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March 30, 2020

Impact Assessment Agency of Canada  
Prairie and Northern Region  
Canada Place  
Suite 1145, 9700 Jasper Avenue  
Edmonton, AB T5J 4C3

**Attention: Barbara Pullishy, Regional Director, Prairie and Northern Region**

Dear Ms. Pullishy:

**Re: NOVA Gas Transmission Ltd. (NGTL) and Foothills Pipe Lines (South B.C.) Ltd. (Foothills)  
Response to Designation Request for the NGTL West Path Delivery 2022, Foothills Zone 8 West Path Delivery 2022, NGTL West Path Delivery 2023, and Foothills Zone 8 West Path Delivery 2023 Projects**

In response to the March 9, 2020 letter from the Impact Assessment Agency of Canada (Agency) NGTL and Foothills enclose their responses, which follows their March 16, 2020 submission.

With respect to the proposed Foothills Zone 8 West Path Delivery 2022 Project, Foothills has determined, based on a recently completed assessment of the system design requirements, that the British Columbia Mainline Loop No. 2 Crowsnest Section identified in the March 16, 2020 letter is no longer required for the proposed project scope.

Should the Agency require any additional information with respect to this filing, please contact the undersigned at (403) 461-6851 or tisha\_homer@tcenergy.com.

Yours truly,

**NOVA Gas Transmission Ltd. and Foothills Pipe Lines (South B.C.) Ltd.**

*Original signed by*

Tisha Homer  
Manager, Regulatory Facilities  
Canadian Natural Gas Pipelines

Enclosures

cc: Ms. L. George, Secretary of the Commission, Canada Energy Regulator  
Dean Cherkas, Director of Consultation, Stoney Tribal Administration

**IR Number:** IAA 1.1

**Category:** Project Designation

**Request:**

In accordance with subsection 9(3) of IAA, and to inform its advice to the Minister, the Agency is requesting that you provide information you have about the Projects, along with relevant documents.

- a) please provide available information regarding potential adverse effects to fish and fish habitat, migratory birds and species at risk; adverse changes to the environment that would occur on federal lands and lands outside Canada; and adverse impacts, resulting from any change to the environment, on Indigenous peoples (e.g., changes to the environment impacting physical and cultural heritage, current use of lands and resources for traditional purposes, and structures, sites or things of historical, archaeological, paleontological or architectural significance) or changes to their health, social or economic conditions; and,
- b) Please also include available information regarding adverse effects (changes to the environment or to health, social or economic conditions) that are directly linked or necessarily incidental to a federal authority's exercise of a power, performance of a duty or function, or provision of financial assistance, that would enable the carrying out of the Project, in whole or in part.
- c) In particular, the Agency requests available information regarding:
  1. Information about key project activities, maps and layouts of the location of project components, land tenure, zoning, and estimated timelines for planning, construction, operation, decommissioning and abandonment.
  2. A list of all regulatory approvals (federal, provincial, municipal, other) and any federal financial assistance that would be required for the Project and the associated project components or activities
  - 3a. For each regulatory approval that would be required, please provide the following information:
    - i. Name of the licence, permit, authorization or approval, the associated legislative framework, and the responsible jurisdiction.

- ii. Whether it would involve an assessment of any of the effects outlined in the paragraphs above, and if so, a general description of the assessment that you intend to undertake. Would conditions be set and if yes, what effects would those conditions address?
    - iii. Whether public and/or Indigenous consultation would be required and if yes, provide information on the approach you intend to take (if any steps have been taken, please provide a summary, including issues raised as well as your responses).
  - 3b. Identify whether any licence, permit, authorization or approval listed above would address any of the following matters:
    - i. Aboriginal rights and capacity funding.
    - ii. If yes, discuss, in general, the benchmarks or standards that you intend to meet (or would be expected to meet)
    - iii. If the Project is anticipated to result in permanent changes or cumulative effects, how you intend to manage those impacts
4. For all federal licences, permits, authorizations, approvals, and/or financial assistance that may be provided for the Project, describe any anticipated adverse direct or incidental effects (including changes to health, social and economic conditions) that may occur as a result
5. What steps have you taken to consult with the public? What steps do you plan to undertake during all phases of the Project? Are you aware of any public concerns in relation to this project? If yes, provide an overview of the key issues and the way in which (in general terms) you intend to address these matters?
6. What steps have you taken to consult with Indigenous communities? What steps do you plan to undertake during all phases of the Project? Are you aware of any Indigenous community concerns in relation to this project? If yes, provide an overview of the key issues and the way in which (in general terms) you plan to address these matters?

7. Do you have any other comments in relation to environmental effects or impacts to the public or Indigenous peoples and how you intend to address and manage those?
8. Explain your views on whether the Project should be designated under IAA

**Response:**

- a) While NOVA Gas Transmission Ltd. (NGTL) and Foothills Pipe Lines (South B.C.) Ltd. (Foothills) expect the effects to be similar to other projects completed of similar scope and scale, the requested information is not available at this time because the Environmental and Socio-economic Assessments (ESAs) for each project have not been completed. NGTL and Foothills are preparing ESAs to support their respective project applications to the Canada Energy Regulator (CER). Each project ESA is currently in different stages of development. As part of the development of the ESAs, NGTL and Foothills are creating project-specific Environmental Protection Plans (EPPs), which will be adhered to during construction of the proposed pipelines and facilities. Both the ESAs and the EPPs incorporate information from site-specific biophysical surveys and input from stakeholders (landowners, provincial agencies etc.) and Indigenous groups through traditional knowledge information sharing. Please see examples of mitigation included in an ESA used for a previous CER Project in 2019 (Attachment 1-Edson Mainline Expansion Project ESA).
- b) As noted above, NGTL and Foothills are in the process of assessing potential adverse effects for the proposed projects and will employ standard and well understood mitigations that have been developed by the pipeline industry for all potential effects as a result of the proposed projects. The projects are not anticipated to have any impacts that affect any federal agency's exercise of a power, performance of a duty or function in evaluating the projects. There may be effects on matters under federal jurisdiction, and these will be assessed in the ESAs and other application materials that are not being developed to meet CER filing guidelines. There is no federal financial assistance required for any part of these projects.
- c)
  1. Please refer to the project information submitted by NGTL and Foothills by letter addressed to Minister Wilkinson, Environment and Climate Change Canada, dated March 16, 2020 and Part 1 of the response sent on March 16, 2020.
  2. See Attachments 2 through Attachment 5 for a list of regulatory approvals that are required for each project. As noted above, neither NGTL nor Foothills requires federal financial assistance for these projects. The Attachments are in a standard format, and as a result, NGTL and Foothills have noted in the respective tables where a particular permit is not anticipated to be required for a project.

3. a. and b.

See Attachments 2 through 5 for tables detailing the requested information regarding licences, permits, authorizations/approvals, legislative framework, and jurisdictions.

4. Please refer to the response to a).

5. Initial engagement with potentially affected landowners and occupants with respect to the proposed projects began in August 2019 to obtain survey access for preliminary investigations of the area(s). As NGTL and Foothills progress project design and scope, early engagement and understanding of stakeholder concerns and feedback is gathered and incorporated into project planning.

Public engagement for the proposed projects began more fully in November 2019, when project information was distributed to potentially affected stakeholders. Engagement to date has included one-on-one meetings with potentially affected landowners, occupants and stakeholders to review project specifics. NGTL and Foothills have held meetings and presentations with respective government agencies within proximity to each project and open houses have been held as shown in Table IAA 1.1-1.

**Table IAA 1.1-1: Open House Details**

<b>Location</b>	<b>Project</b>	<b>Date</b>
Longview, AB	NGTL 2023	December 10, 2019
Turney Valley, AB	NGTL 2023	December 11, 2019
Cranbrook, B.C.	Foothills 2022 Foothills 2023	December 16, 2019
Yahk, B.C.	Foothills 2022	December 17, 2019
Sparwood, B.C.	NGTL 2022 Foothills 2022 Foothills 2023	December 18, 2019
Fernie, B.C.	NGTL 2022 Foothills 2022 Foothills 2023	December 19, 2019
Caroline, AB	NGTL 2022	January 9, 2020

The approach to ongoing consultation and engagement with stakeholders and landowners is designed to inform and to address issues or disputes to reach a mutual resolution or mitigate effects. The preferred method for addressing the concerns of stakeholders and landowners is through direct and respectful discussion to promote mutual resolution and positive interest-based outcomes. Issues received or identified during these discussions are systematically tracked and followed up on throughout the engagement process to project completion and

continues through operation. Tables IAA 1.1-2 through 1.1-5 identify project-specific concerns that were identified by stakeholders, as well as NGTL or Foothills' response, which span the issues typically raised and addressed for this type project.

**Table IAA 1.1-2: Foothills Zone 8 West Path Delivery 2022**

<b>Stakeholder Questions or Concerns</b>	<b>Status of Resolution</b>
Survey Access and Timing	Foothills has confirmed the lands required for survey access and is in the process of conducting discussions for the timing of surveys.
Damage to trees, Removal of trees	Foothills is finalizing the project footprint and will continue to engage with the landowner(s) to quantify impacts on trees and investigate mitigations if required.
Business interruption, insurability	Foothills will continue its engagement to learn more about the concern and mitigate as required once the final route and schedule has been established.
Impact to property value / subdivisions	Foothills is finalizing the project footprint, as well as land valuations / appraisals and will meet with landowners regarding appropriate compensation when the necessary inputs are finalized.
Weed control	Foothills will continue to engage with landowner(s) regarding standard mitigations for weed control management incorporated in the project's EPP.
Increased traffic during construction	Foothills will continue to engage and address this concern under standard construction procedures and associated Traffic Accommodation and Management Plans.

**Table IAA 1.1-3: NGTL West Path Delivery 2022**

Description of Issue	Status of Resolution
Post-construction reclamation concerns	NGTL continues to engage with stakeholders to understand and discuss reclamation concerns and follow up with appropriate construction / reclamation mitigations, if required.
Drainage	Portions of the pipeline have been rerouted to avoid impacting natural drainage.
Access to water during construction	NGTL has rerouted portions of the pipeline to avoid impacting dugout access.
Damage to trees, Removal of trees	NGTL is finalizing the project footprint and will continue to engage with the landowner(s) to quantify impacts on trees and investigate mitigations if required.
Weed control	NGTL will continue to engage with landowner(s) regarding standard mitigations for weed control management incorporated in the project's EPP.
Vehicle access during construction	NGTL is finalizing the project footprint and will continue to engage with the landowner(s) once access requirements have been finalized.
Pipeline routing	NGTL has gathered routing preferences and feedback from stakeholders and is incorporating feedback into project planning. NGTL will continue to engage with stakeholders as routing decisions are finalized.
Impact to waterbodies	NGTL is continuing to gather and delineate aquatics survey information and is incorporating results into project planning. NGTL will continue to engage with stakeholders and share site specific mitigations as information becomes available to NGTL.
Impact to natural springs / water wells	NGTL is planning to conduct geotechnical analysis on the pipeline routes which will provide further clarity on potential impact to water wells and springs. NGTL will follow up with landowners when geotechnical information is available.
Compensation concerns	NGTL is finalizing the project footprint, as well as land valuations / appraisals. NGTL will meet with landowners regarding appropriate compensation when the necessary inputs are finalized.

**Table IAA 1.1-4: NGTL West Path Delivery 2023**

Description of Issue	Status of Resolution
Damage to trees, Removal of trees	NGTL is finalizing the project footprint and will continue to engage with the landowner(s) to quantify impacts on trees and investigate mitigations if required.
Impact to wildlife habitat	NGTL is finalizing wildlife survey results and the project EPP. NGTL will continue to engage with landowner(s) to understand their concerns and investigate mitigations if required.
General construction disturbances	NGTL is finalizing the project footprint and will continue to engage with the landowner(s) to understand their concerns and investigate mitigations if required.
Impact to waterbodies	NGTL is continuing to gather and delineate aquatics survey information and is incorporating results into project planning. NGTL will continue to engage with stakeholders and share site specific mitigations as information becomes available to NGTL.
Compensation concerns	NGTL is finalizing the project footprint, as well as land valuations / appraisals. NGTL will meet with landowners regarding appropriate compensation when the necessary inputs are finalized.
Admixing soils	NGTL is finalizing regionally specific soil handling procedure for both construction and reclamation and will follow up with landowners once information is available.
Pipeline routing	NGTL has gathered routing preferences and feedback from stakeholders and is incorporating feedback into project planning. NGTL will continue to engage with stakeholders as routing decisions are finalized.
Disruption to grazing operations	NGTL will continue to engage with landowner(s) and occupants regarding potential impacts to grazing operations and provide mitigations if necessary.
Crop loss	NGTL is finalizing the project footprint and will meet with landowners regarding appropriate compensation when the necessary inputs are finalized.
Concerns with ROW size	NGTL is finalizing the project footprint and will continue to engage with the landowner(s) to understand their concerns and investigate mitigations if required.
Proximity to residences	NGTL is finalizing the project footprint and will continue to engage with the landowner(s) to understand their concerns and investigate mitigations if required.
Impact to natural springs / water wells	NGTL is planning to conduct geotechnical analysis on the pipeline routes which will provide further clarity on potential impact to water wells and springs. NGTL will follow up with landowners when geotechnical information is available.

**Table IAA 1.1-4: NGTL West Path Delivery 2023 (cont'd)**

Business interruption	NGTL is finalizing project details and construction schedules and will continue to engage with the landowner(s) to understand their concerns and investigate mitigations if required.
Weed control	NGTL will continue to engage with landowner(s) regarding standard mitigations for weed control management incorporated in the project's EPP.
Hiring of local contractors	NGTL is continuing to gather local contractor information for distribution to the prime contractors once awarded
Post-construction reclamation concerns	NGTL continues to engage with stakeholders to understand and discuss reclamation concerns and follow up with appropriate construction / reclamation mitigations, if required.
Impact to irrigation	NGTL is finalizing the project footprint and will continue to engage with the landowner(s) to understand their concerns and investigate mitigations if required.

**Table IAA 1.1-5: Foothills Zone 8 West Path Delivery 2023**

<b>Description of Issue</b>	<b>Status of Resolution</b>
Survey Access and Timing	Foothills has confirmed the lands required for survey access and is in the process of conducting discussions for the timing of surveys.
Damage to trees, Removal of trees	Foothills is finalizing the project footprint and will continue to engage with the landowner(s) to quantify impacts on trees and investigate mitigations if required.
Business interruption, insurability	Foothills will continue its engagement to learn more about the concern and mitigate as required once the final route and schedule has been established.
Impact to property value / subdivisions	Foothills is finalizing the project footprint, as well as land valuations / appraisals and will meet with landowners regarding appropriate compensation when the necessary inputs are finalized
Weed control	Foothills will continue to engage with landowner(s) regarding standard mitigations for weed control management incorporated in the project's EPP.
Impact to business operation	Foothills will continue its engagement to learn more about the concern and mitigate as required once the final route and schedule has been established
Increased Traffic during construction	Foothills will continue to engage and address this concern under standard construction procedures and associated Traffic Accommodation and Management Plans.
Concerns with ROW size	Foothills is finalizing Project footprint and will continue to engage with the landowner(s) to understand their concerns and investigate mitigations if required

6. The Indigenous engagement program that will be used by NGTL and Foothills for each of the proposed projects is guided by a corporate Indigenous Relations Policy, which is attached as Attachment 6-Indigenous Relations Policy.<sup>1</sup> The design of the corporate engagement program is consistent with the CER’s guidance on proponent consultation as set out in its Filing Manual.<sup>2</sup>

The Indigenous engagement program for each project is designed to foster productive dialogue and exchange of information with potentially affected Indigenous groups interested in the projects. The program is developed and adapted according to the nature, location and potential effects of each project, and to the interests, information needs and concerns of Indigenous groups. While the underlying principles remain the same, the scope and depth of engagement may vary according to the potential for project-related effects and the identified interests of each Indigenous group. NGTL and Foothills strive to meet this goal by:

- establishing a practical approach for the implementation of project-specific engagement activities
- initiating engagement activities as soon as possible in the planning of the projects
- providing clear, relevant and timely information to potentially affected Indigenous groups
- responding to concerns raised and commitments made during engagement activities

Engagement with the Indigenous groups initially included notification and provision of project information for each project for review, as applicable to each Indigenous group’s interests and location. The initial project notification packages providing notice of NGTL and Foothills’ intent to file Section 214 and Section 182 applications with the CER were sent to potentially affected Indigenous groups on the dates provided, as per Table IAA 1.1-6.

**Table IAA 1.1-6: Indigenous Engagement Project Notification Dates**

<b>Indigenous Community</b>	<b>Notification Date for Foothills 2022</b>	<b>Notification Date for NGTL 2022</b>	<b>Notification Date for Foothills 2023</b>	<b>Notification Date for NGTL 2023</b>
Alexander First Nation	N/A	November 7, 2019	N/A	N/A

<sup>1</sup> NGTL and Foothills are subsidiaries of TransCanada PipeLines Limited, an affiliate of TC Energy Corporation. In this context, corporate materials that apply across all subsidiaries are held under the TC Energy name.

<sup>2</sup> NEB Filing Manual (National Energy Board, 6 January 2020 Update), p 3-3 to 3-11.

**Table IAA 1.1-6: Indigenous Engagement Project Notification Dates (cont'd)**

<b>Indigenous Community</b>	<b>Notification Date for Foothills 2022</b>	<b>Notification Date for NGTL 2022</b>	<b>Notification Date for Foothills 2023</b>	<b>Notification Date for NGTL 2023</b>
Blood Tribe	November 6, 2019	November 7, 2019	November 6, 2019	November 7, 2019
Ermieskin Cree Nation	N/A	November 7, 2019	N/A	N/A
Enoch Cree Nation	N/A	December 5, 2019	N/A	N/A
Foothills Ojibway Society	N/A	November 7, 2019	N/A	December 4, 2019
Louis Bull Tribe	N/A	November 7, 2019	N/A	N/A
Montana First Nation	N/A	November 7, 2019	N/A	N/A
Mountain Cree (Smallboy Camp)	N/A	November 7, 2019	N/A	N/A
Nakowinewak Nation of Canada	N/A	November 7, 2019	N/A	December 4, 2019
O'Chiese First Nation	N/A	November 7, 2019	N/A	N/A
Piikani Nation	November 6, 2019	November 7, 2019	November 6, 2019	November 7, 2019
Samson Cree Nation	December 5, 2019	November 7, 2019	November 6, 2019	November 7, 2019
Siksika Nation	November 6, 2019	November 7, 2019	November 6, 2019	November 7, 2019
Stoney Nakoda Nations (Bearspaw, Chiniki and Wesley)	N/A	November 7, 2019	December 5, 2019	November 7, 2019
Sunchild First Nation	December 5, 2019	November 7, 2019	N/A	N/A
Tsuut'ina Nation	November 6, 2019	November 7, 2019	December 5, 2019	November 7, 2019
Métis Nation of Alberta	November 6, 2019	November 7, 2019	N/A	November 7, 2019
Métis Nation of Alberta Region 3	November 6, 2019	November 7, 2019	N/A	N/A
Akisiq'nuk First Nation	November 6, 2019	February 6, 2020	November 6, 2019	November 7, 2019
Ktunaxa Nation Council	November 6, 2019	February 6, 2020	November 6, 2019	November 7, 2019
Lower Kootenay First Nation	November 6, 2019	February 6, 2020	November 6, 2019	November 7, 2019
Qwelmintec Secwepemc	November 6, 2019	February 6, 2020	November 6, 2019	N/A

**Table IAA 1.1-6: Indigenous Engagement Project Notification Dates (cont'd)**

<b>Indigenous Community</b>	<b>Notification Date for Foothills 2022</b>	<b>Notification Date for NGTL 2022</b>	<b>Notification Date for Foothills 2023</b>	<b>Notification Date for NGTL 2023</b>
Adams Lake Indian Band	December 5, 2019	February 6, 2020	December 5, 2019	N/A
Shushwap Indian Band	November 6, 2019	February 6, 2020	November 6, 2019	N/A
Little Shuswap Lake Indian Band	December 5, 2019	February 6, 2020	December 5, 2019	N/A
St. Mary's Indian Band	November 6, 2019	February 6, 2020	November 6, 2019	November 7, 2019
Tobacco Plains Indian Band	November 6, 2019	February 6, 2020	November 6, 2019	November 7, 2019
BC Métis Federation	November 6, 2019	N/A	November 6, 2019	N/A
Métis Nation BC	November 15, 2019	N/A	November 15, 2019	N/A
Métis Nation BC - Region 4	November 6, 2019	N/A	November 6, 2019	N/A

NGTL and Foothills included the following material with each project notification package:

- Project introduction letter, including project Fact Sheet and overview maps
- TC Energy brochure: Indigenous Relations Policy
- TC Energy brochure: Engaging with our Stakeholders
- TC Energy brochure: Your Safety, Our Integrity
- TC Energy brochure: Contracting and Employment
- CER brochure: Information for Proposed Pipeline or Power Line Projects That Do Not Involve a Hearing

Following the initial project notification and preliminary discussions, NGTL and Foothills have and will continue to implement a wide range of activities and communication tools to engage Indigenous groups for each proposed project. Communication tools have included, but will not be limited to:

- distribution of regulatory notifications (filings made with the CER)
- sharing of project maps, shapefiles, kmz (Google Earth) files
- distribution of updated fact sheets and brochures as applicable

Engagement activities on the Projects have and will include, but will not be limited to:

- presentations, open houses
- face-to-face meetings
- email, telephone calls, text messages
- map reviews
- site visits
- sharing of Traditional Knowledge (TK), including incorporation of TK input into Project planning from studies conducted by potentially affected Indigenous groups
- review of community-specific TK literature review results
- discussions on contracting, employment, education and training opportunities
- community investment (refer to Community Legacy section below for further details)

NGTL and Foothills will work with each potentially affected Indigenous group to identify areas of interest and opportunity for engagement. Engagement in project activities may include gathering of TK, education and training, community investment, and contracting and employment. These opportunities are described below.

Potentially affected Indigenous groups for each proposed project have been, and will continue to be, provided with project updates, as required or relevant, noting what updates were made to the project scope since the initial notification. Indigenous groups being engaged on each project were also notified of the public Project Open Houses for the NGTL West Path Delivery 2022 and Foothills West Path Delivery 2022 projects that occurred in late 2019.

In February 2020, Indigenous groups being engaged for each proposed project were sent an email pertaining to the Indigenous Rights assessment requirements set out by the CER.<sup>3,4</sup> The email explained that because of the assessment factors introduced by the CER Act and the CER's Interim Filing Guidance in August 2019, NGTL and Foothills were seeking information regarding the potential project-related impacts on the rights of Indigenous peoples commensurate with the scope and scale of each proposed project. Foothills and NGTL requested each Indigenous group's input on the following (new assessment factors under the CER):

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<sup>3</sup> *Ibid.*

<sup>4</sup> Canada Energy Regulator (CER) Early Engagement Guide.

1. Describe the Indigenous and Treaty rights that your community exercises or practices in the Project area.
2. Describe the existing conditions, concerns, limitations or benefits regarding any aspects of the exercise of Indigenous and Treaty rights in the Project area.
3. Provide your community's views on how the Project may affect the ability to exercise or practice Indigenous and Treaty rights in the Project area, including any differences in the potential effects on diverse or specific groups of people within the community.
4. Provide any recommendations on how Foothills and NGTL may avoid, reduce or eliminate potential adverse effects of the Project on the exercise of Indigenous and Treaty rights in the Project area.
5. Provide suggestions on how Foothills and NGTL may enhance or support the exercise of Indigenous and Treaty rights in the Project area.

For the 2022 Foothills and NGTL West Path Delivery projects, Foothills and NGTL also communicated that, in developing the ESA for each project, publicly available information sources are reviewed, such as publicly released TK studies related to past projects in the area, regulatory filings for similar types of resource development projects, and community websites for information regarding the communities Indigenous and Treaty rights, and how they are exercised or practiced in the project areas. It was also noted that the information had been compiled into a community specific literature review document. Foothills and NGTL requested that Indigenous groups confirm the information was accurate, or if it was not, provide any changes and identify additional sources of information relating to the communities' exercise or practice of Indigenous and Treaty rights the community would like considered in each project's ESA. The same approach will be used on the Foothills and NGTL West Path 2023 projects, but to date, the community-specific literature review documents have not yet been developed.

In addition to the above, NGTL and Foothills have met with Indigenous groups in person and have shared additional information via email and telephone calls to understand each community's specific capacity and resourcing needs. NGTL and Foothills will continue to work with interested Indigenous groups to develop project-specific work plans, budgets and formal agreements as appropriate, to facilitate engagement activities to be conducted for each proposed project. Each Indigenous group may have different processes or means of gathering and sharing information. NGTL and Foothills tailor their approaches to gathering information from Indigenous groups to meet a community's specific needs, and

where appropriate provide reasonable resources to support participation in the project's engagement activities.

### **Sharing of Traditional Knowledge (TK)**

NGTL and Foothills will work with potentially affected Indigenous groups to collect and incorporate TK into project planning, as appropriate. NGTL and Foothills understands TK to be knowledge held and contributed to by a group of people through generations of living in close contact with nature. It may consist of traditional ecological knowledge (TEK) and traditional land use (TLU) and forms part of a larger body of information which encompasses knowledge about cultural, environmental, economic, political and spiritual inter-relationships, which is typically identified by, and gathered through, engagement with Indigenous groups. Through the collection of TK with interested groups, NGTL and Foothills seek to:

- identify and consider potential adverse effects of the project on the current use of lands and resources for traditional purposes
- incorporate TK in project planning
- identify concerns about the project
- propose measures to avoid, mitigate or otherwise manage potential adverse project effects on Indigenous interests and rights.

In addition to receiving TK through ongoing engagement, NGTL and Foothills will provide participating Indigenous groups the opportunity to collect project-specific TK independently or facilitated by the support of environmental consultants to meet a group's specific needs.

NGTL and Foothills will collect and assess information resulting from each project's Indigenous engagement programs, publicly-available literature, and completed TK studies. This information will be integrated into the overall ESA created for each project and will be considered in the identification of effects pathways and potential effects for TLRU as well as for relevant biophysical elements (e.g., wildlife, fisheries, and vegetation), given the close connection to TLRU (i.e., traditional species harvested, and other resources required for TLRU activities). Further, the mitigation that will be developed for each project will be described in detail in the ESAs and the project-specific EPPs, and will be developed after considering available TK and, where appropriate, incorporated into project planning. Consideration of this information will include, but not be limited to, evaluating whether NGTL and Foothills' planned mitigations would effectively manage the identified potential interactions, or whether additional or refined mitigation would be warranted. NGTL and Foothills are committed to ongoing engagement, which will include continuing to address questions and

concerns from Indigenous groups throughout all phases of the projects, should any arise.

### **Responding to Questions or Concerns**

All questions or concerns identified by Indigenous groups during engagement activities are recorded and responded to by NGTL and Foothills. As part of preparing a response, questions or concerns will be shared with the appropriate projects' technical specialists or designated environmental consultant. Once a response or resolution is developed, it is provided to the Indigenous group for further comment or dialogue. NGTL and Foothills seek to work collaboratively with Indigenous groups to address project-related questions or concerns and to provide information on how their input may influence project design changes. The mitigation measures identified for each project will be developed by NGTL and Foothills in collaboration with Indigenous groups during engagement activities for the applicable project. NGTL and Foothills will discuss with Indigenous groups the proposed measures to avoid, mitigate or otherwise manage potential effects of the project and to address or respond to questions or identified concerns. The outcomes of these efforts will be considered for incorporation in project planning, as appropriate, and reported in regulatory filings.

To date, the following concerns have been communicated to NGTL and Foothills related to the NGTL and Foothills West Path Delivery 2022 projects, as outlined in the Project Notifications submitted to the CER, included below in Tables IAA 1.1-7 through 1.1-10.<sup>5</sup> At this stage in the engagement process, NGTL and Foothills are continuing to work with Indigenous groups to learn more about concerns and will follow up with appropriate mitigations. To date, NGTL and Foothills have received feedback on the following issues, typical for these types of project.

**Table IAA 1.1-7: Indigenous Community Feedback - NGTL West Path Delivery 2022**

<b>Description of Question/Concern</b>	<b>Status of Resolution</b>
Cumulative effects	NGTL will continue to engage with Indigenous Groups to learn more about concerns and follow up with appropriate mitigations.
Project Splitting	NGTL has explained the independent commercial needs, system design drivers, and in-service timing for the different projects proposed by NGTL.
Potential interaction with traditional land and resource use sites, areas and resources (i.e., hunting, fishing, plant harvesting, camping)	NGTL will continue to engage with Indigenous groups to learn more about concerns and follow up with appropriate mitigations.

<sup>5</sup> Project Notifications filed March 3, 2020 (Foothills - CER Filing ID:C04968-1; NGTL - CER Filing ID: C04970-1).

**Table IAA 1.1-7: Indigenous Community Feedback - NGTL West Path Delivery 2022 (cont'd)**

Description of Question/Concern	Status of Resolution
Water pollution	NGTL will continue to engage with Indigenous groups to learn more about concerns and follow up with appropriate mitigations.
Air pollution	NGTL will continue to engage with Indigenous groups to learn more about concerns and follow up with appropriate mitigations.
Access to undisturbed areas for the exercise of Indigenous and Treaty rights	NGTL will continue to engage with Indigenous groups to learn more about concerns and follow up with appropriate mitigations.

**Table IAA 1.1-8: Indigenous Community Feedback - Foothills Zone 8 West Path Delivery 2022**

Description of Question/Concern	Status of Resolution
Project Splitting	Foothills has explained the independent commercial needs, system design drivers, and in-service timing for the different projects proposed by Foothills.

**Table IAA 1.1-9: Indigenous Engagement Issues - NGTL West Path Delivery 2023**

Description of Issue	Status of Resolution
Cumulative effects	NGTL will continue to engage with Indigenous Groups to learn more about concerns and follow up with appropriate mitigations.
Project Splitting	NGTL explained the independent commercial needs, system design drivers, and in-service timing requirements for the different projects proposed by NGTL.
Potential interaction with traditional land and resource use sites, areas and resources (i.e., hunting, fishing, plant harvesting, camping)	NGTL will continue to engage with Indigenous groups to learn more about concerns and follow up with appropriate mitigations.
Water pollution	NGTL will continue to engage with Indigenous groups to learn more about concerns and follow up with appropriate mitigations.
Air pollution	NGTL will continue to engage with Indigenous groups to learn more about concerns and follow up with appropriate mitigations.
Access to undisturbed areas for the exercise of Indigenous and Treaty rights	NGTL will continue to engage with Indigenous groups to learn more about concerns and follow up with appropriate mitigations.

**Table IAA 1.1-10: Indigenous Engagement Issues - Foothills Zone 8 West Path Delivery 2023**

Description of Issue	Status of Resolution
Project Splitting	Foothills has explained the independent commercial needs, system design drivers, and in-service timing for the different projects proposed by Foothills.

NGTL and Foothills have received feedback from Indigenous groups on its approach taken for seeking information regarding the potential project-related impacts on the rights of Indigenous peoples, pursuant to the assessment requirements set out in the CER's Interim Filing Guidance. NGTL and Foothills are committed to working with Indigenous groups to better understand how this information can be gathered and incorporated into project planning.

### **Education and Training**

NGTL and Foothills recognize the importance of providing opportunities for Indigenous participation in the proposed projects. NGTL and Foothills will provide support and resources to Indigenous groups to increase their ability to participate in project activities and to support their long-term goals for skills development and training.

In collaboration with local Indigenous groups, and in alignment with TC Energy's Indigenous Relations Policy, NGTL and Foothills will work with Indigenous groups to identify opportunities for capacity development. As part of NGTL and Foothills' ongoing engagement program, NGTL and Foothills will work with Indigenous groups through their human resource coordinators, economic development and education officers, or other designated responsible representatives, to support a group's immediate and/or long-term training needs.

Training and capacity development programs which TC Energy, NGTL and Foothills have supported and sponsored in the past include:

- literacy and numeracy programs
- job readiness and life skills programs
- administration courses for Band staff
- safety tickets, first-aid and cardiopulmonary resuscitation (CPR) training
- heavy equipment operators training
- environmental assessment and monitoring courses
- pre-trades training

### **Community Legacy**

NGTL and Foothills recognize that each Indigenous group's needs and interests are unique. Community legacy funding to communities is designed to provide

flexibility in the development of initiatives that will support each group's long-term goals.

NGTL and Foothills will work with Indigenous groups to identify their needs and interests for community legacy initiatives in alignment with the following four focus areas for community legacy, in addition to education:

- **Safety:** Work with communities to understand how NGTL and Foothills can support their safety initiatives, including emergency preparedness, accident prevention and education and training.
- **Community:** Support organizations and community initiatives that bring communities together through initiatives such as cultural preservation, community events, health and wellness, skills development, job readiness and career development.
- **Environment:** Work with communities to conserve important habitat, protect species at risk and the environment.

NGTL and Foothills have previously contributed to community legacy initiatives with local Indigenous groups in various project areas and will continue to identify economic opportunities for community investment in all operating regions.

### **Contracting and Employment**

NGTL and Foothills' Indigenous Relations Business Engagement (IRBE) activities for the proposed projects will be employed to increase the participation of those Indigenous groups potentially affected by each project. Business engagement activities will seek to provide business opportunities arising from project-related activities to qualified Indigenous contractors and suppliers and are designed to:

- assess local Indigenous group and business capacity and capabilities for contracting and employment opportunities
- maximize contracting and employment opportunities for Indigenous groups and businesses through each project's contractors and subcontractors or through direct contracts with the project
- where opportunities exist, NGTL and Foothills will work with Indigenous groups and businesses to help enhance capacity, including project-related training and employment, if applicable
- monitor and report performance of contractor Indigenous participation plans
- implement the Indigenous Relations Business Engagement program, to provide business and employment opportunities arising from Project-related activities to qualified Indigenous contractors and suppliers

NGTL and Foothills will provide information about IRBE activities to potentially affected Indigenous groups and businesses, obtain information regarding Indigenous group interest, capacity and capability relating to each Project, and discuss potential economic participation in the Projects to build reciprocal business relationships.

Where opportunities exist, NGTL and Foothills will work with the Indigenous groups and businesses to help enhance capacity, including Project-related training and employment, if applicable.

### **Ongoing Engagement**

NGTL and Foothills are committed to actively engage with all potentially affected Indigenous groups during all project phases. NGTL and Foothills will continue to respond to questions and concerns, and ongoing engagement activities will continue with the intent to:

- address any project-related questions or concerns
- progress work plans that provide capacity funding for communities
- understand interests in employment and contracting opportunities
- continue to gather input through ongoing engagement activities

### **Pre-Construction and Construction**

NGTL and Foothills will continue to engage with Indigenous groups potentially affected by the projects during the pre-construction and construction phases, and address questions or concerns in a timely manner should any arise.

### **Operations**

TC Energy's Public Awareness Program will be implemented once each project transitions from the construction to operations phase. This Program facilitates consistent, ongoing communication about safety, integrity and emergency response with Indigenous groups, and key community stakeholders and interested parties, such as landowners, the public, government representatives, and emergency response agencies.

7. Refer to responses 5 and 6. NGTL and Foothills have no further comments.
8. Please refer to the letter submitted by NGTL and Foothills addressed to Minister Wilkinson, Environment and Climate Change Canada on March 16, 2020.

## **EDSON MAINLINE EXPANSION PROJECT ENVIRONMENTAL AND SOCIO-ECONOMIC ASSESSMENT**

Assessment of Effects on Wildlife and Wildlife Habitat  
April 2019

Construction is scheduled to occur outside of the Primary Nesting Period (PNP) for the Elk River and Alford Creek Sections (within Nesting Zones B5 and B4), including the extended period for species at risk (B5: May 1 to August 31, B4: April 26 to August 31; ECCO 2017; Gregoire 2014, pers. comm.). If construction activities extend into the PNP, the Breeding Bird and Nest Management Plan (EPP, Appendix 1F in Appendix A) will be implemented, as necessary, to avoid destruction or disturbance to bird nests. Therefore, winter construction is not anticipated to increase mortality risk for these species.

Operation of the Elk River and Alford Creek Sections is not predicted to result in a further change in habitat, movement, or mortality risk for the majority of key indicators. Effects of vegetation clearing on wildlife, including key indicators, will occur during construction and will persist into the operations phase, where infrequent vegetation management is undertaken in the permanent. However, no new effects on wildlife habitat are expected. No sensory-related effects above baseline levels are anticipated during routine operation the pipeline sections (minor, short-term sensory effects may occur during pipeline inspection and maintenance activities). As a result, operations phase effects of the Elk River and Alford Creek Sections on wildlife were not assessed further. Intermittent low levels of human activity during vegetation maintenance activities (which will avoid wetland habitat) and site inspections during operation of the pipelines is unlikely to have a measurable effect on mortality risk for key indicators, with the exception of potential increased mortality risk to beaver and western toad.

### **7.4 MITIGATION**

Standard industry practices and avoidance measures, along with Project-specific mitigation measures outlined in the EPP (Appendix A) will be implemented to reduce potential effects on wildlife and wildlife habitat. Key mitigation measures are summarized in Table 7-11. Refer to the vegetation and wetlands assessment (Section 6.4) for other mitigation measures to reduce or avoid potential effects on vegetation types that are considered suitable habitat for wildlife.

**EDSON MAINLINE EXPANSION PROJECT  
ENVIRONMENTAL AND SOCIO-ECONOMIC ASSESSMENT**

Assessment of Effects on Wildlife and Wildlife Habitat  
April 2019

**Table 7-11 Project Mitigation for Wildlife and Wildlife Habitat**

Potential Effect	Effect Pathway	Mitigation Measures	Applicable Project Component	
			Elk River Section	Alford Creek Section
Change in habitat	<ul style="list-style-type: none"> <li>Direct loss or alteration of habitat from vegetation removal and ground disturbance</li> <li>Indirect loss or alteration of habitat effectiveness through sensory disturbance</li> </ul>	<ul style="list-style-type: none"> <li>Restrict all construction activities to the approved construction footprint. All construction traffic will adhere to safety and road closure regulations.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Minimize the removal of vegetation in wetlands to the extent possible.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Prior to the start of construction activities, clearly mark all sensitive resources as identified on the Environmental Alignment Sheets, Environmental Figures and/or other Project-specific environmental documents and in the project-specific mitigation tables (EPP, Tables 1 and 2 in Appendix A).</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>The contractor shall provide a grade plan to the Company, or as specified in the contract documents. The grade plan will be reviewed by the Environmental Inspector(s) or designate(s) to ensure identified environmental resources are addressed as per Project commitments.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Do not harass or feed wildlife or livestock. Do not permit construction personnel to have dogs on the construction footprint. Firearms are not permitted in Project vehicles or on the construction footprint, or at associated Project facilities. In addition, prohibit the recreational use of all-terrain vehicles (ATVs) or snowmobiles by construction personnel on the construction footprint. Report any incidents with wildlife to the Environmental Inspector or designate(s) immediately.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Ensure that noise abatement equipment on machinery is in good working order. Take reasonable measures to control construction related noise near residential areas.</li> </ul>	✓	✓

**EDSON MAINLINE EXPANSION PROJECT  
ENVIRONMENTAL AND SOCIO-ECONOMIC ASSESSMENT**

Assessment of Effects on Wildlife and Wildlife Habitat  
April 2019

**Table 7-11 Project Mitigation for Wildlife and Wildlife Habitat**

Potential Effect	Effect Pathway	Mitigation Measures	Applicable Project Component	
			Elk River Section	Alford Creek Section
Change in habitat (cont'd)		<ul style="list-style-type: none"> <li>If construction commences after the start of the bear denning period (October 1, AEP 2018a), a field survey for bear dens will be conducted in suitable habitat by a Wildlife Resource Specialist. If an active den is discovered, consult with AEP to determine appropriate mitigation.</li> </ul>	✓	✓
Change in movement	<ul style="list-style-type: none"> <li>Alteration or impediment of wildlife movement due to physical barriers, sensory disturbance, or vegetation removal (i.e., gaps in forested habitat)</li> </ul>	<ul style="list-style-type: none"> <li>Leave gaps in windrows (e.g., topsoil/strippings, grade spoil, rollback, snow) and strung pipe at obvious drainages and wildlife trails, and to allow for livestock and vehicle/machinery passage across the construction footprint. Locations where wildlife gaps are appropriate will be determined in the field by the Environmental Inspector(s) or designate(s). These gaps should align.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Construction activities are scheduled to occur during the restricted activity period of January 15 to April 30 for KWBZs (ESRD 2015a). A KWBZ Protection Plan and Access Management Plan (AMP), , will be developed by NGTL in consultation with AEP.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>To facilitate free movement of livestock and wildlife, follow trenching operations as closely as feasible with lowering-in and backfill operations, unless for construction purposes there is a need to have the trench open for an extended period of time.</li> </ul>	✓	✓

**EDSON MAINLINE EXPANSION PROJECT  
ENVIRONMENTAL AND SOCIO-ECONOMIC ASSESSMENT**

Assessment of Effects on Wildlife and Wildlife Habitat  
April 2019

**Table 7-11 Project Mitigation for Wildlife and Wildlife Habitat**

Potential Effect	Effect Pathway	Mitigation Measures	Applicable Project Component	
			Elk River Section	Alford Creek Section
Change in mortality risk	<ul style="list-style-type: none"> <li>Project-related works and activities resulting in physical destruction of key habitat features (e.g., nests, dens, roosts)</li> <li>Project-related works and activities resulting in accidental mortality of small, less mobile species or individuals (e.g., amphibians, juvenile birds)</li> <li>Entrapment (i.e., within the pipeline trench or open excavations)</li> <li>Vehicle collisions</li> <li>Wildlife-human conflict (e.g., removal of nuisance animals)</li> </ul>	<ul style="list-style-type: none"> <li>Prior to the start of construction activities, clearly mark all sensitive resources as identified on the Environmental Alignment Sheets, Environmental Figures and/or other Project-specific environmental documents and in the project-specific mitigation tables (EPP, Tables 1 and 2 in Appendix A).</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Workers will be provided wildlife awareness training prior to the start of construction activities. Training will be tailored to local wildlife species (e.g., grizzly bear).</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Avoid disturbance to environmentally sensitive features during clearing as identified by the appropriate signage and/or fencing. The Environmental Inspector(s) or designate(s) and appropriate Environmental Resource Specialist will determine the size of avoidance buffer surrounding these features, if appropriate.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Construction of the Elk River Section and Alford Creek Section is scheduled to occur outside of the PNP for these locations, including the extended period for species at risk (ECCC 2017; Gregoire 2014, pers. comm.):               <ul style="list-style-type: none"> <li>Elk River Section – Overlaps Zone B5: May 1 to August 31; and Zone B4: April 26 to August 31</li> <li>Alford Creek Section – Zone B4; April 26 to August 31</li> </ul> </li> <li>Should construction extend into the PNP, the <i>Breeding Bird and Nest Management Plan</i> (EPP, Appendix 1F in Appendix A) will be followed</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Avoid physical activities during the nesting period for owls and raptors (March 1 to August 31 [ESRD 2013c; AEP 2018a]). Where activities overlap the nesting period, a nest survey may be conducted if warranted, based on recommendations from a Wildlife Resource Specialist.</li> </ul>	✓	✓

**EDSON MAINLINE EXPANSION PROJECT  
ENVIRONMENTAL AND SOCIO-ECONOMIC ASSESSMENT**

Assessment of Effects on Wildlife and Wildlife Habitat  
April 2019

**Table 7-11 Project Mitigation for Wildlife and Wildlife Habitat**

Potential Effect	Effect Pathway	Mitigation Measures	Applicable Project Component	
			Elk River Section	Alford Creek Section
Change in mortality risk (cont'd)		<ul style="list-style-type: none"> <li>In the event an active bird nest is found, it will be subject to site-specific mitigation measures (i.e., clearly marked protective buffer around the nest and/or non-intrusive monitoring) based on the <i>Breeding Bird and Nest Management Plan</i>.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Avoid physical activities during the active amphibian season (approximately May 1 to September 30 for western toad ESRD 2013c), where feasible. If physical activities are scheduled to occur during the active amphibian season within 100 m of potential breeding and foraging habitat (i.e., suitable breeding wetlands), conduct pre-construction surveys to confirm presence. If breeding wetlands are confirmed, install exclusion fencing around the overlapping portion of the proposed workspace prior to physical activities. Conduct searches of the fenced area and remove amphibians encountered within the exclusion area. Where fencing is not feasible, conduct area searches and relocate amphibians away from the work space (distance and location to be determined). Applicable amphibian handling protocols will be followed (e.g., Alberta Wildlife Animal Care Committee Class Protocol #003 – Capture and Handling of Amphibians).</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Avoid physical activities during the active bat season (approximately May 1 to September 30), where feasible. If physical activities are scheduled to occur during the active bat season, conduct bat surveys prior to clearing mature trees or building removal. If an active roost is discovered, consult with AEP to determine appropriate mitigation.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>If construction commences after the start of the bear denning period (October 1, AEP 2018a), a field survey for bear dens will be conducted in potential denning habitat by a Wildlife Resource Specialist. If an active den is discovered, consult with AEP to determine appropriate mitigation.</li> </ul>	✓	✓

**EDSON MAINLINE EXPANSION PROJECT  
ENVIRONMENTAL AND SOCIO-ECONOMIC ASSESSMENT**

Assessment of Effects on Wildlife and Wildlife Habitat  
April 2019

**Table 7-11 Project Mitigation for Wildlife and Wildlife Habitat**

Potential Effect	Effect Pathway	Mitigation Measures	Applicable Project Component	
			Elk River Section	Alford Creek Section
Change in mortality risk (cont'd)		<ul style="list-style-type: none"> <li>Project personnel are prohibited from hunting or fishing on the construction footprint, and from harassing, feeding, collecting or possessing wildlife species.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Do not harass or feed wildlife or livestock. Do not permit construction personnel to have dogs on the construction footprint. Firearms are not permitted in Project vehicles or on the construction footprint, or at associated Project facilities. In addition, prohibit the recreational use of ATVs or snowmobiles by construction personnel on the construction footprint. Report any incidents with wildlife to the Environmental Inspector or designate(s) immediately.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Restrict all construction activities to the approved construction footprint. All construction traffic will adhere to safety and road closure regulations.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Where practical and applicable, use multi-passenger vehicles for the transport of crews to and from job sites.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Unanticipated wildlife issues encountered during construction will be discussed and resolved by the Environmental Inspector(s) or designate(s); Wildlife Resource Specialist(s), and the responsible regulatory agencies, if necessary.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>The Contractor will monitor the open trench for trapped wildlife or livestock. Should any wildlife be identified, the Contractor will contact the Environmental Inspector(s) or designate(s) and Construction Manager. The Environmental Inspector(s) or designate(s) will contact the responsible regulatory agency or a Wildlife Resource Specialist, where required, for direction. In the case of livestock, the land agent assigned to the Project will contact the landowner.</li> </ul>	✓	✓

**EDSON MAINLINE EXPANSION PROJECT  
ENVIRONMENTAL AND SOCIO-ECONOMIC ASSESSMENT**

Assessment of Effects on Wildlife and Wildlife Habitat  
April 2019

**Table 7-11 Project Mitigation for Wildlife and Wildlife Habitat**

Potential Effect	Effect Pathway	Mitigation Measures	Applicable Project Component	
			Elk River Section	Alford Creek Section
Change in mortality risk (cont'd)		<ul style="list-style-type: none"> <li>If previously unidentified listed or sensitive wildlife species or their site-specific habitat (e.g., dens, nests) are identified during Project construction, report to the Environmental Inspector(s) or designate(s) and implement the <i>Wildlife Species of Concern Discovery Contingency Plan</i> (EPP, Appendix 1E in Appendix A).</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Report sightings of project-specific species of interest to the Environmental Inspector(s) or designate(s). Specific protection measures may be implemented and the sighting will be recorded.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>The Contractor will collect all construction debris and other waste materials and dispose at an approved facility and in accordance with the <i>Chemical and Waste Management Plan</i> (EPP, Appendix 1E in Appendix 1F) and the <i>Release Contingency Plan</i> (EPP Appendix 1E in Appendix A) unless otherwise authorized by the Environmental Inspector(s) or designate(s).</li> </ul>	✓	✓

## EDSON MAINLINE EXPANSION PROJECT ENVIRONMENTAL AND SOCIO-ECONOMIC ASSESSMENT

Assessment of Effects on Aquatic Resources  
April 2019

### 8.4 MITIGATION

Mitigation measures outlined in the EPP (Appendix A) will be implemented during crossing construction to avoid or reduce risks to aquatic resources. Key mitigation measures are summarized in Table 8-14.

For pipeline watercourse crossings, key mitigation measures include routing the pipeline to avoid sensitive areas and selecting appropriate watercourse crossing methods that reduce interactions with fish and fish habitat. The selection of watercourse crossing methods will follow TransCanada's Watercourse Crossing Selection Process (see Section 2.1.1.3). Dry or frozen open-cut methods will be employed when appropriate.

**Table 8-14 Key Mitigation Measures for Aquatic Resources**

Potential Effect	Effect Pathway	Mitigation Measures	Applicable Project Component	
			Elk River Section	Alford Creek Section
Change in fish habitat (including critical habitat and residences for species at risk)	<ul style="list-style-type: none"> <li>Instream construction resulting in changes to habitat structure (i.e., substrate, banks, and riparian vegetation)</li> </ul>	<ul style="list-style-type: none"> <li>Construct or install temporary vehicle access across waterbodies, shorelines, and riverbanks in a manner that protects the banks from erosion, maintains the flows in the waterway, and is completed in accordance with applicable guidelines, environmental protection measures, approval conditions or legislation, including applicable DFO <i>Measures to Avoid Causing Harm to Fish and Fish Habitat</i> (DFO 2018a).</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Construct/install all watercourse vehicle crossings as outlined in Table 2 in Appendix A and in accordance with the typical drawings (EPP, Appendix 1D in Appendix A, Dwgs. STDS-03-ML-05-101, STDS-03-ML-05-103 and STDS-03-ML-05-104).</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Construct all bridges (single-span or ice and snowfill) beyond the ends of the banks and with a minimum depth of 0.5 m of snowfill or fill material at each bank. Do not place fill within primary banks for bridge abutment construction, unless approved by the responsible regulatory agency.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>If hauling in of fill material is required during the construction of bridge abutments with wings, place geotextile fabric between the fill material and the surface layer.</li> </ul>	✓	✓

**EDSON MAINLINE EXPANSION PROJECT  
ENVIRONMENTAL AND SOCIO-ECONOMIC ASSESSMENT**

Assessment of Effects on Aquatic Resources  
April 2019

**Table 8-14 Key Mitigation Measures for Aquatic Resources**

Potential Effect	Effect Pathway	Mitigation Measures	Applicable Project Component	
			Elk River Section	Alford Creek Section
Change in fish habitat (including critical habitat and residences for species at risk) (cont'd)		<ul style="list-style-type: none"> <li>Line single-span bridges with impervious geotextile. All watercourse crossing structures must have a minimum of 30cm high side boards. Side containment for single span bridges must be constructed of plywood. Snow bridges can use watered snow.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Install and remove temporary vehicle crossings in a manner that protects the banks from erosion and maintains flow. Temporary vehicle crossings will be returned to their preconstruction condition.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Under frozen conditions, and where conditions permit, employ ice and snowfill bridges as temporary crossing structures. Install ice and snowfill bridges using water drawn from an approved source and/or clean snow ploughed in from surrounding areas or produced through snowmaking.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>If water withdrawal is necessary for the construction of a temporary crossing, ensure that necessary provincial approvals are in place and apply <i>DFO Measures to Avoid Causing Harm to Fish and Fish Habitat</i>. Ensure water withdrawal is in compliance with site-specific permit or license conditions. Pump intakes should not disturb the streambed. Pumps must be screened with a maximum mesh size of 2.54 mm and have a maximum screen approach velocity of less than 0.038 m/s where fish habitat is present. Follow design requirements of <i>DFO Freshwater Intake End-of-Pipe Fish Screen Guidelines</i> (DFO 1995).</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Use only clean ice/snow for construction of an ice/snowfill or ice bridge. Approaches to the bridge will be constructed with compacted snow and ice of sufficient thickness to protect the stream channel and banks. Sand, gravel and soils are not to be used for ice bridge approaches.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Ensure that ice bridges or snowfills do not interfere with or impede winter flows.</li> </ul>	✓	✓

**EDSON MAINLINE EXPANSION PROJECT  
ENVIRONMENTAL AND SOCIO-ECONOMIC ASSESSMENT**

Assessment of Effects on Aquatic Resources  
April 2019

**Table 8-14 Key Mitigation Measures for Aquatic Resources**

Potential Effect	Effect Pathway	Mitigation Measures	Applicable Project Component	
			Elk River Section	Alford Creek Section
Change in fish habitat (including critical habitat and residences for species at risk) (cont'd)		<ul style="list-style-type: none"> <li>Snowfills and ice bridges shall be regularly maintained to remove soil, mud and other debris prior to affecting water quality, as directed by the Environmental Inspector or designate(s).</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Breach the beaver dam slowly to avoid the rapid release of water that could cause flooding, fish entrapments and/or erosion of the bed and banks resulting in subsequent siltation of downstream waters.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Complete watercourse crossings in a timely manner. Before the installation of the watercourse crossing and the commencement of instream activity, the Contractor will ensure that all necessary equipment and materials are available and are onsite.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Construct/install all pipeline crossings as outlined in Table 2 in Appendix A and in accordance with the typical and/or Project-specific drawings (EPP, Appendix 1D in Appendix A).</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Do not permit fording of watercourses, unless otherwise approved by the Company.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Where approved by the Company, for the one-time (over and back) fording of equipment without a temporary crossing structure, use streambank and bed protection methods (e.g., matting), as directed by the Environmental Inspector(s) or designate.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Develop water quality monitoring plans to monitor for sediment events during instream construction activities, where required by the applicable regulatory approvals or as identified by an Aquatic Resource Specialist. If monitoring reveals sediment values are approaching threshold values, the water quality monitors will alert the Environmental Inspector(s) or designate(s) and work with them to develop corrective actions. If corrective actions are not successful, construction activities will be temporarily suspended until effective solutions are identified.</li> </ul>	✓	✓

**EDSON MAINLINE EXPANSION PROJECT  
ENVIRONMENTAL AND SOCIO-ECONOMIC ASSESSMENT**

Assessment of Effects on Aquatic Resources  
April 2019

**Table 8-14 Key Mitigation Measures for Aquatic Resources**

Potential Effect	Effect Pathway	Mitigation Measures	Applicable Project Component	
			Elk River Section	Alford Creek Section
Change in fish habitat (including critical habitat and residences for species at risk) (cont'd)		<ul style="list-style-type: none"> <li>The Contractor shall weld, coat, and weight the portion of the pipe crossing the watercourse prior to starting instream trenching activities. To reduce the length of time of instream activity, the Contractor shall trench, lower-in, and backfill water crossings during the same working day, unless otherwise approved by the Company.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>When implementing a trenched (i.e., open cut or isolated) pipeline installation method, and where practical, salvage the upper 0.5 m (minimum) of granular material if present. Stockpile separately from the remainder of the trench spoil so that the salvaged, native granular material can be used to cap the upper portion of the trench.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>If spoil is likely to be highly saturated, excavate a pit or construct berms of packed earth to prevent spoil from flowing back into the watercourse. Locate containment berms and spoil outside of the 10m riparian buffer area (EPP, Appendix 1D in Appendix A, Dwg. STDS-03-ML-05-131).</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Conduct typical open cut of seasonally dry or frozen to the bottom watercourses and drainages in accordance with applicable DFO <i>Measures to Avoid Causing Harm to Fish and Fish Habitat</i>. Refer to Appendix 1D in Appendix A, Dwg. STDS-03-ML-05-105.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Store excavation material outside the watercourse during the open cut.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Refer to Table 2 in Appendix A for locations where an isolated crossing method is proposed. Refer to Appendix 1D in Appendix A, Dwgs. STDS-03-ML-05-111 and STDS-03-ML-05-112.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Conduct isolated crossings of watercourses in accordance with applicable DFO <i>Measures to Avoid Causing Harm to Fish and Fish Habitat</i>.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Do not use earthen berms to isolate the crossing construction area.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Ensure maintenance of downstream flow at all times when constructing an isolated crossing.</li> </ul>	✓	✓

**EDSON MAINLINE EXPANSION PROJECT  
ENVIRONMENTAL AND SOCIO-ECONOMIC ASSESSMENT**

Assessment of Effects on Aquatic Resources  
April 2019

**Table 8-14 Key Mitigation Measures for Aquatic Resources**

Potential Effect	Effect Pathway	Mitigation Measures	Applicable Project Component	
			Elk River Section	Alford Creek Section
Change in fish habitat (including critical habitat and residences for species at risk) (cont'd)		<ul style="list-style-type: none"> <li>Ensure water from flumes, dam and pumps, diversion or other methods do not cause erosion or introduce sediment into the channel.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Ensure water and pump intakes avoid or reduce disturbance of the streambed and are screened with a maximum mesh size of 2.54 mm and approach velocity of 0.038 m/s. Follow design requirements of DFO <i>Freshwater Intake End-of-Pipe Fish Screen Guidelines</i>. To accomplish this, where pumps larger than 15 cm diameter are used, place the intakes in a mesh cage (2.54 mm) to reduce the approach velocity that fish are exposed to and prevent them from being impinged on the intakes. Maintain the screens free of debris. If a deeper sump is required for success of the isolated crossing refer to Environmental Inspector(s) or designate(s).</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Place only imported clean coarse material (gravel or rock), or native material removed from the trench, as the final 0.5 m of backfill. Imported material must be obtained from a Company approved off-site facility.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Return the bed and banks of each watercourse as close as feasible to their original preconstruction contours. Do not realign or straighten watercourses or change their hydraulic characteristics.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Implement permanent bank reclamation measures to re-establish riparian vegetation and fish habitat as a part of backfill operations (EPP, Appendix 1D in Appendix A, Dwgs. STDS-03-ML-05-601, STDS-03-ML-05-602, STDS-03-ML-05-603, STDS-03-ML-05-604, STDS-03-ML-05-606 and STDS-03-ML-05-608). Biodegradable materials shall be utilized unless otherwise specified by the Company.</li> </ul>	✓	✓

**EDSON MAINLINE EXPANSION PROJECT  
ENVIRONMENTAL AND SOCIO-ECONOMIC ASSESSMENT**

Assessment of Effects on Aquatic Resources  
April 2019

**Table 8-14 Key Mitigation Measures for Aquatic Resources**

Potential Effect	Effect Pathway	Mitigation Measures	Applicable Project Component	
			Elk River Section	Alford Creek Section
Change in fish habitat (including critical habitat and residences for species at risk) (cont'd)		<ul style="list-style-type: none"> <li>Seed disturbed banks and riparian areas with an approved native seed mixture and/or cover crop as directed by the Environmental Inspector(s) or designate(s). The Environmental Inspector(s) or designate(s) will determine onsite whether other restoration methods need to be applied to stabilize banks (e.g., soil wraps, brush layers and matting).</li> </ul>	✓	✓
	<ul style="list-style-type: none"> <li>Construction activity on land adjacent to waterbodies resulting in changes to bank stability, loss of riparian habitat, sedimentation, or in increased erosion potential</li> </ul>	<ul style="list-style-type: none"> <li>The location of all discharge areas shall be approved by the Environmental Inspector(s) or designate(s).</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Water pumping from the construction footprint shall be released onto stable surfaces in a manner that does not cause erosion of soils, or sedimentation of the watercourse.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Using filter bags or other appropriate sediment filtering devices, pump water onto stable, well vegetated areas, tarpaulins, sheeting, rocks, sand bags, or into settling ponds. Complete dewatering in a manner that does not cause erosion or allow sediment to re-enter a watercourse or waterbody.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Do not permit pumped water to flow directly into any watercourse. If water is released onto private land, landowner consent must be acquired prior to release.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>The Contractor will ensure the pump intake is elevated to minimize the pumping of sediment.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>The Contractor will ensure hoses and pumps are of sufficient length and capacity to transfer water to the desired location.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>The Contractor will ensure hoses are in good working condition, and hoses with tears or ruptures will be repaired or replaced.</li> </ul>	✓	✓

**EDSON MAINLINE EXPANSION PROJECT  
ENVIRONMENTAL AND SOCIO-ECONOMIC ASSESSMENT**

Assessment of Effects on Aquatic Resources  
April 2019

**Table 8-14 Key Mitigation Measures for Aquatic Resources**

Potential Effect	Effect Pathway	Mitigation Measures	Applicable Project Component	
			Elk River Section	Alford Creek Section
Change in fish habitat (including critical habitat and residences for species at risk) (cont'd)		<ul style="list-style-type: none"> <li>Prohibit clearing of extra temporary workspace within a 10m (minimum) riparian buffer from top of bank of the watercourse. This area shall be clearly marked prior to clearing operations. The right-of-way will be narrowed through the riparian area, if feasible.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Limit clearing of trees and shrubs at watercourse crossings to the trench line and work side areas that are required for vehicle crossings.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Fell trees away from watercourses where feasible. Immediately remove trees, debris or soil inadvertently deposited below the high watermark of a watercourse.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>If the working surface is unstable, do not permit clearing equipment within the 10 m riparian buffer, unless approved by the Environmental Inspector(s) or designate(s). Following clearing, the 10 m riparian buffer will remain intact (i.e., consisting of low-lying understory vegetation).</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Delay grading of the primary banks of watercourses until immediately before construction of the crossing. If required, appropriate temporary erosion and sediment control structures shall be installed at the discretion of the Environmental Inspector(s) or designate(s), upon initial disturbance of the vegetative mat and strippings.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Direct grading away from waterbodies. Do not place fill material in a waterbody during grading.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Ensure that grubbing, stripping and grading on approach slopes to watercourses is restricted to an amount required to allow the safe passage of equipment, excavation of the trench, and installation of the pipeline.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Do not allow grading within the 10 m riparian buffer immediately adjacent to the watercourse crossing until installation of the vehicle crossing.</li> </ul>	✓	✓

**EDSON MAINLINE EXPANSION PROJECT  
ENVIRONMENTAL AND SOCIO-ECONOMIC ASSESSMENT**

Assessment of Effects on Aquatic Resources  
April 2019

**Table 8-14 Key Mitigation Measures for Aquatic Resources**

Potential Effect	Effect Pathway	Mitigation Measures	Applicable Project Component	
			Elk River Section	Alford Creek Section
Change in fish habitat (including critical habitat and residences for species at risk) (cont'd)		<ul style="list-style-type: none"> <li>Install erosion and sediment control at all watercourses and/or waterbodies as directed by the Environmental Inspector(s) or designate(s) (EPP, Appendix 1D in Appendix A, Dwgs. STDS-03-ML-05-001, STDS-03-ML-05-131, STDS-03-ML-05-132, STDS-03-ML-05-137).</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Where water erosion is evident, and there is potential for runoff from the construction footprint to flow into a watercourse, refer to the Soil Erosion Contingency Plan (EPP, Appendix 1E in Appendix A).</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Conduct trenchless crossings in accordance with the applicable sections of the Trenchless Crossing Management Plan (EPP, Appendix 1F in Appendix A).</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>For pipeline crossings conducted using a trenchless crossing method, apply applicable DFO <i>Measures to Avoid Causing Harm to Fish and Fish Habitat</i>.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Excavate entry and exit sites back from the ordinary high watermark and far enough from the watercourse to provide for containment of sediments and other deleterious substances above the high watermark. Vegetation removal for the entry and exit sites is only to occur within the approved construction footprint.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Ensure that water from dewatering entry and exit sites with a high sediment load is not discharged or allowed to flow into any waterbody. Remove the sediment load (e.g., filter or discharge into a vegetated area) before discharge water is allowed to enter any watercourse.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Where warranted, develop a water quality monitoring plan with input from an Aquatic Resource Specialist that includes monitoring for TSS and/or turbidity if trenchless methods are used.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Ensure any leaks in the fill and discharge lines are controlled to prevent erosion.</li> </ul>	✓	✓

**EDSON MAINLINE EXPANSION PROJECT  
ENVIRONMENTAL AND SOCIO-ECONOMIC ASSESSMENT**

Assessment of Effects on Aquatic Resources  
April 2019

**Table 8-14 Key Mitigation Measures for Aquatic Resources**

Potential Effect	Effect Pathway	Mitigation Measures	Applicable Project Component	
			Elk River Section	Alford Creek Section
Change in fish habitat (including critical habitat and residences for species at risk) (cont'd)	<ul style="list-style-type: none"> <li>Temporary diversions for hydrostatic testing resulting in changes to habitat availability</li> </ul>	<ul style="list-style-type: none"> <li>Where applicable, shunt test water ahead from test section to test section to the extent practical to minimize water hauling, water usage and number of dewatering points.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Discharge hydrostatic test water into the same drainage basin from which it was withdrawn, unless otherwise approved by the responsible authority.</li> </ul>	✓	✓
Change in fish mortality risk	<ul style="list-style-type: none"> <li>Mobilization and transport of sediment resulting in fish mortality from gill abrasion and/or limited foraging ability, or mortality of fish eggs</li> </ul>	<ul style="list-style-type: none"> <li>The location of all discharge areas shall be approved by the Environmental Inspector(s) or designate(s).</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Water pumping from the construction footprint shall be released onto stable surfaces in a manner that does not cause erosion of soils, or sedimentation of the watercourse.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Using filter bags or other appropriate sediment filtering devices, pump water onto stable, well vegetated areas, tarpaulins, sheeting, rocks, sand bags, or into settling ponds. Complete dewatering in a manner that does not cause erosion or allow sediment to re-enter a watercourse or waterbody.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Do not permit pumped water to flow directly into any watercourse. If water is released onto private land, landowner consent must be acquired prior to release.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>The Contractor will ensure the pump intake is elevated to minimize the pumping of sediment.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>The Contractor will ensure hoses and pumps are of sufficient length and capacity to transfer water to the desired location.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>The Contractor will ensure hoses are in good working condition, and hoses with tears or ruptures will be repaired or replaced.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Install erosion and sediment control at all watercourses and/or waterbodies as directed by the Environmental Inspector(s) or designate(s) (EPP, Appendix 1D in Appendix A, Dwgs. STDS-03-ML-05-001, STDS-03-ML-05-131, STDS-03-ML-05-132, STDS-03-ML-05-137).</li> </ul>	✓	✓

**EDSON MAINLINE EXPANSION PROJECT  
ENVIRONMENTAL AND SOCIO-ECONOMIC ASSESSMENT**

Assessment of Effects on Aquatic Resources  
April 2019

**Table 8-14 Key Mitigation Measures for Aquatic Resources**

Potential Effect	Effect Pathway	Mitigation Measures	Applicable Project Component	
			Elk River Section	Alford Creek Section
Change in fish mortality risk (cont'd)		<ul style="list-style-type: none"> <li>Where water erosion is evident, and there is potential for runoff from the construction footprint to flow into a watercourse, refer to the Soil Erosion Contingency Plan (EPP, Appendix 1E in Appendix A).</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>If hauling in of fill material is required during the construction of bridge abutments with wings, place geotextile fabric between the fill material and the surface layer.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Line single-span bridges with impervious geotextile. All watercourse crossing structures must have a minimum of 30cm high side boards. Side containment for single span bridges must be constructed of plywood. Snow bridges can use watered snow.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Use only clean ice/snow for construction of an ice/snowfill or ice bridge. Approaches to the bridge will be constructed with compacted snow and ice of sufficient thickness to protect the stream channel and banks. Sand, gravel and soils are not to be used for ice bridge approaches.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Snowfills and ice bridges shall be regularly maintained to remove soil, mud and other debris prior to affecting water quality, as directed by the Environmental Inspector or designate(s).</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Develop water quality monitoring plans to monitor for sediment events during instream construction activities, where required by the applicable regulatory approvals or as identified by an Aquatic Resource Specialist. If monitoring reveals sediment values are approaching threshold values, the water quality monitors will alert the Environmental Inspector(s) or designate(s) and work with them to develop corrective actions. If corrective actions are not successful, construction activities will be temporarily suspended until effective solutions are identified.</li> </ul>	✓	✓

**EDSON MAINLINE EXPANSION PROJECT  
ENVIRONMENTAL AND SOCIO-ECONOMIC ASSESSMENT**

Assessment of Effects on Aquatic Resources  
April 2019

**Table 8-14 Key Mitigation Measures for Aquatic Resources**

Potential Effect	Effect Pathway	Mitigation Measures	Applicable Project Component	
			Elk River Section	Alford Creek Section
Change in fish mortality risk (cont'd)		<ul style="list-style-type: none"> <li>If spoil is likely to be highly saturated, excavate a pit or construct berms of packed earth to prevent spoil from flowing back into the watercourse. Locate containment berms and spoil outside of the 10m riparian buffer area (EPP, Appendix 1D in Appendix A, Dwg. STDS-03-ML-05-131).</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Do not use earthen berms to isolate the crossing construction area.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Ensure water from flumes, dam and pumps, diversion or other methods do not cause erosion or introduce sediment into the channel.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Ensure water from flumes, dam and pumps, diversion or other methods do not cause erosion or introduce sediment into the channel.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Excavate entry and exit sites back from the ordinary high watermark and far enough from the watercourse to provide for containment of sediments and other deleterious substances above the high watermark. Vegetation removal for the entry and exit sites is only to occur within the approved construction footprint.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Ensure that water from dewatering entry and exit sites with a high sediment load is not discharged or allowed to flow into any waterbody. Remove the sediment load (e.g., filter or discharge into a vegetated area) before discharge water is allowed to enter any watercourse.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Where warranted, develop a water quality monitoring plan with input from an Aquatic Resource Specialist that includes monitoring for TSS and/or turbidity if trenchless methods are used.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Discharge water into a well-vegetated area. Provide scour protection and an energy diffuser at the discharge site as directed by the Company.</li> </ul>	✓	✓

**EDSON MAINLINE EXPANSION PROJECT  
ENVIRONMENTAL AND SOCIO-ECONOMIC ASSESSMENT**

Assessment of Effects on Aquatic Resources  
April 2019

**Table 8-14 Key Mitigation Measures for Aquatic Resources**

Potential Effect	Effect Pathway	Mitigation Measures	Applicable Project Component	
			Elk River Section	Alford Creek Section
Change in fish mortality risk (cont'd)		<ul style="list-style-type: none"> <li>Preserve water quality, including preventing the introduction of foreign material (debris, sediment, etc.) into the receiving waterbody / watercourse.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Monitor the discharge area for erosion and sedimentation.</li> </ul>	✓	✓
	<ul style="list-style-type: none"> <li>Change in timing, duration and frequency of flow (including during isolation of crossings), resulting in fish mortality by stranding, entraining or impinging fish, or by preventing access to spawning areas</li> </ul>	<ul style="list-style-type: none"> <li>Under frozen conditions, and where conditions permit, employ ice and snowfill bridges as temporary crossing structures. Install ice and snowfill bridges using water drawn from an approved source and/or clean snow ploughed in from surrounding areas or produced through snowmaking.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>If water withdrawal is necessary for the construction of a temporary crossing, ensure that necessary provincial approvals are in place and apply <i>DFO Measures to Avoid Causing Harm to Fish and Fish Habitat</i>. Ensure water withdrawal is in compliance with site-specific permit or license conditions. Pump intakes should not disturb the streambed. Pumps must be screened with a maximum mesh size of 2.54 mm and have a maximum screen approach velocity of less than 0.038 m/s where fish habitat is present. Follow design requirements of <i>DFO Freshwater Intake End-of-Pipe Fish Screen Guidelines</i> (DFO 1995).</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Ensure that ice bridges or snowfills do not interfere with or impede winter flows.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Ensure maintenance of downstream flow at all times when constructing an isolated crossing.</li> </ul>	✓	✓

**EDSON MAINLINE EXPANSION PROJECT  
ENVIRONMENTAL AND SOCIO-ECONOMIC ASSESSMENT**

Assessment of Effects on Aquatic Resources  
April 2019

**Table 8-14 Key Mitigation Measures for Aquatic Resources**

Potential Effect	Effect Pathway	Mitigation Measures	Applicable Project Component	
			Elk River Section	Alford Creek Section
Change in fish mortality risk (cont'd)		<ul style="list-style-type: none"> <li>Ensure water and pump intakes avoid or reduce disturbance of the streambed and are screened with a maximum mesh size of 2.54 mm and approach velocity of 0.038 m/s. Follow design requirements of DFO <i>Freshwater Intake End-of-Pipe Fish Screen Guidelines</i>. To accomplish this, where pumps larger than 15 cm diameter are used, place the intakes in a mesh cage (2.54 mm) to reduce the approach velocity that fish are exposed to and prevent them from being impinged on the intakes. Maintain the screens free of debris. If a deeper sump is required for success of the isolated crossing refer to Environmental Inspector(s) or designate(s).</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Obtain the required permits for conducting fish salvage, prior to conducting instream work.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>If an isolated method is employed, and where recommended by a qualified environmental professional, conduct a fish salvage led by an Aquatic Resource Specialist (i.e., Qualified Aquatic Environment Specialist [QAES] or provincial equivalent).</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Conduct fish salvage, in accordance with permit conditions, using appropriate methods and equipment. Release all captured fish to areas downstream of the crossing that provide suitable habitat.</li> </ul>	✓	✓
	<ul style="list-style-type: none"> <li>Destruction of fish and/or eggs during instream work</li> </ul>	<ul style="list-style-type: none"> <li>If water withdrawal is necessary for the construction of a temporary crossing, ensure that necessary provincial approvals are in place and apply DFO <i>Measures to Avoid Causing Harm to Fish and Fish Habitat</i>. Ensure water withdrawal is in compliance with site-specific permit or license conditions. Pump intakes should not disturb the streambed. Pumps must be screened with a maximum mesh size of 2.54 mm and have a maximum screen approach velocity of less than 0.038 m/s where fish habitat is present. Follow design requirements of DFO <i>Freshwater Intake End-of-Pipe Fish Screen Guidelines</i> (DFO 1995).</li> </ul>	✓	✓

**EDSON MAINLINE EXPANSION PROJECT  
ENVIRONMENTAL AND SOCIO-ECONOMIC ASSESSMENT**

Assessment of Effects on Aquatic Resources  
April 2019

**Table 8-14 Key Mitigation Measures for Aquatic Resources**

Potential Effect	Effect Pathway	Mitigation Measures	Applicable Project Component	
			Elk River Section	Alford Creek Section
Change in fish mortality risk (cont'd)		<ul style="list-style-type: none"> <li>Ensure water and pump intakes avoid or reduce disturbance of the streambed and are screened with a maximum mesh size of 2.54 mm and approach velocity of 0.038 m/s. Follow design requirements of DFO <i>Freshwater Intake End-of-Pipe Fish Screen Guidelines</i>. To accomplish this, where pumps larger than 15 cm diameter are used, place the intakes in a mesh cage (2.54 mm) to reduce the approach velocity that fish are exposed to and prevent them from being impinged on the intakes. Maintain the screens free of debris. If a deeper sump is required for success of the isolated crossing refer to Environmental Inspector(s) or designate(s).</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Obtain the required permits for conducting fish salvage, prior to conducting instream work.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>If an isolated method is employed, and where recommended by a qualified environmental professional, conduct a fish salvage led by an Aquatic Resource Specialist (i.e., QAES or provincial equivalent).</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Conduct fish salvage, in accordance with permit conditions, using appropriate methods and equipment. Release all captured fish to areas downstream of the crossing that provide suitable habitat.</li> </ul>	✓	✓
	<ul style="list-style-type: none"> <li>Introduction of whirling disease</li> </ul>	<ul style="list-style-type: none"> <li>Equipment (e.g., machinery, pumps, and intake baskets) must arrive onsite clean and free of mud and plant material. Equipment will be inspected by the Environmental Inspector(s) or designate, and if deemed to be in appropriate condition will be approved for use.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Follow the Decontamination Protocol for Industrial and Construction Operations (AEP 2018e)</li> </ul>	✓	✓

**EDSON MAINLINE EXPANSION PROJECT  
ENVIRONMENTAL AND SOCIO-ECONOMIC ASSESSMENT**

Assessment of Effects on Aquatic Resources  
April 2019

**Table 8-14 Key Mitigation Measures for Aquatic Resources**

Potential Effect	Effect Pathway	Mitigation Measures	Applicable Project Component	
			Elk River Section	Alford Creek Section
Change in fish mortality risk (cont'd)		<ul style="list-style-type: none"> <li>Following use, equipment that was instream (e.g., machinery, pumps, and intake baskets) must be steam-cleaned, drained and dried, and water tanks drained before leaving the Project. Equipment will be inspected by the Environmental Inspector(s) or designate, and if deemed to be in appropriate condition will be approved for leaving the Project.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Discharge hydrostatic test water into the same drainage basin from which it was withdrawn, unless otherwise approved by the responsible authority.</li> </ul>	✓	✓
Change in Surface Water Quality	<ul style="list-style-type: none"> <li>Increased sediment concentrations and transport in surface water due to instream construction, vegetation clearing, increased erosion on the Project footprint, and release of hydrostatic test water</li> </ul>	<ul style="list-style-type: none"> <li>The location of all discharge areas shall be approved by the Environmental Inspector(s) or designate(s).</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Water pumping from the construction footprint shall be released onto stable surfaces in a manner that does not cause erosion of soils, or sedimentation of the watercourse.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Using filter bags or other appropriate sediment filtering devices, pump water onto stable, well vegetated areas, tarpaulins, sheeting, rocks, sand bags, or into settling ponds. Complete dewatering in a manner that does not cause erosion or allow sediment to re-enter a watercourse or waterbody.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Do not permit pumped water to flow directly into any watercourse. If water is released onto private land, landowner consent must be acquired prior to release.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>The Contractor will ensure the pump intake is elevated to minimize the pumping of sediment.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>The Contractor will ensure hoses and pumps are of sufficient length and capacity to transfer water to the desired location.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>The Contractor will ensure hoses are in good working condition, and hoses with tears or ruptures will be repaired or replaced.</li> </ul>	✓	✓

**EDSON MAINLINE EXPANSION PROJECT  
ENVIRONMENTAL AND SOCIO-ECONOMIC ASSESSMENT**

Assessment of Effects on Aquatic Resources  
April 2019

**Table 8-14 Key Mitigation Measures for Aquatic Resources**

Potential Effect	Effect Pathway	Mitigation Measures	Applicable Project Component	
			Elk River Section	Alford Creek Section
Change in Surface Water Quality (cont'd)		<ul style="list-style-type: none"> <li>Install erosion and sediment control at all watercourses and/or waterbodies as directed by the Environmental Inspector(s) or designate(s) (EPP, Appendix 1D in Appendix A, Dwgs. STDS-03-ML-05-001, STDS-03-ML-05-131, STDS-03-ML-05-132, STDS-03-ML-05-137).</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Where water erosion is evident, and there is potential for runoff from the construction footprint to flow into a watercourse, refer to the Soil Erosion Contingency Plan (EPP, Appendix 1E in Appendix A).</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Develop water quality monitoring plans to monitor for sediment events during instream construction activities, where required by the applicable regulatory approvals or as identified by an Aquatic Resource Specialist. If monitoring reveals sediment values are approaching threshold values, the water quality monitors will alert the Environmental Inspector(s) or designate(s) and work with them to develop corrective actions. If corrective actions are not successful, construction activities will be temporarily suspended until effective solutions are identified.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>If spoil is likely to be highly saturated, excavate a pit or construct berms of packed earth to prevent spoil from flowing back into the watercourse. Locate containment berms and spoil outside of the 10m riparian buffer area (EPP, Appendix 1D in Appendix A, Dwg. STDS-03-ML-05-131).</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Ensure water from flumes, dam and pumps, diversion or other methods do not cause erosion or introduce sediment into the channel.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Excavate entry and exit sites back from the ordinary high watermark and far enough from the watercourse to provide for containment of sediments and other deleterious substances above the high watermark. Vegetation removal for the entry and exit sites is only to occur within the approved construction footprint.</li> </ul>	✓	✓

## EDSON MAINLINE EXPANSION PROJECT ENVIRONMENTAL AND SOCIO-ECONOMIC ASSESSMENT

Assessment of Effects on Aquatic Resources  
April 2019

**Table 8-14 Key Mitigation Measures for Aquatic Resources**

Potential Effect	Effect Pathway	Mitigation Measures	Applicable Project Component	
			Elk River Section	Alford Creek Section
Change in Surface Water Quality (cont'd)		<ul style="list-style-type: none"> <li>Ensure that water from dewatering entry and exit sites with a high sediment load is not discharged or allowed to flow into any waterbody. Remove the sediment load (e.g., filter or discharge into a vegetated area) before discharge water is allowed to enter any watercourse.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Where warranted, develop a water quality monitoring plan with input from an Aquatic Resource Specialist that includes monitoring for TSS and/or turbidity if trenchless methods are used.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Prior to discharge of hydrostatic test water, ensure that the appropriate testing and treatment measures are implemented in accordance with local regulatory requirements.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Discharge water into a well-vegetated area. Provide scour protection and an energy diffuser at the discharge site as directed by the Company.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Preserve water quality, including preventing the introduction of foreign material (debris, sediment, etc.) into the receiving waterbody / watercourse.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Monitor the discharge area for erosion and sedimentation.</li> </ul>	✓	✓
Change in Surface Water Quantity	<ul style="list-style-type: none"> <li>Construction activity on land adjacent to waterbodies resulting in changes in natural flow patterns across the ROW</li> <li>Trenching could affect flow at drainage crossings</li> <li>Temporary diversions for hydrostatic testing or release of test water</li> </ul>	<ul style="list-style-type: none"> <li>Leave gaps in windrows, at obvious drainages, on side-hill terrain and wherever seepage occurs to reduce interference with natural drainage patterns.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Under frozen conditions, and where conditions permit, employ ice and snowfill bridges as temporary crossing structures. Install ice and snowfill bridges using water drawn from an approved source and/or clean snow ploughed in from surrounding areas or produced through snowmaking.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Ensure that ice bridges or snowfills do not interfere with or impede winter flows.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Ensure maintenance of downstream flow at all times when constructing an isolated crossing.</li> </ul>	✓	✓

**EDSON MAINLINE EXPANSION PROJECT  
ENVIRONMENTAL AND SOCIO-ECONOMIC ASSESSMENT**

Assessment of Effects on Aquatic Resources  
April 2019

**Table 8-14 Key Mitigation Measures for Aquatic Resources**

Potential Effect	Effect Pathway	Mitigation Measures	Applicable Project Component	
			Elk River Section	Alford Creek Section
Change in Surface Water Quantity (cont'd)		<ul style="list-style-type: none"> <li>Assess the capability to handle the expected flow rate with the proposed crossing method.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>If use of the proposed crossing method is determined to be feasible by the Company, the crossing will proceed.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>If use of the proposed crossing method is determined NOT to be feasible by the Company due to excessive flows or flood conditions, follow the Flood and Excessive Flow Contingency Plan (EPP, Appendix 1E in Appendix A).</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Monitor water levels in all open trenches.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Where practical, grade the construction footprint to divert surface water away from the open trench.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Where the open trench has the potential to dewater a wetland, undertake trenching in a manner that prevents the flow of water along the trench.</li> </ul>	✓	✓
Change in Groundwater Quality	<ul style="list-style-type: none"> <li>Disturbance to physical hydraulic properties of soil and parent material above or below the water table</li> </ul>	<ul style="list-style-type: none"> <li>Based on the evaluation of water well logs, regional geological information, or site-specific information collected, provide shallow domestic well owners the option to participate in a water well monitoring program prior to construction to determine baseline quality and quantity conditions.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>If springs and groundwater are encountered, the Company will review the area and determine the appropriate mitigation.</li> </ul>	✓	✓
Change in Groundwater Quantity		<ul style="list-style-type: none"> <li>Based on the evaluation of water well logs, regional geological information, or site-specific information collected, provide shallow domestic well owners the option to participate in a water well monitoring program prior to construction to determine baseline quality and quantity conditions.</li> </ul>	✓	✓
		<ul style="list-style-type: none"> <li>Water pumping from the construction footprint shall be released onto stable surfaces in a manner that does not cause erosion of soils, or sedimentation of the watercourse.</li> </ul>	✓	✓

**EDSON MAINLINE EXPANSION PROJECT  
ENVIRONMENTAL AND SOCIO-ECONOMIC ASSESSMENT**

Assessment of Effects on Aquatic Resources  
April 2019

**Table 8-14 Key Mitigation Measures for Aquatic Resources**

Potential Effect	Effect Pathway	Mitigation Measures	Applicable Project Component	
			Elk River Section	Alford Creek Section
Change in Groundwater Quantity (cont'd)		<ul style="list-style-type: none"> <li>Using filter bags or other appropriate sediment filtering devices, pump water onto stable, well vegetated areas, tarpaulins, sheeting, rocks, sand bags, or into settling ponds. Complete dewatering in a manner that does not cause erosion or allow sediment to re-enter a watercourse or waterbody.</li> <li>Do not permit pumped water to flow directly into any watercourse. If water is released onto private land, landowner consent must be acquired prior to release.</li> <li>The Contractor will ensure the pump intake is elevated to minimize the pumping of sediment.</li> <li>The Contractor will ensure hoses and pumps are of sufficient length and capacity to transfer water to the desired location.</li> <li>The Contractor will ensure hoses are in good working condition, and hoses with tears or ruptures will be repaired or replaced.</li> </ul>	✓	✓
	<ul style="list-style-type: none"> <li>Alteration of groundwater levels or flow rate in nearby water wells or springs through dewatering</li> <li>Initiation of artesian flow to the surface due to breach of a confining layer during excavation</li> <li>Disturbance to physical hydraulic properties of soil and parent material above or below the water table</li> </ul>	<ul style="list-style-type: none"> <li>If springs and groundwater are encountered, the Company will review the area and determine the appropriate mitigation.</li> </ul>	✓	✓
<p>NOTES:</p> <ul style="list-style-type: none"> <li>✓ Applicable</li> <li>- Not applicable</li> </ul>				

2 Required Authorization	3a i. Legislative Framework	3a ii. Effects assessment required? Yes/No	3a ii. If Yes, Describe Assessment	3a ii. Conditions in Approval? Yes/No	3a ii If Yes, Describe Effect the Conditions would Address	Is Public and/or Indigenous Consultation required? Yes/No	3a iii. If Yes, Describe Approach to be taken and summarise issues raised and response	3b i. Does this address Aboriginal Rights/Capacity funding? Yes/No	3b ii. If Yes, Discuss Benchmarks and Standards to meet (capacity funding)	3b ii. If Yes, Discuss Benchmarks and Standards to meet (Aboriginal rights)	3b iii. How will the impact of permanent changes or cumulative effects be Managed?
<b>Federal</b>											
Order under Section 214	Canada Energy Regulator <i>Canadian Energy Regulator Act</i>	Yes	An assessment of effects to environmental and socioeconomic valued components is underway, including but not limited to: fish and fish habitat; migratory birds and species at risk; and adverse impacts, resulting from any change to the environment, on Indigenous peoples or changes to their health, social or economic conditions. Project-related and cumulative environmental effects are assessed sequentially. Potential project-related environmental effects and the mechanisms through which they act are discussed first, considering design and mitigation measures that help to avoid or reduce the effect. Residual Project related environmental effects are characterized using specific criteria (e.g., direction, magnitude, geographic extent, duration, frequency, likelihood). If there is an identified potential for adverse residual environmental effects of the Project to interact cumulatively with the residual environmental effects of other past, present or reasonably foreseeable future projects or physical activities, these cumulative environmental effects are also assessed. The significance of residual Project and residual cumulative effects is then determined based on pre-defined criteria or thresholds.	Yes	While approval conditions have not yet been set, it is expected that they will address effects including, but not limited to: fish and fish habitat; migratory birds and species at risk; adverse changes to the environment that would occur on federal lands; and adverse impacts, resulting from any change to the environment, on Indigenous peoples or changes to their health, social or economic conditions.	Yes	See IR Response number 5 and 6	Yes, both	It is NGTL's practice to offer, where appropriate, and depending on the scope and scale of the project, a range of project-specific capacity funding agreements to Indigenous groups for engagement activities with the company to better understand the potential effects of the project on Indigenous or Treaty rights and interests. These capacity funding agreement cover the entire scope of project engagement activities.	NGTL is required to assess effects on the rights of Indigenous people in accordance with section iv. of the Interim Filing Guidance AND Early Engagement Guide (Interim Guide) under the <i>Canadian Energy Regulatory Act</i> .	All changes are reversible, either in the short, medium or long-term. Mitigation to minimize temporary effects will be applied during construction, disturbance will be reclaimed to equivalent land capability after construction, and PCM will be implemented to confirm that mitigation met its objectives or to adapt mitigation that did not meet its objectives.
Authorization under subsection 35(1) of the Fisheries Act for activities that result in the harmful alteration, disruption or destruction of fish habitat (HADD)	Department of Fisheries and Oceans (DFO) <i>Fisheries Act Section 35(2)</i>	Yes	<b>This is not expected to be required for the Project. If required, an assessment of effects to fish and fish habitat will be undertaken.</b> Under paragraphs 34.4(2)(b) and 35(2)(b) of the <i>Fisheries Act</i> , the Minister of Fisheries and Oceans (the Minister) may issue an authorization with any terms and conditions in relation to a proposed work, undertaking or activity that may, respectively, result in the death of fish or the harmful alteration, disruption or destruction of fish habitat. To make an application under paragraphs 34.4(2)(b) and 35(2)(b) of the <i>Fisheries Act</i> , information consistent with an effects assessment must be provided.	Yes	N/A	Yes	See IR Response numbers 5 and 6	No	It is NGTL's practice to offer, where appropriate, and depending on the scope and scale of the project, a range of project-specific capacity funding agreements to Indigenous groups for engagement activities with the company to better understand the potential effects of the project on Indigenous or Treaty rights and interests. These capacity funding agreement cover the entire scope of project engagement activities.		N/A
Scientific Fish Collection Permit - Section 74 of SARA	Department of Fisheries and Oceans (DFO) <i>Fisheries Act Fishery (General) Regulations (SOR/93-53)</i>	Yes	An assessment of effects to fish and fish habitat was undertaken. The assessment included: a description of proposed activities (e.g., locations, protocols, personnel); mitigation to minimize potential effects to fish and fish habitat, potential residual effects to fish and fish habitat, significance of potential residual effects, and monitoring.	Yes	Approval conditions addressed effects to fish and fish habitat.	No		No			N/A
<b>Provincial -Alberta</b>											
Wildlife Research Permit and Collection Limit  (Research Permit for Class Protocol #03, 13, & 10)	Alberta Environment and Parks (AEP) <i>Wildlife Act</i>	No		Yes	Approval conditions addressed effects to wildlife, including species at risk.	No		No			N/A
First Nations Consultation Decision of Adequacy (where required)	Government of Alberta's Policy on Consultation with First Nations on Land and Natural Resource Management, 2013, Government of Alberta's Policy on Consultation with Metis Settlement on Land and Natural Resource Management, 2015, as well as the Government of Alberta's Guidelines on Consultation with First Nations on Land and Natural Resource Management 2014 and Government of Alberta's Guidelines on Consultation with Metis Settlements on Land Natural Resource Management 2016	Yes	Alberta directs proponents to consult with Indigenous groups, if they believe there is a trigger for the Duty to Consult. Alberta will determine the level of consultation required, and assess consultation completeness, with Indigenous groups on potential adverse impacts of Crown decisions on Aboriginal Treaty rights and Traditional use activities. Including for Provincial land dispositions and certain Water Act applications.	No	N/A	Yes	If consultation with Indigenous groups is required, the approach will adhere to the standards and requirements described in the Legislative Frameworks listed in column # a i. of this row and in alignment to approach listed in IR response 6	No	It is NGTL's practice to offer, where appropriate, and depending on the scope and scale of the project, a range of project-specific capacity funding agreements to Indigenous groups for engagement activities with the company to better understand the potential effects of the project on Indigenous or Treaty rights and interests. These capacity funding agreement cover the entire scope of project engagement activities.	NGTL is required to assess effects on the rights of Indigenous people in accordance with section iv. of the Interim Filing Guidance AND Early Engagement Guide (Interim Guide) under the <i>Canadian Energy Regulatory Act</i> .	N/A
<i>Historical Resources Act</i> approval is required from Alberta Culture, Multiculturalism and Status of Women (ACMSW). A Historical Resources Application is submitted to ACMSW. ACMSW issues unconditional or conditional approval, which would include requirements for a Historical Resources Impact Assessment (HRIA) to be conducted to receive clearance.	Alberta Culture, Multiculturalism and Status of Women (ACMSW) <i>Historical Resources Act</i>	Yes	An assessment of the following effects will be undertaken: Indigenous peoples (e.g., changes to the environment impacting physical and cultural heritage, and structures, sites or things of historical, archaeological, paleontological or architectural significance). The potential for change in heritage resources as a result of the following activities will be assessed: (1) the loss or disturbance to site contents and site contexts through ground disturbance associated with brush and/ or topsoil removal, grading, trenching, vehicle traffic and use of workspaces during construction activities and (2) Vandalism (e.g., if the Project creates new human access opportunities) or unauthorized artifact/fossil collection by workers during construction.	Yes	While approval conditions have not yet been set, it is expected that they will address effects including but not limited to: Indigenous peoples (e.g., changes to the environment impacting physical and cultural heritage, and structures, sites or things of historical, archaeological, paleontological or architectural significance).	Yes - for Aboriginal Traditional Use Sites	See IR Response number 6	No			N/A

2 Required Authorization	3a i. Legislative Framework	3a ii. Effects assessment required? Yes/No	3a ii. If Yes, Describe Assessment	3a ii. Conditions in Approval? Yes/No	3a ii If Yes, Describe Effect the Conditions would Address	Is Public and/or Indigenous Consultation required? Yes/No	3a iii. If Yes, Describe Approach to be taken and summarise issues raised and response	3b i. Does this address Aboriginal Rights/Capacity funding? Yes/No	3b ii. If Yes, Discuss Benchmarks and Standards to meet (capacity funding)	3b ii. If Yes, Discuss Benchmarks and Standards to meet (Aboriginal rights)	3b iii. How will the impact of permanent changes or cumulative effects be Managed?
Temporary Field Authorizations (TFA) For workspace on Crown land (Geotechnical, construction work space, laydown yards, drill mud sumps etc.), Department Pipeline Lease (DPL) for pipeline ROW and Department Miscellaneous Lease (DML) for camps	AEP <i>Public Lands Act</i>	Yes	An assessment of the following effects will be undertaken: migratory birds and species at risk. Based on provincially-identified environmental sensitivities, areas with environmental sensitivities will be identified.	Yes	While approval conditions have not yet been set, it is expected that Approval Standards and Operating Conditions related to effects to migratory birds and species at risk, among other valued components, will be applied, except where a non-routine application is submitted. For non-routine applications, it is expected that conditions related to effects to migratory birds and species at risk will be determined in consultation with AEP on a case-by-case basis.	Yes	See IR Response numbers 5 and 6	Yes Both	It is NGTL's practice to offer, where appropriate, and depending on the scope and scale of the project, a range of project-specific capacity funding agreements to Indigenous groups for engagement activities with the company to better understand the potential effects of the project on Indigenous or Treaty rights and interests. These capacity funding agreement cover the entire scope of project engagement activities.	The Alberta Aboriginal Consultation Office directs proponents to engage with identified Indigenous groups for certain TFA's in compliance with Government of Alberta's Policy on Consultation with First Nation on Land and Natural Resource Management, 2013, Government of Alberta's Policy on Consultation with Metis Settlement on Land and Natural Resource Management, 2015, as well as the Government of Alberta's Guidelines on Consultation with First Nation on Land and Natural Resource Management 2014 and Government of Alberta's Guidelines on Consultation with Metis Settlements on Land Natural Resource Management 2016	N/A
Crown land dispositions for facility site	AEP <i>Public Lands Act</i>	No	<b>This is not expected to be required for the Project. The ABC Border MS is on NGTL private land.</b>								N/A
Approval under Alberta's <i>Water Act</i> - For geotechnical activities on Crown Land within the high water mark of watercourse crossings	AEP <i>Water Act</i>	No	<b>This is not expected to be required for the Project. The geotechnical program will avoid activities within the high water mark of watercourse crossings.</b>								N/A
Approval under Alberta's <i>Water Act</i> - Required for temporary disturbances to wetlands including marshes and shallow open water only	AEP <i>Water Act</i>	No	An assessment of the following effects will not be undertaken: fish and fish habitat; migratory birds and species at risk; and adverse impacts, resulting from any change to the environment, on Indigenous peoples or changes to their health, social or economic conditions. However, effects to wetlands will be undertaken.	Yes	While approval conditions have not yet been set, it is expected that they will address effects to wetlands.						N/A
Approval under Alberta's <i>Water Act</i> - permanent disturbance to wetlands	AEP <i>Water Act</i>	No	<b>This is not expected to be required for the Project. Permanent disturbance to wetlands will be avoided.</b>								N/A
Notification under the <i>Code of Practice for Pipelines and Telecommunication Lines Crossing a Water Body</i> All watercourses and wetlands crossed by the proposed pipeline.	AEP <i>Code of Practice for Pipelines and Telecommunication Lines Crossing a Water Body</i>	Yes	An assessment of effects to fish and fish habitat, including fish species at risk, will be undertaken. The <i>Code of Practice for Pipelines and Telecommunication Lines Crossing a Water Body</i> sets out the standards and conditions to be met to ensure the activity minimizes the disturbance and impact on the environment when undertaking or conducting the activities governed by the <i>Code of Practice for Pipelines and Telecommunication Lines Crossing a Water Body</i> . NGTL must develop a plan to comply with the COP objectives and standards. Records must be maintained and made available upon request.	No							N/A
Notification under the <i>Code of Practice for Watercourse Crossings</i> Vehicle crossings of watercourses and wetlands crossed by the Project.	AEP <i>Code of Practice for Watercourse Crossings</i>	Yes	An assessment of effects to fish and fish habitat, including fish species at risk, will be undertaken. The <i>Code of Practice for Watercourse Crossings</i> sets out the standards and conditions to be met to ensure the activity minimizes the disturbance and impact on the environment when undertaking or conducting the activities governed by the <i>Code of Practice for Watercourse Crossings</i> . NGTL must develop a plan to comply with the COP objectives and standards. Records must be maintained and made available upon request.	No							N/A
Notification or Registration under the <i>Code of Practice for Hydrostatic Testing</i> , Registration under the ESEA and/or Notification under the <i>Water Act</i> and/or <i>Code of Practice for Temporary Diversion of Water for Hydrostatic Testing of Pipelines</i>	Hydrostatic testing activities for approval of acceptable water sources under <i>AEPEA</i>	No		No							N/A

2 Required Authorization	3a i. Legislative Framework	3a ii. Effects assessment required? Yes/No	3a ii. If Yes, Describe Assessment	3a ii. Conditions in Approval? Yes/No	3a ii If Yes, Describe Effect the Conditions would Address	Is Public and/or Indigenous Consultation required? Yes/No	3a iii. If Yes, Describe Approach to be taken and summarise issues raised and response	3b i. Does this address Aboriginal Rights/Capacity funding? Yes/No	3b ii. If Yes, Discuss Benchmarks and Standards to meet (capacity funding)	3b ii. If Yes, Discuss Benchmarks and Standards to meet (Aboriginal rights)	3b iii. How will the impact of permanent changes or cumulative effects be Managed?
Temporary Diversion License Approval under Alberta's <i>Water Act</i> Approval for temporary diversion of water (i.e., for ice/snow bridge construction, drilling, camps), etc.)	AEP <i>Water Act</i>	No		Yes	While approval conditions have not yet been set, it is expected that they will address applicable effects to fish and fish habitat.	Yes - if AEP refers the file to the ACO for a consultation recommendation, and the ACO determines consultation is required.	The ACO is responsible for determining if Consultation is required and if so, the adequacy of consultation, and provides a recommendation or AEP to give adequacy; NGTL will consult with Indigenous or Metis Communities if directed to by AEP (per the ACO's recommendation), for this approval. NGTL will complete all activities required by AEP to obtain adequacy.	Yes, Both	Capacity funding - It is NGTL's practice to offer, where appropriate, and depending on the scope and scale of the project, a range of project specific capacity funding agreements to Indigenous groups for engagement activities with the company to better understand the potential effects of the project on Indigenous or Treaty rights and interests. These capacity funding agreement cover the entire scope of project engagement activities.	The Alberta Aboriginal Consultation Office directs proponents to engage with identified Indigenous groups in compliance with Government of Alberta's Policy on Consultation with First Nation on Land and Natural Resource Management, 2013, Government of Alberta's Policy on Consultation with Metis Settlement on Land and Natural Resource Management, 2015, as well as the Government of Alberta's Guidelines on Consultation with First Nation on Land and Natural Resource Management 2014 and Government of Alberta's Guidelines on Consultation with Metis Settlements on Land Natural Resource Management 2016.	N/A
Fish Research License /Fish Salvage/monitoring plan-construction. required for fish collection/salvage	AEP <i>Wildlife Act</i>	No		Yes	While approval conditions have not yet been set, it is expected that they will address effects to fish and fish habitat.	No		No			N/A
Approval to remove beaver dams and beavers if required	AEP <i>Wildlife Act</i>	No		Yes	While approval conditions have not yet been set, it is expected that they will address applicable effects to fish and fish habitat.	Yes - registered trapper		No			N/A
Fire Permit under the <i>Forest and Prairie Protection Act</i> Burning timber from construction clearing (March 1 – October 31)	AEP <i>Forest and Prairie Protection Act</i>	No		Yes	While approval conditions have not yet been set, it is expected that they will address applicable effects to environmental and socioeconomic changes resulting from forest fires.	No		No			N/A
<b>Municipal</b>											
Municipal permits to develop facilities and bylaws that relate to environmental issues including noise and waste disposal	Clearwater County Rick Emmons 403-845-4444	No				Yes Public	NGTL will engage with landowners and occupants within 1.5 km (at minimum) of a proposed surface development requiring a county or municipal permit. At this point NGTL has not selected any locations for facilities requiring a municipal permit	No			N/A
Municipal permits to develop facilities and bylaws that relate to environmental issues including noise and waste disposal	Municipality of Crowsnest Pass	No				Yes Public	NGTL will engage with landowners and occupants within 1.5 km (at minimum) of a proposed surface development requiring a county or municipal permit. At this point NGTL has not selected any locations for facilities requiring a municipal permit	No			N/A

2. Required Authorization	3a. Legislative Framework	3a. ii. Effects assessment required? Yes/No	3a. ii. Conditions in Approval? Yes/No	3a. ii. If Yes, Describe Effect the Conditions would Address	3a. iii. Is Public and/or Indigenous Consultation required? Yes/No	3a. iii. If Yes, Describe Approach to be taken and summarize issues raised and response	3b. i. Does this address Aboriginal Rights/Capacity funding? Yes/No	3b. ii. If Yes, Discuss Benchmarks and Standards to meet (Capacity Funding)	3b. ii. If Yes, Discuss Benchmarks and Standards to meet (Aboriginal Rights)	3b. iii. How will the impact of permanent changes or cumulative effects be Managed?		
<b>Federal</b>												
Order under Section 214	Canada Energy Regulator <i>Canadian Energy Regulator Act</i>	Yes	Yes	An assessment of effects to environmental and socioeconomic valued components is underway, including but not limited to: fish and fish habitat; migratory birds and species at risk; and adverse impacts, resulting from any change to the environment, on Indigenous peoples or changes to their health, social or economic conditions. Project-related and cumulative environmental effects are assessed sequentially. Potential project-related environmental effects and the mechanisms through which they act are discussed first, considering design and mitigation measures that help to avoid or reduce the effect. Residual Project related environmental effects are characterized using specific criteria (e.g., direction, magnitude, geographic extent, duration, frequency, likelihood). If there is an identified potential for adverse residual environmental effects of the Project to interact cumulatively with the residual environmental effects of other past, present or reasonably foreseeable future projects or physical activities, these cumulative environmental effects are also assessed. The significance of residual Project and residual cumulative effects is then determined based on pre-defined criteria or thresholds.	Yes	While approval conditions have not yet been set, it is expected that they will address effects including but not limited to: fish and fish habitat; migratory birds and species at risk; adverse changes to the environment that would occur on federal lands; and adverse impacts, resulting from any change to the environment, on Indigenous peoples or changes to their health, social or economic conditions.	Yes	See IR Response numbers 5 and 6	Yes Both	It is Foothills' practice to offer, where appropriate, and depending on the scope and scale of the project, a range of project-specific capacity funding agreements to Indigenous groups for engagement activities with the company to better understand the potential effects of the project on Indigenous or Treaty rights and interests. These capacity funding agreement cover the entire scope of project engagement activities.	Foothills is required to assess effects on the rights of Indigenous people in accordance with section iv. of the Interim Filing Guidance AND Early Engagement Guide (Interim Guide) under the <i>Canadian Energy Regulatory Act</i> .	All changes are reversible, either in the short, medium or long-term. Mitigation to minimize temporary effects will be applied during construction, disturbance will be reclaimed to equivalent land capability after construction, and PCM will be implemented to confirm that mitigation met its objectives or to adapt mitigation that did not meet its objectives.
Authorization under subsection 35(1) of the Fisheries Act for activities that result in the harmful alteration, disruption or destruction of fish habitat (HADD)	Department of Fisheries and Oceans (DFO) <i>Fisheries Act Section 35(2)</i>	Yes		<b>This is not expected to be required for the Project. If required, an assessment of effects to fish and fish habitat will be undertaken.</b> Under paragraphs 34.4(2)(b) and 35(2)(b) of the <i>Fisheries Act</i> , the Minister of Fisheries and Oceans (the Minister) may issue an authorization with any terms and conditions in relation to a proposed work, undertaking or activity that may, respectively, result in the death of fish or the harmful alteration, disruption or destruction of fish habitat. To make an application under paragraphs 34.4(2)(b) and 35(2)(b) of the <i>Fisheries Act</i> , information consistent with an effects assessment must be provided.	Yes		Yes	See IR Response numbers 5 and 6	No			N/A
Scientific Fish Collection Permit - Section 74 of SARA (handling and relocation of fish)	Department of Fisheries and Oceans (DFO) <i>Fisheries Act Fishery (General) Regulations (SOR/93-53)</i>	Yes	Yes	An assessment of effects to fish and fish habitat (specific to species at risk) will be undertaken. The assessment would include: a description of proposed activities (e.g., locations, protocols, personnel); mitigation to minimize potential effects to fish and fish habitat, potential residual effects to fish and fish habitat, significance of potential residual effects, and monitoring.	Yes	Approval conditions are expected to address effects to fish and fish habitat including species at risk.	No		No			N/A
<b>Provincial - BC</b>												
Oversize-overweight Vehicle permits Operation of an oversize or overweight vehicle on a highway	Ministry of Transportation and Infrastructure (MOTI) <i>Commercial Transport Act Section 8</i>	No					No		No			N/A
Non-resident Commercial Vehicle Permit Operation of a vehicle with a gross weight between 6,000 to 50,000 kg and is a commercial or industrial vehicle	MOTI <i>Commercial Transport Act</i>	No					No		No			N/A
Controlled Access Highway Permit Authorization for access to or from a controlled access highway	MOTI <i>Transportation Act Sections 48 &amp; 49</i>	No					No		No			N/A
Sign Permit Erecting a traffic sign	MOTI <i>Transportation Act Section 62</i>	No					No		No			N/A
Temporary Work Space, Parallel or Crossing Permit Permit to construct works within a MOTI right-of-way		No					No		No			N/A
Work Notification or Lane Closure Request Permit When work requires a closure of a MOTI right-of-way		No					No		No			N/A
Highway Access Permits Permit for resource and industrial road access		No					No		No			N/A
Forest Service Road Use Permit Use of a Forest Service Road which Proponents is required to maintain	Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD) <i>Forest and Range Practices Act</i>	No					No		No			N/A
Burning registration Burning of slash following clearing.	FLNRORD Open Burning Smoke Control Regulation under the <i>Environmental Management Act</i>	No					No		No			N/A

2. Required Authorization	3a. Legislative Framework	3a. ii. Effects assessment required? Yes/No	3a. ii. Conditions in Approval? Yes/No	3a. ii. If Yes, Describe Assessment	3a. iii. Is Public and/or Indigenous Consultation required? Yes/No	3a. iii. If Yes, Describe Approach to be taken and summarize issues raised and response	3b. i. Does this address Aboriginal Rights/Capacity funding? Yes/No	3b. ii. If Yes, Discuss Benchmarks and Standards to meet (Capacity Funding)	3b. ii. If Yes, Discuss Benchmarks and Standards to meet (Aboriginal Rights)	3b. iii. How will the impact of permanent changes or cumulative effects be Managed?
Application to Collect Fish for Scientific Purposes (handling and relocation of fish)		Yes	Yes	An assessment of effects to fish and fish habitat will be undertaken. The potential for impact to fish and fish habitat as a result of the Project will be assessed in the Environmental and Socio-Economic Assessment, in accordance with the assessment requirements outlined in the NEB Filing Manual, as required by the CER  The assessment required for this permit would include: a description of proposed activities (e.g., locations, protocols, personnel); mitigation to minimize potential effects to fish and fish habitat, potential residual effects to fish and fish habitat, significance of potential residual effects, and monitoring.	No	Approval conditions are expected to address effects to fish and fish habitat, including species at risk.	No			N/A
Wildlife Act permit Moving or removing nests protected under Section 34 of the BC Wildlife Act		Yes	Yes	An assessment of effects to migratory birds (including species at risk) will be undertaken. The potential for impact to wildlife and wildlife habitat (including migratory birds and species at risk) as a result of the Project will be assessed in the Environmental and Socio-Economic Assessment, in accordance with the assessment requirements outlined in the NEB Filing Manual, as required by the CER.  The assessment required for this permit would include: a description of proposed activities (e.g., locations, protocols, personnel); mitigation to minimize potential effects to birds (including migratory birds), potential residual effects to birds, significance of potential residual effects, and monitoring.	No	Approval conditions are expected to address effects to wildlife, including species at risk.	No			N/A
Wildlife Act Exemption Permits (handling, relocation and removal of beavers and beaver dams)		No	Yes	The potential for impact to wildlife and wildlife habitat (including species at risk) as a result of the Project will be assessed in the Environmental and Socio-Economic Assessment, in accordance with the assessment requirements outlined in the NEB Filing Manual, as required by the CER.  The assessment required for this permit would include: a description of proposed activities (e.g., locations, protocols, personnel); mitigation to minimize potential effects to beavers, potential residual effects to beavers, significance of potential residual effects, and monitoring.	No	Approval conditions are expected to address effects to wildlife, including species at risk.	No			N/A
General Wildlife Act Permit (handling and relocation of amphibians)		Yes	Yes	An assessment of effects to species at risk will be undertaken. The potential for impact to wildlife and wildlife habitat (including species at risk) as a result of the Project will be assessed in the Environmental and Socio-Economic Assessment, in accordance with the assessment requirements outlined in the NEB Filing Manual, as required by the CER.  The assessment required for this permit would include: a description of proposed activities (e.g., locations, protocols, personnel); mitigation to minimize potential effects to amphibians, potential residual effects to amphibians, significance of potential residual effects, and monitoring.	No	Approval conditions are expected to address effects to wildlife, including species at risk.	No			N/A
Heritage Inspection Permit (Section 12.2) Archaeological Impact Assessment prior to clearing and ground disturbance activities	FLNRORD Heritage Conservation Act Section 12.2	Yes	Yes	An assessment of the following effects will be undertaken: Indigenous peoples (e.g., changes to the environment impacting physical and cultural heritage, and structures, sites or things of historical, archaeological, paleontological or architectural significance). The potential for change in heritage resources as a result of the Project will be assessed in the Environmental and Socio-Economic Assessment, as required by the CER and will include (1) the loss or disturbance to site contents and site contexts through ground disturbance associated with brush and/ or topsoil removal, grading, trenching, vehicle traffic and use of workspaces during construction activities and (2) Vandalism (e.g., if the Project creates new human access opportunities) or unauthorized artifact/fossil collection by workers during construction.  The assessment required for this permit will include an assessment of potential heritage resources in the vicinity of the Project, a review of any recorded (previously known) heritage resources that overlap the Project footprint and recommendations from a qualified archaeologist on methods for conducting archaeological survey work in the field.	Yes - for Aboriginal Traditional Use Sites	See IR Response number 6	No	It is Foothills' practice to offer, where appropriate, and depending on the scope and scale of the project, a range of project-specific capacity funding agreements to Indigenous groups for engagement activities with the company to better understand the potential effects of the project on Indigenous or Treaty rights and interests. These capacity funding agreement cover the entire scope of project engagement activities.	FLNRORD consults with Indigenous groups regarding potential impact to Section 35 Aboriginal Rights for all dispositions	N/A
Site Alteration Permit (Section 12.4) Site Alteration Permit	FLNRORD Heritage Conservation Act Section 12.4	Yes	Yes	An assessment of the following effects will be undertaken: Indigenous peoples (e.g., changes to the environment impacting physical and cultural heritage, and structures, sites or things of historical, archaeological, paleontological or architectural significance). The assessment required for this permit will include an assessment of field information for any heritage resources that will be impacted by the Project and mitigation recommendations developed by a qualified archaeologist for any required heritage site alteration.	Yes - Foothills would engage with Indigenous Groups	See IR Response number 6	Yes - Aboriginal Rights	It is Foothills' practice to offer, where appropriate, and depending on the scope and scale of the project, a range of project-specific capacity funding agreements to Indigenous groups for engagement activities with the company to better understand the potential effects of the project on Indigenous or Treaty rights and interests. These capacity funding agreement cover the entire scope of project engagement activities.	FLNRORD consults with Indigenous groups regarding potential impact to Section 35 Aboriginal Rights for all dispositions	N/A
Works Permit Widening or improvement of an existing Forest Service Road	FLNRORD Forest and Range Practices Act	No			No		No			N/A

2. Required Authorization	3a. Legislative Framework	3a. ii. Effects assessment required? Yes/No	3a. li. If Yes, Describe Assessment	3a. ii. Conditions in Approval? Yes/No	3a ii. If Yes, Describe Effect the Conditions would Address	3a. iii. Is Public and/or Indigenous Consultation required? Yes/No	3a iii. If Yes, Describe Approach to be taken and summarize issues raised and response	3b. i. Does this address Aboriginal Rights/Capacity funding? Yes/No	3b. ii. If Yes, Discuss Benchmarks and Standards to meet (Capacity Funding)	3b. ii. If Yes, Discuss Benchmarks and Standards to meet (Aboriginal Rights)	3b. iii. How will the impact of permanent changes or cumulative effects be Managed?
Consent to Connect Permit Connecting a new road to an existing Forest Service Road		No				No		No			N/A
OGC - Authorization for CER-Related Activity - Pipeline or Facility application where the OGC issues the authorizations under the Land Act, Forestry Act and Water Sustainability Act	British Columbia Oil and Gas Commission (OGC) <i>Oil and Gas Activities Act</i> Section 9	Yes	An assessment of the following effects will be undertaken: wildlife including migratory birds and species at risk. Based on provincially-identified environmental sensitivities, areas with environmental sensitivities will be identified.  Foothills must demonstrate adherence to the BC Government's Environmental Objectives (GEOs) by following the Environmental Protection and Management Regulation (EPMR) and to satisfy the Commission that the proposed activity will not create a material adverse effect, including those to fish and fish habitat, species at risk and migratory birds.  Where Environmental planning and operational measures exist for a specific environmental value(s) adherence to these measures satisfies the respective GEOs. This would include the mitigation measures and commitments detailed in the Project-specific Environmental Protection Plan that is developed as part of the Environmental and Socio-economic Assessment (ESA) that is required by the CER.	Yes	Approval conditions are expected to address effects to wildlife, including migratory birds and species at risk.	Yes	See IR Response numbers 5 and 6	Yes Aboriginal Rights	It is Foothills' practice to offer, where appropriate, and depending on the scope and scale of the project, a range of project-specific capacity funding agreements to Indigenous groups for engagement activities with the company to better understand the potential effects of the project on Indigenous or Treaty rights and interests. These capacity funding agreement cover the entire scope of project engagement activities.	OGC consults with Indigenous groups regarding potential impact to Section 35 Aboriginal Rights for all dispositions. OGC encourages proponent to also engaged with Indigenous groups to increase information sharing, establish effective mitigation measures, and facilitate economic development opportunities.	N/A
OGC - Authorization for CER-Related Activity - New Road Application A road approval is required for any new road on Crown land to be constructed and operated, for a non-status road to be maintained or modified by an NEB pipeline permit holder		Yes	An assessment of the following effects will be undertaken: wildlife including migratory birds and species at risk. Based on provincially-identified environmental sensitivities, areas with environmental sensitivities will be identified.  Foothills must demonstrate adherence to the BC Government's Environmental Objectives (GEOs) by following the Environmental Protection and Management Regulation (EPMR) and is required to satisfy the Commission that the proposed activity will not create a material adverse effect, including those to fish and fish habitat, species at risk and migratory birds.  Where Environmental planning and operational measures exist for a specific environmental value(s) adherence to these measures satisfies the respective GEOs. This would include the mitigation measures and commitments detailed in the Project-specific Environmental Protection Plan that is developed as part of the Environmental and Socio-economic Assessment (ESA) that is required by the CER.	Yes	Approval conditions are expected to address effects to wildlife, including migratory birds and species at risk.	Yes	See IR Response numbers 5 and 6	Yes Aboriginal Rights	It is Foothills' practice to offer, where appropriate, and depending on the scope and scale of the project, a range of project-specific capacity funding agreements to Indigenous groups for engagement activities with the company to better understand the potential effects of the project on Indigenous or Treaty rights and interests. These capacity funding agreement cover the entire scope of project engagement activities.	OGC consults with Indigenous groups regarding potential impact to Section 35 Aboriginal Rights for all dispositions. OGC encourages proponent to also be engaged with Indigenous groups to increase information sharing, establish effective mitigation measures, and facilitate economic development opportunities.	N/A
OGC Authorization for CER-Related Activity - Application for Crown Land Dispositions (Temporary or Permanent) for ancillary activities or sites (i.e., investigative activities, borrow pits, aggregate operations, camp sites, staging areas, storage sites, laydown sites, temporary water lines, etc.)	OGC <i>Land Act</i>	Yes	An assessment of the following effects will be undertaken: wildlife including migratory birds and species at risk. Based on provincially-identified environmental sensitivities, areas with environmental sensitivities will be identified.  Foothills must demonstrate adherence to the BC Government's Environmental Objectives (GEOs) by following the Environmental Protection and Management Regulation (EPMR) and is required to satisfy the Commission that the proposed activity will not create a material adverse effect, including those to fish and fish habitat, species at risk and migratory birds.  Where Environmental planning and operational measures exist for a specific environmental value(s) adherence to these measures satisfies the respective GEOs. This would include the mitigation measures and commitments detailed in the Project-specific Environmental Protection Plan that is developed as part of the Environmental and Socio-economic Assessment (ESA) that is required by the CER.	Yes	Approval conditions are expected to address effects to wildlife, including migratory birds and species at risk.	Yes	See IR Response numbers 5 and 6	Yes Aboriginal Rights	It is Foothills' practice to offer, where appropriate, and depending on the scope and scale of the project, a range of project-specific capacity funding agreements to Indigenous groups for engagement activities with the company to better understand the potential effects of the project on Indigenous or Treaty rights and interests. These capacity funding agreement cover the entire scope of project engagement activities.	OGC consults with Indigenous groups regarding potential impact to Section 35 Aboriginal Rights for all dispositions. OGC encourages proponent to also be engaged with Indigenous groups to increase information sharing, establish effective mitigation measures, and facilitate economic development opportunities.	N/A
Road Use Permits Industrial use of existing forest service roads and development of a new road for oil and gas activities	OGC <i>Forest and Range Practices Act</i> and <i>Land Act</i>	No		Yes		No		No			As the ESA is still in development, it is not known if permanent changes or cumulative effects will occur as a result of the project.
Short Term Use of Water Permit (Section 10 of WSA) Authorization to divert, store and use surface water	OGC <i>Water Sustainability Act</i> Section 10	Yes	An assessment of effects to fish (species at risk) will be undertaken. The assessment would include: effects assessment of fisheries utilization of the water source and downstream of the point of diversion and an environmental flow needs assessment of the source to maintain fish resources, consistent with Section 15 of the <i>Water Sustainability Act</i> .	Yes	Approval conditions are expected to address effects to fish and fish habitat, including species at risk.	Yes - Foothills would engage with Indigenous Groups and water rights holders	See IR Response number 6	Yes Aboriginal Rights	It is Foothills' practice to offer, where appropriate, and depending on the scope and scale of the project, a range of project-specific capacity funding agreements to Indigenous groups for engagement activities with the company to better understand the potential effects of the project on Indigenous or Treaty rights and interests. These capacity funding agreement cover the entire scope of project engagement activities.	OGC consults with Indigenous groups regarding potential impact to Section 35 Aboriginal Rights for all dispositions. OGC encourages proponent to also be engaged with Indigenous groups to increase information sharing, establish effective mitigation measures, and facilitate economic development opportunities.	N/A

2. Required Authorization	3a. Legislative Framework	3a. ii. Effects assessment required? Yes/No	3a. ii. Conditions in Approval? Yes/No	3a. ii. If Yes, Describe Assessment	3a. iii. Is Public and/or Indigenous Consultation required? Yes/No	3a. iii. If Yes, Describe Approach to be taken and summarize issues raised and response	3b. i. Does this address Aboriginal Rights/Capacity funding? Yes/No	3b. ii. If Yes, Discuss Benchmarks and Standards to meet (Capacity Funding)	3b. ii. If Yes, Discuss Benchmarks and Standards to meet (Aboriginal Rights)	3b. iii. How will the impact of permanent changes or cumulative effects be Managed?
Changes In and About a Stream (Instream works) Authorization (Section 11 of WSA) Instream activities (e.g., vehicle crossings and pipeline crossing construction), of streams	OGC <i>Water Sustainability Act</i> Section 11	Yes	Yes	An assessment of effects to fish (including species at risk) will be undertaken. The potential for impact to aquatic resources (including fish and fish habitat and species at risk) as a result of the Project will be assessed in the Environmental and Socio-Economic Assessment, in accordance with the assessment required outlined in the NEB Filing Manual, as required by the CER.  The assessment required for this permit would include: effects of in-stream activities on fish streams, or stream reaches that could affect fish habitat or water quality either directly or downstream.	Yes - Foothills would engage with Indigenous Groups	See IR Response number 6	Yes Aboriginal Rights	It is Foothills' practice to offer, where appropriate, and depending on the scope and scale of the project, a range of project-specific capacity funding agreements to Indigenous groups for engagement activities with the company to better understand the potential effects of the project on Indigenous or Treaty rights and interests. These capacity funding agreement cover the entire scope of project engagement activities.	OGC consults with Indigenous groups regarding potential impact to Section 35 Aboriginal Rights for all dispositions. OGC encourages proponent to also be engaged with Indigenous groups to increase information sharing, establish effective mitigation measures, and facilitate economic development opportunities.	N/A
Master License to Cut or Occupant License to Cut Removal of timber from Crown land	OGC <i>Forest and Range Practices Act</i>	No			No		No			N/A
Pesticide Use Notice Application of pesticides	British Columbia Ministry of the Environment (MOE) <i>Integrated Pest Management Act</i>	No	Yes	Application of herbicides requires a license under the BC Integrated Pest Management Act (2003)	Yes - Foothills would engage with Indigenous Groups	See IR Response number 6	No			N/A
Construction Permit (sewage disposal, camp and drinking water supply) The construction of an industrial work camp	Ministry of Health <i>Public Health Act</i> <i>Water Sustainability Act</i>	No			No		No			N/A
Camp Operation Permit Operation of an industrial work camp	Ministry of Health <i>Public Health Act</i> <i>Water Sustainability Act</i>	No			No		No			N/A
Permit for holding tank Using a sewage holding tank	Ministry of Health <i>Sewerage System Regulation</i> <i>Public Health Act</i>	No			No		No			N/A
Application for Health Approval (Permit to Operate a Food Premise) The construction of, or alteration to, a food premise at a camp must be approved by a health official	Ministry of Health <i>Public Health Act</i>	No			No		No			N/A
Hazardous Waste Generator Registration (Hazardous Waste Regulation) Generating hazardous waste	Ministry of Environment & Climate Change (MOECC) <i>Environmental Management Act</i>	No			No		No			N/A
Hazardous Waste Site Registration (Hazardous Waste Regulation) Generating hazardous waste		No			No		No			N/A
Drivers for Compressor, Oil Pump, or Electricity Generator Registration (Oil and Gas Waste Regulation) Using generators on site		No			No		No			N/A
Sewage Discharge Authorization (Municipal Wastewater Regulation) Discharging sewage		No			No		No			N/A
Waste Management Permit (Environmental Management Act) Handling and holding of waste		No			No		No			N/A
Site Specific Authorization for Burning Waste (Environmental Management Act) Burning waste		No			No		No			N/A
<b>Municipal</b>										
Municipal Permits and Bylaws Municipal permits to develop facilities and bylaws that relate to environmental issues including noise and waste disposal	Regional District of East Kootenay Andrew MacLeod 250-489-2791	No			Yes - Public	Foothills will engage with landowners and occupants within the required distance of a proposed surface development requiring a county or municipal permit. At this point Foothills has not selected any locations for facilities requiring a municipal permit	No			N/A

2. Required Authorization	3a. Legislative Framework	3a. ii. Effects assessment required? Yes/No	3a. ii. If Yes, Describe Assessment	3a. ii. Conditions in Approval? Yes/No	3a. ii. If Yes, Describe Effect the Conditions would Address	3a. iii. Is Public and/or Indigenous Consultation required? Yes/No	3a. iii. If Yes, Describe Approach to be taken and summarize issues raised and response	3b. i. Does this address Aboriginal Rights/Capacity funding? Yes/No	3b. ii. If Yes, Discuss Benchmarks and Standards to meet (Capacity Funding)	3b. ii. If Yes, Discuss Benchmarks and Standards to meet (Aboriginal Rights)	3b. iii. How will the impact of permanent changes or cumulative effects be Managed?
Municipal Permits and Bylaws Municipal permits to develop facilities and bylaws that relate to environmental issues including noise and waste disposal	Regional District of West Kootenay Nelson Wright 250-352-6665	No				Yes - Public	Foothills will engage with landowners and occupants within the required distance of a proposed surface development requiring a county or municipal permit. At this point Foothills has not selected any locations for facilities requiring a municipal permit	No			N/A

2 Required Authorization	3a i. Legislative Framework	3a ii. Effects assessment required? Yes/No	3a ii. If Yes, Describe Assessment	3a ii. Conditions in Approval? Yes/No	3a ii If Yes, Describe Effect the Conditions would Address	Is Public and/or Indigenous Consultation required? Yes/No	3a iii. If Yes, Describe Approach to be taken and summarise issues raised and response	3b i. Does this address Aboriginal Rights/Capacity funding? Yes/No	3b ii. If Yes, Discuss Benchmarks and Standards to meet (capacity funding)	3b ii. If Yes, Discuss Benchmarks and Standards to meet (Aboriginal rights)	3b iii. How will the impact of permanent changes or cumulative effects be Managed?
Order under Section 182	Canada Energy Regulator <i>Canadian Energy Regulator Act</i>	Yes	An assessment of effects to environmental and socioeconomic valued components is underway, including but not limited to: fish and fish habitat; migratory birds and species at risk; adverse changes to the environment that would occur on federal lands; and adverse impacts, resulting from any change to the environment, on Indigenous peoples or changes to their health, social or economic conditions. Project-related and cumulative environmental effects are assessed sequentially. Potential project-related environmental effects and the mechanisms through which they act are discussed first, considering design and mitigation measures that help to avoid or reduce the effect. Residual Project related environmental effects are characterized using specific criteria (e.g., direction, magnitude, geographic extent, duration, frequency, likelihood). If there is an identified potential for adverse residual environmental effects of the Project to interact cumulatively with the residual environmental effects of other past, present or reasonably foreseeable future projects or physical activities, these cumulative environmental effects are also assessed. The significance of residual Project and residual cumulative effects is then determined based on pre-defined criteria or thresholds.	Yes	While approval conditions have not yet been set, it is expected that they will address effects including but not limited to: fish and fish habitat; migratory birds and species at risk; adverse changes to the environment that would occur on federal lands; and adverse impacts, resulting from any change to the environment, on Indigenous peoples or changes to their health, social or economic conditions.	Yes		Yes both	It is NGTL's practice to offer, where appropriate, and depending on the scope and scale of the project, a range of project-specific capacity funding agreements to Indigenous groups for engagement activities with the company to better understand the potential effects of the project on Indigenous or Treaty rights and interests. These capacity funding agreement cover the entire scope of project engagement activities.	NGTL is required to assess effects on the rights of Indigenous people in accordance with section iv.of the Interim Filing Guidance AND Early Engagement Guide (Interim Guide) under the <i>Canadian Energy Regulatory Act</i> .	All changes are reversible, either in the short, medium or long-term. Mitigation to minimize temporary effects will be applied during construction, disturbance will be reclaimed to equivalent land capability after construction, and post-construction monitoring will be implemented to confirm that mitigation met its objectives or to adapt mitigation that did not meet its objectives.
Authorization under subsection 35(1) of the Fisheries Act for activities that result in the harmful alteration, disruption or destruction of fish habitat (HADD)	Department of Fisheries and Oceans (DFO) <i>Fisheries Act</i>	Yes	<b>This is not expected to be required for the Project. If required, an assessment of effects to fish and fish habitat will be undertaken.</b> Under paragraphs 34.4(2)(b) and 35(2)(b) of the <i>Fisheries Act</i> , the Minister of Fisheries and Oceans (the Minister) may issue an authorization with any terms and conditions in relation to a proposed work, undertaking or activity that may, respectively, result in the death of fish or the harmful alteration, disruption or destruction of fish habitat. To make an application under paragraphs 34.4(2)(b) and 35(2)(b) of the <i>Fisheries Act</i> , information consistent with an effects assessment must be provided.	Yes	N/A	Yes		Yes	Capacity funding - It is NGTL's practice to offer, where appropriate, and depending on the scope and scale of the project, a range of project-specific capacity funding agreements to Indigenous groups for engagement activities with the company to better understand the potential effects of the project on Indigenous or Treaty rights and interests. These capacity funding agreement cover the entire scope of project engagement activities.		N/A
Scientific Fish Collection Permit - Section 74 of SARA	Department of Fisheries and Oceans (DFO) <i>Species at Risk Act</i>	Yes	A an assessment of effects to fish and fish habitat was undertaken. The assessment included: a description of proposed activities (e.g., locations, protocols, personnel); mitigation to minimize potential effects to fish and fish habitat, potential residual effects to fish and fish habitat, significance of potential residual effects, and monitoring.	Yes	Approval conditions addressed effects to fish and fish habitat.			No			N/A
<b>Provincial - Alberta</b>											
Wildlife Research Permit and Collection Limit  (Research Permit for Class Protocol #03, 13, & 10)	Alberta Environment and Parks (AEP) <i>Wildlife Act</i>	No		Yes	Approval conditions addressed effects to wildlife, including species at risk.			No			N/A
First Nations Consultation (FNC) Decision of Adequacy (where required)	Government of Alberta's Policy on Consultation with First Nations on Land and Natural Resource Management, 2013, Government of Alberta's Policy on Consultation with Metis Settlement on Land and Natural Resource Management, 2015, as well as the Government of Alberta's Guidelines on Consultation with First Nations on Land and Natural Resource Management 2014 and Government of Alberta's Guidelines on Consultation with Metis Settlements on Land Natural Resource Management 2016	Yes	Alberta directs proponents to consult with Indigenous groups, if they believe there is a trigger for the Duty to Consult. Alberta will determine the level of consultation required, and assess consultation completeness, with Indigenous groups on potential adverse impacts of Crown decisions on Aboriginal Treaty rights and Traditional use activities. Including for Provincial land dispositions and certain Water Act applications.	No	N/A		If consultation with Indigenous groups is required, the approach will adhere to the standards and requirements described in the Legislative Frameworks listed in column # a i. of this row and in alignment to approach listed in IR response 6	No	It is NGTL's practice to offer, where appropriate, and depending on the scope and scale of the project, a range of project-specific capacity funding agreements to Indigenous groups for engagement activities with the company to better understand the potential effects of the project on Indigenous or Treaty rights and interests. These capacity funding agreement cover the entire scope of project engagement activities.	NGTL is required to assess effects on the rights of Indigenous people in accordance with section iv.of the Interim Filing Guidance AND Early Engagement Guide (Interim Guide) under the Canadian Energy Regulatory Act.	N/A
<i>Historical Resources Act</i> approval is required from Alberta Culture, Multiculturalism and Status of Women (ACMSW). A Historical Resources Application is submitted to ACMSW. ACMSW issues unconditional or conditional approval, which would include requirements for a Historical Resources Impact Assessment (HRIA) to be conducted to receive clearance.	Alberta Culture, Multiculturalism and Status of Women (ACMSW) <i>Historical Resources Act</i>	Yes	An assessment of the following effects will be undertaken: Indigenous peoples (e.g., changes to the environment impacting physical and cultural heritage, and structures, sites or things of historical, archaeological, paleontological or architectural significance). The potential for change in heritage resources as a result of the following activities will be assessed: (1) the loss or disturbance to site contents and site contexts through ground disturbance associated with brush and/ or topsoil removal, grading, trenching, vehicle traffic and use of workspaces during construction activities and (2) Vandalism (e.g., if the Project creates new human access opportunities) or unauthorized artifact/fossil collection by workers during construction.	Yes	While approval conditions have not yet been set, it is expected that they will address effects including but not limited to: Indigenous peoples (e.g., changes to the environment impacting physical and cultural heritage, and structures, sites or things of historical, archaeological, paleontological or architectural significance).	Yes - for Aboriginal Traditional Use Sites	If consultation with Indigenous groups is required, the approach will adhere to the standards and requirements described in the Legislative Frameworks listed in column # a i. of this row and in alignment to approach listed in IR response 6	No			N/A

2 Required Authorization	3a i. Legislative Framework	3a ii. Effects assessment required? Yes/No	3a ii. If Yes, Describe Assessment	3a ii. Conditions in Approval? Yes/No	3a ii If Yes, Describe Effect the Conditions would Address	Is Public and/or Indigenous Consultation required? Yes/No	3a iii. If Yes, Describe Approach to be taken and summarise issues raised and response	3b i. Does this address Aboriginal Rights/Capacity funding? Yes/No	3b ii. If Yes, Discuss Benchmarks and Standards to meet (capacity funding)	3b ii. If Yes, Discuss Benchmarks and Standards to meet (Aboriginal rights)	3b iii. How will the impact of permanent changes or cumulative effects be Managed?
Temporary Field Authorizations (TFA) For workspace on Crown land (Geotechnical, construction work space, laydown yards, drill mud sumps etc.), Department Pipeline Lease (DPL) for pipeline ROW and Department Miscellaneous Lease (DML) for camps	AEP <i>Public Lands Act</i>	Yes	An assessment of the following effects will be undertaken: migratory birds and species at risk. Based on provincially-identified environmental sensitivities, areas with environmental sensitivities will be identified.	Yes	While approval conditions have not yet been set, it is expected that Approval Standards and Operating Conditions related to effects to migratory birds and species at risk, among other valued components, will be applied, except where a non-routine application is submitted. For non-routine applications, it is expected that conditions related to effects to migratory birds and species at risk will be determined in consultation with AEP on a case-by-case basis.	Yes	NGTL engages directly with registered crown occupants (trappers, GRL, FMA, DRS, guide outfitters etc.) and will obtain necessary consents and permissions required by AEP for disposition applications.  The ACO is responsible for determining if Consultation is required and if so, the adequacy of consultation, for activities requiring AER approvals; NGTL will consult with Indigenous or Metis Communities if directed to by the ACO, for this approval. NGTL will complete all activities required by ACO to obtain adequacy. Crown dispositions will not be approved until consultation adequacy has been issued.	Yes	It is NGTL's practice to offer, where appropriate, and depending on the scope and scale of the project, a range of project-specific capacity funding agreements to Indigenous groups for engagement activities with the company to better understand the potential effects of the project on Indigenous or Treaty rights and interests. These capacity funding agreement cover the entire scope of project engagement activities.	The Alberta Aboriginal Consultation Office directs proponents to engage with identified Indigenous groups for certain TFA's in compliance with Government of Alberta's Policy on Consultation with First Nation on Land and Natural Resource Management, 2013, Government of Alberta's Policy on Consultation with Metis Settlement on Land and Natural Resource Management, 2015, as well as the Government of Alberta's Guidelines on Consultation with First Nation on Land and Natural Resource Management 2014 and Government of Alberta's Guidelines on Consultation with Metis Settlements on Land Natural Resource Management 2016	N/A
Crown land dispositions for facility site	AEP <i>Public Lands Act</i>	No	<b>This is not required for this project, no facilities planned.</b>					No			N/A
Approval under Alberta's <i>Water Act</i> - For geotechnical activities on Crown Land within the high water mark of watercourse crossings	AEP <i>Water Act</i>	No	<b>This is not expected to be required for the Project. The geotechnical program will avoid activities within the high water mark of watercourse crossings.</b>					No			N/A
Approval under Alberta's <i>Water Act</i> - Required for temporary disturbances to wetlands including marshes and shallow open water only	AEP <i>Water Act</i>	No	an assessment of the following effects will not be undertaken: fish and fish habitat; migratory birds and species at risk; and adverse impacts, resulting from any change to the environment, on Indigenous peoples or changes to their health, social or economic conditions. However, effects to wetlands will be undertaken.	Yes	While approval conditions have not yet been set, it is expected that they will address effects to wetlands.			No			N/A
Approval under Alberta's <i>Water Act</i> - permanent disturbance to wetlands	AEP <i>Water Act</i>		<b>This is not expected to be required for the Project. Permanent disturbance to wetlands will be avoided.</b>					No			N/A
Notification under the <i>Code of Practice for Pipelines and Telecommunication Lines Crossing a Water Body</i> All watercourses and wetlands crossed by the proposed pipeline.	AEP Code of Practice for Pipelines and Telecommunication Lines Crossing a Water Body	Yes	An assessment of effects to fish and fish habitat, including fish species at risk, will be undertaken. The Code of Practice for Pipelines and Telecommunication Lines Crossing a Water Body sets out the standards and conditions to be met to ensure the activity minimizes the disturbance and impact on the environment when undertaking or conducting the activities governed by the Code of Practice for Pipelines and Telecommunication Lines Crossing a Water Body. NGTL must develop a plan to comply with the COP objectives and standards. Records must be maintained and made available upon request.	No	as the Code of Practice for Pipelines and Telecommunication Lines Crossing a Water Body sets the objectives, standards and conditions that must be met. Compliance monitoring is conducted by AEP.			No			N/A
Notification under the <i>Code of Practice for Watercourse Crossings</i> Vehicle crossings of watercourses and wetlands crossed by the Project.	AEP Code of Practice for Watercourse Crossings	Yes	An assessment of effects to fish and fish habitat, including fish species at risk, will be undertaken. The Code of Practice for Watercourse Crossings sets out the standards and conditions to be met to ensure the activity minimizes the disturbance and impact on the environment when undertaking or conducting the activities governed by the Code of Practice for Watercourse Crossings. NGTL must develop a plan to comply with the COP objectives and standards. Records must be maintained and made available upon request.	No	as the Code of Practice for Pipelines and Telecommunication Lines Crossing a Water Body sets the objectives, standards and conditions that must be met. Compliance monitoring is conducted by AEP.			No			N/A
Notification or Registration under the Code of Practice for Hydrostatic Testing, Registration under the ESEA and/or Notification under the <i>Water Act</i> and/or <i>Code of Practice for Temporary Diversion of Water for Hydrostatic Testing of Pipelines</i>	Hydrostatic testing activities for approval of acceptable water sources under AEPEA	No		No	Code of Practice for Temporary Diversion of Water for Hydrostatic Testing of Pipelines sets out the standards and conditions that must be met. NGTL must develop a plan to comply with the COP objectives and standards. Records must be maintained and made available upon request.			No			N/A
Temporary Diversion License Approval under Alberta's <i>Water Act</i> Approval for temporary diversion of water (i.e., for ice/snow bridge construction, drilling, camps), etc.)	AEP <i>Water Act</i>	No		Yes	While approval conditions have not yet been set, it is expected that they will address applicable effects to fish and fish habitat.			No			N/A
Fish Research License /Fish Salvage/monitoring plan-construction. required for fish collection/salvage	AEP <i>Wildlife Act</i>	No		Yes	While approval conditions have not yet been set, it is expected that they will address effects to fish and fish habitat.			No			N/A
Approval to remove beaver dams and beavers if required	AEP <i>Wildlife Act</i>	No		Yes	While approval conditions have not yet been set, it is expected that they will address applicable effects to fish and fish habitat.			No			N/A

2 Required Authorization	3a i. Legislative Framework	3a ii. Effects assessment required? Yes/No	3a ii. If Yes, Describe Assessment	3a ii. Conditions in Approval? Yes/No	3a ii If Yes, Describe Effect the Conditions would Address	Is Public and/or Indigenous Consultation required? Yes/No	3a iii. If Yes, Describe Approach to be taken and summarise issues raised and response	3b i. Does this address Aboriginal Rights/Capacity funding? Yes/No	3b ii. If Yes, Discuss Benchmarks and Standards to meet (capacity funding)	3b ii. If Yes, Discuss Benchmarks and Standards to meet (Aboriginal rights)	3b iii. How will the impact of permanent changes or cumulative effects be Managed?
Fire Permit under the <i>Forest and Prairie Protection Act</i> Burning timber from construction clearing (March 1 – October 31)	AEP <i>Forest and Prairie Protection Act</i>	No		Yes	While approval conditions have not yet been set, it is expected that they will address applicable effects to environmental and socioeconomic changes resulting from forest fires.			No			N/A
<b>Municipal</b>											
Municipal Permits and Bylaws Municipal permits to develop facilities and bylaws that relate to environmental issues including noise and waste disposal	Foothills County Jeff Porter 403-652-2423	No				Yes	NGTL will engage with landowners and occupants within 1.5 km (at minimum) of a proposed surface development requiring a county or municipal permit. At this point NGTL has not selected any locations for facilities requiring a municipal permit	No			N/A
Municipal Permits and Bylaws Municipal permits to develop facilities and bylaws that relate to environmental issues including noise and waste disposal	Municipal District of Pincher Creek	No				Yes	NGTL will engage with landowners and occupants within 1.5 km (at minimum) of a proposed surface development requiring a county or municipal permit. At this point NGTL has not selected any locations for facilities requiring a municipal permit	No			N/A
Municipal Permits and Bylaws Municipal permits to develop facilities and bylaws that relate to environmental issues including noise and waste disposal	MD of Ranchland No.66 Mike Burla 403-329-1344	No				Yes	NGTL will engage with landowners and occupants within 1.5 km (at minimum) of a proposed surface development requiring a county or municipal permit. At this point NGTL has not selected any locations for facilities requiring a municipal permit	No			N/A

2. Required Authorization	3a. Legislative Framework	3a. ii. Effects assessment required? Yes/No	3a. li. If Yes, Describe Assessment	3a. ii. Conditions in Approval? Yes/No	3a. ii. If Yes, Describe Effect the Conditions would Address	3a. iii. Is Public and/or Indigenous Consultation required? Yes/No	3a. iii. If Yes, Describe Approach to be taken and summarize issues raised and response	3b. i. Does this address Aboriginal Rights/Capacity funding? Yes/No	3b. ii. If Yes, Discuss Benchmarks and Standards to meet (Capacity Funding)	3b. ii. If Yes, Discuss Benchmarks and Standards to meet (Aboriginal Rights)	3b. iii. How will the impact of permanent changes or cumulative effects be Managed?
<b>Federal</b>											
Order under Section 214	Canada Energy Regulator <i>Canadian Energy Regulator Act</i>	Yes	An assessment of effects to environmental and socioeconomic valued components is underway, including but not limited to: fish and fish habitat; migratory birds and species at risk; and adverse impacts, resulting from any change to the environment, on Indigenous peoples or changes to their health, social or economic conditions. Project-related and cumulative environmental effects are assessed sequentially. Potential project-related environmental effects and the mechanisms through which they act are discussed first, considering design and mitigation measures that help to avoid or reduce the effect. Residual Project related environmental effects are characterized using specific criteria (e.g., direction, magnitude, geographic extent, duration, frequency, likelihood). If there is an identified potential for adverse residual environmental effects of the Project to interact cumulatively with the residual environmental effects of other past, present or reasonably foreseeable future projects or physical activities, these cumulative environmental effects are also assessed. The significance of residual Project and residual cumulative effects is then determined based on pre-defined criteria or thresholds.	Yes	While approval conditions have not yet been set, it is expected that they will address effects including but not limited to: fish and fish habitat; migratory birds and species at risk; adverse changes to the environment that would occur on federal lands; and adverse impacts, resulting from any change to the environment, on Indigenous peoples or changes to their health, social or economic conditions.	Yes	See IR Response numbers 5 and 6	Yes Both	It is Foothills' practice to offer, where appropriate, and depending on the scope and scale of the project, a range of project-specific capacity funding agreements to Indigenous groups for engagement activities with the company to better understand the potential effects of the project on Indigenous or Treaty rights and interests. These capacity funding agreement cover the entire scope of project engagement activities.	Foothills is required to assess effects on the rights of Indigenous people in accordance with section iv. of the Interim Filing Guidance AND Early Engagement Guide (Interim Guide) under the <i>Canadian Energy Regulator Act</i> .	All changes are reversible, either in the short, medium or long-term. Mitigation to minimize temporary effects will be applied during construction, disturbance will be reclaimed to equivalent land capability after construction, and PCM will be implemented to confirm that mitigation met its objectives or to adapt mitigation that did not meet its objectives.
Authorization under subsection 35(1) of the Fisheries Act for activities that result in the harmful alteration, disruption or destruction of fish habitat (HADD)	Department of Fisheries and Oceans (DFO) <i>Fisheries Act Section 35(2)</i>	Yes	<b>This is not expected to be required for the Project. If required an assessment of effects to fish and fish habitat will be undertaken.</b> Under paragraphs 34.4(2)(b) and 35(2)(b) of the <i>Fisheries Act</i> , the Minister of Fisheries and Oceans (the Minister) may issue an authorization with any terms and conditions in relation to a proposed work, undertaking or activity that may, respectively, result in the death of fish or the harmful alteration, disruption or destruction of fish habitat. To make an application under paragraphs 34.4(2)(b) and 35(2)(b) of the <i>Fisheries Act</i> , information consistent with an effects assessment must be provided.			Yes	See IR Response numbers 5 and 6	No			N/A
Scientific Fish Collection Permit - Section 74 of SARA (handling and relocation of fish)	Department of Fisheries and Oceans (DFO) <i>Fisheries Act Fishery (General) Regulations (SOR/93-53)</i>	Yes	An assessment of effects to fish and fish habitat (specific to species at risk) will be undertaken. The assessment would include: a description of proposed activities (e.g., locations, protocols, personnel); mitigation to minimize potential effects to fish and fish habitat, potential residual effects to fish and fish habitat, significance of potential residual effects, and monitoring.	Yes	Approval conditions are expected to address effects to fish and fish habitat including species at risk.	No		No			N/A
<b>Provincial - BC</b>											
Oversize-overweight Vehicle permits Operation of an oversize or overweight vehicle on a highway	Ministry of Transportation and Infrastructure (MOTI) <i>Commercial Transport Act Section 8</i>	No				No		No			N/A
Non-resident Commercial Vehicle Permit Operation of a vehicle with a gross weight between 6,000 to 50,000 kg and is a commercial or industrial vehicle	MOTI <i>Commercial Transport Act</i>	No				No		No			N/A
Controlled Access Highway Permit Authorization for access to or from a controlled access highway	MOTI <i>Transportation Act Sections 48 &amp; 49</i>	No				No		No			N/A
Sign Permit Erecting a traffic sign	MOTI <i>Transportation Act Section 62</i>	No				No		No			N/A
Temporary Work Space, Parallel or Crossing Permit Permit to construct works within a MOTI right-of-way		No				No		No			N/A
Work Notification or Lane Closure Request Permit When work requires a closure of a MOTI right-of-way		No				No		No			N/A
Highway Access Permits Permit for resource and industrial road access		No				No		No			N/A
Forest Service Road Use Permit Use of a Forest Service Road which Proponents is required to maintain	Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD) <i>Forest and Range Practices Act</i>	No				No		No			N/A
Burning registration Burning of slash following clearing.	FLNRORD Open Burning Smoke Control Regulation under the <i>Environmental Management Act</i>	No				No		No			N/A

2. Required Authorization	3a. Legislative Framework	3a. ii. Effects assessment required? Yes/No	3a. ii. If Yes, Describe Assessment	3a. ii. Conditions in Approval? Yes/No	3a. ii. If Yes, Describe Effect the Conditions would Address	3a. iii. Is Public and/or Indigenous Consultation required? Yes/No	3a. iii. If Yes, Describe Approach to be taken and summarize issues raised and response	3b. i. Does this address Aboriginal Rights/Capacity funding? Yes/No	3b. ii. If Yes, Discuss Benchmarks and Standards to meet (Capacity Funding)	3b. ii. If Yes, Discuss Benchmarks and Standards to meet (Aboriginal Rights)	3b. iii. How will the impact of permanent changes or cumulative effects be Managed?
Application to Collect Fish for Scientific Purposes (handling and relocation of fish)	FLNRORD <i>Wildlife Act</i>	Yes	An assessment of effects to fish and fish habitat will be undertaken. The potential for impact to fish and fish habitat as a result of the Project will be assessed in the Environmental and Socio-Economic Assessment, in accordance with the assessment requirements outlined in the NEB Filing Manual, as required by the CER.  The assessment required for this permit would include: a description of proposed activities (e.g., locations, protocols, personnel); mitigation to minimize potential effects to fish and fish habitat, potential residual effects to fish and fish habitat, significance of potential residual effects, and monitoring.	Yes	Approval conditions are expected to address effects to fish and fish habitat, including species at risk.	No		No			N/A
<i>Wildlife Act</i> permit Moving or removing nests protected under Section 34 of the BC Wildlife Act		Yes	An assessment of effects to migratory birds (including species at risk) will be undertaken. The potential for impact to wildlife and wildlife habitat (including migratory birds and species at risk) as a result of the Project will be assessed in the Environmental and Socio-Economic Assessment, in accordance with the assessment requirements outlined in the NEB Filing Manual, as required by the CER.  The assessment required for this permit would include: a description of proposed activities (e.g., locations, protocols, personnel); mitigation to minimize potential effects to birds (including migratory birds), potential residual effects to birds, significance of potential residual effects, and monitoring.	Yes	Approval conditions are expected to address effects to wildlife, including species at risk.	No		No			N/A
<i>Wildlife Act</i> Exemption Permits (handling, relocation and removal of beavers and beaver dams)		No	The potential for impact to wildlife and wildlife habitat (including species at risk) as a result of the Project will be assessed in the Environmental and Socio-Economic Assessment, in accordance with the assessment requirements outlined in the NEB Filing Manual, as required by the CER.  The assessment required for this permit would include: a description of proposed activities (e.g., locations, protocols, personnel); mitigation to minimize potential effects to beavers, potential residual effects to beavers, significance of potential residual effects, and monitoring.	Yes	Approval conditions are expected to address effects to wildlife, including species at risk.	No		No			N/A
General <i>Wildlife Act</i> Permit (handling and relocation of amphibians)		Yes	An assessment of effects to species at risk will be undertaken. The potential for impact to wildlife and wildlife habitat (including species at risk) as a result of the Project will be assessed in the Environmental and Socio-Economic Assessment, in accordance with the assessment requirements outlined in the NEB Filing Manual, as required by the CER.  The assessment required for this permit would include: a description of proposed activities (e.g., locations, protocols, personnel); mitigation to minimize potential effects to amphibians, potential residual effects to amphibians, significance of potential residual effects, and monitoring.	Yes	Approval conditions are expected to address effects to wildlife, including species at risk.	No		No			N/A
Heritage Inspection Permit (Section 12.2) Archaeological Impact Assessment prior to clearing and ground disturbance activities	FLNRORD <i>Heritage Conservation Act</i> Section 12.2	Yes	An assessment of the following effects will be undertaken: Indigenous peoples (e.g., changes to the environment impacting physical and cultural heritage, and structures, sites or things of historical, archaeological, paleontological or architectural significance). The potential for change in heritage resources as a result of the Project will be assessed in the Environmental and Socio-Economic Assessment, as required by the CER and will include (1) the loss or disturbance to site contents and site contexts through ground disturbance associated with brush and/ or topsoil removal, grading, trenching, vehicle traffic and use of workspaces during construction activities and (2) Vandalism (e.g., if the Project creates new human access opportunities) or unauthorized artifact/fossil collection by workers during construction.  The assessment required for this permit will include an assessment of potential heritage resources in the vicinity of the Project, a review of any recorded (previously known) heritage resources that overlap the Project footprint and recommendations from a qualified archaeologist on methods for conducting archaeological survey work in the field.	Yes	While approval conditions have not yet been set, it is expected that they will address effects including but not limited to: Indigenous peoples (e.g., changes to the environment impacting physical and cultural heritage, and structures, sites or things of historical, archaeological, paleontological or architectural significance).	Yes - for Aboriginal Traditional Use Sites	See IR Response number 6	No	It is Foothills' practice to offer, where appropriate, and depending on the scope and scale of the project, a range of project-specific capacity funding agreements to Indigenous groups for engagement activities with the company to better understand the potential effects of the project on Indigenous or Treaty rights and interests. These capacity funding agreement cover the entire scope of project engagement activities.	FLNRORD consults with Indigenous groups regarding potential impact to Section 35 Aboriginal Rights for all dispositions	N/A
Site Alteration Permit (Section 12.4) Site Alteration Permit	FLNRORD <i>Heritage Conservation Act</i> Section 12.4	Yes	An assessment of the following effects will be undertaken: Indigenous peoples (e.g., changes to the environment impacting physical and cultural heritage, and structures, sites or things of historical, archaeological, paleontological or architectural significance). The assessment required for this permit will include an assessment of field information for any heritage resources that will be impacted by the Project and mitigation recommendations developed by a qualified archaeologist for any required heritage site alteration.	Yes	While approval conditions have not yet been set, it is expected that they will address effects including but not limited to: Indigenous peoples (e.g., changes to the environment impacting physical and cultural heritage, and structures, sites or things of historical, archaeological, paleontological or architectural significance).	Yes - Foothills would engage with Indigenous Groups	See IR Response number 6	Yes - Aboriginal Rights	It is Foothills' practice to offer, where appropriate, and depending on the scope and scale of the project, a range of project-specific capacity funding agreements to Indigenous groups for engagement activities with the company to better understand the potential effects of the project on Indigenous or Treaty rights and interests. These capacity funding agreement cover the entire scope of project engagement activities.	FLNRORD consults with Indigenous groups regarding potential impact to Section 35 Aboriginal Rights for all dispositions	N/A
Works Permit Widening or improvement of an existing Forest Service Road	FLNRORD <i>Forest and Range Practices Act</i>	No				No		No			N/A
Consent to Connect Permit Connecting a new road to an existing Forest Service Road		No					No		No		N/A

2. Required Authorization	3a. Legislative Framework	3a. ii. Effects assessment required? Yes/No	3a. ii. If Yes, Describe Assessment	3a. ii. Conditions in Approval? Yes/No	3a. ii. If Yes, Describe Effect the Conditions would Address	3a. iii. Is Public and/or Indigenous Consultation required? Yes/No	3a. iii. If Yes, Describe Approach to be taken and summarize issues raised and response	3b. i. Does this address Aboriginal Rights/Capacity funding? Yes/No	3b. ii. If Yes, Discuss Benchmarks and Standards to meet (Capacity Funding)	3b. ii. If Yes, Discuss Benchmarks and Standards to meet (Aboriginal Rights)	3b. iii. How will the impact of permanent changes or cumulative effects be Managed?
OGC - Authorization for CER-Related Activity - Pipeline or Facility application where the OGC issues the authorizations under the Land Act, Forestry Act and Water Sustainability Act	British Columbia Oil and Gas Commission (OGC) <i>Oil and Gas Activities Act</i> Section 9	Yes	An assessment of the following effects will be undertaken: wildlife including migratory birds and species at risk. Based on provincially-identified environmental sensitivities, areas with environmental sensitivities will be identified.  Foothills must demonstrate adherence to the BC Government's Environmental Objectives (GEOs) by following the Environmental Protection and Management Regulation (EPMR) and to satisfy the Commission that the proposed activity will not create a material adverse effect, including those to fish and fish habitat, species at risk and migratory birds.  Where Environmental planning and operational measures exist for a specific environmental value(s) adherence to these measures satisfies the respective GEOs. This would include the mitigation measures and commitments detailed in the Project-specific Environmental Protection Plan that is developed as part of the Environmental and Socio-economic Assessment (ESA) that is required by the CER.	Yes	Approval conditions are expected to address effects to wildlife, including migratory birds and species at risk.	Yes	See IR Response numbers 5 and 6	Yes Aboriginal Rights	It is Foothills' practice to offer, where appropriate, and depending on the scope and scale of the project, a range of project-specific capacity funding agreements to Indigenous groups for engagement activities with the company to better understand the potential effects of the project on Indigenous or Treaty rights and interests. These capacity funding agreement cover the entire scope of project engagement activities.	OGC consults with Indigenous groups regarding potential impact to Section 35 Aboriginal Rights for all dispositions. OGC encourages proponent to also engaged with Indigenous groups to increase information sharing, establish effective mitigation measures, and facilitate economic development opportunities.	N/A
OGC - Authorization for CER-Related Activity - New Road Application A road approval is required for any new road on Crown land to be constructed and operated, for a non-status road to be maintained or modified by an NEB pipeline permit holder		Yes	An assessment of the following effects will be undertaken: wildlife including migratory birds and species at risk. Based on provincially-identified environmental sensitivities, areas with environmental sensitivities will be identified.  Foothills must demonstrate adherence to the BC Government's Environmental Objectives (GEOs) by following the Environmental Protection and Management Regulation (EPMR) and is required to satisfy the Commission that the proposed activity will not create a material adverse effect, including those to fish and fish habitat, species at risk and migratory birds.  Where Environmental planning and operational measures exist for a specific environmental value(s) adherence to these measures satisfies the respective GEOs. This would include the mitigation measures and commitments detailed in the Project-specific Environmental Protection Plan that is developed as part of the Environmental and Socio-economic Assessment (ESA) that is required by the CER.	Yes	Approval conditions are expected to address effects to wildlife, including migratory birds and species at risk.	Yes	See IR Response numbers 5 and 6	Yes Aboriginal Rights	It is Foothills' practice to offer, where appropriate, and depending on the scope and scale of the project, a range of project-specific capacity funding agreements to Indigenous groups for engagement activities with the company to better understand the potential effects of the project on Indigenous or Treaty rights and interests. These capacity funding agreement cover the entire scope of project engagement activities.	OGC consults with Indigenous groups regarding potential impact to Section 35 Aboriginal Rights for all dispositions. OGC encourages proponent to also engaged with Indigenous groups to increase information sharing, establish effective mitigation measures, and facilitate economic development opportunities.	N/A
OGC Authorization for CER-Related Activity - Application for Crown Land Dispositions (Temporary or Permanent) for ancillary activities or sites (i.e., investigative activities, borrow pits, aggregate operations, camp sites, staging areas, storage sites, laydown sites, temporary water lines, etc.)	OGC <i>Land Act</i>	Yes	An assessment of the following effects will be undertaken: wildlife including migratory birds and species at risk. Based on provincially-identified environmental sensitivities, areas with environmental sensitivities will be identified.  Foothills must demonstrate adherence to the BC Government's Environmental Objectives (GEOs) by following the Environmental Protection and Management Regulation (EPMR) and is required to satisfy the Commission that the proposed activity will not create a material adverse effect, including those to fish and fish habitat, species at risk and migratory birds.  Where Environmental planning and operational measures exist for a specific environmental value(s) adherence to these measures satisfies the respective GEOs. This would include the mitigation measures and commitments detailed in the Project-specific Environmental Protection Plan that is developed as part of the Environmental and Socio-economic Assessment (ESA) that is required by the CER.	Yes	Approval conditions are expected to address effects to wildlife, including migratory birds and species at risk.	Yes	See IR Response numbers 5 and 6	Yes Aboriginal Rights	It is Foothills' practice to offer, where appropriate, and depending on the scope and scale of the project, a range of project-specific capacity funding agreements to Indigenous groups for engagement activities with the company to better understand the potential effects of the project on Indigenous or Treaty rights and interests. These capacity funding agreement cover the entire scope of project engagement activities.	OGC consults with Indigenous groups regarding potential impact to Section 35 Aboriginal Rights for all dispositions. OGC encourages proponent to also engaged with Indigenous groups to increase information sharing, establish effective mitigation measures, and facilitate economic development opportunities.	N/A
Road Use Permits Industrial use of existing forest service roads and development of a new road for oil and gas activities	OGC <i>Forest and Range Practices Act</i> and <i>Land Act</i>	No		Yes		No		No			As the ESA is still in development, it is not known if permanent changes or cumulative effects will occur as a result of the project.
Short Term Use of Water Permit (Section 10 of WSA) Authorization to divert, store and use surface water	OGC <i>Water Sustainability Act</i> Section 10	Yes	An assessment of effects to fish (species at risk) will be undertaken. The assessment would include: effects assessment of fisheries utilization of the water source and downstream of the point of diversion and an environmental flow needs assessment of the source to maintain fish resources, consistent with Section 15 of the <i>Water Sustainability Act</i> .	Yes	Approval conditions are expected to address effects to fish and fish habitat, including species at risk.	Yes - Foothills would engage with Indigenous Groups and water rights holders	See IR Response number 6	Yes Aboriginal Rights	It is Foothills' practice to offer, where appropriate, and depending on the scope and scale of the project, a range of project-specific capacity funding agreements to Indigenous groups for engagement activities with the company to better understand the potential effects of the project on Indigenous or Treaty rights and interests. These capacity funding agreement cover the entire scope of project engagement activities.	OGC consults with Indigenous groups regarding potential impact to Section 35 Aboriginal Rights for all dispositions. OGC encourages proponent to also engaged with Indigenous groups to increase information sharing, establish effective mitigation measures, and facilitate economic development opportunities.	N/A

2. Required Authorization	3a. Legislative Framework	3a. ii. Effects assessment required? Yes/No	3a. ii. Conditions in Approval? Yes/No	3a. ii. If Yes, Describe Assessment	3a. iii. Is Public and/or Indigenous Consultation required? Yes/No	3a. iii. If Yes, Describe Approach to be taken and summarize issues raised and response	3b. i. Does this address Aboriginal Rights/Capacity funding? Yes/No	3b. ii. If Yes, Discuss Benchmarks and Standards to meet (Capacity Funding)	3b. ii. If Yes, Discuss Benchmarks and Standards to meet (Aboriginal Rights)	3b. iii. How will the impact of permanent changes or cumulative effects be Managed?
Changes In and About a Stream (Instream works) Authorization (Section 11 of WSA) Instream activities (e.g., vehicle crossings and pipeline crossing construction), of streams	OGC <i>Water Sustainability Act</i> Section 11	Yes	Yes	An assessment of effects to fish (including species at risk) will be undertaken. The potential for impact to aquatic resources (including fish and fish habitat and species at risk) as a result of the Project will be assessed in the Environmental and Socio-Economic Assessment, in accordance with the assessment required outlined in the NEB Filing Manual, as required by the CER.  The assessment required for this permit would include: effects of in-stream activities on fish streams, or stream reaches that could affect fish habitat or water quality either directly or downstream.	Yes - Foothills would engage with Indigenous Groups	See IR Response number 6	Yes Aboriginal Rights	It is Foothills' practice to offer, where appropriate, and depending on the scope and scale of the project, a range of project-specific capacity funding agreements to Indigenous groups for engagement activities with the company to better understand the potential effects of the project on Indigenous or Treaty rights and interests. These capacity funding agreement cover the entire scope of project engagement activities.	OGC consults with Indigenous groups regarding potential impact to Section 35 Aboriginal Rights for all dispositions. OGC encourages proponent to also engaged with Indigenous groups to increase information sharing, establish effective mitigation measures, and facilitate economic development opportunities.	N/A
Master License to Cut or Occupant License to Cut Removal of timber from Crown land	OGC <i>Forest and Range Practices Act</i>	No			No		No			N/A
Pesticide Use Notice Application of pesticides	British Columbia Ministry of the Environment (MOE) <i>Integrated Pest Management Act</i>	No	Yes	Application of herbicides requires a license under the BC Integrated Pest Management Act (2003)	Yes - Foothills would engage with Indigenous Groups	See IR Response number 6	No			N/A
Construction Permit (sewage disposal, camp and drinking water supply) The construction of an industrial work camp	Ministry of Health <i>Public Health Act</i> <i>Water Sustainability Act</i>	No			No		No			N/A
Camp Operation Permit Operation of an industrial work camp	Ministry of Health <i>Public Health Act</i> <i>Water Sustainability Act</i>	No			No		No			N/A
Permit for holding tank Using a sewage holding tank	Ministry of Health <i>Sewerage System Regulation</i> <i>Public Health Act</i>	No			No		No			N/A
Application for Health Approval (Permit to Operate a Food Premise) The construction of, or alteration to, a food premise at a camp must be approved by a health official	Ministry of Health <i>Public Health Act</i>	No			No		No			N/A
Hazardous Waste Generator Registration (Hazardous Waste Regulation) Generating hazardous waste	Ministry of Environment & Climate Change (MOECC) <i>Environmental Management Act</i>	No			No		No			N/A
Hazardous Waste Site Registration (Hazardous Waste Regulation) Generating hazardous waste		No			No		No			N/A
Drivers for Compressor, Oil Pump, or Electricity Generator Registration (Oil and Gas Waste Regulation) Using generators on site		No			No		No			N/A
Sewage Discharge Authorization (Municipal Wastewater Regulation) Discharging sewage		No			No		No			N/A
Waste Management Permit (Environmental Management Act) Handling and holding of waste		No			No		No			N/A
Site Specific Authorization for Burning Waste (Environmental Management Act) Burning waste		No			No		No			N/A
<b>Municipal</b>										
Municipal Permits and Bylaws Municipal permits to develop facilities and bylaws that relate to environmental issues including noise and waste disposal	Regional District of East Kootenay Andrew MacLeod 250-489-2791	No			Yes - Public	Foothills will engage with landowners and occupants within the required distance of a proposed surface development requiring a county or municipal permit. At this point Foothills has not selected any locations for facilities requiring a municipal permit	No			N/A

2. Required Authorization	3a. Legislative Framework	3a. ii. Effects assessment required? Yes/No	3a. ii. If Yes, Describe Assessment	3a. ii. Conditions in Approval? Yes/No	3a. ii. If Yes, Describe Effect the Conditions would Address	3a. iii. Is Public and/or Indigenous Consultation required? Yes/No	3a. iii. If Yes, Describe Approach to be taken and summarize issues raised and response	3b. i. Does this address Aboriginal Rights/Capacity funding? Yes/No	3b. ii. If Yes, Discuss Benchmarks and Standards to meet (Capacity Funding)	3b. ii. If Yes, Discuss Benchmarks and Standards to meet (Aboriginal Rights)	3b. iii. How will the impact of permanent changes or cumulative effects be Managed?
Municipal Permits and Bylaws Municipal permits to develop facilities and bylaws that relate to environmental issues including noise and waste disposal	Regional District of West Kootenay Nelson Wright 250-352-6665	No				Yes - Public	Foothills will engage with landowners and occupants within the required distance of a proposed surface development requiring a county or municipal permit. At this point Foothills has not selected any locations for facilities requiring a municipal permit	No			N/A

# Indigenous Relations.

*Working with Indigenous groups*





## Engaging Indigenous groups

At TC Energy we recognize Indigenous groups as rights holders who have a distinct relationship to the land. We understand that our business activities have the potential to affect these groups in tangible ways.

In alignment with TC Energy's corporate values of Safety, Integrity, Responsibility and Collaboration, we engage early and often with potentially affected Indigenous groups to share information, understand their interests, respond to their concerns, identify opportunities and facilitate participation in our projects. Through collaboration and open communication with Indigenous groups, we strive to earn and maintain their respect and trust.

### **Our principles guide our engagement activities with Indigenous groups:**

- Recognizing the unique connection Indigenous Peoples have with the land and their community governance.
- Ensuring meaningful and respectful engagement with Indigenous groups, as early as possible, using a principled approach.
- Achieving regulatory certainty using a pragmatic approach in the jurisdiction where we are building or operating.
- Building innovative project strategies, reflecting engagement and regulatory outcomes that are defensible, commercially reasonable and community led.

We seek to involve Indigenous groups in all aspects of project development, as well as contribute to their long-term aspirations through community legacy, capacity building, contracting and employment opportunities and project participation.



## Indigenous Relations Policy

**We strive to establish and develop long-term, mutually beneficial relationships with Indigenous groups across North America.**

Our Policy sets expectations that must be followed by all personnel and is summarized below. The Policy in full can be read at [TCEnergy.com](https://www.tcenergy.com).

- TC Energy respects the spirit and intent of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), its guiding principles and other international and national law.
- TC Energy recognizes and respects that Indigenous peoples may have a collective attachment to the land and resources associated with our business activities, and that there are often separate organizational and governance structures and political institutions from those of the jurisdictions they fall under. TC Energy will conduct any such business activities with integrity, mutual responsibility and collaboration.
- When engaging in project-related activities, TC Energy engages with Indigenous groups in a timely manner, to allow them to identify interests, understand the potential impacts of our business activities and make decisions freely and openly. TC Energy will ensure meaningful and respectful engagement and dialogue using a principled, transparent and adequate approach.
- When working with Indigenous groups, TC Energy personnel is expected to take the company's Indigenous cultural awareness training to help them work more effectively and collaboratively
- TC Energy will engage Indigenous groups' leadership to:
  - align their capacity and capabilities with the company's project requirements and qualifications
  - support community-led initiatives tailored to local priorities
  - develop skills in the local workforce compatible with industry needs
  - develop community-led innovative project strategies, reflecting engagement and regulatory outcomes that are defensible and commercially reasonable

*Our Indigenous Relations Policy, commitment statement, guiding principles and strategy inform our work with Indigenous groups and can be read in full in the Indigenous section on [TCEnergy.com](https://www.tcenergy.com).*

**For more information:**

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1-855-895-8754

[www.tcenergy.com](http://www.tcenergy.com)