

INDIGENOUS MONITOR OVERVIEW REPORT

Month: June 2023

Indigenous Monitor days on-site: 26

Project Region: Fraser Valley

**Kilometre Posts (KPs) monitored:
KP 1075–1165**

Indigenous Monitors on the Trans Mountain Expansion Project – Overview

The Trans Mountain Expansion Project (the Project or TMEP) is retaining Indigenous Monitors as integrated members of its construction Environmental Inspection team. Indigenous Monitors work with Environmental Inspectors to monitor compliance with mitigation measures to minimize impacts to traditional resource use and cultural/heritage impacts during construction. Indigenous Monitors have a strategic role in providing traditional knowledge directly and pragmatically to construction oversight practices and bring an Indigenous lens to daily environmental inspection activities.

This Overview Report provides highlights of the Indigenous Monitors' day-to-day work and key mitigation measures observed by the Monitors related to Project construction in the Fraser Valley. The purpose of this report is to provide an update on Indigenous Monitor activity to Indigenous groups.

During this reporting period, key Project activities in the Fraser Valley Region involving Indigenous Monitors included construction on Spread 6/7A, archaeological impact assessments, reclamation, pump-off, environmental features flagging and signage, trenchless crossings and Sumas Terminal.

The Project Construction Progress Report (Condition 106) for June 2023, which reports environmental events and deficiencies in Tables 4 and 5 respectively, is found [here](#).

The Project has a process for sharing information related to potential Traditional Land Use (TLU) and Heritage Resource chance finds during construction. [Protecting TLU and Cultural Heritage Resources Fact Sheet \(link here\)](#) provides an overview of the chance find communication process. Applicable Indigenous groups are notified and engaged directly on potential chance finds.

For more information: email info@transmountain.com or call 1.866.514.6700.

Archaeological Impact Assessments (AIA)

Resource-Specific Mitigation Tables and Environmental Alignment Sheets are used to identify locations of and summarize specified mitigation for previously identified historical resources and TLU areas. Such locations have been identified via TLU studies conducted by Indigenous groups and archaeology baseline assessments conducted in relation to the Project for more than seven years.

The Indigenous Monitors observed the implementation of an AIA conducted near KP 1127. The assessment, completed by a qualified archaeologist and Indigenous participants, may include visual inspection to identify features with predictable archaeological potential, surface inspection of areas with exposed sediments for cultural materials and shovel testing of terrain features exhibiting archaeological potential. No concerns were identified.

If an archaeological site is found, Trans Mountain completes the applicable reporting and applies for the required permits in alignment with the Heritage Conservation Act. Engagement with Indigenous groups occurs when a previously unidentified site is discovered. Ongoing AIA activities continue in the Fraser Valley region.



Soil being raked by the resource specialist observed near KP 1127.

Reclamation

Subsoil is de-compacted to alleviate compaction caused by construction activities before topsoil replacement. Acceptable topsoil depths are confirmed by an Environmental Inspector (EI) during final cleanup. Multiple measurements are taken of topsoil replacement quality and depth. After the contractor has properly prepared the ground for seed, the area is seeded with the approved mix that reflects the vegetation profile from pre-disturbance.

Indigenous Monitors inspected various reclamation activities in the Fraser Valley, including discing for soil decompaction, topsoil replacement, confirming topsoil depth, erosion and sediment control measures, and confirmation that proper seed mixes are applied. Indigenous Monitors worked with Environmental Inspectors to ensure mitigation measures were in place during reclamation activities.



Reclamation measures observed near KP 1118, including backfilling, application of a tackifier and installation of wood debris, as well as coco matting installed for ESC measures.



Reinstallation of drainage with rock armouring and coco matting for ESC measures observed near KP 1158.

Pump-Off

To keep trench excavation and other construction site areas dewatered and stable during pipeline construction, water that accumulates from precipitation or groundwater seepage is pumped off and relocated to an approved location either on or off the construction footprint.

In various areas on Spread 6 and 7A, the Indigenous Monitor observed that water accumulating on-site was pumped off to a settling containment system and filter bags. Water flowing out of the filtration system was discharged upland to a well-vegetated area. The settling containment systems were inspected and functioning as intended and no sediment loading was identified at the discharge points.



The dewatering system near KP 1092 observed to be functioning as intended.

Trenchless Crossings

Trans Mountain is using horizontal directional drilling (HDD), a trenchless construction method, near KP 1145 to 1146, KP 1151 to 1154, KP 1158 to 1160 and KP 1161 to 1164. Trenchless construction methods are used to construct the pipeline under rivers and other environmentally sensitive areas, such as wetlands and ravines, as well as major transportation corridors to minimize or avoid environmental and socio-economic impacts associated with open-cut construction. The HDD technique involves setting up a drill rig on one side of the crossing. Following the drilling of a pilot bore, the borehole diameter is enlarged using a series of consecutively larger reams. The pipe is then assembled and welded on the opposite side of the crossing, with the pipe string connected to the drill assembly and pulled back through the drill path to the HDD rig.

The Indigenous Monitors participated in inspections of environmental mitigations at the HDD crossings. Inspections included observing that signage and buffers were in place for environmental features, including archaeological sensitive areas, and that these areas were undisturbed during construction activities. Other environmental mitigations observed included inspection of Inadvertent Fluid Release (IFR) cleanup materials, ESC measures, participation in wildlife sweeps and observation of reclamation measures.



Re-installation of drainage observed during a substantial completion inspection with the Environmental Inspector and the contractor near KP 1158. No concerns were identified.



Preparation for HDD observed near KP 1145. No concerns were identified.

Sumas Terminal

Work at Sumas Terminal includes installation of a new perimeter fence and a temporary infrastructure needed for construction, as well as a temporary laydown yard at the terminal on Trans Mountain property. One new storage tank will be installed within the terminal, bringing the total number of tanks to seven. A new firewater retention pond will also be built.

At Sumas Terminal, the Indigenous Monitor completed site inspections that included observing and documenting general housekeeping, waste management, ESC measures, including hydroseeding, soil stripping and storage, concrete management, groundwater management and wildlife management. The Indigenous Monitor observed and inspected nesting bird mitigations, including signage and buffer zones. No environmental concerns were identified.



Bird nest signage and buffer observed near Tank 103 at Sumas Terminal.

Environmental Features Flagging and Signage

The Indigenous Monitors conducted inspections in areas of known environmental features to ensure buffer zones are clearly flagged and staked. As part of pre-construction activity, environmental features such as wildlife species of concern, rare plants and rare ecological communities, archaeological features, wetlands, watercourses, TLU sites and any other sensitive environmental features are staked, flagged and sometimes fenced by Resource Specialist teams. The features are clearly marked so they can be appropriately protected during construction. Indigenous Monitors inspect TLU and archaeological areas with a focus on sites near active construction to ensure mitigation measures are in place to protect TLU and Heritage Resources.

Indigenous Monitors inspected multiple locations, including TLU sites and archaeological sites. No concerns were identified.



Environmental feature signage delineating an archaeological area inspected near KP 1153.

Indigenous Monitor Request Dashboard

Indigenous Monitors are provided daily on-site field support from Environmental Inspectors and office support from Indigenous Monitor Coordinators. Indigenous Monitors can also make specific support requests or submit questions through their daily report. Examples include but are not limited to requests for Project reports, input from an environmental resource specialist or on-site support from an Elder or other cultural knowledge holder. Requests and their completion status are noted below.

Status	Rolling Total and Type of Requests				
	Project Reports/ Documents	Environmental Resource Specialists	Elder/Cultural Knowledge Holder	Other	Total
Total	0	2	0	0	2
Fulfilled	-	2	-	-	2
Outstanding	-	0	-	-	0

This report has been reviewed by the active Indigenous Monitor(s)

CONTACT US:
Trans Mountain

 info@transmountain.com
 1.866.514.6700
 transmountain.com

  @TransMtn
 youtube.com/transmntn
 [linkedin.com/company/transmountain](https://www.linkedin.com/company/transmountain)

 PO Box 81018
 Burnaby, BC V5H 3B0



TRANSMOUNTAIN