INDIGENOUS MONITOR OVERVIEW REPORT

Month: March 2023

Project Region: Fraser Valley

Indigenous Monitor days on-site: 27

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, wildlife management mitigations, environmental features flagging and signage, pump-off, erosion and sediment control (ESC), watercourse crossings, topsoil and subsoil stripping, trenchless crossings, and inspections at Sumas Terminal.

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

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 inspect and participate in wildlife sweeps for various species of wildlife.

The Indigenous Monitor observed the resource specialist monitoring activity near an owl sanctuary at KP 1145. Noise recordings measured in decibels are recorded and the owls are monitored via video camera in their aviary to observe if noise from construction causes behavioural changes. No issues or changes were identified.

Near KP 1152 where pump-off activity was occurring, the Indigenous Monitor observed the enactment of the Wildlife Contingency Plan and monitored the resource specialist conduct an amphibian and fish salvage. During the inspection, one salamander and a stickleback fish were salvaged. At a subsequent inspection, the Indigenous Monitor observed the resource specialist conduct a nesting bird sweep.

Near KP 1120, the Indigenous Monitor inspected a buffer zone installed around a Killdeer nest. Flagging and signage were inspected and found to be in good condition.

Owl monitored via video camera in a sanctuary at KP 1154.

Area swept for nesting birds near KP 1152.

Kildeer nest buffer inspected near KP 1120.

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.

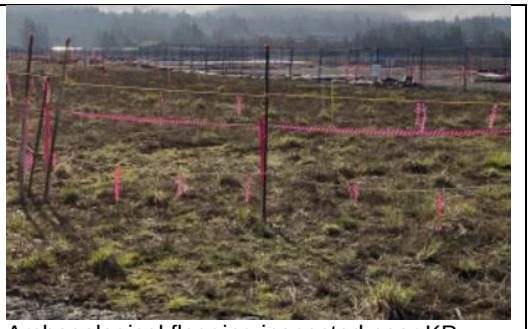
Near KPs 1092, 1097, 1099 and 1153, the Indigenous Monitor observed that water accumulating on-site was pumped off to a settling containment system and filter bags. Water flowing out of the filtration system is discharged upland to a well-vegetated area. The settling containment systems were inspected and functioning as intended and no sediment loading was identified at the discharge points.

Near KP 1099, the dewatering system was observed to be functioning as intended.

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 (Stõ:lō-AQ8) KP 1102, (Stõ:lō-AQ-22) KP 1112, (Stõ:lō-1614w) KP 1126 and archaeological areas of focus near KP 1085, KP 1120, KP 1124 and KP 1151–1153. Signage was in place and the area was staked and flagged appropriately. No concerns were identified.



Archaeological flagging inspected near KP 1120.

Near KP 1151–1153, the Indigenous Monitor observed that environmental feature signage and flagging was in place and archaeological areas of interest were secure.

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, soil stripping and storage, concrete management, groundwater management and wildlife management. The Indigenous Monitor observed and inspected the nesting bird mitigations, including signage and mesh netting. No environmental concerns were identified.

Signage installed for nesting bird mitigations was inspected at Sumas Terminal.

Erosion and Sediment Control

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, as well as water drainage control measures.

Indigenous Monitors, alongside Environmental Inspectors, inspected ESC measures at construction sites throughout Spreads 6 and 7A. Inspections were completed in areas between KP 1076 and KP 1165.

Near KP 1077, the Indigenous Monitor observed stockpiles covered to reduce the risk of water and wind erosion. No concerns were noted..

Topsoil and subsoil covered to mitigate erosion near KP 1077.

Topsoil Salvage and Storage

When salvaging topsoil in construction areas, required mitigation includes segregation of topsoil from root zone material, proper storage to reduce potential erosion, effective labelling and signage, and inspection of soil piles to ensure they are within the survey limits of the right-of-way and no soil has gone outside these limits.

Near KP 1089 to KP 1098, the Indigenous Monitor observed topsoil stripping and grading and observed measures to mitigate foreign aggregate from spreading onto agricultural lands soil during topsoil stockpiling. The Indigenous Monitors also inspected the construction areas before and after soil stripping to identify any potential chance finds. No potential chance finds were identified.

During topsoil stripping activities near KP 1127, a potential heritage resources chance find was discovered. The Indigenous Monitored observed the implementation of the Heritage Resource Site Discovery Contingency Plan. The site was buffered to allow for ongoing assessments with the Resource Specialist, Indigenous Monitor and Environmental Inspector. As part of the Contingency Plan, Trans Mountain initiated the communication process with Indigenous groups related to notification and engagement on potential TLU and Heritage Resources chance finds. Ongoing assessment continues.

Topsoil stripping near KP KP 1089.

Resource specialist scraping and raking topsoil in the area where the chance find was discovered near KP 1127.

Trenchless Crossings

Trans Mountain is using horizontal directional drilling (HDD), a trenchless construction method, at the West Munday Creek Crossing near KP 1153 to 1154. 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. Next, the pipe is 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 monitoring and inspections of environmental mitigations at the West Munday Crossing HDD site. 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 cleanup materials, ESC measures and participation in wildlife sweeps.

ESC measures inspected at the West Munday Creek Crossing HDD site.

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/transmtn
PO Box 81018
Burnaby, BC V5H 3B0