

INDIGENOUS MONITOR OVERVIEW REPORT

Month: August 2023

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, watercourse crossings, reclamation, pump-off, trenchless crossings, archaeological impact assessments, environmental features flagging and signage, and Sumas Terminal.

The Project Construction Progress Report (Condition 106) for August 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.

Watercourse Crossings

Environmental mitigation measures for in-stream construction of the watercourses are prescribed in the provincial permit and the watercourse crossing plan. 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 water quality monitoring and sediment/erosion control.

The Indigenous Monitors observed the construction contractor prepare and execute in-stream work. In BC-715 KP 1080, BC-719 KP 1101, BC-728e, h, i, KP 1115, BC-729 KP 1116 and BC-736 KP 1129, the upstream water was diverted downstream of the crossing area to maintain natural flow conditions and water quality.

The Indigenous Monitor also observed fish salvage and reclamation. Indigenous Monitors observed the Resource Specialists' efforts to recreate fish habitat using various sized rock and coarse woody debris during stream bank and bed restoration. No environmental concerns or deficiencies were noted during these inspections.



Prepping for isolation BC-736 KP 1129.



Creek restoration underway BC-729 KP 1116.

Reclamation

Subsoil is decompacted 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 1138, including topsoil replacement and ESC maintenance.



Reclamation underway near KP 1131.

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.

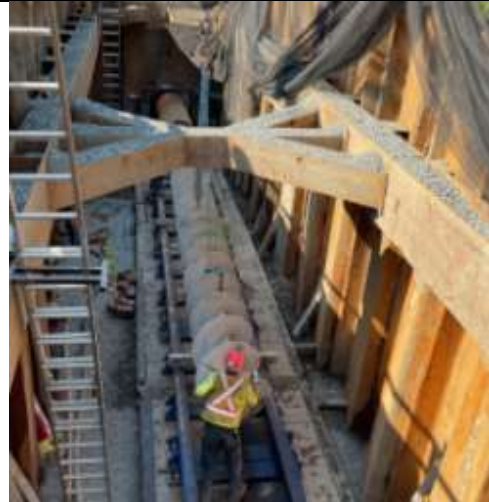


The dewatering system near KP 1080 observed functioning as intended.

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 noted 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.



Preparation for HDD observed near KP 1175. No concerns were identified.

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 Archaeological Impact Assessments (AIA) conducted along the right-of-way near KP 1127 and KP 1144. 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.



Inspecting soil before storage KP 1127.

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 and other mitigations to ensure they're effectively in place to prevent incidental contact. Indigenous Monitors also routinely observe and participate in wildlife sweeps and salvages for various species of wildlife.

The Indigenous Monitor conducted bird sweeps with the Environmental Inspector in simplified habitat. They discussed the nesting bird season, mitigation measures in place and the transition out of the Restricted Access Period, which ends September 6. No new nests or concerns were identified during the sweeps and mitigations were in place at previously identified nests.



Bird sweep completed at KP 1146.



Oregon Forest Snail outside exclusion fence. Mitigation working as intended near KP 1076.

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 to observe and document 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.



Backfill and grade work around Tank 103.



Nesting bird mitigations installed on the top of Tank 100 Sumas Terminal.



Spill kit stocked at Sumas Terminal.

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)

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