWN to address this concern.
	5 Mar 22	Tsleil-Waututh Nation		8 – Climate Change and Greenhouse Gas Emissions	Section 7.3.3 of the dAIR states that "fugitive methane emissions are addressed in Section 8" but that is not the case. Please add a requirement that fugitive methane emissions be included in the upstream GHG assessment or in the calculation for net GHG emissions.  Rationale: Over a 20-year time period, methane traps 86 times more heat than the same amount of CO2. Given the urgent timeline required to limit warming to 1.5 degrees Celsius, reducing short-lived, but highly potent greenhouse gases like methane is low hanging fruit to buy humanity more time for hard-to-reduce sectors. Fugitive methane emissions fall within this category. Further, Canada has recently signed the Global Methane Pledge (as of October 12, 2021), in which Canada aims to reduce oil and gas methane emissions by at least 75 percent below 2012 levels by 2030. To accurately track this goal, it is imperative that FortiSBC calculate upstream fugitive methane emissions.	Section 8.1 of the dAIR includes fugitive methane emissions as part of operational direct GHG emissions of the facility. Initial estimates are included in Tables 6.1 and 6.4 of the Detailed Project Description and will be refined and presented as separate line items in the Application. The extent to which upstream GHG emissions are to be assessed will be determined under the Strategic Assessment of Climate Change (SACC) methodology provided in the recently released technical guidelines.					TWN would like further clarification on how climate change will be considered in the assessment. Although the proponent will conduct a SACC, climate or climate change should be included as a separate selected VC. The assessment should consist of the project's contribution to climate change (GHG emissions) and also the impacts of climate change on the project.  The methodology provided by the SACC in the "Draft Technical Guide related to the Strategic Assessment of Climate Change" (Draft Technical Guide) does not adequately address TWN's concern. This methodology (Draft Technical Guide) focuses on the proposed project itself. It does not include the evaluation of project-induced emissions in other parts of the region, or downstream emissions associated with this project (e.g., Tibury Marine Jetty – transportation), which (if approved) could be a cause of downstream emissions. Equally important is the inclusion of indirect and fugitive methane emissions in the upstream GHG assessment or the calculation for net GHG emissions). Please update the scope of the assessment in the Draft Application Information Requirements.	Under Section 25 of the Environmental Assessment Act (2018), the EAO is required to assess a project's GHG emissions and potential impacts of those emissions on the Province being able to meet its legislated emission reduction targets. Per Section 8 of the dAIR (Climate Change and Greenhouse Gases), the proponent is required to conduct its assessment in accordance with the Strategic Assessment of Climate Change (SACC). While GHG emissions are not considered in the VC framework, all Section 25 matters are weighted equally and the EAO has the ability to potentially recommend attaching a condition(s) to an EA Certificate for the management or mitigation of GHG emissions, much like it would for a VC.  Section 10 of the AIR is focused on the effects of the environment on the project, and includes the following bullet points: Describe how climate change might increase the likelihood and severity of the above-mentioned environmental factors; Provide the likelihood (based on future climate change projections) and consequences of the changes or effects to relevant VCs. Describe how climate change has been incorporated into the Project design and planning over the lifetime of the Project and a description of the climate data and projections used.  The scope of the assessment does not include downstream GHG emissions per the draft Process Order, provincial and federal policy and requirements including the SACC.	TWN continues to disagree with the method and scope used in the SACC as it does not include downstream emissions, which must be included to adequately assess GHG emissions.  TWN has noted that the proposed scope of quantifying a project's GHG emissions is problematic. It is limited to direct and upstream emissions to the exclusion of indirect, downstream, full lifecycle emissions. In order for the Strategic Assessment to be effective, it is critical that downstream impacts be assessed (TWN comments: Developing the SACC, September 2018, p. 3).  Without including downstream emissions in the scope of the assessment, TWN cannot make an informed decision, which will be an infringement on TWN's rights and interests.  Please update the scope of the assessment in the Draft Application Information Requirements to ensure meaningful consultation and that the assessment will not infringe on TWN's rights.  <b>Follow up comment:</b>  Without adequately including downstream emissions in the scope of the assessment, TWN cannot make an informed decision, which will be an infringement on TWN's rights and interests.	The GHG emissions assessment, including direct, indirect and upstream emissions, in the dAIR is consistent with provincial and federal policy including the SACC. The EAO notes that downstream assessments are not part of EA due to uncertainties associated with downstream emissions assessments. The EAO would like to continue discussing with TWN and FortiSBC to understand what information could be provided to satisfy TWN's information needs.  <b>Follow up response:</b>  The EAO understands TWN is concerned that the downstream emission assessment does not meet TWN's information needs to make an informed decision about the project. The EAO suggests a meeting with EAO, ECC, Fortis and TWN to better understand the federal government's information requirements (in the SACC) related to downstream emissions and what information FortiSBC could provide to satisfy TWN's information needs.  The EAO will continue to work with TWN to address this concern.	
	9 Mar 22	Tsleil-Waututh Nation		Valued Component Selection Document	Climate Change. As shown in the recent report from Health Canada, the changing climate will exacerbate the health and socio-economic inequalities already experienced by Indigenous people. As described in TWN's Climate Change Vulnerabilities Report, TWN is and will continue to be disproportionately affected by climate change, related sea-level rise, as well as changes in precipitation, temperature and oceanic changes. These hazards further give rise to coastal flooding and erosion, creek flooding and erosion and over land flooding, coastal squeeze and reduction of intertidal areas, ocean acidification, increased risk of forest fire, and from TWN Climate Change Vulnerabilities Report). Thus, TWN is a view that the assessment should include the project's contribution to climate change and the impacts of climate change on the project. Although the proponent will conduct a SACC, climate or climate change should be included as a separate selected VC (table 1 Candidates Valued Components and Sub-components Selection).	Climate change is considered in several areas of the assessment including in the identification of the existing conditions of VCs when examining natural / human-caused trends that may alter a VC. Climate change is also considered in the assessment of cumulative effects. In this instance, FortiSBC will assess how climate change may alter the future conditions of a VC subject to a cumulative effects assessment. The assessment of Climate Change and Greenhouse Gas Emissions is assessed in a similar manner to the VCs identified for the Project through the assessment of potential impacts. The identification of mitigation measures and the application of BAT. The results of this assessment are then interwoven into the assessment of VCs, as appropriate, to holistically capture the potential effects of climate change on the project. The scenarios outlined in Section 10 will account for both the current and future potential impacts, i.e., the potential effects of the climate on the project will assess how that effect may increase as a result of climate change. The EAO would like to see the assessment of climate change on human and community well-being based on the results of the SACC assessment. The EAO would like to see the assessment of climate change on human and community well-being based on the results of the SACC assessment.					Climate Change. As shown in the recent report from Health Canada, the changing climate will exacerbate the health and socio-economic inequalities already experienced by Indigenous people. As described in TWN's Climate Change Vulnerabilities Report, TWN is and will continue to be disproportionately affected by climate change, related sea-level rise, as well as changes in precipitation, temperature and oceanic changes. These hazards further give rise to coastal flooding and erosion, creek flooding and erosion and over land flooding, coastal squeeze and reduction of intertidal areas, ocean acidification, increased risk of forest fire, and from TWN Climate Change Vulnerabilities Report). Thus, TWN is a view that the assessment should include the project's contribution to climate change and the impacts of climate change on the project. Although the proponent will conduct a SACC, climate or climate change should be included as a separate selected VC (table 1 Candidates Valued Components and Sub-components Selection).	Under Section 25 of the Environmental Assessment Act (2018), the EAO is required to assess a project's GHG emissions and potential impacts of those emissions on the Province being able to meet its legislated emission reduction targets. Per Section 8 of the dAIR (Climate Change and Greenhouse Gases), the proponent is required to conduct its assessment in accordance with the Strategic Assessment of Climate Change (SACC). While GHG emissions are not considered in the VC framework, all Section 25 matters are weighted equally and the EAO has the ability to potentially recommend attaching a condition(s) to an EA Certificate for the management or mitigation of GHG emissions, much like it would for a VC.  The EAO is also required to assess potential impacts to distinct populations that may be disproportionately affected by the project. In Section 11 of the dAIR (Summary of Human and Community Well-Being), the EAO requires the proponent to provide an overview of the current state of human and community well-being in the project area from both a local and indigenous nation perspective, as well as describe the potential effects including residual cumulative effects of the project on human and community well-being based on the results of the SACC assessment. The EAO would like to see the assessment of climate change on human and community well-being based on the results of the SACC assessment.	TWN is in the opinion that it is crucial to have Climate Change (including GHG emissions) included in the VC framework (see TWN Round 3 comment). TWN is not confident that Climate Change and the assessment of GHG emissions will be adequately addressed through the SACC. Although it provides background context, it may not be weighed the same way as a VC for the characterisation of residual effects and conclusion regarding the project's potential adverse effects. This could result in insufficient information to determine appropriate mitigation and plans to be included through the EA Certificate conditions.  TWN requires clarification on the following: how will Section 25 of the Environmental Assessment Act (2018) weigh climate change and GHG emissions if they are not considered VCs?  In 2018, TWN reviewed the SACC while it was being developed and provided comments on downstream and upstream emissions and fugitive emissions (see TWN Round 3 comment on page 140).  <b>Follow up comment:</b>  Without adequately including downstream emissions in the scope of the assessment, TWN cannot make an informed decision, which will be an infringement on TWN's rights and interests.  Please see TWN Round 3 comment on page 148.	All assessment matters under Section 25 of the Act are weighed equally. Climate change and GHGs are not captured as VCs for the following reasons: Climate change is cross cutting across several VCs, and incorporates information from several VCs in the assessment, and takes a more holistic approach. Climate change & GHGs will be assessed with the same rigor as VCs. The primary difference is that instead of a significance rating, GHGs will be compared to emission targets.  <b>Follow up response:</b>  The EAO understands TWN is concerned that the downstream emission assessment does not meet TWN's information needs to make an informed decision about the project. The EAO suggests a meeting with EAO, ECC, Fortis and TWN to better understand the federal government's information requirements (in the SACC) related to downstream emissions and what information FortiSBC could provide to satisfy TWN's information needs.  The EAO will continue to work with TWN to address this concern.	
	9 Mar 22	Tsleil-Waututh Nation		Valued Component Selection Document	1) Cultural Health. TWN requires an assessment of community / cultural health as a separate VC or an extension of the Human Health indicator. While many of these components ultimately be assessed in Part C of the application, it will be important to ensure that VCs assessed for the EAO referral report are collected as part of the Health indicators data collection exercise. Possible metrics include but are not limited to changes to biophysical aspects like noise and light. There are also cultural aspects related to traditional practices, sense of place, sense of community, knowledge transmission, well-being, capacity to act as stewards, food security, and both intra- and inter-nation relationships/trade. Health assessments should also reflect the link between consumption of certain traditional foods and culture, how indigenous groups may be disproportionately affected by project-related effects, and how these groups are especially vulnerable to socioeconomic and health impacts from these projects.	FortiSBC is committed to conducting a robust assessment of climate change on human and community well-being based on the results of the SACC assessment. The EAO would like to see the assessment of climate change on human and community well-being based on the results of the SACC assessment.					FortiSBC is committed to conducting a robust assessment of climate change on human and community well-being based on the results of the SACC assessment. The EAO would like to see the assessment of climate change on human and community well-being based on the results of the SACC assessment.		The existing considerations under the Human Health VC include air quality, drinking water quality, recreational water quality, noise, soil quality, quality and quantity of country foods and population. The existing considerations under the Culture VC include governance and stewardship systems, customs, beliefs and values, language and intergenerational knowledge transfer, and community, cultural cohesion and continuity. Table 5.1 of the AIR also demonstrates that the two VCs are linked in the assessment. The assessment of both of these VCs would also inform the assessment of effects to indigenous nations and their interests.  Section 25(2) of the Act requires considerations of disproportionate effects on distinct human populations. This is captured under sections 6.3, 6.4, 6.5 and 6.8 of the AIR – the Proponent must identify disproportionate residual effects for diverse groups.  The EAO would like to continue discussions with TWN on how the AIR and TWN's cultural health Indigenous Led Assessment can address their concern.	TWN looks forward to the ongoing consultation on the Cultural Health Indigenous Led Assessment assessment under Section 18(4).  TWN would like clarification on the following questions:  [1] How will TWN's ILA be incorporated in the development of the Application Development & Review and/or Effects Assessment stage?  [2] How will the ILA be used to inform the assessment of Human and Community Well-being effects? i.e. disproportionate effects on distinct human populations and effects on present and future generations, which are required assessment matters under Section 25(2) of the Act?  TWN continues to raise concerns about the EA methodology and limitations of the VC scoping process. This causes TWN to be uninformed in relation to assessing the potential Project effects on the environment and Tsleil-Waututh rights. The purpose of the Process Order is to establish the scope and timing of the EA of the Act. Stating that "the scope of the assessment does not include downstream GHG emissions per the draft Process Order" does not constitute meaningful consultation, as this information was requested by TWN but will not be set out in the Assessment Plan.  TWN requires a full assessment of downstream and upstream GHG emissions, and not a full assessment of GHG emissions. TWN cannot make an informed decision and ensure that the Project does not infringe on TWN's rights.  <b>Follow up comment:</b>  TWN has an outstanding concern that the Project is not adequately assessing downstream GHG emissions. A lack of a standardized assessment methodology and the uncertainties with global displacement is not a sufficient reason for not assessing downstream emissions. The SACC methodology has not yet been applied to any project and is still in question.  As presented now, downstream emissions are not adequately counted in the EA. In TWN's view, it is not acceptable to ignore these emissions simply because there is no standardized assessment methodology (and other reasons provided by the Proponent). First, the consumption of LNG as a fuel rather than coal or diesel is still uncertain. Second, if these emissions are not attributed directly to this specific Project, the Proponent should still include these in their assessment as these emissions will affect air reduction targets.	The EAO would like to continue discussions with TWN on the Cultural Health Indigenous Led Assessment
	9 Mar 22	Tsleil-Waututh Nation		Valued Component Selection Document	Ecosystem Stability (habitat restoration and resilience). TWN has raised concerns with regard to habitat loss for both terrestrial and marine habitats and has been involved in several fish habitat restoration projects within its territory to protect and re-establish fish populations to a level where they can continue to thrive, particularly in spawning and terminal areas. With the objective of achieving "net" in TWN and other Nations have spent many years and invested millions of dollars in restoring the ecology of the Fraser. However, these restoration efforts are jeopardized by the increasing developments in the area. As suggested by a recent study (Kehner et al., 2020), under a business-as-usual scenario, there is a likely result in the loss of two-thirds of the species in the Fraser estuary in the next 25 years. The use of a current, project-specific baseline fundamentally underestimates the degree of change in the project area, and will continue to be an obstacle to conduct proper assessments of the total cumulative effects. TWN requests that 2) the dAIR includes specifics on baseline surveys, assessment methods, guidelines or standards, use, and 3) an ecosystem stability VC or subcomponent is included in the assessment to adequately address the cumulative impacts of the proposed project on the overall habitat values of the Fraser.	The dAIR includes requirements to include specifics on baseline surveys, assessment methods, guidelines or standards, use under each Valued Component. This information ultimately feeds into Section 12, Summary of Biological Factors that Support Ecosystem Function. Section 12 will consider Project effects on biological factors that support ecosystem function based on the results of the VC assessments, including the Cumulative Effects Assessments. The Cumulative Effects Assessment will address all past, ongoing and reasonable foreseeable developments along with the contribution from the project. Additionally, Section 12 is meant to cover concepts like ecosystem stability. See Section 12 of the dAIR for additional requirements that will be followed in the Application. FortiSBC believes that this section supports the evaluation of ecosystem function by using the information from each Valued Component assessment and therefore should not be considered a single Valued Component.					Under Section 25 of the Environmental Assessment Act (2018), the EAO is required to assess potential impacts to biological factors that support ecosystem function. As outlined in Section 12 of the dAIR (Summary of Biological Factors that Support Ecosystem Function), the EAO requires the proponent to consider Project effects on biological factors that support ecosystem function based on the results of the VC assessments, including the Cumulative Effects Assessments. This process includes identifying positive and negative effects, including adverse cumulative effects, on biological factors that support ecosystem function based on appropriate information from the VC assessments, as well as identifying proposed measures requirements that will be followed in the Application. FortiSBC believes that this section supports the evaluation of ecosystem function by using the information from each Valued Component assessment and therefore should not be considered a single Valued Component.	TWN acknowledges that the EAO requires "the proponent to consider Project effects on biological factors that support ecosystem function based on the results of VC assessments, including cumulative effects assessments" under section 25(2) of the Environmental Assessment Act (2018).  Please clarify how will the EAO assess biological factors that support ecosystem function under section 25 of the EA Act (2018) if the EAO is not using a baseline beyond the project?  TWN requires a pre-contact baseline to assess cumulative effects and follows a net environmental gain/benefit principle rather than "no net loss" for all projects. The net environmental gain principle considers that current conditions throughout the territory are already at a loss compared to pre-industrial times. The Fraser River estuary has reached a tipping point and faces multiple cumulative threats. Regardless of the amount of habitat restoration conducted in the Fraser, any additional project takes away from these efforts.  Currently there is no connectivity among restoration projects in the Fraser and its ecosystem continues to lose healthy habitat. Without adequately addressing VC sensitivity to potential stresses or the combination of stresses, we cannot understand the long-term resilience of the Fraser River Estuary.  TWN cannot make an informed decision without an assessment that adequately addresses the cumulative impacts of the proposed Project on the overall habitat values of the Fraser.	In its assessment of the potential effects of a project to biological factors supporting ecosystem function, the EAO will consider that the current content of the state of the environment including the cumulative effects of past and present projects or activities, and that these cumulative effects will be considered when concluding on the "overall" level of impact to the biological factors supporting ecosystem function. Further, the EAO will consider that where the cumulative effects of past and present activities have negatively affected conditions today, then the EAO's conclusion on effects from a current project on the biological factors supporting ecosystem function would be more serious.		
	15-Feb-22	VFA	Sarah Bidner	2.3			Section 2.3	An Engineer stamped mooring analysis will be needed.				FortiSBC believes that this requirement is inappropriate given the intended use of the Material Offloading Facility. The delivery of materials will take place during high tide windows, barges and vessels will not be moored at the material Offloading Facility for periods beyond the delivery window.	4-Mar-22	The EAO is satisfied that the language in the revised AIR is appropriate to address both the provincial and federal requirements.	
	17-Feb-22	Natural Resources Canada		6-26	6.5.1 Assessing Positive Effects			NRCan requests that the Proponent conduct and include the results of a sensitivity analysis in conjunction with the description of long term trends and market fluctuations. Text below, edit as bold: "Describe how long term trends (for example, changing environment, employment, and technology) and market fluctuations have been considered. Provide the results of a sensitivity analysis where appropriate."				FortiSBC believes that an economic analysis of the nature requested by the Technical Advisor exceeds the information required to assess the effects of the proposed project. We further note that the registered components of this development are already subject to a regulatory review and approval process conducted by the BC Utilities Commission.			
	17-Feb-22	Natural Resources Canada		7-31 to 7-32	7.10.4 Potential Effects			NRCan requests that the following text in bold be added to this section for assessment of economic benefits:  "The Application must describe potential positive and adverse effects to the local, regional, and provincial economies, including whether and how local benefits can be maximized. The economic information provided will be made publicly available and should not contain confidential business information. The assessment must follow the process outlined as follows: 1) An estimate of the anticipated levels of local and regional economic participation in the Project in comparison to the total Project requirements (such as, number of workers and total value of local and regional contracts). The proponent will also: - Provide the information in the context of existing employment rates and economic well-being in the community. - Include a discussion of skilled versus non-skilled labour requirements of the Project including availability and capacity of local workforce and potential for worker shortages in certain sectors within the community. - If applicable, describe plans and rationale for hiring short-term workers to address labor and skill shortages."				FortiSBC rejects the request to add the text in bold. In addition to being more information than is necessary to assess the effects of the Project, the information requested by the Technical Advisor is both confidential and proprietary financial and economic data, which could materially benefit competitors and harm the Proponent's business.  The dAIR includes requirements to include specifics on baseline surveys, assessment methods, guidelines or standards, use under each Valued Component. This information ultimately feeds into Section 12, Summary of Biological Factors that Support Ecosystem Function. Section 12 will consider Project effects on biological factors that support ecosystem function based on the results of the VC assessments, including the Cumulative Effects Assessments. The Cumulative Effects Assessment will address all past, ongoing and reasonable foreseeable developments along with the contribution from the project. Additionally, Section 12 is meant to cover concepts like ecosystem stability. See Section 12 of the dAIR for additional requirements that will be followed in the Application. FortiSBC believes that this section supports the evaluation of ecosystem function by using the information from each Valued Component assessment and therefore should not be considered a single Valued Component.	For the purposes of validating estimates of the impacts of the project on employment, income, GDP and government revenues, information on the amount of spending during high phase of the project, and a breakdown showing the amount of spending in Canada, B.C., and the local area, is required. This information is often provided voluntarily by proponents of major oil and gas projects.  NRCan requests that the following text in bold be added to the end of section 7.10.4: <b>An estimate of project-related spending during each phase of the project (construction, operation, decommissioning) and a geographic breakdown (Canada, B.C., local area)</b>	FortiSBC has added the requested text to the dAIR.	

EAIR-SPN-1	16-Feb-22		Snuwumw First Nation		1-1	1.1 Project Introduction							There appears to be an error in this section which currently references the wrong Project and Provincial and Federal legislation: "The Tilbury Marine Jetty Project, which is currently being assessed under the British Columbia (B.C.) Environmental Assessment Act (B.C. EAA) (2002) and the Canadian Environmental Assessment Act, 2012..."			Thank you for your comment. This bullet is requesting that the Application outline the larger context of developments on Tilbury Island, and the Tilbury Phase 2 Project's relationship to the Tilbury Marine Jetty Project, which is being assessed under the BC Environmental Assessment (2002) and the Canadian Environmental Assessment Act, 2012.			
EAIR-SPN-2	16-Feb-22		Snuwumw First Nation		1-6	1.4 Alternative Means of Carrying out the Project		Section 1.4.4					This section states "The Application must identify and consider alternative means of carrying out the Project that are technically and economically feasible, including the use of Best Available Technologies (BATs), and the potential environmental, economic, social, cultural, and health effects, risks and uncertainties of those alternatives."			Thank you - the text in the AIR was updated to include effects to Indigenous interests.			
EAIR-SPN-3	16-Feb-22		Snuwumw First Nation		2-1	2.4 Indigenous Nation Arrangements							Within an assessment of alternative means of carrying out the Project, the Proponent should be required to also assess potential effects to Indigenous rights and interests, and indicate whether these impacts could be more or less adverse.			Thank you - the AIR has been updated to include further information requirements under Section 11.14. The EAO encourages Snuwumw First Nation to review this updated section to make Snuwumw's interests in relation to the project are adequately captured.	Track changes with suggested edits relating to Snuwumw First Nation's interests have been made in Table 11-15 under Section 11.14 for the EAO's review.	Thank you for your suggested edits. We have updated Table 11-15 in the AIR to capture all of your suggested edits.	
EAIR-SPN-4	16-Feb-22		Snuwumw First Nation		5-7	5 Valued Component Selection Table 5.1							In 2020 Snuwumw First Nation entered into the Reconciliation Implementation Framework Agreement and Land Transfer Agreement with the Province of British Columbia, the purpose of which was to develop a framework for deepening the relationship between the Province and Snuwumw First Nation in ways that recognized Snuwumw's Section 35 rights consistent with UNDRP and DRPA. The Framework Agreement also provisions that the Province and Snuwumw will negotiate to reach agreements on "mechanisms for the cooperative implementation of Snuwumw's Section 35 Rights" (Section 4(6)) of the Framework Agreement). As such, the dAIR must outline requirements that relate impacts to Snuwumw's rights and interests and propose mitigation measures developed in consultation with Snuwumw. These impacts and measures must be assessed by the EAO in the Project's Application, and the Province must uphold the provisions in the Framework Agreement that protect Snuwumw's Section 35 rights and recognize Snuwumw's valid decision-making interests in the Project Area.			The EAO updated the draft Assessment Plan to reflect that Snuwumw First Nation will be conducting a Section 19(4) Indigenous Led Assessment as per the Act. The EAO looks forward to working with Snuwumw First Nation in the development of scope and timing of the Indigenous Led Assessment, to be captured in the Assessment Plan.			
EAIR-SPN-5	16-Feb-22		Snuwumw First Nation		6-23	6 Valued Component Assessment Methods 6.3 Existing Conditions							The Existing Conditions for each VC should, in addition to the description of Indigenous knowledge used in the assessment, consider existing conditions for nations to exercise their rights and interests in the Project area.			The EAO would like to discuss this approach with Snuwumw, especially in regards to Snuwumw's Indigenous Led Assessment.			The EAO has added the following language (in italic) to Section 11.1.2 (Context): The assessment of the effect to Indigenous nations will include an overview of the understanding of Indigenous interests in the area that could be affected by the Project. Information in this section will be developed through engagement with Indigenous nations. The Application must: • Describe the context in which effects of the Project on an Indigenous nation and its rights would occur, including: o Identify the environmental and socio-economic conditions that support the community's meaningful exercise of their rights o A how historic, existing, and reasonably foreseeable future activities have cumulatively affected or could affect the conditions that support or limit the community's meaningful exercise of their rights
EAIR-SPN-6	16-Feb-22		Snuwumw First Nation		6-24 6-26	6 Valued Component Assessment Methods 6.5 Effects Management							Please indicate if there will be any opportunities for Indigenous groups to participate in the development of mitigation measures for all VCs.			The EAO will engage with Indigenous nations on identifying appropriate mitigation measures and developing the draft conditions for an Environmental Assessment Certificate.			
EAIR-SPN-7	16-Feb-22		Snuwumw First Nation		7-4	7.2 Air Quality 7.2.4 Potential Effects							"The assessment of Air Quality must follow the process outlined as follows: ... Provide details of all air quality model configuration, including meteorology, land use, gridded and sensitive receptors, and chemical and physical transformation settings..."		14-Mar-22	FortisBC will elaborate on the use of sensitive human receptors, including Indigenous receptors, in the assessment as applicable and as information becomes available.			
EAIR-SPN-8	16-Feb-22		Snuwumw First Nation		7-7	7.3 Acoustic 7.3.5 Effects Management		n/a					"...the assessment will follow the process outlined as follows: ... describe the locations and characteristics of the most sensitive receptors including human receptors, traditional land use sites, species at risk..."		7-Mar-22	FortisBC agrees that impacts to Indigenous harvesters may be different than those assessed in Section 7.3 and intends to include sensory disturbances such as noise as a potential Project-related change to the experience of practicing harvesting rights in Section 11 of the Application (see table 11-2). FortisBC maintains that this effects assessment can be conducted with the existing proposed acoustic receptors.			
EAIR-SPN-9	16-Feb-22		Snuwumw First Nation		7-19	7.7 Vegetation 7.7.5 Effects Management		n/a					See Comment 7: Receptors specific to Indigenous harvesters will be required in the assessment of effects management for impacts to Acoustic. Indigenous harvesters will have different activity patterns than other human receptors (i.e., earlier hours of activity), and are therefore most accurately represented through their own receptors. The impacts to Indigenous harvesters as a result of acoustic disturbances can be missed in the assessment if grouped under human receptors.		7-Mar-22	FortisBC intends to review and consider mitigation brought forward by Indigenous Nations. As stated in the dAIR, FortisBC proposes that it be required to present mitigation information in a hierarchy along with an analysis. When mitigation measures proposed by Indigenous nations are not technically or economically feasible, FortisBC is to provide rationale as to why. The language in the dAIR follows direction from EAO and IAAC.			
EAIR-SPN-10	16-Feb-22		Snuwumw First Nation		7-22	7.8 Wildlife and Wildlife Habitat 7.8.3 Existing Conditions		n/a					"Describe any revegetation procedures to be implemented as part of the Project, including: ... Revegetation techniques and the locations where they would be implemented; Seed mixes to be used, application rates, and location of application; Fertilizers to be used, application rates and locations, and criteria for determining these specifications; and Contingency planning and seeding plans that include a description of species to be replanted, the locations for replanting and criteria for determining these specifications."		7-Mar-22	FortisBC anticipates that it will be required to prepare and submit the dAIR subsection 7.7.3 Existing Conditions (for Vegetation VC) included similar requirement: Provide information on the use (current and desired future) of local vegetation as a source of country foods (traditional foods) and the presence and abundance of culturally important traditional use species in the Project area, integrating available Indigenous knowledge and information."	7-Mar-22	The dAIR subsection 7.7.3 Existing Conditions (for Vegetation VC) included similar requirement: Provide information on the use (current and desired future) of local vegetation as a source of country foods (traditional foods) and the presence and abundance of culturally important traditional use species in the Project area, integrating available Indigenous knowledge and information."	
EAIR-SPN-11	16-Feb-22		Snuwumw First Nation		7-23	7.8 Wildlife and Wildlife Habitat 7.8.4 Potential Effects		n/a					"As applicable, for each sub-component of Wildlife and Wildlife Habitat VC, the assessment must follow the process outlined as follows: ... Describe the change in mortality risk, including as a result of collision of migratory birds with flaring gas, any Project infrastructure, vessels and vehicles, sensory disturbance and attraction to lighting..."		7-Mar-22	Part 1: FortisBC notes that the Project described in the Detailed project Description includes a Totally Enclosed Ground Flare ("TEGF"). This technology does not have an open flame, and poses no risks to birds. Part 2: FortisBC maintains that the request is addressed with the existing proposed measurable parameters as described in Table 5-1 for Fish and Fish Habitat effects assessment, including: Acoustic environment may be affected by direct in-stream disturbance and within the zone of influence, as measured by: - Sound level, frequency and duration of underwater noise - Vessel strikes measurable parameters include: - Number of vessel strikes.			
EAIR-SPN-12	16-Feb-22		Snuwumw First Nation		7-27 7-28	7.9 Fish and Fish Habitat 7.9.5 Effects Management		n/a					Given that vessel strikes are listed as an Indicator and Measurable Parameter for the Fish subcomponent of the Fish and Fish Habitat VC, a similar requirement should be included under the Fish and Fish Habitat Potential Effects assessment. Snuwumw First Nation suggests the following wording: "Describe the change in mortality risk, including as a result of any Project infrastructure, sensory disturbance, or vessel strikes" It is particularly important to Snuwumw First Nation that such an assessment be completed for Southern Resident Killer Whales ("SRKW")."		7-Mar-22	Part 3: The proposed Project is expected to have limited interactions with Southern Resident Killer Whales (SRKW). An estimated 6 to 8 project barges will be received, and the modules delivered by a small number of barges during construction. Barges will use established navigation channels to travel to and from the proposed Project Site. Given the distance of the proposed Project from SRKW critical habitat (11.6 km) it is unlikely there will be any impacts to SRKW critical habitat features and attributes or SRKW health as a result of the Project.			
EAIR-SPN-13	16-Feb-22		Snuwumw First Nation		7-29	7.9 Fish and Fish Habitat 7.9.7 Cumulative Effects		subsection 7.9.7					"The Application must include an assessment of cumulative effects on freshwater fish following the methods outlined in subsection 6.7 and identify any additional mitigation measures."		7-Mar-22	Fortis acknowledges that the assessment of cumulative effects should include marine and freshwater fish and fish habitat as well. Note that the Fish and Fish Habitat VC includes freshwater and marine fish and fish habitat.			
EAIR-SPN-14	16-Feb-22		Snuwumw First Nation			7.9 Fish and Fish Habitat							"The assessment of Potential Effects specifies that the application must define potential effects to marine and freshwater fish and fish habitat. The assessment of cumulative effects should consistently define cumulative effects to marine and freshwater fish and fish habitat as well."		7-Mar-22	Text in dAIR subsection 7.9.7 has been updated as follows: "The Application must include an assessment of cumulative effects on fish and fish habitat following the methods outlined in subsection 6.7 and identify any additional mitigation measures. The Application must: The proposed Project is expected to have limited interactions with Southern Resident Killer Whales (SRKW). An estimated 6 to 8 project barges will be received, and the modules delivered by a small number of barges during construction. Barges will use established navigation channels to travel to and from the proposed Project Site. Given the distance of the proposed Project from SRKW critical habitat (11.6 km) it is unlikely there will be any impacts to SRKW critical habitat features and attributes or SRKW health as a result of the Project."	7-Mar-22	The EAO understands the assessment of fish includes effects to SRKW's prey populations. The EAO is recommending an addition to the AIR to add the linkage of the fish assessment to SRKW, should the fish assessment identify residual effects to SRKW prey populations. The EAO will continue to work with Indigenous Nations, ECC and FortisBC to develop the requirements for the AIR re: SRKW.	The AIR has been updated with the following bullet under Section 7.9.4 Potential Effects to the Fish and Fish Habitat VC: Potential for direct effects from contaminants on fish and also bioaccumulation of contaminants (such as, selenium, mercury) in fish adjacent to and downstream of the Project. If interactions between legacy contaminants and proposed Project activities are identified and if subsequent changes in water and sediment quality are anticipated, an assessment of potential direct effects to fish and fish habitat (e.g., bioaccumulation effects on fish health and fish-eating marine mammal health, including southern resident killer whales) will be conducted.
EAIR-SPN-15	16-Feb-22		Snuwumw First Nation		7-30 7-31	7.10 Employment and Economy 7.10.3 Existing Conditions							"This section indicates that marine mammals will be assessed under the "Fish and Fish Habitat" VC, as marine mammals are considered fish under the Fisheries Act. As such, there are currently no specific requirements for marine mammals. Of particular concern to Snuwumw First Nation are the SRKW, a nationally and culturally significant species. Living SRKW populations have been described by Elders as analogous to living culture (See the Trans Mountain Pipeline IAC Application for the Trans Mountain Expansion National Energy Board reconsideration of aspects of its OH-02-2012 Report: <a href="https://docs2.ec.gc.ca/nae/nae/nae/fish/2009/2009/04/05052/548311/964726/230287/784457/375178/774555/48802-1_NAB_-_NEB_Reconsideration_Report_-_Reconsideration.pdf">https://docs2.ec.gc.ca/nae/nae/nae/fish/2009/2009/04/05052/548311/964726/230287/784457/375178/774555/48802-1_NAB_-_NEB_Reconsideration_Report_-_Reconsideration.pdf</a> ).		7-Mar-22	FortisBC intends to assess potential project effects on rights held by Indigenous Nations in the Project area in Section 11 of the Project Application.			
EAIR-SPN-16	16-Feb-22		Snuwumw First Nation		7-31	7.10 Employment and Economy 7.10.4 Potential Effects							"The assessment must follow the process outlined as follows: ... The proponent will also: Describe any training or education programs or scholarships the proponent is supporting to enhance employment opportunities for local residents."		14-Mar-22	FortisBC will describe the employment opportunities associated with the Project in the assessment. FortisBC also notes that as a significant employer in the Lower Mainland employment opportunities extend beyond the Project.	Thank you for your response. Snuwumw First Nation wishes to further discuss employment opportunities related to the project with FortisBC and to source avenues for economic benefit and prosperity for Snuwumw members.	Thank you for your feedback. FE will contact Snuwumw First Nation regarding economic opportunities related to the Project.	
EAIR-SPN-17	16-Feb-22		Snuwumw First Nation		7-40	7.13 Archaeological and Heritage Resources 7.13.5 Effects Management							Indigenous groups should be consulted and engaged in the development of mitigation measures for impacts to Indigenous rights and interests related to changes in Archaeological and Heritage Resource sites. The Proponent must engage with Indigenous groups to ensure that nation-specific cultural protocols are being protected and upheld in the event that a significant archaeological or heritage site is identified."		7-Mar-22	FortisBC acknowledges and agrees to this request.	The EAO will engage with Indigenous nations on identifying appropriate mitigation measures and developing the draft conditions for an Environmental Assessment Certificate.		
EAIR-SPN-18	16-Feb-22		Snuwumw First Nation		7-44	7.15 Human Health 7.15.3 Existing Conditions							"As applicable, the Application must: Describe baseline conditions for VCs that are linked to human health, which may include: ..."		7-Mar-22	Fortis confirmed that the linkages listed in Table 5-1 of the dAIR include Cultural VC and Employment and Economy VC. The list of linked VCs in dAIR subsection 7.15.3 has been updated to be consistent with linkages listed in Table 5-1 for human health VC.			
EAIR-SPN-19	16-Feb-22		Snuwumw First Nation		7-46	7.15 Human Health 7.15.4 Potential Effects							Currently the listed linked VCs refer only to environmental or biophysical VCs. The "Air Quality" VC is not included.		7-Mar-22	The EAO would like to work with Snuwumw First Nation on how Snuwumw's Indigenous Led Assessment can capture perceived changes, especially with community members that may use the area.			
EAIR-SPN-20	16-Feb-22		Snuwumw First Nation		9-2	9 Malfunctions and Accidents							"The assessment of potential effects to Snuwumw First Nations community health must specifically include the assessment of real or perceived changes to lake effect pathways that can influence human health."		7-Mar-22	The Application will assess Malfunctions and Accidents and Effects of the Environment on the Project that will speak to the topics listed. FortisBC has an existing emergency response plan for Tilbury LNG Facility, which has been reviewed and approved by various levels of government. This plan will be updated as appropriate to consider the proposed site changes prior to commissioning of the new project components. Relevant government agencies will have the opportunity to review and approve the revised plan.	At what stage of the Project's EA will Indigenous groups be provided the opportunity to review and provide input on FortisBC's emergency response plans? Will FortisBC or the EAO host workshops to review emergency response and notification plans with participating Indigenous nations? Please clarify if Indigenous governments are included in "relevant government agencies"?	FortisBC is supportive of a workshop concept. We will work with the EAO, participating Indigenous nations and TAC on the appropriate timing of such workshops. From EAO's perspective, relevant government agencies should include participating Indigenous nations.	The EAO will continue to work with Snuwumw First Nation and FortisBC on hosting a workshop to review emergency response and notification plans, and the timing of such workshops. From EAO's perspective, relevant government agencies should include participating Indigenous nations.
EAIR-SPN-21	16-Feb-22		Snuwumw First Nation		11-1 11-2	11.2.2 Understanding of Indigenous Interests and Current Context		n/a					"Standard emergency response plans for accidents and malfunctions that are in place for the general public are not always effective for Indigenous groups and harvesters. The proponent must work with Snuwumw to develop the required background information. Further, harvesters must also be considered a contextual population information while collecting background information on Indigenous nations."		7-Mar-22	FortisBC welcomes the opportunity to work with Indigenous Nations to receive and understand Indigenous knowledge that can be incorporated into the Application and support the Assessment.			

dAIR-SPN-22	16-Feb-22			Snuwemuxw First Nation		11-3	11 Indigenous Nations Effects Assessment 11.1.3 Summary of Engagement			N/A					"Provide an analysis of the input received from Indigenous nations with respect to the Project including: • Where and how Indigenous Nations' perspectives were integrated into or contributed to decisions regarding the Project, including: • Development and collection of baseline information • Plans for construction, operation, or decommissioning; and • Identification of VCLs."  Perspectives from Indigenous groups should also include input on mitigation and follow-up measures.	The Summary of Engagement and the Information Requests received to date provide details on the information and input provided by Indigenous groups. Where Indigenous knowledge has been provided or obtained it will be described and incorporated into relevant Valued Components and Section 11 as required.	10-Mar-22						
dAIR-SPN-23	16-Feb-22			Snuwemuxw First Nation		11-5	11.1.5 Assessing Effects on Indigenous Interests 11.1.5.1 Existing Conditions			N/A					As applicable, the Application must: • Describe the nature and extent of known Indigenous interests, including but not limited to: • The historic and current use of the Project site by Indigenous nations over time, including the current use of lands and resources for traditional purposes, and practices in the Project site regarding Indigenous interests..."  The dAIR specifies that the "Project Site" is 7651 Hagecott Road, on Tilbury Island in the City of Delta, BC. However, potential Project-related impacts to Indigenous rights and interests extend beyond the Project site (i.e., preference of use of lands adjacent to the Project site and footprint). As such, the assessment of existing conditions to Indigenous interests should encompass the Local and Regional Assessment Areas as well.  Wake size is listed as a Measurable Parameter under the Navigation subcomponent of the Land and Resource Use VC. Given that the Land and Resource Use VC is linked to Indigenous interests in Table 5-1, an assessment of wake size should be scoped under the assessment of effects to Indigenous Nations from a rights perspective. There is potential for harvesting use around the Project area and access to areas during low and zero tides. Changes in wake size can create impacts to the safety of Indigenous harvesters and navigability while harvesting on the water, as well as impacts to the quality of harvesting preferences and experiences.	As per Section 11.1.5.3 of the dAIR, FortisBC intends to consider the proposed Project footprint, the LAA, and the RAA for each Indigenous Nation as outlined in Table 11-1. As indicated in the table, the LAA will combine the LAAs of VCLs which are linked to the assessment of each Indigenous nation's Indigenous interests and each Indigenous nation's RAA will combine RAAs established for VCLs which are linked to the assessment of Indigenous interests.	7-Mar-22						
dAIR-SPN-24	16-Feb-22			Snuwemuxw First Nation		5-5 and 11-5	5 Valued Components Selection Table 5-1 and 11.1.5 Assessing Effects on Indigenous Interests 11.1.5.6 Potential Effects								Wake size is listed as a Measurable Parameter under the Navigation subcomponent of the Land and Resource Use VC. Given that the Land and Resource Use VC is linked to Indigenous interests in Table 5-1, an assessment of wake size should be scoped under the assessment of effects to Indigenous Nations from a rights perspective. There is potential for harvesting use around the Project area and access to areas during low and zero tides. Changes in wake size can create impacts to the safety of Indigenous harvesters and navigability while harvesting on the water, as well as impacts to the quality of harvesting preferences and experiences.	The potential effects of changes in wake size are noted. However, as project-related shipping will be limited to 4 km project cargo, occurring only during construction, and for which cargo receiving procedures will be developed and implemented, FortisBC does not support including an assessment of wake size in the Application.	7-Mar-22						
dAIR-SPN-25	16-Feb-22			Snuwemuxw First Nation		11-6	11.1.5.6 Potential Effects on Indigenous Interests Table 11-2			Section 11.1.5.6					The Potential Effects Eitel for the Harvesting and Substance Activities Indigenous interest should also include harvesting and substance preferences. Project-related changes to VCLs that alter Indigenous harvesting preferences can increase avoidance behaviours and adversely impact Snuwemuxw First Nation's abilities to exercise their rights and interests. In Table 11-2 under "Harvesting and Substance Activities", this can be re-written to state:  "Changes to the experience and preferences around the practice of harvesting rights and effects on the quality, quantity, and availability of resources..."			This change was made to Section 11.1.5.6		Please elaborate where in section 11.1.5.6 this change was made, as Table 11-2 appears unchanged from the previous draft.		Thank you for your comment and apologies for our error. Table 11-2 has now been updated with Snuwemuxw's proposed changes.	
dAIR-SPN-26	16-Feb-22			Snuwemuxw First Nation		11-7	11.1.5.6 Potential Effects on Indigenous Interests Table 11-2			Section 11.1.5.6					As sensory disturbances are listed as potential effects for the Cultural Use Sites and Areas Indigenous interest, linked VCLs to these interests should also include Air Quality and Acoustics.			This change was made to Section 11.1.5.6		Please elaborate where in section 11.1.5.6 this change was made, as Table 11-2 appears unchanged from the previous draft.		Thank you for your comment and apologies for our error. Table 11-2 has now been updated with Snuwemuxw's proposed changes.	
dAIR-SPN-27	16-Feb-22			Snuwemuxw First Nation		11-7	11.1.5.6 Potential Effects on Indigenous Interests Table 11-2			Section 11.1.5.6					As effects on commercial and non-commercial fishing, hunting, and gathering are listed as potential effects for the Social and Economic Conditions Indigenous interest, linked VCLs to these interests should also include Fish and Fish Habitat, Wildlife and Wildlife Habitat, and Vegetation.			This change was made to Section 11.1.5.6		Please elaborate where in section 11.1.5.6 this change was made, as Table 11-2 appears unchanged from the previous draft.		Thank you for your comment and apologies for our error. Table 11-2 has now been updated with Snuwemuxw's proposed changes.	
dAIR-SPN-28	16-Feb-22			Snuwemuxw First Nation		11-7	11.1.5.6 Potential Effects on Indigenous Interests Table 11-2			Section 11.1.5.6					As effects on air quality, noise, and water quality are listed as potential effects to Indigenous Health and Well-being, linked VCLs should also include Air Quality, Acoustics, Surface Water, Groundwater, and Fish and Fish Habitat.			This change was made to Section 11.1.5.6		Please elaborate where in section 11.1.5.6 this change was made, as Table 11-2 appears unchanged from the previous draft.		Thank you for your comment and apologies for our error. Table 11-2 has now been updated with Snuwemuxw's proposed changes.	
dAIR-SPN-29	16-Feb-22			Snuwemuxw First Nation		11-8	11.1.4								Pursuant to Section 19(4) of the BC Environmental Assessment Act (2018), Snuwemuxw First Nation will complete a stand-alone assessment of potential Project-related impacts to Snuwemuxw rights and interests in to include in the Project Application's Indigenous Nations Effects Assessment. In addition to the methodologies outlined in subsection 11.1, this assessment must also include an assessment of Project-related impacts to Snuwemuxw's Treaty of 1854 rights.	EAO has updated the Assessment plan to reflect that TPN confirms it will complete an Indigenous-led Assessment under Section 19(4) of the EIA Act.							
dAIR-SPN-30	16-Feb-22			Snuwemuxw First Nation		12-1	12								The assessment must follow the process outlined as follows: • Identify proposed measures required to manage potential effects on biophysical factors that support ecosystem function..."  This requirement should also include a summary of input received from Indigenous groups and how this input was incorporated into the development of proposed mitigation measures.	Since the summary in Section 12 includes consideration of Project effects on biophysical factors that support ecosystem function based on the results of the VC assessments, FortisBC intends to include references or cross-references to input received from Indigenous Nations.	7-Mar-22						
dAIR-SPN-31	16-Feb-22			Snuwemuxw First Nation		13-1	13 Summary of Human and Community Well-being								The assessment must follow the process outlined as follows: • Identify any key measures proposed to manage potential effects on human and community well-being"  See previous comments. The identification of mitigation measures should include a summary of input received from Indigenous groups and how this input was incorporated into the development of proposed mitigation measures.	Since the summary in Section 13 includes indicators proposed by each Indigenous Nation, FortisBC intends to include references or cross-references to input received from Indigenous Nations.	7-Mar-22						
dAIR-SPN-32	16-Feb-22			Snuwemuxw First Nation		14-1	14 Summary of Effects on Current and Future Generations								The assessment must follow the process outlined as follows: • Discuss the type(s) of economic growth that would be generated by the Project and how this growth would be distributed, both within the population and over time..."  The examination of economic growth should also include a summary of any potential impacts to Indigenous economic rights, as this can hinder the economic growth and self-sufficiency of an Indigenous nation and their future generations, particularly Snuwemuxw First Nation.	Since the summary in Section 14 includes a discussion of the potential outcome that residual effects to VCLs and Indigenous interests will have on both current and future generations, FortisBC intends to include information from the assessment of the Employment and Economy VC in this section.	7-Mar-22						
dAIR-TPN-1	16-Feb-22	LGL for TPN	p. 5-2	Table 5-1, Surface Water, Sediment quality, Measurable Parameter												TSS and Contaminants are indicated as measurable parameters for the indicators "sediment disturbance" and "Changes in sediment quality relative to baseline conditions". We suggest that sediment particle size be added as a measurable parameter, as the type of substrate is having an impact on fish habitat quality.				The proposed Project does not include any dredging and in-water construction will be temporary (a period up to sixty days), although construction details have not been finalized. As such, any potential sediment disturbance is unlikely to be distinguishable from natural sediment processes in the Fraser River. Localized sedimentation around the Material Offloading Facility (MOF) is considered negligible compared to existing Fraser River processes and therefore change in sediment particle size is not required as a measurable parameter to characterize this negligible effect.		The EAO is satisfied that the language included in the dAIR suffices for the project activities and predicted interactions. The EAO notes that as more information becomes available (e.g., construction details), the EAO will work with Tsawwassen First Nation and FortisBC to determine if further assessment is needed.	
dAIR-TPN-2	16-Feb-22	LGL for TPN	p. 5-4	Table 5-1, Fish and Fish Habitat, Measurable Parameter												Temperature and salinity should be added to the list of Measurable Parameter, under the indicator Water Quality: "Turbidity and/or TSS, pH, dissolved oxygen, potential contaminants of concern".				There is no anticipated discharge from the proposed Project to the Fraser River. Project Site stormwater runoff will be conveyed to the Tilbury Slough via the City of Delta storm sewer. Therefore, the proposed Project is not expected to result in any change in the Tilbury Slough water temperature or salinity. However, temperature and salinity will be added to the list of Measurable Parameters under the indicator Water Quality.		Temperature and salinity have been added as measurable parameters to the Water Quality indicator.	
dAIR-TPN-3	16-Feb-22	LGL for TPN	p. 7-10	7.4.4 Potential Effects											"Describe changes to surface water quality due to effluents from the Project including changes to physicochemical parameters (temperature, pH, salinity, DO, turbidity), chemical constituents (major and minor ions, trace metals, radionuclides, nutrients, organic compounds)"  We recommend adding electrical conductivity and TSS to the list of physicochemical parameters to match the list in section 7.4.3 Existing Conditions.	As there is no discharge to the Fraser River from the proposed Project and only Project Site stormwater runoff will be conveyed to the Tilbury Slough via the City of Delta storm sewer, the proposed Project is not expected to result in any change in the slough TSS or electrical conductivity (EC). However, TSS and EC will be added to the list of physicochemical parameters.					TSS and EC has been added as physicochemical parameters.		
dAIR-TPN-4	16-Feb-22	LGL for TPN	p. 10	VC Draft, Table 2											Fish and fish habitat indicators include visual strikes for marine mammals. Vessel strikes should also be considered for fish (largefish).				Nothing relating to vessel strikes has been updated in Table 2 of the Valued Component section of the dAIR to consider marine mammals and fish.				The EAO would also like to discuss this concept further with TPN.
dAIR-TPN-5	16-Feb-22	LGL for TPN	6-28	6.7 Cumulative Effects											TPN is very interested in seeing a quantitative tracking of anthropogenic changes in land use on Tilbury Island from pre-agricultural times to today, through a post-project scenario. Changes to the amount and quality of fish habitat, wildlife habitat, native plant habitat could be quantified using historic air photos and expert opinion. And while TPN would like to see a cumulative effects assessment of this nature for the entire Tsawwassen Territory, if that is deemed an unreasonable request of a single proponent, then a cumulative effects assessment centered on Tilbury Island may be appropriate here.								
dAIR-TPN-6	16-Feb-22	LGL for TPN	7-29	7.9.4 Potential Effects (Fish and Fish Habitat)												If in-water works are necessary, the Application must: • Potential for direct effects from contaminants on fish... We assume the quote above is missing text at the beginning of the bullet point.						Thank you. This has been revised to the following: ... "Describe the potential for direct effects from contaminants on fish..."	
											</												