

INDIGENOUS MONITOR OVERVIEW REPORT

Month: July 2022

**Project Region: Edmonton and
Yellowhead**

Indigenous Monitor days on-site: 23

**Kilometre Posts (KPs) monitored:
KP 1–377**

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 sites 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 Edmonton and Yellowhead Regions. The purpose of this report is to provide an update on Indigenous Monitor activity to Indigenous groups.

During this reporting period, key activities in the Edmonton and Yellowhead Regions involving Indigenous Monitors included monitoring wildlife mitigations, pump station, pump-off, Edmonton Terminal, right-of-way clearing, Traditional Land Use (TLU) sites, topsoil removal, grading and stream bed restoration. Pipeline construction on Spread 1 is mechanically complete; some final Project activities on the Spread 1 right-of-way are being completed intermittently. The Project Construction Progress Report (Condition 106) for July 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 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.

Wildlife Management

While conducting site monitoring, Indigenous Monitors record and report any wildlife sightings to the Environmental Inspector. Indigenous Monitors also participate in discussions with the Environmental Inspection team relating to wildlife protection strategies and inspect that mitigation measures like environmental feature signage and buffers are effectively in place.

Indigenous Monitors participated in migratory nesting bird sweeps alongside the Resource Specialist prior to clearing and/or other construction activity. Nesting birds that require protection include species of migratory birds and those listed federally and/or provincially.

Resource Specialists performed sweeps in all areas where active construction is or will soon be underway. Indigenous Monitors joined bird sweeps between KP 48 and 311. After bird sweeps were completed Indigenous Monitors and Environmental Inspectors confirmed that proper buffers and signage were in place. Indigenous Monitors continue to observe active nest locations and associated protection measures. No issues were identified during these inspections.



Bird nest buffer in place at KP 66.



Bird nest buffer KP 90.



Bird nest buffer at KP 126.

Pump Station Inspection

A joint environmental inspection was conducted by an Environmental Inspector and an Indigenous Monitor at the Gainford Pump Station. The Facilities Environmental Protection Plan was reviewed and referenced during the inspection to ensure compliance measures were being followed.

The inspection included observing the sites' waste management procedures, use of secondary containment and the completion of final grade for the Gainford Pump Station buildings. Two drainage culverts were being installed as well as a drainage ditch to manage surface run-off. No environmental concerns were identified.



Drainage ditch construction at Gainford Pump Station KP 116.

Pump-Off

To keep trench excavation areas dewatered and stable during pipeline installation, water that accumulates from precipitation or groundwater seepage is pumped off and relocated to an approved location either on or off the construction footprint. At KP 265, water accumulating in the excavated pipeline trench was pumped off to a sediment bag. Water flowing out of the filtration system was discharged in a well-vegetated upland area.

The Indigenous Monitors inspected to ensure the filtration system was functioning as intended and that no sediment loading was identified at the discharge point. It was observed that pump-off water was released a minimum of 50 m from the nearest watercourse, replacement materials were readily available, including sediment control devices, pumps, spills kits and secondary containment, and housekeeping of off-construction footprint locations. No deficiencies were identified during the inspection.



Pump-off location at KP 265.



Pump-off release location KP 265.



Pump-off location at KP 246.

Edmonton Terminal Inspection

A joint inspection was conducted by the Environmental Inspector and Indigenous Monitor at Edmonton Terminal. Observations included construction of the containment wall, coating prep for the second tank and the construction of the line 2 pump building and the concrete sump for emergency hydrocarbon containment.

The containment wall construction continues with installation going as planned. Piles for the containment wall continue to be installed in the tank area. The second tank is being sandblasted and prepared for coating. Mitigations for collecting the blasting sand were confirmed to be in place. Line 2 pump building construction continues and is scheduled for completion in December 2022. Construction of the concrete sump for emergency hydrocarbon containment continues. . Waste management was inspected as well as secondary containment for equipment and fuel storage tanks. Spill kits and spill response procedures were also reviewed in the field. Key compliance measures on the construction permit were reviewed and mitigations were in place. No deficiencies were noted.



Containment wall complete beside new tank, coating to be completed, Edmonton Terminal.



Piling construction for containment walls at Edmonton Terminal.

Right-of-Way Clearing

Project right-of-way clearing involves the removal of trees and vegetation in areas along the pipeline. During this process, the surveyed Project right-of-way is cleared by removing the trees and brush. The topsoil is salvaged and stored along the edge of the Project right-of-way so it may be spread back out during reclamation. During the winter months, snow removal activities are required.

At KP 76, the Indigenous Monitors inspected clearing activities, wildlife mitigations, including general housekeeping, erosion and sediment control measures, buffers and signage for environmentally sensitive areas. No rare or medicinal plants were identified by the Indigenous Monitors in the workspace. No concerns were noted.



Clearing activities at KP 76.



Bird buffers confirmed in place before clearing at KP 76.

Traditional Land Use Sites

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 archaeology baseline assessments conducted in relation to the Project over many years.

Indigenous Monitors inspected previously identified TLU sites along the right-of-way on Spread 2 to confirm mitigation measures remain in place included signage, staking and flagging.

Indigenous Monitors inspect TLU sites with a focus on sites near active construction to ensure mitigation measures are in place to protect Heritage Resources. Sites inspected include but are not limited to TLU-3, TLU-6, TLU-9 and TLU-26.

An Indigenous Monitor also performed an inspection on a plant gathering site. The Indigenous Monitor confirmed no chemicals have been sprayed in the TLU site, construction is confined to approved work boundaries, that boundary signage is in place and that the Heritage Resource and Sacred and Cultural Sites Plan for the Trans Mountain Pipeline ULC Trans Mountain Expansion Project NEB Condition 100 is followed. Inspected mitigation measures remained in compliance. No cultural or environmental concerns were identified.



Signage in place at TLU-6 .



Signage in place at TLU-9.

Topsoil Removal and Grading

When removing soil 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.

At locations between KP 51 and 74, the Indigenous Monitors were involved in monitoring and inspecting soil salvage mitigation. Indigenous Monitors confirmed topsoil was separated and labelled and that piles remained inside the construction footprint. It was noted that wildlife breaks were left in soil piles where required. The Indigenous Monitors also inspected the construction areas before and after soil stripping to identify any potential archaeological chance finds. No potential archaeological chance finds were identified.



Topsoil strip and grading crew working at KP 74.



Strip and grade crew at KP 69.



Topsoil pile staked and labeled KP 74.

Stream Bed 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 regularly monitor completed watercourse crossings. Erosion and Sediment Control (ESC) measures are monitored; these measures mitigate erosion and sediment transport from construction sites to downstream areas and watercourses. On-site ESC mitigations may include sediment fences, swales, wattles, rock armouring, erosion control blankets and hydroseeding, as well as water drainage control measures.

In addition to regular monitoring, Indigenous Monitors took part in a DFO inspection. The group inspected the effectiveness of restorations completed at DFO sites on Spread 2. Activities observed included site housekeeping efforts, recontour of the bank, transplant areas, including erosion control blanket, willow stakes in riparian zones, re-seeding in previously excavated and backfilled areas and rock armouring and stream bed material replacement. These mitigations were installed and working as planned. The Indigenous Monitors present engaged in conversations about each crossing with DFO representatives and representatives from their Nation. No deficiencies were identified.

Indigenous Monitors reviewed and contributed to Alberta Isolated Trenched Crossings Monthly Report prior to submission to DFO during construction.



Stream bank restoration complete at AB-153 KP 290.



Stream bank restoration complete at AB-167 KP 307.



Stream bank restoration complete at AB-202 KP 337.



AB-178 KP 317.

Indigenous Monitor Request Dashboard

Indigenous Monitors are provided with 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 (beyond any reports or documents requested and shared through day-to-day team activity on-site), 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	6	1	5	-	12
Fulfilled	6	1	5	-	12
Outstanding	-	-	-	-	-

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

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