



# Coastal GasLink Pipeline Project

## Selection of Valued Components

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## 1.0 INTRODUCTION

### 1.1 PROJECT BACKGROUND

Coastal GasLink Pipeline Ltd. (Coastal GasLink) is proposing to construct and operate a natural gas pipeline from the area near the community of Groundbirch (about 40 km west of Dawson Creek, British Columbia (BC)) to the proposed LNG Canada Development Inc. (LNG Canada) liquefied natural gas (LNG) export facility (LNG Canada export facility) near Kitimat, BC.

The Coastal GasLink Pipeline Project (Project) involves:

- the construction of approximately 650 km of 48 inch (NPS 48) (1,219 mm) diameter pipeline
- the construction and operation of:
  - metering facilities at the receipt and delivery points
  - one compressor station with provisions for up to five additional compressor station sites to allow for future expansion

The Project will have an initial capacity of about 1.7 billion cubic feet (bcf)/day (48 million cubic metres (mmcm/d)) with the potential for expansion up to about 5 bcf/d (142 mmcm/d). The expansion scenarios do not involve the construction of additional pipeline; only the number and locations of potential future compressor stations would change.

### 1.2 DOCUMENT PURPOSE

This document outlines:

- the draft Valued Components (VCs) and Key Indicators (KIs) to the British Columbia Environmental Assessment Office (EAO) and Canadian Environmental Assessment Agency for the proposed Coastal GasLink Pipeline Project
- the VC selection process and methodology followed by the Coastal GasLink Project team

### 1.3 VALUED COMPONENTS AND KEY INDICATORS PURPOSE

Valued Components are those components of the environment, economy, social, health and heritage pillars that are considered to be important and have the potential to interact with the proposed Project; therefore, they warrant evaluation in an environmental assessment (EA). Valued Components for this Project were selected based on Coastal GasLink's current understanding of what is important to the proponent, Aboriginal groups, public and government involved in the EA process.

Key Indicators are topics that can be described or measured to represent the interaction between the VCs and the Project.

Selecting VCs and KIs is part of the EA process scoping phase. Scoping determines the important issues and parameters that should be addressed in an EA, establishes the boundaries of the assessment, and focuses the assessment on relevant issues and concerns. The selected VCs and associated KIs define what will be assessed in the EA, thereby influencing the baseline data collection and analysis.

The expected Project effects on the VCs after applying mitigation measures will ultimately be used to determine the significance of residual effects. Impact significance is a key consideration used by the EAO and decision makers to determine whether the proposed Project is in the public interest.



## **2.0 SELECTION PROCESS AND METHODOLOGY**

### **2.1 SELECTION CONSIDERATIONS**

#### **2.1.1 Measurability**

The Coastal GasLink team considered measurability when selecting the VCs for the proposed Project. It is important to identify VCs that can:

- contribute to measuring environmental effects
- feed into the EA for the determination of the significance of environmental effects

Another measurability consideration is to establish a baseline against which Coastal GasLink can:

- evaluate effects management, mitigation strategies and protection plans
- monitor compliance with conditions

Lastly, measurability of VCs allows the effectiveness of mitigation measures and the accuracy of impact predictions to be monitored. Preference, therefore, was given to indicators that can be measured in either qualitative or quantitative terms.

#### **2.1.2 Ensuring the Most Useful Selection of Valued Components**

The Coastal GasLink team also sought to identifying candidate VCs that can be mitigated through the application of Best Management Practices (BMPs). Coastal GasLink received feedback from regulatory agencies to focus the EA on those interactions that have the most potential to cause adverse environmental effects. In its VC identification process, Coastal GasLink asked the following question: Will the determination of predicted effects of the proposed Project on the candidate VC be useful for the EAO and other decision makers to assess whether the Project is in the public interest? If the candidate VC could be mitigated through BMPs, then it was considered to be of little use for decision makers because the potential interaction with the environment would likely be avoided or minimized. Thus, the VCs selected for the Project are focused on those potential interactions that have the greatest potential to cause adverse environmental effects.

### **2.2 SELECTION PROCESS OVERVIEW**

The Coastal GasLink team followed a three step process to identify the draft VCs for the proposed Project, as shown in Figure 2–1.

Step 1 involved compiling a list of all potential issues identified to date through preliminary routing and background research, and issues and concerns raised by Aboriginal groups, government and the public during Coastal GasLink engagement

activities. At Step 1, candidate VCs were identified based on their identified potential issues.

Step 2 involved determining whether the potential issues and concerns identified in Step 1 had the potential to interact with the Project, and, if so, whether the interaction could result in an adverse effect on the environment. If the candidate VC had no clear interaction, it was not carried forward for the purpose of the EA. If the candidate VC was expected to have a clear interaction with the proposed Project that could result in an adverse effect on the environment, it was carried forward to Step 3.

Step 3 involved evaluating the candidate VCs in closer detail. The Coastal GasLink team asked two questions:

- Is there a strong, clear and measurable interaction between the candidate VC and the proposed Project?
- Will the determination of predicted Project effects on the candidate VC be useful for the EAO and other decision makers to assess whether the proposed Project is in the public interest?

Whether or not the candidate VC was useful to regulatory decision makers was based on:

- legislation and guidance documents
- feedback received during meetings with regulatory agencies
- professional experience and judgment

After completing Step 3, candidate VCs were either selected for use in the EA or not.

This VC selection process was completed workshops for each subject area or topic. Coastal GasLink team members, including subject-matter experts, environmental assessment leads and members of the project management team contributed to the selection of the VCs and the methodology to confirm.

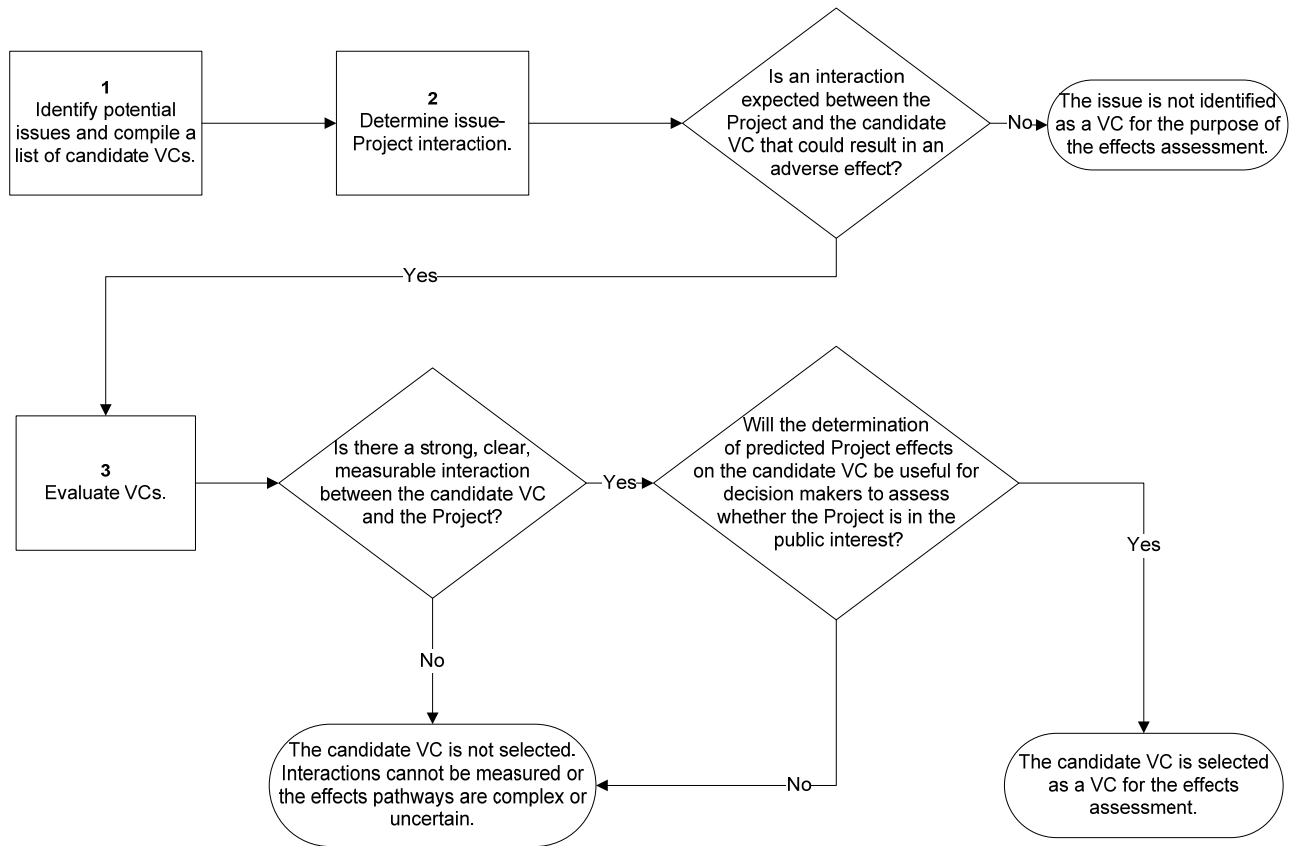


Figure 2-1: Selection Process for Valued Components

2.3 SELECTION METHODOLOGY

To further illustrate the methodology for identifying the VCs, Figure 2–1 depicts the discussion flow from pillar to measurable parameters for the Geophysical Environment topic.



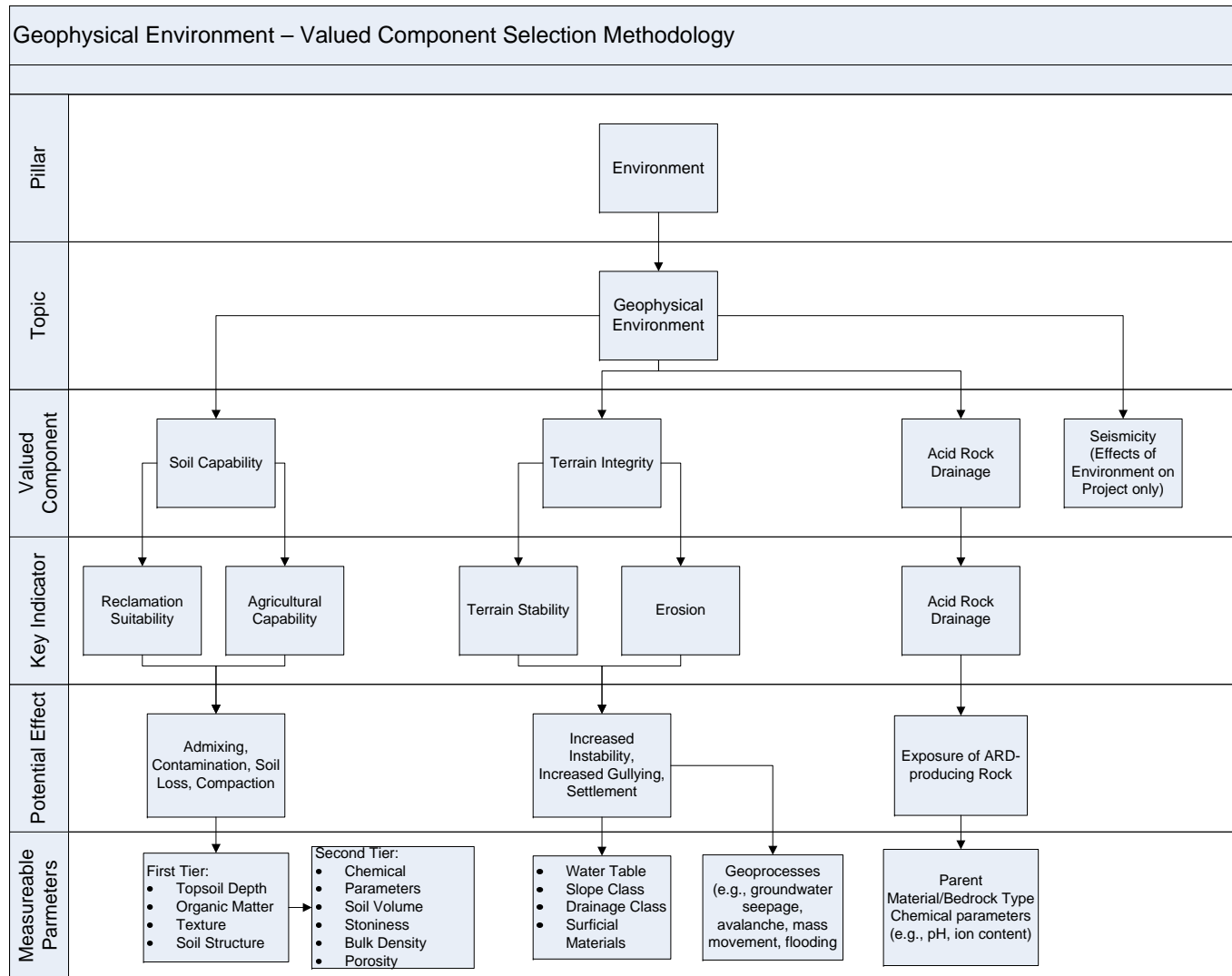


Figure 2-2: Example of Valued Component Selection Methodology



**3.0 DRAFT VALUED COMPONENTS AND KEY INDICATORS**

The draft VCs for the Project are presented in Table 3–1, and are organized in the five pillars used by the EAO for assessment:

- Environmental VCs are organized into six topic areas including geophysical environment, atmospheric environment, vegetation, wetlands, wildlife and aquatic environment.
- Economic VCs are represented by the employment and economy topic. They include economy and jobs and labour force.
- Social VCs are organized into land and resource use, community and regional infrastructure and services, and traditional land and resource use topics.
- Heritage VCs are all presented under the heritage resources topic and include archaeological sites, historic sites, palaeontological sites and architectural sites.
- Health VCs include human health and ecological health.

Recognizing that the process for selecting and finalizing the VCs involves input from Aboriginal communities, the public and regulatory agencies, it is noted that the candidate VCs (shown in Table 3–1) may be updated before the final Application Information Requirements (AIR) are issued by the EAO.

**Table 3-1: Draft Valued Components and Key Indicators**

Pillar	Topic	Valued Component	Key Indicator
Environment	Geophysical Environment	Soil Capability	Reclamation Suitability
			Agricultural Capability
		Terrain Integrity	Terrain Stability
			Erosion
		Acid Rock Drainage	Acid Rock Drainage
			Relating to the effects of the environment on the Project
	Atmospheric Environment	Acoustic Environment	Overall Sound Levels
		Air Quality	Criteria Air Contaminants (Construction)
			Criteria Air Contaminants (Operations)
	Aquatic Environment	Protection of Recreationally, Commercially and/or Culturally Important Fish and Fish Habitat	Species of fish that are important for recreation, cultural or traditional use, and commercial fisheries, including their habitats
		Species of Conservation Concern	Species that are provincially or federally listed, or are considered as being of conservation concern in other planning documents (e.g., regional land use plans and BC Conservation Framework)
		Surface Water Quality	Surface Water Quality
		Groundwater Quality	Groundwater Quality

**Table 3-1: Draft Valued Components and Key Indicators (cont'd)**

Pillar	Topic	Valued Component	Key Indicator
	Vegetation	Species of Concern	Plant Species at Risk
			Traditionally Important Species
		Ecological Communities of Concern	Ecological Communities at Risk
			Native Vegetation Communities
	Wetlands	Wetland Function	Hydrology
			Habitat
			Biochemical
	Wildlife	Viability of Mammal Populations	<ul style="list-style-type: none"> <li>• <i>Grizzly Bear</i></li> <li>• Woodland Caribou</li> <li>• <i>Moose</i></li> <li>• Mountain Goat</li> <li>• <i>Fur-bearers</i></li> </ul> Note: Italics denotes species whose habitats will be modeled for the effects assessment.
			Viability of Amphibian Populations
		Viability of Bird Populations	Birds by Habitat <ul style="list-style-type: none"> <li>• <i>Old Seral Forest</i></li> <li>• <i>Mid Seral Forest</i></li> <li>• <i>Early Seral Forest</i></li> <li>• <i>Wetland</i></li> <li>• <i>Grassland</i></li> </ul> Note: Italics denotes species whose habitats will be modeled for the effects assessment.
Viability of Wildlife Species at Risk Populations			Provincially and Federally listed wildlife species at risk
Economy	Employment and Economy	Economy	<ul style="list-style-type: none"> <li>• Government Revenue (federal, provincial and municipal)</li> <li>• Contracts and Procurement</li> <li>• Employment and Training</li> </ul>
		Employment and Labour Force	



**Table 3-1: Draft Valued Components and Key Indicators (cont'd)**

Pillar	Topic	Valued Component	Key Indicator
Social	Land and Resource Use	Current Use of Land and Resources	<ul style="list-style-type: none"> <li>• Human Habitation</li> <li>• Recreational Use</li> <li>• Industrial Activities</li> <li>• Guide Outfitting</li> <li>• Hunting, Fishing and Gathering</li> </ul>
		Domestic Water Supply Quality and Quantity	<ul style="list-style-type: none"> <li>• Trapping</li> <li>• Agriculture</li> <li>• Forestry</li> <li>• Tourism</li> <li>• Designated Areas</li> </ul>
	Community and Regional Infrastructure and Services	Community Utilities and Services	<ul style="list-style-type: none"> <li>• Emergency Services</li> <li>• Health Care Services</li> <li>• Recreational Facilities</li> <li>• Waste Management Facilities</li> <li>• Housing and Commercial Accommodation</li> </ul>
		Transportation Infrastructure and Facilities	<ul style="list-style-type: none"> <li>• Traffic</li> <li>• Navigability of Waterways</li> </ul>
	Traditional Land and Resource Use	Traditional Land and Resource Use	<ul style="list-style-type: none"> <li>• Plant Harvesting</li> <li>• Hunting</li> <li>• Trapping</li> <li>• Fishing</li> <li>• Gathering Places</li> <li>• Sacred Areas</li> <li>• Habitation Sites</li> <li>• Trails and Travelways</li> </ul>
		Cultural Sites	

**Table 3-1: Draft Valued Components and Key Indicators (cont'd)**

Pillar	Topic	Valued Component	Key Indicator
Heritage	Heritage Resources	Archaeological Sites	<ul style="list-style-type: none"> <li>• Buildings</li> <li>• Ceremonial/Religious Features</li> <li>• Cultural Depressions</li> <li>• Cultural Materials</li> <li>• Habitation Features</li> <li>• Human Remains</li> <li>• Landmarks</li> <li>• Other Structures</li> <li>• Rock Art</li> <li>• Transportation</li> <li>• Cultural Landform</li> <li>• Domestic</li> <li>• Food Harvesting</li> <li>• Material Harvesting</li> <li>• Renewable Resource Activity</li> <li>• Supernatural/Mythological</li> <li>• Traditional History</li> <li>• Culturally Modified Trees</li> <li>• Other Features</li> <li>• Subsistence Feature</li> <li>• Earthwork Feature</li> <li>• Other Archaeological Site Types</li> </ul>
		Historic Sites	<ul style="list-style-type: none"> <li>• Buildings</li> <li>• Ceremonial/Religious Features</li> <li>• Cultural Depressions</li> <li>• Cultural Materials</li> <li>• Habitation Features</li> <li>• Human Remains</li> <li>• Landmarks</li> <li>• Other Structures</li> <li>• Rock Art</li> <li>• Transportation</li> <li>• Other Historic Site Types</li> </ul>
		Palaeontological Sites	Fossil Sites
		Architectural Sites	Above-ground Structures
		Health	Human and Ecological Health
		Ecological Health	

