

VIA ELECTRONIC SUBMISSION

July 28, 2022

Canada Energy Regulator Suite 210, 517 Tenth Avenue S.W. Calgary, Alberta T2R 0A8

To: Ms. Ramona Sadic, Secretary of the Commission

Dear Ms. Sadic:

Re: Trans Mountain Pipeline ULC ("Trans Mountain")

Trans Mountain Expansion Project ("Project")

OC-065

Condition 110a: Authorizations under the Fisheries Act and Species at Risk permits

CER File: OF-Fac-Oil-T260-2013-03 61

In 2020, Trans Mountain applied for and received a Fisheries Act Authorization under section 35(2)(b) of the Fisheries Act for the open cut crossing of the Coquihalla River near Hope BC. The crossing is identified in Trans Mountain's Condition 43: Watercourse Crossing Table as BC-654. A copy of Authorization 19-HPAC-00555 was filed with the CER in May 2020 [C06333]. In response to delays in construction, the relevant dates in the Authorization were amended to provide for construction in August 2022. There were no other changes to the Authorization. A copy of the amended Authorication is attached as an administrative update to the previous filing.

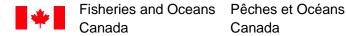
Should you have any questions or wish to discuss this matter further, please contact the undersigned at regulatory@transmountain.com or (403) 514-6400.

Yours truly,

Original signed by

Scott Stoness
Vice President, Regulatory and Compliance
Trans Mountain Canada Inc.

Enclosure: DFO Authorization 19-HPAC-00555



Paragraphs 34.4(2)(b) and 35(2)(b) Fisheries Act Authorization

Authorization No.: 19-HPAC-00555

Authorization issued to

Trans Mountain Pipeline ULC (hereafter referred to as the "Proponent")

Attention to: Scott Stoness, VP, Regulatory and Compliance

Trans Mountain Pipeline ULC 300 – 5 Avenue SW., Suite 2700 Calgary, AB T2P 5J2 Canada

Location of Proposed Project

Nearest community (city, town, village): Hope

Municipality, district, township, county: District of Hope

Province: British Columbia

Name of watercourse, waterbody: Coquihalla River UTM Coordinates: 10U; 614629 E; 5470394 N

Valid Authorization Period

This Authorization remains in force from the **Date of Issuance** until Fisheries and Oceans Canada (DFO) confirms to you in writing that all of the requirements of this Authorization have been met, in particular those requirements relating to monitoring, offsetting measures and contingency measures.

Please note that this Authorization may contain more specific timing requirements and limitations. These are set out in the Conditions of Authorization section.

Description of Proposed Project

The proposed project described herein involves an open wet-cut crossing of the Coquihalla River to install two pipeline sections in a shared trench, and includes the replacement of a section of pipeline belonging to the existing Trans Mountain Pipeline and the installation of a new section of pipeline associated with Trans Mountain Expansion (TMX) Project. The proposed project is located along Trans Mountain Pipeline ULC's existing pipeline corridor, and is part of the TMX Project.

The proposed project of which the work, undertaking or activity authorized under this authorization is a part, involves:

- Land-based site preparation, including clearing of previously disturbed riparian vegetation on the left and right banks of the river at the crossing;
- Excavation of an open wet-cut trench across the Coquihalla River, removal and replacement of an existing pipeline section, installation of a new pipeline section within the shared trench, and backfilling of the trench using native material following pipeline replacement;



- Replacement of rock-armour revetment along the left bank of the river (adjacent to Old Hope Princeton Way); and
- Restoration of the river bed and banks at the crossing site to pre-construction conditions.

Works, undertakings, or activities conducted under this authorization supersede those authorized under *Fisheries Act* Authorization 19-HPAC-00555 issued on March 20, 2020.

The proposed project is more specifically described in the following documents:

- Application Form for Paragraph 35(2)(b) *Fisheries Act* Authorization (Normal Circumstances) received August 7, 2019.
- Revised Application Form for Paragraph 35(2)(b) *Fisheries Act* Authorization (Normal Circumstances) received
- Form for Authorization Holders to Request an Amendment to an Authorization received July 30, 2021.

Description of Authorized work(s), undertaking(s) or activity(ies) likely to result in the harmful alteration, disruption or destruction of fish habitat:

The work(s), undertaking(s), or activity(ies) associated with the proposed project described above, that are likely to result in the harmful alteration, disruption or destruction of fish habitat, are:

• Excavation of an open wet-cut trench across the Coquihalla River and backfilling of the trench following removal and replacement of an existing section of pipeline.

The authorized work(s), undertaking(s), or activity(ies) are likely to result in the following impacts to fish and fish habitat:

• Permanent alteration of approximately **800 m²** of instream spawning habitat for pink salmon and steelhead trout as a result of sedimentation (estimated to extend up to approximately 1 km downstream) from the work, undertaking or activity.

Conditions of Authorization

The above described work, undertaking or activity must be carried on in accordance with the following conditions.

1. Conditions that relate to the period during which the work, undertaking or activity can be carried on

The work, undertaking or activity is authorized to be carried on during the following period:

From August 1, 2022 to August 31, 2022

If the Proponent cannot complete the work, undertaking or activity during this period, the Proponent must notify Fisheries and Oceans Canada (DFO) 10 days in advance of the expiration of the above time period.

The periods during which other conditions of this Authorization must be complied with are provided in their respective sections below. The Proponent must notify DFO 10 days in advance of any relevant expiration dates if a given condition cannot be met within the set timeframe.

2. Conditions that relate to measures and standards to avoid and mitigate impacts to fish and fish habitat:

- 2.1 The Proponent shall ensure that the location and design of the work, undertaking or activity are consistent with the information included in the document titled, "Application for Paragraph 35(2)(b) *Fisheries Act* Authorization Open-wet cut crossing of the Coquihalla River (crossing code: BC-654)" (revised on September 19, 2019, and referred to hereafter as 'the Application'), or as agreed upon in consultation with DFO.
- 2.2 The Proponent shall implement the measures and standards described below to avoid and mitigate impacts to fish and fish habitat:
 - 2.2.1 All instream construction activities at the Coquihalla River crossing (BC-654) shall only be carried out during the least risk work timing window from August 1 to 31. This timing window will enable construction to occur during a period of lower sensitivity to the life processes of resident and anadromous fish species (e.g., pink salmon, chum salmon, steelhead trout).
 - 2.2.2 The duration of instream construction will be limited to shifts of up to 15 consecutive hours when there is daylight to allow visual monitoring and to reduce levels of suspended sediment prior to recommencement of instream works.
 - 2.2.3 Effective sediment and erosion control measures must be in place prior to the start of construction and shall be upgraded and maintained throughout the duration of construction, such that an unauthorized release of sediment (e.g., from the stock piling of substrate excavated from the trench) into any watercourse is avoided.
 - 2.2.4 Disturbed areas of riparian vegetation shall be replanted as appropriate, with native, non-invasive species of vegetation following completion of construction activities.
 - 2.2.5 Soft start procedures (e.g., the gradual increase in the force, scale, or physical presence of instream mechanical activities), under the direction of a Qualified Environmental Professional, will be implemented at the start of, or recommencement of, instream works to allow fish time to vacate the work area.
 - 2.2.6 Fish salvage shall be conducted by a Qualified Environmental Professional, using appropriate gear, timing and salvage techniques, within instream work areas prior to the start of, or recommencement of, instream construction activities to limit adverse impacts to fish. Salvaged fish must be relocated downstream of the instream work areas and outside of the zone of influence of sedimentation.
 - 2.2.7 Following backfilling of the trench, and replacement of the existing revetment armouring along the southern bank, instream habitats (i.e., river bed and banks) located within the construction footprint shall be restored to pre-construction contours and conditions using native gravel, cobble, and boulder substrate. Restoration will be conducted on the advice and approval of a Qualified Environmental Professional, and should involve the strategic placement of boulder clusters, and anchoring of root wads or large woody debris along channel margins to enhance fish habitat.
 - 2.2.8 Water quality measurements to document turbidity and total suspended solids will be collected throughout the period of instream construction and replacement of revetment armouring at an upstream control site, and from an appropriate number of representative sample sites along the length of the watercourse to a distance located 1 km downstream of instream construction. If levels of turbidity or total suspended solids exceed the *Canadian Council of Ministers of Environment [CCME] Canadian Water Quality Guidelines for the Protection of Aquatic Life* [CCME 2016] at 1 km downstream of instream construction), instream construction activities will be ceased immediately to allow water quality parameters to return to levels within the CCME guidelines.
- 2.3 If the monitoring measures required in Condition 3 below indicate that the measures and standards to avoid and mitigate impacts to fish and fish habitat are not effective, the Proponent must identify, in

- consultation with DFO, and implement contingency measures to avoid or limit residual impacts to fish and fish habitat.
- 2.4 In the event that monitoring indicates that the contingency measures implemented are not effective at preventing impacts beyond what is authorized, the Proponent must provide a report to DFO (refer to Conditions 3 and 6.1 for reporting requirements) that details the outstanding issues affecting fish and fish habitat, reasons for failure of the measures implemented, and any potential alternate solutions to address outstanding issues.

3. Conditions that relate to monitoring and reporting of measures and standards to avoid and mitigate impacts to fish and fish habitat:

- 3.1 A Qualified Environmental Professional must be present on site during the carrying on of the inwater work, undertaking or activity, and shall monitor the work, undertaking or activity on an ongoing basis to ensure that the standards and measures to avoid and mitigate impacts to fish and fish habitat are effective, and that unauthorized impacts to fish and fish habitat are avoided.
- 3.2 An Indigenous Monitor, hired by the Proponent, must be present on site to monitor the carrying on of all in- or near-water works, undertakings or activities on an on-going basis, and given the opportunity to acquire Indigenous Knowledge (i.e., from local Indigenous communities) and to provide Indigenous Knowledge, as appropriate, in relation to the Proponent's carrying on of the work, undertaking or activity.
- 3.3 The Proponent shall monitor the implementation of avoidance and mitigation measures referred to in Condition 2 of this Authorization and submit weekly reports to DFO for the duration of the work, undertaking or activity. The construction monitoring reports must indicate whether the measures and standards to avoid and mitigate impacts to fish and fish habitat were conducted according to the conditions of this Authorization. This shall be done, by providing:
 - 3.3.1 A concise summary of the work, undertaking or activity carried out during that reporting period.
 - 3.3.2 Commentary on the work, undertaking or activity, and the work area from an environmental perspective (e.g., observations of fish, weather conditions, average discharge, water quality summaries, any measured exceedances).
 - 3.3.3 Dated photographs and inspection reports to demonstrate whether the mitigation measures and standards described in Condition 2 are effectively being implemented and functioning as intended to limit the impacts to fish to what is covered by this Authorization.
 - 3.3.4 A tally of any salvaged fish, including information on species, size, date and location of capture and release, and any incidental mortality observed.
 - 3.3.5 Photographic documentation and a succinct summary of any environmental issues (e.g., potential non-compliance events) or impacts that arose or occurred in relation to fish and fish habitat, and details of any contingency measures that were taken to prevent impacts greater than those covered by this Authorization in the event that mitigation measures did not function as intended.
 - 3.3.6 A summary of compliance with relevant Environmental Protection Plans (EPPs) pertaining to fish and fish habitat.
 - 3.3.7 A table summarizing unforeseen issues with respect to fish and fish habitat that remain outstanding and must be addressed (i.e., those without on-the-spot solutions or those requiring follow-up to ensure corrective measures are being taken), proposed/planned mitigation measures, priority and anticipated dates of implementation and/or completion.
- 3.4 The Proponent shall provide a post-construction monitoring report to DFO within 90 days of completion of the work, undertaking or activity and indicate whether the work, undertaking or activity was conducted according to the conditions of this Authorization by providing 'as-built' drawings, dated photographs, and a summary of the completed work, undertaking or activity (including any issues that arose pertaining to fish and fish habitat and how these issues were addressed).

3.5 If monitoring indicates that the work, undertaking or activity will result or is resulting in unauthorized prohibited impacts, the Proponent has a duty to notify DFO immediately. The Proponent must report any unauthorized prohibited impacts to DFO's Observe, Record, and Report line (1-800-465-4336).

3.6 All monitoring reports are to be submitted to Referencing DFO file: 19-HPAC-00555.

4. Conditions that relate to offsetting

- 4.1 In order to offset the harmful alteration, disruption or destruction of fish habitat resulting from the work, undertaking or activity authorized herein, the Proponent shall create, restore and enhance a total of 3,023 m² of instream salmon spawning and rearing habitat in William Phillips Slough, as described in the Proponent's Offsetting Plan (Section 6.0 of the Application), and in accordance with the specifications included in Schedule A of this Authorization. The implementation of all fish and fish habitat offsetting measures shall be completed by **August 31, 2022**.
- 4.2 In the event that the Proponent fails to implement the Offsetting Plan described in Section 6.0 of the Application, and required under Condition 4.1, DFO may draw upon funds set aside by the Proponent through the irrevocable standby letter of credit (No. S101083, issued by The Toronto-Dominion Bank), to cover the costs of implementing and maintaining the proposed offsetting, including the associated monitoring measures included in Condition 5 of this Authorization.
- 4.3 A QEP must be present on site during construction of the Offsetting Plan, and is to monitor the works to ensure that the standards and measures to avoid and mitigate impacts to fish and fish habitat are effective, and that unauthorized impacts to fish and fish habitat are avoided.
- 4.4 An Indigenous Monitor, hired by the Proponent, must be given opportunities to monitor the carrying on of all works in or near water and offset monitoring described under Condition 5. The Indigenous Monitor must be given opportunities to acquire Indigenous Knowledge (e.g., from local Indigenous communities) and to provide Indigenous Knowledge, as appropriate, in relation to the Proponent's carrying on of construction and monitoring activities associated with the Offsetting Plan.
- 4.5 If during any reporting period identified in Condition 5.2, monitoring of the effectiveness of offsetting measures indicates that the offsetting measures are deficient and/or unlikely to function as intended, the Proponent shall undertake remedial measures at the earliest time feasible to correct any deficiencies in the offsetting measures, and ensure impacts to fish and fish habitat are mitigated or avoided.
- 4.6 If the results of monitoring as required in Condition 5 indicate that the offsetting measures are not completed by the date specified or are not functioning as intended, the Proponent shall give written notice to DFO and shall implement the contingency measures and associated monitoring measures identified within the Offsetting Plan. The Proponent shall meet the following requirements:
 - 4.6.1 The Proponent will determine the reason for failure(s) and develop and implement a contingency Offsetting Plan to address the failure(s) within one calendar year to bring offsetting measures to a level agreed upon in consultation with DFO.
 - 4.6.2 The contingency plan(s) (including any associated monitoring measures) to address deficiencies in offsetting measures shall be submitted to DFO and the Indigenous Advisory and Monitoring Committee (IAMC) as defined in Condition 6.1, for review, and approval by DFO at least 120 days prior to implementation of the contingency plan(s).
 - 4.6.3 Following implementation of the contingency plan(s), the Proponent will monitor the contingency offsetting measures constructed and/or implemented in accordance with standards stated in Condition 5 below.
- 4.7 The Proponent shall identify, to DFO satisfaction, success criteria that align with the objectives of the habitat offsetting, on or before March 31, 2022. The success criteria will be used to verify that the habitat offsetting measures has been successful in meeting the objectives of the offsetting plan.
- 4.8 The offsetting measures will be considered successful if, at any point following the third consecutive year of effectiveness monitoring of the offsetting, the success criteria are met. Should the success

- criteria be met, upon written notification from DFO, the Proponent may be released from the requirement to conduct further effectiveness monitoring (i.e., Condition 5.2 will cease to apply).
- 4.9 The Proponent shall not carry on any work, undertaking or activity that will adversely impact the offsetting measures.

5. Conditions that relate to monitoring and reporting of implementation of offsetting measures (described in section 4):

- 5.1 The Proponent shall undertake monitoring and report to DFO on whether the offsetting measures were implemented according to the conditions of this Authorization by submitting a post-construction monitoring report to DFO within 90 days of completion of construction of the offsetting measures. The post-construction monitoring report must include:
 - 5.1.1 As-built drawings of the completed offsetting measures;
 - 5.1.2 A summary of the 'as-built' condition of the offsetting measures;
 - 5.1.3 Dated photographs of the completed offsetting measures; and
 - 5.1.4 A summary of the effectiveness of mitigation measures and standards implemented during the construction of the offsetting measures, as referred to in Section 6.1 of the Application.
- 5.2 The Proponent shall undertake five (5) consecutive years of habitat effectiveness monitoring following the construction of the offsetting measures and submit annual effectiveness monitoring reports to DFO to document changes in the effectiveness and functioning of the offsetting measures. Each report must include:
 - 5.2.1 Geo-referenced photographs of the offsetting measures;
 - 5.2.2 An assessment of the apparent effectiveness or success of the offsetting measures;
 - 5.2.3 Measurements of environmental variables during monitoring, including ambient temperature and water quality metrics; and
 - 5.2.4 Any concerns regarding the functioning of the offsetting measures and a description of any remedial measures implemented and their effectiveness.
- 5.3 All effectiveness monitoring reports are to be submitted no later than December 31st of each year referenced in Condition 5.2 to ReferralsPacific@dfo-mpo.gc.ca, referencing DFO file: 19-HPAC-00555.

6. Conditions that relate to reporting and engagement with the IAMC:

- 6.1 Monitoring reports, plans and notifications letters submitted to DFO under Conditions 2.4, 3, 4.6.2 and 5 of this Authorization shall be shared concurrently by the Proponent with the IAMC, DFO, and potentially affected Indigenous groups that have requested them.
- 6.2 If the IAMC communicates concerns to DFO or to the Proponent related to the content of the monitoring reports (e.g., monitoring criteria, measures of success), the Proponent shall, at the request of DFO and, in a timely manner, meet with DFO, the IAMC, and potentially affected Indigenous groups that have requested inclusion to discuss the concerns.
- 6.3 If monitoring activities and/or reports indicate non-compliance with any conditions of this Authorization and/or the provisions of the *Fisheries Act*, the Proponent must identify the reasons for non-compliance, remedial actions or measures taken or to be taken, a timeline for their implementation and the effectiveness of any implemented remedial measures. This information shall be provided in a report to DFO, the IAMC, and potentially affected Indigenous groups that have requested them, concurrently, and in a timely manner.

Authorization Limitations and Application Conditions

The Proponent is solely responsible for plans and specifications relating to this authorization and for all design, safety and workmanship aspects of all the works associated with this authorization.

The holder of this authorization is hereby authorized under the authority of Paragraphs 34.4(2)(b) and 35(2)(b) of the *Fisheries Act.* R.S.C., 1985, c.F-14, to carry on the work(s), undertaking(s) and/or activity(ies) that are likely to result in impacts to fish and fish habitat as described herein.

This authorization does not purport to release the applicant from any obligation to obtain permission from or to comply with the requirements of any other regulatory agencies.

This authorization does <u>not</u> permit the deposit of a deleterious substance in water frequented by fish. Subsection 36(3) of the *Fisheries Act* prohibits the deposit of any deleterious substances into waters frequented by fish unless authorized by regulations made by Governor in Council.

This authorization does not permit the killing, harming, harassment, capture or taking of individuals of any aquatic species listed under the *Species at Risk Act* (SARA) (s. 32 of the SARA), or the damage or destruction of residence of individuals of such species (s. 33 of the SARA) or the destruction of the critical habitat of any such species (s. 58 of the SARA).

At the date of issuance of this authorization, no individuals of aquatic species listed under the *Species at Risk Act* (SARA) were identified in the vicinity of the authorized works, undertakings or activities.

In accordance with An Act to amend the Fisheries Act and other Acts in consequence, this Authorization is deemed to have been issued under the authority of paragraphs 34.4(2)(b) and 35(2)(b) of the Fisheries Act as those paragraphs read after the day on which section 22 of An Act to amend the Fisheries Act and other Acts in consequence came into force, on August 28, 2019.

The failure to comply with any condition of this authorization constitutes an offence under Paragraph 40(3)(a) of the *Fisheries Act* and may result in charges being laid under the Act.

A copy of this authorization should be kept on site while the work is in progress and upon request be provided to relevant federal or provincial officials. The authorization holder is responsible for ensuring work crews are familiar with, and able to adhere to, the conditions.

This authorization cannot be transferred or assigned to another party. If the works, undertakings or activities authorized to be conducted pursuant to this Authorization are expected to be sold or transferred, or other circumstances arise that are expected to result in a new Proponent taking over the works, undertakings or activities, the Proponent named in this authorization shall advise DFO in advance.

Date of Issuance: November 8, 2021

Approved by: Rebecca Reid

Regional Directory General

Pacific Region

Fisheries and Oceans Canada

Schedule A: William Phillips Slough Fish Habitat Offsetting Plan



