INDIGENOUS MONITOR OVERVIEW REPORT

Month: October 2021 Indigenous Monitor days on-site: 20

Project Region: Lower Mainland Kilometre Posts (KPs) monitored:

Spread 7 KP 1166–1175

Indigenous Monitors on the Trans Mountain Expansion Project - Overview

The Trans Mountain Expansion Project (the Project or TMEP) has retained 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 Lower Mainland. 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 Lower Mainland region involving Indigenous Monitors included construction at Westridge Marine Terminal (WMT), Burnaby Terminal and on Spread 7. Activities included monitoring heritage resource sites, the Fraser River Horizontal Directional Drill (HDD), erosion and sediment control, guided horizontal auger boring at WMT, environmental feature and Traditional Land Use (TLU) site flagging and staking, and participating in a collaborative meeting connecting Indigenous Monitors from across the Project.

The Project Construction Progress Report (Condition 106) for October 2021, 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 TLU and Heritage Resource chance finds during construction. The **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.

Trans Mountain COVID-19 - Our Response

Trans Mountain is actively monitoring the COVID-19 situation with the help of federal, provincial and local agencies. Trans Mountain's top priority remains the health and safety of its workforce, their families and our communities.

For more information: transmountain.com/covid19



Heritage Resource Site

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 over many years of Project planning.

In October, the Indigenous Monitors observed Archaeological Impact Assessments (AIA) conducted near KP 1174. The assessments, completed by a qualified archaeologist and Indigenous participants, included visual inspections to identify features with predictable archaeological potential, surface inspection of areas with exposed sediments for cultural materials and subsurface testing (shovel testing) of terrain features exhibiting archaeological potential.

In the event that 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 Lower Mainland.



Environmental feature stake placed for marking of an AIA site near KP 1174.

Construction of Guided Horizontal Auger Bore – Westridge Marine Terminal

At Westridge Marine Terminal (WMT), installation of utilities connecting the foreshore to the manifold area must be installed underneath the existing Canadian Pacific rail track that runs through the WMT footprint. This activity is being performed utilizing a trenchless guided horizontal auger bore (GHAB) operation. Construction activities include: excavation of the GHAB sending (entry) pit to facilitate the auger boring on the foreshore, horizontal auger boring to create an underground path for the utilities, pipe fitting and welding, examination of pipe using radiography and sandblasting for coating application.

During the excavation and GHAB activity, Trans Mountain archaeological resource specialists are on-site monitoring and screening the soil being removed. The Indigenous Monitor at WMT observes and monitors this activity to support any potential discovery of heritage resources that are unearthed. If this occurs, it is considered a chance find and the Trans Mountain Chance Find Contingency Plan would be enacted. To date, nothing has been discovered. The GHAB activity will be continuing into November and the Indigenous Monitor at WMT will continue to monitor the activity.



GHAB entry pit at WMT. Inactive at time of photo.



GHAB drill at WMT. Inactive at time of photo.



Erosion and Sediment Control

Erosion and sediment control (ESC) mitigation measures are used to reduce erosion and limit sediment transport across construction sites to downstream areas, including watercourses or the marine environment. On-site ESC mitigations include sediment fences, swales, wattles, straw bales, polyethylene sheeting, coco matting and hydroseeding, as well as water drainage control measures.

In preparation for the anticipated seasonal rainfall, the Indigenous Monitor at Burnaby Terminal inspected that ESC measures throughout the terminal were installed effectively as prescribed in the Environmental Protection Plan. This included inspecting that berms and exposed slopes were securely covered with polyethene sheeting. Ditches and other water conveyance measures throughout the terminal and along the perimeter of the Project footprint were also inspected to ensure they were free of construction materials and debris and flowing appropriately. During the inspections, construction material was observed in a ditch for temporary storage. The contractor was notified and the material removed and stored in an approved location on-site.

In October at Burnaby Terminal, the Indigenous Monitor also observed that the Eagle Creek and Silver Creek tributary realignment outfalls were functioning as intended. No concerns were observed as the water being realigned was flowing well and as intended to mitigate any potential sediment transfer.

On Spread 7, the Indigenous Monitors inspected ESC measures installed along Holmes Creek in CWP 98 (KP 1175). It was observed that the silt fencing was well maintained, and all exposed slopes and soil stockpiles were properly covered and secured with polyethylene sheeting. Filter cloth was also secured on the sides of the construction temporary bridge crossing Holmes Creek to catch any debris from falling into the watercourse.



Eagle Creek tributary outfall monitored at the exterior perimeter of Burnay Terminal. Flowing well as intended.



Silt fencing and filter cloth at Holmes Creek.



Environmental Feature and Traditional Land Use Site Flagging and Staking

The Indigenous Monitors conducted inspections in areas of known environmental features to check on flagging/marking and to verify buffer zones are clearly marked. As part of preconstruction 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.

In the event 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 monitored activity on CWP 62 (KP 1166.4), CWP 89 (KP 1773.4) and CWP 93 (KP 1174) and inspected that signage marking TLU sites was installed and visible.



TLU stake and flagging on CWP 63 (KP 1174).

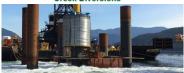
TMEP Linewide Indigenous Monitor Meeting

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 29, Indigenous Monitors from all TMEP spreads and terminal locations gathered via TEAMS web conference for a linewide meeting. This collaborative meeting covered many topics, including TMEP construction updates and milestones, support and information request mechanisms, and environmental skills development training/career progression opportunities. The Indigenous Monitors also prepared and presented information on their respective spread or location, including topics such as TLU protection, plant gathering and cultural use sites, reclamation, archaeological monitoring, erosion and sediment control, watercourse diversion, wildlife planning and mitigations, and offshore marine steel pile driving.



Erosion & Sediment Control Creek Diversions



Westridge Marine Terminal
Mitigation Measures for Impact Pile Driving



Trans Mountain Expansion Project
Colony Farm



Fraser River Horizontal Directional Drill (HDD)

Horizontal directional drilling (HDD) is being used to cross under the Fraser River. This work takes place in a phased approach beginning with the establishment of temporary workspaces on either side of the area being crossed at CWP 61 (KP 1165) and CWP 62 (KP 1166). The south side houses a drilling rig and associated equipment, and the other at Colony Farm (KP 1166–KP 1167) serves as a staging site for the pipe, including welding and pipe stringing.

In October, the Indigenous Monitors on Spread 7 observed various construction activities associated with the Fraser River HDD. Before the drilling activity started, the Indigenous Monitors inspected that environmental feature staking and flagging was installed properly and that ESC measures like silt fencing and polyethylene sheeting on soil stockpiles were functioning as intended.

While drilling was in progress, the Indigenous Monitor accompanied the contractor and Environmental Inspector on walkthroughs along the path of the active bore to monitor for inadvertent fluid release (IFR). No IFRs were identified at the time of inspection.

In addition, Trans Mountain has retained an independent research company to monitor for IFRs by boat on the Fraser River in the vicinity of the HDD route.

The Indigenous Monitor also participated in discussions with the Environmental Inspector and Environmental Construction Analyst regarding the HDD and subsequent pullback operations.



Pathway walked when monitoring for IFR on the south side of the HDD.



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: request for Project reports, input from an environmental resource specialist or on-site support from an Elder or other cultural knowledge holder. Monthly 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	2	0	0	0	2
Fulfilled	1	-	-	-	1
Outstanding	1	-	-	-	1

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

