

Reviewer Comments and Proponent Responses

Project: PCAR

Board: Sahtu Land and Water Board

Organization: GNWT - INF (Infrastructure)

No	Topic	Reviewer Comment	Reviewer Recommendation	Proponent Response
GNWT-Lands - Sahtu Region - Jonathan Gillingham				
1	Permafrost Protection Plan	Appendix A describes diverting natural drainage during construction. Natural drainage should only be obstructed to construct proper means for natural drainage to dissipate without impediment, not affecting the newly built object or construction area (ex. Damming or diverting a stream to install a culvert, then reverting the natural drainage to the natural stream bed through the culvert).	Ensure this method is only used when necessary and completed during the winter months, where water levels are lowest. Therefore, it is less likely to disturb and create permanent damage to habitat and water quality.	Noted. This recommendation is consistent with Land Use Permit S20E-005 Part C, Condition 19
2	Erosion and Sedimentation Control Plan	Table 2.1 talks about how off-road travel will be avoided where possible. Inspector believes the best mitigation measure will be to travel only over these areas during the winter months when the ground is frozen and there is enough snowpack to prevent any adverse effects such as rutting.	ensure travel over saturated soils only occurs during the winter months when there is adequate mitigation measures put in place to ensure there will be no damage such as rutting.	Noted. This recommendation is consistent with Land Use Permit S20E-005 Part C, Conditions 21- 24
3	Erosion and Sedimentation Control Plan	Section 3.1 States "Installations, as indicated in design drawings and specifications, take precedence over BMPs unless otherwise approved by the Engineer based on observed site conditions". All designs and drawings should follow best management practices to limit any adverse environmental damage. The engineered designs should be adapting the current site conditions.	Ensure designs and their implementation are following the best management practice for ESCP and PPP. If they do not, provide justification on how this installation will not work without adhering to BMPs	Noted

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Environment and Climate Change Canada (ECCC) - Melissa Pinto				
1	Disposal and stockpiling of materials References: Prohibition Creek Access Road Erosion and Sedimentation Control Plan, Version 1.0 (November 2021), Tables 2.4 and 2.5	Per Table 2.4 (Measures for Construction of Watercourse Crossings and Drainage Structures), excavated bed and bank spoil material will be disposed of at least 30 m from the watercourse. As stated in Table 2.5 (Measures for Quarry Operations), material stockpiles will be kept a minimum of 30 m from a watercourse or waterbody with the appropriate erosion control mitigation in place (per GNWT, 2013) to prevent sediment from entering a watercourse or waterbody.	ECCC recommends that disposal and stockpiling of materials be conducted and located in such a manner to prevent any materials or associated runoff from entering surface waters, with periodic verification of stability and mitigation measures planned in the event sediment migration is observed.	Version 2.0 will incorporate the mitigation from Table 2.5 into Table 2.4: Material stockpiles will be kept a minimum of 30 m from a watercourse or waterbody with the appropriate erosion control mitigation in place (per GNWT, 2013) to prevent sediment from entering a watercourse or waterbody. Section 3 of the plan (Inspection and Response) identifies planned methods and frequency of inspection and response.
2	Water quality monitoring References: Prohibition Creek Access Road Erosion and Sedimentation Control Plan, Version 1.0 (November 2021), Table 2.4	Table 2.4 indicates that construction of watercourse crossings and drainage structures will be conducted during no- or low-flow periods to mitigate sediment releases to water. The Erosion and Sedimentation Control Plan does not indicate whether Total Suspended Solids (TSS)/turbidity levels would be monitored during in-stream works.	ECCC recommends that the Erosion and Sedimentation Control Plan describe how TSS/turbidity levels would be monitored during in-stream works, and provide mitigation measures to manage potential parameter increases.	During winter construction, watercourses along the PCAR are expected to be frozen to the bottom with no flowing water and therefore no sediment monitoring would be conducted. If construction occurs during flowing water conditions (open water season) in potentially fish-bearing watercourses, turbidity monitoring is proposed as a method of sediment monitoring to be conducted only during the removal of sediment control structures when pulses of sediment release are most likely to occur. At other times, sediment control measures are expected to be effective, and visual monitoring will be used to monitor performance. If sediment is seen to be released while sediment control is in place, work would be halted until sediment mitigation is corrected. Turbidity monitoring for removal of sediment control structures includes the establishment of four transects, including one at 25 m upstream of the construction site (baseline), and three transects downstream (50 m, 100 m, 200 m). An additional transect at 300 m would be established if turbidity levels are not decreasing by the 200 m transect. At each transect turbidity will be measured at three stations; 25%, 50% and 75% of the channel width. Three measurements using a turbidity meter

				will be taken at each station at approximately 30% water depth to avoid potential floating material (e.g., organic material) on the surface of the water affecting the turbidity measurement. The three measurements would be averaged to provide a turbidity level for each station. Turbidity monitoring would occur every three hours just prior to, during and after removal of sediment control, until turbidity levels reach baseline levels (upstream transect). Per Canadian Council of Ministers of the Environment (CCME) Canadian Water Quality Guidelines for the Protection of Aquatic Life, Total Particulate Matter (CCME, 2002), if downstream turbidity levels exceed eight Nephelometric Turbidity Units (NTU)s above baseline levels, removal of the sediment control barriers will cease and additional site-specific mitigation will be employed to allow the continuation of the removal of the sediment control structures. No total suspended solids (TSS) monitoring is proposed.
3	Species of Concern Occurring in the Project Area References: Prohibition Creek Access Road Wildlife Management and Monitoring Plan (October 2021), Table 6-1	Species at risk are assessed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) or added to Schedule 1 of the Species at Risk Act (SARA) on a regular basis. It is important for the Proponent to ensure they are aware of what species are present in the Project area and take appropriate actions to ensure compliance with the SARA. Lesser Yellowlegs, assessed by COSEWIC as Threatened in November 2020, is missing from Table 6-1 (Species of Concern Occurring in the Project Area). Also, Transverse Lady Beetle was added to Schedule 1 of the federal SARA as Special Concern in August 2021.	ECCC recommends the Proponent: - consult the Species at Risk Public Registry (https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry.html) to maintain the most current information for their operations; - add Lesser Yellowlegs to Table 6-1; and - change Transverse Lady Beetle federal SARA status to Special Concern.	Noted. Version 2 will incorporate this change.
4	Reporting to ECCC and Contact Information	Table 7-1 (Potential Wildlife Impacts and Mitigation Measures: General) should include ECCC, as an agency to report to, under Wildlife Incidents and Wildlife	ECCC recommends the Proponent: - add ECCC to Table 7-1 and Appendix D's Wildlife Incident Record form;	Noted. Version 2 will incorporate this change.

	References: Prohibition Creek Access Road Wildlife Management and Monitoring Plan (October 2021), Tables 7-1 and 9-1; Appendix D Forms (Wildlife Incident Record)	Mortalities, for wildlife species falling under ECCC's mandate. Similarly, ECCC should be added to the Wildlife Incident Record form in Appendix D. ECCC's contact information in Table 9-1 (Report submissions and relevant Authorities) should be updated to avoid delays in obtaining advice or receiving notifications.	- change ECCC's Canadian Wildlife Service contact information in Table 9-1 to: cwsnorth-scfnorth@ec.gc.ca; and - add ECCC's Wildlife Enforcement Directorate contact information to Table 9-1: dalfnord-wednorth@ec.gc.ca	
5	Raptors References: Prohibition Creek Access Road Wildlife Management and Monitoring Plan (October 2021), Table 7-2	As point of clarification, raptors are not a migratory bird protected under the Migratory Birds Convention Act (MBCA), as indicated in Table 7-2 (Wildlife Mitigation Measures: Specific Wildlife). Raptors are protected under territorial legislation, but some raptor species may also be protected under the federal SARA. ECCC encourages the Proponent to consult our website for the list of migratory birds protected under the MBCA: https://www.canada.ca/en/environment-climate-change/services/migratory-birds-legal-protection/list.html	ECCC recommends that the Proponent revise the following sentence in Table 7-2: "It is prohibited to damage or destroy an unoccupied raptor nest at any time of the year under the MBCA."	Noted. Version 2 will incorporate this change.
6	Nesting periods for migratory birds References: Prohibition Creek Access Road Wildlife Management and Monitoring Plan (October 2021)	ECCC notes a number of different sensitive periods for nesting migratory birds used in the Wildlife Management and Monitoring Plan (WMMP) for various species or guilds (e.g. Table 7-3: June 1 - August 31, May 1 – August 15, April 15 – August 30). For ease in implementing the WMMP, ECCC suggests that the Proponent use a single sensitive period for all nesting migratory birds. The Project overlaps nesting zone B8 and the general nesting period for this zone extends from	ECCC recommends that the Proponent use the period of early May to late August to define the sensitive period of all nesting migratory birds and for planning the bird nest surveys in Section 8.2.	Noted. Version 2 will incorporate this change.

		<p>early May to late August. This period should also be used for planning the bird nest surveys described in Section 8.2.</p> <p>ECCC encourages the Proponent to consult our website for more information on general nesting periods: https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/general-nesting-periods.html</p>		
7	<p>Adaptive Management</p> <p>References: Prohibition Creek Access Road Wildlife Management and Monitoring Plan (October 2021), Section 10</p>	<p>Section 10 (Adaptive Management) describes event thresholds requiring incident reports and that would trigger a review of the WMMP mitigation measures.</p> <p>Single incident or mortality events for any species of concern (included in Table 6-1) should be added as a threshold. This should apply to the individual and not only to destruction or disturbance of an active nest, in the case of migratory birds.</p> <p>Multiple separate events related to migratory birds during a short period of time, or at the same location, should also be added as a threshold leading to contacting ECCC and a review of WMMP mitigation measures.</p>	<p>ECCC recommends that the Proponent add the following event thresholds to Section 10:</p> <ul style="list-style-type: none"> - Single incident or mortality event for any individual that is a species of concern (Table 6-1); and - Multiple separate mortality events, involving migratory birds, during a short period of time, or at the same location. 	<p>Noted. Version 2 will incorporate this change.</p>