

INDIGENOUS MONITOR OVERVIEW REPORT

Month: April 2023

**Project Region: Edmonton and
Yellowhead**

Indigenous Monitor days on-site: 23

**Kilometre Posts (KPs) monitored:
KP 1–337**

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 surface water pump-off, pipe installation and backfill, watercourse restoration inspection, erosion and sediment control, right-of-way reclamation, Edmonton Terminal, Traditional Land Use (TLU) sites and wildlife management. 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 April 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 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.

Erosion and Sediment Control

Site-specific erosion and sediment control (ESC) measures are implemented to prevent sediment-laden runoff from leaving the right-of-way or from entering watercourses and wetlands. Key areas where ESC measures are required can include soil excavations, exposed slopes, soil stockpiles and locations near watercourses.

On-site ESC mitigations may include sediment fences, swales, wattles, rock armouring, erosion control blankets and hydroseeding, coarse woody debris (CWD), as well as water drainage control measures.

ESC measures are a major focus as crews prepare for spring runoff. Indigenous Monitors inspected ESC mitigations, including wing walls and silt fencing through several wetlands. Indigenous Monitors inspected erosion control blankets secured with willow stakes, rock armouring, swales and placement of CWD in and around the several watercourse crossings and steep slopes, including AB-185 at KP 321, AB-187 at KP 325, AB-194 at KP 332 and AB-202 at KP 337. No deficiencies were identified.



ESC installed near KP 325.



ESC installed reclamation and seeding complete KP 99.

Pump-Off

To keep trench excavation 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. At KP 55 on Spread 2, water accumulating in the excavated trench was pumped off to a sediment bag. Water flowing out of the filtration system was discharged upland to a well-vegetated 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. Observation showed pump-off water was released a minimum of 50 m from the nearest watercourse, replacement materials were readily available, including sediment control devices, pumps, spill kits and secondary containment, and housekeeping of off-construction footprint locations took place.



Pump-off location KP 55.

Watercourse Restoration Inspection

Environmental mitigation measures for in-stream construction of watercourses are prescribed in the provincial permits and the watercourse crossing plans, and in some cases, a Fisheries and Oceans Canada (DFO) authorization. Mitigation measures required for in-stream construction include but are not limited to biosecurity cleaning of equipment, secondary containment of hydrocarbons, salvaging of stream bed material, fish salvage, water quality monitoring and sediment/erosion control. When in-stream work is complete, Indigenous Monitors regularly monitor 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.

Indigenous Monitors inspected the effectiveness of restorations completed at AB-132 at KP 226, AB-152 at KP 293 AB-185 at KP 321, AB-187 at KP 325, AB-188 at KP 326 AB-194 at KP 332 and AB-202 at KP 337 to observe site transplant areas, including erosion control blanket, willow stakes in riparian zones, reseeded in previously backfilled areas, rock armouring, and stream bed material replacement. These mitigations were installed and observed to be working as planned.



Inspection of AB-188 at KP 326.



Monitoring of AB-132 Bench Creek at KP 226.



Monitoring of AB-152 at KP 293.

Edmonton Terminal Inspection

Strategies for avoiding or reducing potential environmental impacts are employed at all stages of construction by following the Environmental Protection Plans. The goal is to protect the environment, have as little impact as possible and ensure the land is returned to a similar function.

A joint inspection was conducted at the Edmonton Terminal by the Environmental Inspector and Indigenous Monitor. Observations included construction in the Line 2 pump building where crews are finalizing mechanical and electrical items and the new lift station. This activity includes some new underground drainage piping and catch basins. Other work includes final grade, geotextile and rock along the east ditch and berm on the west road. The civil crew has been recompacting the west tank area and reconstructing the berm between tanks 10 and 23 and the ramp into tank 23. The remainder of the work is finalizing mechanical and electrical items.

Waste management was inspected as well as secondary containment for equipment and fuel storage tanks. Open excavations were marked and properly delineated. Walking paths were kept clear. 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.



New pump building at Edmonton Terminal.



Good housekeeping on-site at Edmonton Terminal.

Traditional Land Use Sites (TLU)

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 including 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-1, TLU-3, TLU-6, TLU-8, TLU-9, TLU-12, TLU-19, TLU-20, TLU-24, TLU-26, TLU-27 and TLU-28.

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, and that boundary signage is in place. Inspected mitigation measures remained in compliance. No cultural or environmental concerns were identified.



Reclamation complete TLU-1.



Reclamation complete TLU-3.



Mitigations in place TLU-6.

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.

The Indigenous Monitors participated in wildlife sweeps, including migratory nesting bird sweeps alongside Environmental Inspectors prior to construction activities. Nesting birds that require protection include species of migratory birds and those listed federally and/or provincially. Indigenous Monitors joined to conduct bird sweeps between KP 48 and 337 and communicate about active nests daily. All mitigations were in place during inspection.



Bird nest buffer at KP 111.

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	7	1	8	-	16
Fulfilled	7	1	8	-	16
Outstanding	-	-	-	-	-

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

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