

INDIGENOUS MONITOR OVERVIEW REPORT

Month: October 2022

Indigenous Monitor days on-site: 25

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, stream bed restorations, watercourse crossings, erosion and sediment control, Archaeological Impact Assessments (AIAs), wildlife management, site housekeeping, Culturally Modified Trees, clearing, pre-construction walk-throughs and the TMEP Line-Wide Indigenous Monitor Gathering.

The Project Construction Progress Report (Condition 106) for October 2022, 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.

Watercourse Restoration

Once in-stream work is complete, restoration of the riparian zone is conducted including recontouring watercourse beds and banks to pre-construction conditions. Additional work includes replacing site-specific features important for fish or other aquatic organisms, and replacing salvaged topsoil, surface soils and salvaged root zone material like root balls (i.e., roots of shrubs and trees) in proper sequence over all portions of the construction site where soil cover was stripped.

Indigenous Monitors observed watercourse BC 720 at KP 1101 to inspect the completed stream bank restoration, observed site housekeeping efforts, transplant areas, erosion and sediment control (ESC) and stream bed material replacement. Replacement of topsoil in the riparian buffer zone was also observed. No deficiencies were identified during inspections.



Positive inspection of the stream bed restoration of watercourse BC720.



ESC measures observed for the restoration of BC720, including sediment and exclusion fencing with seed placed underneath coconut matting.

Erosion and Sediment Control

ESC measures are monitored and inspected to ensure they are functioning as intended to mitigate erosion and sediment transport from construction sites to sensitive environmental features downstream. On-site ESC mitigations include sediment fences, swales, wattles, straw, polyethylene sheeting, coco matting, geotextile fabric and hydroseeding, as well as water drainage control measures.

Indigenous Monitors, alongside Environmental Inspectors, observed and inspected numerous ESC measures at construction sites throughout Spreads 6 and 7A. Inspections were completed in areas including but not limited to KP 1075, KP 1100, KP KP1136 and KP 1158.

At Anderson Creek (watercourse BC705) near KP 1075, the Indigenous Monitor observed the contractor install a clear span bridge and cover it with geotextile fabric to keep construction debris from entering the watercourse.

Near KP 1136 by watercourse BC 747, the Indigenous Monitor observed sediment fencing that was bending due to rainwater that had accumulated. The Environmental Inspector notified the contractor and the fencing was fixed.



Geotextile fabric is placed on top of the bridge as an ESC mitigation measure near KP 1075.

Culturally Modified Trees (CMT)

Resource-Specific Mitigation Tables and Environmental Alignment Sheets are used to illustrate 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 AIAs that have been conducted in relation to the Project for more than seven years. If a site or location is observed in the field that may be a previously unidentified TLU area, the TLU Site Discovery Contingency Plan is followed.

The Indigenous Monitors participated in the implementation of the TLU Site Discovery Contingency Plan in areas where trees were identified as potentially culturally modified. Trees found during a CMT sweep were examined by Indigenous Monitors and Environmental Inspectors on-site to collect initial information. The area was flagged off for additional evaluation. Resource Specialists and Knowledge Holders of Indigenous Monitors' communities were contacted for evaluation of the tree and potential mitigation. The engagement process with Indigenous groups was initiated to share information about the resource and seek feedback.

Additional CMT walk-throughs were conducted near KP 1113, KP 1115 and KP 1137. No CMTs were identified during inspection.



Area swept for CMTs near KP 1113. No CMT were identified during walk-through.

Watercourse Crossings

Environmental mitigation measures for in-stream construction of watercourses are prescribed in the provincial permit and site-specific watercourse crossing plans. Mitigation measures required for in-stream construction include but are not limited to biosecurity cleaning of equipment, secondary containment of hydrocarbons, stream bed material, fish salvage, amphibian salvage, water quality monitoring and erosion and sediment control.

Indigenous Monitors observed the contractor prepare for in-stream work at watercourse BC730 near KP 1118, which included installation of sediment cloth and placement of dewatering hoses and pumps. In-stream work is planned for November and restoration is anticipated to be completed shortly afterwards. No issues were identified during inspection.



Sediment cloth being placed near KP 1118.

Wildlife Management

While conducting site monitoring, the Indigenous Monitors record and report wildlife sightings to the Environmental Inspector. They also inspect signage and wildlife buffers to ensure they're effectively in place to prevent incidental contact. Indigenous Monitors also routinely observe and participate in wildlife sweeps for various species of wildlife.

The Indigenous Monitor observed the Resource Specialist conduct wildlife sweeps at various construction work areas, including amphibian salvages near KP 1075, KP 1145 and KP 1151. No amphibians were found during wildlife sweeps. At KP 1151, the Indigenous Monitor also observed the Resource Specialist conduct a fish salvage. Stickleback fish and tadpoles were salvaged and released downstream.

Near KP 1142, the Indigenous Monitor inspected wildlife mitigations including fencing installed to delineate an owl sanctuary and observed amphibian exclusion fencing near KP 1075. No issues were identified during inspection.



Amphibian exclusion fencing installed by the Resource Specialist near KP 1075.



Fencing installed to delineate an owl sanctuary and prevent trespass inspected near KP 1142.

Right of Way Clearing

Project right-of-way clearing involves the removal of trees and vegetation in areas along the Project footprint. During this process, the right-of-way is cleared by removing trees and brush. The topsoil is salvaged and stored along the edge of the right-of-way so it may be spread back out during reclamation. Prior to clearing activities, site-specific pre-clearing walk-throughs and meetings are conducted that will identify existing and potential environmental issues and/or constraints.

The Indigenous Monitors participated in a pre-clearing walk-through with the Environmental Inspector near KP 1099, KP 1115 and KP 1135 to ensure appropriate staking, flagging and signage of environmental features were in place prior to tree falling activities. The inspections included documenting topsoil storage, good housekeeping measures, fencing installation and accurate buffers and signage for environmentally sensitive areas. At KP 1135, inspection showed the Resource Specialist had completed wildlife sweeps prior to any clearing activities. No issues were identified.



Sediment fence observed during a pre-construction walk-through near KP 1115.



Near KP 1135 environmental feature buffer and signage was inspected.

Site Housekeeping

Indigenous Monitors conduct regular site inspections for general housekeeping measures. This includes observing and documenting garbage and recycling disposal, scrap metal management, waste storage and secondary containment of fuel and other hydrocarbons. Secondary containment measures include but are not limited to drip trays under inactive vehicles and equipment, and drip trays placed under hydrocarbon containers like gasoline and diesel and paint aerosol spray cans.

Indigenous Monitors conducted housekeeping inspections at various construction work areas in the Fraser Valley. At KP 1110, an out-of-date fire extinguisher was noted. The Environmental Inspector advised the contractor to have the fire extinguisher replaced. At the Sumas direct pipe installation entrance near KP 1112, the Indigenous Monitor observed positive site housekeeping efforts, including cleaning of welding equipment debris.



KP 1161 site inspected and housekeeping in good order.

Archaeological Impact Assessments

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 by way of TLU studies conducted by Indigenous groups and archaeology baseline assessments conducted over many years of Project planning.

The Indigenous Monitors observed AIAs conducted along the right-of-way near KP 1162. The assessments, completed by a qualified archaeologist and Indigenous participants, included visual inspections to identify features with archaeological potential, surface inspection of areas with exposed sediments for cultural or terrain features exhibiting archaeological potential and subsurface testing (shovel testing) of terrain features exhibiting archaeological potential. 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*. Ongoing AIA activities continue in the area.

At KP 1164, Indigenous Monitors observed construction activity, including topsoil stripping, alongside the Archaeological Resource Specialist



Soil being sifted by the Archaeological Resource Specialist during subsurface testing near KP 1162.



Archaeological Resource Specialist raking area stripped of topsoil near KP 1164.

and Indigenous Participants in a pre-identified archaeologically sensitive area. The soil was raked by the Archaeological Resource Specialist before being transported to an approved off-site location where it will be further examined by a qualified archaeologist.	
TMEP Line-Wide Indigenous Monitor Gathering Trans Mountain Indigenous Monitors from across the Project gather annually for a team meeting to collaborate and discuss the TMEP IM program and topics of interest related to environmental inspection, monitoring and Indigenous interests. On October 21, Indigenous Monitors from spreads and terminal locations gathered in person and via Teams web conference for a line-wide meeting. This collaborative meeting covered topics, including TMEP construction updates and milestones, support and information request mechanisms, environmental skills development training/career progression opportunities and team-building opportunities.	

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](https://twitter.com/TransMtn)
 youtube.com/transmtn


 PO Box 81018
Burnaby, BC V5H 3B0


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