INDIGENOUS MONITOR OVERVIEW REPORT

Month: September 2021

Project Region: Lower Mainland

Indigenous Monitor days on-site: 25

Kilometre Posts (KPs) monitored: Spread 7 KP 1166.515–1173.622

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 biosecurity and weed management, heritage resource site, Fraser River horizontal directional drill (HDD), and erosion and sediment control.

The Project Construction Progress Report (Condition 106) for September 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

Biosecurity and Invasive Weed Management

Biosecurity measures are designed to reduce the introduction or spread of noxious weeds and soil pathogens from construction activities. Environmental mitigations manage the risks associated with invasive, noxious and prohibited weeds at active construction areas and include equipment and tire washing and disinfecting stations as well as regular cleaning inspections of equipment and vehicles.

On Spread 7 at KP 1174.8, the Indigenous Monitor observed that additional signage and flagging was installed for the identification and containment of Japanese Knotweed, a common local invasive weed species. In the same area where the additional buffers were installed, the Indigenous Monitor identified that wooden material had been removed. They confirmed with the Environmental Inspector that any materials removed from an invasive weed species area is properly cleaned to prevent the potential spread to other weed-free areas.

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 September, the Indigenous Monitors observed Archaeological Impact Assessments (AIA) conducted near KP 1174. The assessments, 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 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.

Equipment used in AIA shovel testing on Spread 7.

Erosion and Sediment Control and Stormwater Management

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, polyethylene sheeting, coco matting and hydroseeding, as well as water drainage control measures. Before and after heavy rainfall, the Indigenous Monitors inspect exposed slopes to ensure they are covered with the appropriate ESC measures.

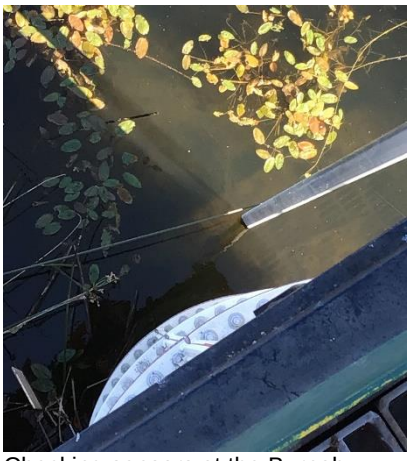
At Burnaby Terminal, the best management practices below have been implemented. Read more about Burnaby Terminal on the Trans Mountain website here.

- Reduce movement of exposed soil on sloped areas or salvaged/stockpiled material by installing temporary control structures.
- Minimize the input of sediment into non-contact water by minimizing, to the extent possible, the surface area of disturbed at any given time.
- Manage drainage and stormwater in and around work sites and direct contact water to a centralized water treatment location(s).
- Avoid the discharge of untreated sediment-laden water to the environment, using a water treatment system(s), incorporating water retention areas with sufficient storage capacity to manage for major storm events.
- Limit erosion at discharge points.
- Maintain water quality at discharge points.

In September, in preparation for the forecasted heavy rainfall, the Indigenous Monitor observed the draining of the Intermediate Storm Water Retention Pond at Burnaby Terminal to avoid overflow of water before it could be pumped into the water treatment plant, cleaned, then discharged to the Tertiary Containment Area (retention pond). They also inspected the sensors at the retention pond to ensure weeds were not obstructing the readings.

After the heavy rainfall, the Indigenous Monitor at Burnaby Terminal activity inspected ESC measures across the site. The Indigenous Monitor observed berms on the Upper Road slumping and sliding, and pooling water in various areas. The contractor was made aware of the deficiencies and corrected them.

Emptying water from the Intermediate Storm Water Retention Pond (ISWRA) in preparation for heavy rainfall.



Checking sensors at the Burnaby Terminal retention pond.

Straw bales and silt fencing functioning as intended at CWP 87.

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<tr>
<td>On Spread 7, the Indigenous Monitors also inspected ESC measures in anticipation of the forecasted heavy rainfall. For example, on CWP 61 (KP 1165.133) and CWP 98 (KP 1174) during inspections it was noted that a silt fence on each site required minor repairs. The Environmental Inspector was notified who contacted the contractor to repair.

At WMT in preparation for the mid-September heavy rainfall, the Indigenous Monitor inspected the hydroseeding on an exposed slope near the manifold wall. The contractor was advised to cover the slope with polyethylene sheeting ahead of the expected rain event to ensure it did not get washed away.</td>
<td> 
Hydroseed to be covered by poly sheeting at WMT prior to forecasted heavy rainfall.</td>
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<td>Fraser River Horizontal Directional Drill (HDD)

Construction activity on the Fraser River HDD laydown yard at Colony Farm (KP 1167.8) was ongoing in September. Placement of protective wood matting was completed, and the new pipe and equipment was delivered to the laydown yard for assembly in preparation for the HDD.

Assembling the pipe by welding and sandblasting occurs on the protective wood matting. Each morning before the pipe assembly crew begins activity, a sweep for snails and other small wildlife is conducted along the wood matting and adjacent worksite. Before welding activities can begin, fire retardant matts must be placed on top of the wood per the site fire safety plan.

The Indigenous Monitors observe these activities as well as inspect for construction housekeeping measures like assurance that residue from sandblasting has been contained and cleaned up before activities end for the day. No environmental concerns were noted during the observations.</td>
<td> 
Pipe stored on wooden protective matting on Colony Farm after being welded together. This pipe will be used for the Fraser River HDD.</td>
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Construction Site Housekeeping

The Indigenous Monitors at all sites in the Lower Mainland regularly conduct inspections of the various construction areas for general housekeeping measures. This includes observing and documenting garbage and recycling disposal, scrap metal management, waste storage, fuel storage, secondary containment of equipment and hydrocarbons, and proper storage and use of vehicle and equipment spill kits. In addition to daily inspections, prior to statutory holiday long weekends at Burnaby Terminal and WMT, the Indigenous Monitor and Environmental Inspector conduct a thorough inspection of site garbage and recycling receptacles and make recommendations to the contractor on priority areas to be dealt with before the site closes for the holiday. At WMT, the Indigenous Monitor reported some minor deficiencies with waste segregation and the contractor environmental team was advised to facilitate corrective actions.

On Spread 7, the Indigenous Monitors regularly inspect construction site housekeeping measures on active and inactive Construction Work Packages (CWPs) , including garbage and recycling disposal, waste segregation, secondary containment of equipment and hydrocarbons, and proper storage and use of vehicle and equipment spill kits. In September these inspections occurred at CWP 67 (KP 1168.2), CWP 75 (KP 1169.2), CWP 85 (KP 1172.2), CWP 88 (KP 1173.3), CWP 89 (KP 1173.5), and CWP 98 (KP 1174). During an inspection of the Fraser Mills Yard, the Indigenous Monitor identified a deficiency with waste segregation and insufficient ground covering in the area where the pipe was being coated. The Environmental Inspector notified the contractor to address the deficiencies.

Example of proper storage of aerosol spray cans and other materials at CWP 75.

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)