

Project Name	Coastal GasLink Pipeline Project	Inspection Status	Final
EA Certificate #	E14-03	Inspection No.	20230027_IR003
Project Status	Certified - construction	Inspection Start	2023-05-26
Officer	Lombardi	UTM	9U 600010 E 6007241 N to 9U 589850 E 6007975 N
Trigger	Unplanned Inspection	Inspection Type	Field
Project Description	The Coastal GasLink Pipeline Project (Project) is an approximately 650-kilometre (km) natural gas pipeline connecting facilities in northeast British Columbia to the LNG Canada facility near Kitimat.		
Location Description	The Project initiates near the community of Groundbirch and terminates near Kitimat. This inspection covered works in Sections 7.		
Inspection Summary	<p>The Officer inspected the Project right-of-way (ROW) between kilometre post (KP) 565+400 to 576+500. At the time of the inspection, this area of the Project was under Order 20230027_OR001 (Appendix 1), which requires that all activities that advance the completion of the Project, except for those activities specific to erosion and sediment control and those necessary for the watercourse crossing of Gosnell Creek, cease until EAO Compliance and Enforcement Branch (CEB) has conducted a site inspection and confirmed that progressive construction may proceed.</p> <p>The primary focus of the inspection was to re-inspect the Project against the requirements of the Work Execution Plan (WEP) KP 565+400 to 576+500 for the purpose of assessing whether Order 20230027_OR001 could be lifted.</p> <p>This inspection also included an assessment of public concerns regarding sediment inputs to the Morice River. The findings of that assessment are detailed in the <i>Regulatory Considerations</i> section below. The inspection included a debrief of observations with Project staff on May 27, 2023.</p> <p>The following requirements were inspected against:</p> <ol style="list-style-type: none"> 1. Order 20230027_OR001 with respect to ceasing all Progressive Construction activities on the Project between KP 565+400 to 576+500, with the exception of activities necessary for the watercourse crossing of Gosnell Creek. 2. The Compliance Agreement with respect to implementation of the WEP for KP 565+400 to 576+500. <p>Additional detail regarding these findings may be found in the sections below.</p> <p>The compliance determinations in this report reflect the findings from the inspection dates noted above. These determinations can change at any time upon information gathered through future inspections or if new information is obtained by the EAO CEB.</p>		
In Attendance	Fisheries and Oceans Canada (DFO) Compliance and Enforcement Officer (May 26) DFO Senior Biologist, Fish and Fish Habitat Protection Program (May 26) Coastal GasLink Lead Designate Environmental Inspector, Sections 5, 6 and 7 (May 27) Coastal GasLink Environmental Inspector (May 27) OJ Pipelines Erosion and Sediment Control Specialist (May 27)		
Certificate Holder	Coastal GasLink Pipeline Ltd.		

Mailing Address	450 1 st Street SW, Calgary, AB, T2P 5H1
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INSPECTION DETAILS

Requirement 1: Order 20230027_OR001 Issued Under the *Environmental Assessment Act* (Appendix 1)

In this Order,

Progressive Construction means all activities that advance the completion of the Project except for those activities specific to erosion and sediment control.

Pursuant to Section 53(1)(a)&(c) of the Act, I order that the Certificate Holder must:

- 1) Effective 6:00pm PDT May 9, 2023, cease all Progressive Construction activities on the Project between KP 565+400 to 576+500 with the exception of activities necessary for the watercourse crossing of Gosnell Creek.
- 3) Do not resume Progressive Construction activities until compliant with the Agreement and EAO CEB has conducted a site inspection and confirms that Progressive Construction may proceed.

Findings:

On May 9, 2023, EAO CEB issued Order 20230027_OR001 under Section 53 of the *Environmental Assessment Act* for non-compliance with the Project’s Compliance Agreement specific to observations regarding the WEP for KP 565+400 to 576+500 (Appendix 1).

On May 26, 2023, the Officer made aerial observations of the Project ROW between KP 565+400 to 576+500 to evaluate if Progressive Construction was ongoing. The only Project activities observed were specific to erosion and sediment control.

These findings provide evidence that the Project is compliant with Order 20230027_OR001 with respect to ceasing all Progressive Construction activities on the Project between KP 565+400 to 576+500, with the exception of activities necessary for the watercourse crossing of Gosnell Creek.

Compliance Determination: In

Requirement 2: Compliance Agreement Under Section 55 of the *Environmental Assessment Act* (Appendix 2)

Section 2.4 Compliance Obligations – Work Execution Plan Implementation

For each Identified Area, the Holder must

- (2) after receiving approval under section 2.3(1)(b) or (c), implement the applicable Work Execution Plan until such time that the portion of the Identified Area covered by the Work Execution Plan demonstrates final site stabilization in relation to ESC risks to ESRs as determined by a Qualified Professional to the satisfaction of EAO;

Schedule B – Identified Areas

The following kilometer point (KP) ranges are Identified Areas for the purposes of this Agreement:

- KP 564+000 to 568+775
- KP 568+825 to 579+700

Segment 7 – Phase 1 – Work Execution Plan – WP3 West 565+400 to 576+500 (Appendix 3)

Findings:

On May 26 and 27, 2023, the Officer inspected the Project ROW between KP 565+820 to 572+350 against the currently approved WEP or Identified Areas KP 565+000 to 568+775 and KP 568+825 to 579+700 (Appendix 3). This inspection was requested by the Certificate Holder in relation to Order 20230027_OR001, specifically, to assess if the Project was in compliance with the Compliance Agreement and able to resume Progressive Construction between KP 565+400 and 576+500 (see Requirement 1).

Over the course of the inspection, the Officer observed multiple instances of noncompliance with the WEP requirements with respect to the implementation of erosion and sediment control measures specified in the WEP and with the deactivation of erosion and sediment control measures in a manner that is inconsistent with the WEP. The following is a non-exhaustive listing of examples.

KP 556+000 to +500

- Lined ditch at KP 566+000 was not present. The OJ Pipelines Erosion and Sediment Control Specialist identified that the feature had been deactivated to allow non-classified drainage (NCD) J430.02 to flow into an unlined ditch on the south side of the ROW, and that the change was documented in a field fit submission. The May 11, 2023 field fit submission identifies that the NCD was captured in a non-contact perimeter ditch (Appendix 4), yet erosion on the grade cut above the ditch was evident and exposed soils were observed to be stored adjacent to the ditch (Photo 1).
- Rather than delineating the margin of Ecologically and Socio-Economically Important Wetland (ESIW) WET-566.3 at KP 566+200 to the edge of the ROW with sediment fencing, as specified in the WEP, the cleared wetland area was observed to be utilized as a catchment pond for water from unlined ditches running along the south side of the ROW from both the upchain and downchain directions (Photo 1 and 2). A pump was in place to discharge collected water off the ROW, but a culvert maintained connectivity of the catchment to the undisturbed portion of the wetland on the north side of the ROW.
- Water bar at KP 566+360 was not present and no alternate measures were observed to be in place (Photo 3). The OJ Pipelines Erosion and Sediment Control Specialist identified that grade was completed in this area in March and that the feature had been deactivated since April 6, 2023, due to saturated soils. The WEP specifies that “features should not be deactivated unless temporarily required to facilitate safe travel and work activities during favourable weather/site conditions”. There was not evidence that the deactivation criteria had been met.



Photo 1. Unlined ditch at KP 566+180 directing NCD J430.02 to cleared wetland area.



Photo 2. Cleared portion of ESIW WET-566.3 utilized as a catchment area for unlined ditches at KP 566+200. The WEP specifies that the wetland be delineated from the ROW.



Photo 3. Location of deactivated water bar on ROW at KP 566+350.

KP 567+000 to +200

- The lined ditch across the ROW at KP 567+050 was not installed per the ESC Mitigation Package (Appendix 5). The specification for a lined ditch is a minimum of 0.5 metres (m) and the ditch did not meet this specification (Photo 4). In addition, the lining of this ditch was interrupted across the travel lane.
- The lined ditch on the south side of the ROW between KP 567+000 and 567+080 specified in the WEP was observed to be unlined (Photo 5).
- Gap observed at the corner between the silt saver and sediment fence at KP 567+150 (Photo 6). Evidence of previous sediment movement through this gap was observed.
- Soil storage at KP 567+160 to 260 observed to not be hydromulched, as specified in the WEP (Photo 7).



Photo 4. Lined ditch at KP 567+050 not installed to depth specification and unlined across a portion of the ROW.



Photo 5. Ditch at KP 567+000 and 567+080 not lined as specified in WEP.



Photo 6. Gap in the corner of sediment fencing at KP 567+150 where evidence of sediment movement was observed.



Photo 7. Soil storage at KP 567+160 to 260 not hydromulched.

570+700 to 571+000 (Gosnell Creek crossing)

Overall, the Gosnell Creek crossing site was observed to be proceeding in a fundamentally different manner than is depicted and described in the WEP.

- The WEP specifies a berm across the ROW on the lowchain side of the crossing at KP 570+900 to separate the ROW from the vegetated area adjacent to Gosnell Creek, including lake 575B.02. The WEP depicts the bore bay as outside of the vegetated area. The Officer observed both the bore bay and a flocculant tank (not

specified in the WEP) to be located inside of the vegetated area, metres from the bank of Gosnell Creek, with no containment measures between these features and Gosnell Creek. Figure 1 and Photo 8 present the planned and actual site conditions.

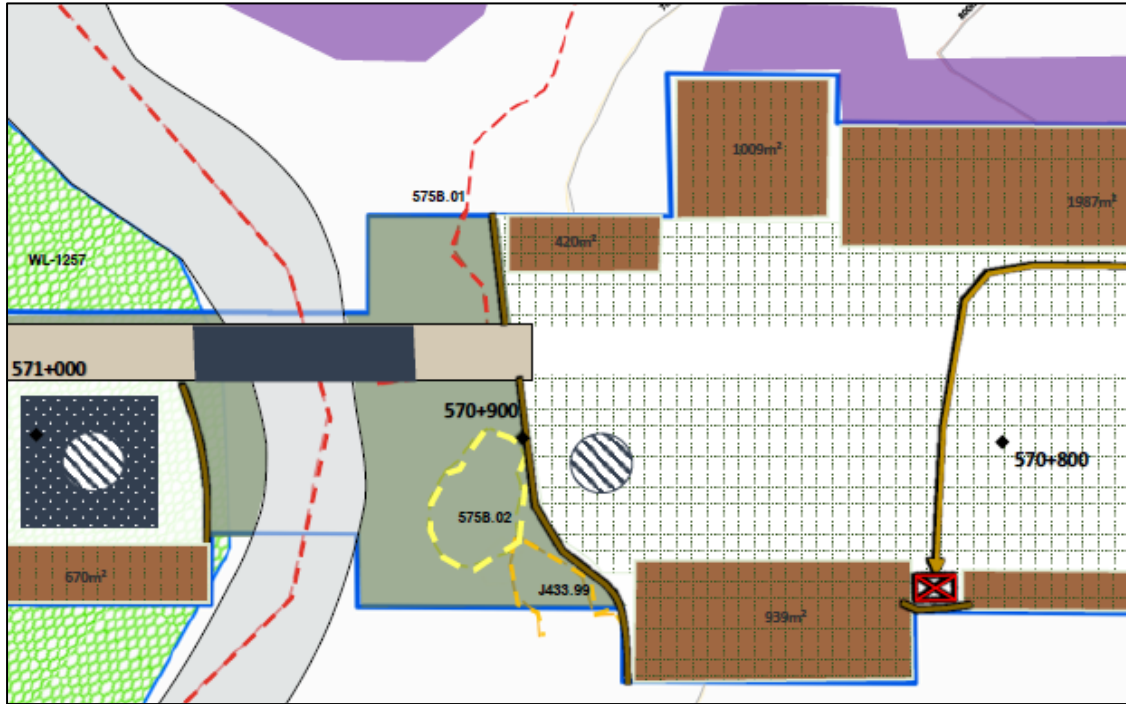


Figure 1. Excerpt from the KP 565+400 to 576+500 for the Gosnell Creek crossing (bore bays indicated with lined circles).



Photo 8. Aerial view of Gosnell Creek crossing site facing the highchain (west) direction.

- The Gosnell Creek crossing structure at KP 590+900 has been moved from the north side of the ROW to the south resulting in lake 575B.02 being pumped out and filled in to accommodate the configuration. As illustrated by Figure 1 and Photo 8 above, this approach is not reflected in the WEP.
- The crossing activities have yet to commence at this location beyond the installation of the bore bays, despite the WEP indicating that mechanical construction was scheduled to be complete in early March 2023 and machine cleanup was scheduled to be completed in early April. The delay has been primarily caused by water management issues in the bore bays. The site also experienced a significant flooding event before the inspection (see *Regulatory Considerations* below). The seasonality (frozen conditions) identified in the WEP does not reflect the actual construction conditions, which may result in unmitigated environmental risks.

These findings provide evidence that the Project is in continued non-compliance with Section 2.4(2) of the Compliance Agreement with respect to implementation of the WEP for KP 565+400 to 576+500.

Compliance Determination: Out – Order 20230027_OR001 remains in effect - Refer to Enforcement Summary

Actions Required by Certificate Holder & Additional Comments

None at this time.

Enforcement Summary

COASTAL GASLINK PIPELINE LTD. IS IN CONTINUED NONCOMPLIANCE WITH THE COMPLIANCE AGREEMENT FOR EAC# E14-03 WITH RESPECT TO IMPLEMENTATION OF THE WEP FOR KP 565+400 TO 576+500. ORDER 20230027_OR001 REMAINS IN EFFECT. A RECOMMENDATION FOR AN ADMINISTRATIVE PENALTY MAY BE REFERRED TO A DECISION MAKER PURSUANT TO SECTION 60 OF THE ENVIRONMENTAL ASSESSMENT ACT IN RESPONSE TO THIS NON-COMPLIANCE.

ON MAY 31, 2023, ORDER 20230027_OR001 WAS RESCINDED AND REPLACED WITH ORDER 20230027_OR002 (APPENDIX 6). ORDER 20230027_OR002 REMOVES THE EXCEPTION OF ACTIVITIES NECESSARY FOR THE WATERCOURSE CROSSING OF GOSNELL CREEK FROM THE ORDER TO CEASE PROGRESSIVE CONSTRUCTION ACTIVITIES ON THE PROJECT BETWEEN KP 565+400 TO 576+500.

EAO CEB MAY INSPECT TO DETERMINE IF THE COASTAL GASLINK PIPELINE PROJECT HAS BEEN BROUGHT BACK INTO COMPLIANCE WITH THESE REQUIREMENTS. CONTINUED NON-COMPLIANCE WITH THESE REQUIREMENTS MAY RESULT IN ADDITIONAL ENFORCEMENT UNDER THE ENVIRONMENTAL ASSESSMENT ACT. SEE REGULATORY CONSIDERATIONS SECTION FOR ADDITIONAL INFORMATION.

Regulatory Considerations

On May 26, 2023, the Officer, a DFO Compliance and Enforcement Officer and a DFO Senior Biologist inspected the Gosnell Creek and Morice River watersheds in response to public concerns regarding sediment inputs as a result of Project activities at the pipeline crossing of S1B watercourse Gosnell Creek (KP 570+941). The expressed concern was that flooding at the crossing site, and at other Project activities in the area, were causing a significant input of sediment to Gosnell Creek, which was subsequently discharging into the Morice River.

At the time of the inspection, the water level at the highchain side Gosnell Creek crossing site had receded significantly, but the ROW was still flooded. No evidence of mass sediment movement offsite was observed. Aerial observations were made of Gosnell Creek both upstream of the Project ROW and downstream to the Morice River. No difference in water quality was observed in Gosnell Creek upstream and immediately downstream of the Project. An eroding bank downstream of the Project, approximately 5 km upstream of its confluence with the

Morice River, was observed to be impacting water quality in Gosnell Creek (Photo 9). At this location, a sediment plume was observed in Gosnell Creek and the water downstream was visibly more turbid. Other minor inputs from eroding banks were observed both upstream and downstream of the Project ROW, which increased the turbidity of Gosnell Creek.



Photo 9. Eroding bank depositing sediment into Gosnell Creek downstream of the Project ROW.

More significantly, approximately 200 m before the confluence of Gosnell Creek and the Morice River, the Thautil River was observed to flow into Gosnell Creek heavily loaded with sediment that was subsequently discharged into the Morice River (Photo 10). This observation is consistent with a 2002 publication by David Bustard and Associates titled *Conserving Morice Watershed Fish Populations and Their Habitat*, which notes Gosnell Creek and the Thautil River as the main sources of sediment into the Morice River (Appendix 7 and Figure 2). The Thautil River flows south toward Gosnell Creek from the opposite direction of the ROW, so its condition is independent of Project activities.

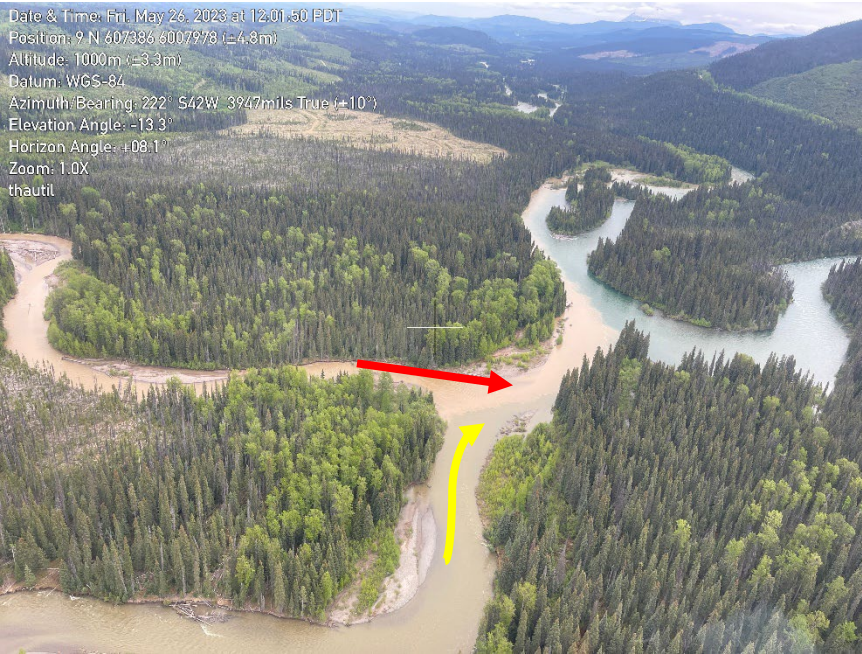


Photo 10. Inputs to the Morice River from the Thautil River (red) and Gosnell Creek (yellow).

Photo 1. Gosnell Creek (lower left) and Thautil River (top of photo) are main sources of sediment into the Morice River at a point located 13 km downstream from Morice Lake. This photo was taken in June 1982 prior to any significant road or logging development in these drainages.



Figure 2. Excerpt from *Conserving Morice Watershed Fish Populations and their Habitat* (Appendix 7) documenting pre-Project sediment input to the Morice River from Gosnell Creek and Thautil Creek.

These findings indicate the massive sediment input from the Chlore River to the Morice River was the result of inputs from the Thautil River and naturally occurring bank erosion, rather than as result of current Project activities.

Inspection Conducted by

Christie Lombardi Compliance & Enforcement Officer	Date Preliminary Record Sent to Certificate Holder n/a
	Date Finalized 2023-07-28

Appendices

- Appendix 1: Coastal GasLink Order 20230027_OR001 2023-05-09
- Appendix 2: Coastal GasLink Compliance Agreement 2022-07-13
- Appendix 3: WEP 565+400 to 576+500 Segment 7 Phase 1 Rev4
- Appendix 4: WP3 West Field Fits 2023-05-011 - Ditches
- Appendix 5: WP3 West ESC Mitigation Package Rev2
- Appendix 6: Coastal GasLink Order 20230027_OR002 2023-05-31
- Appendix 7: Conserving Morice Watershed Fish Populations and Their Habitat - David Bustard and Associates 2002

Environmental Assessment Office - Compliance & Enforcement Branch

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