

## Reviewer Comments and Proponent Responses

**Project: Oscar Creek Bridge Relocation Project**  
**Board: Sahtu Land and Water Board**  
**Proponent: GNWT-INF (Infrastructure)**

**File Number: S24E-006**  
**Review Comments Due: June 17, 2024**  
**Proponent Responses Due: June 25, 2024**

No.	Topic	Reviewer Comment	Reviewer Recommendation	Proponent Response
Transport Canada - Mr. Scott Kidd				
1	<p>Preliminary Screening: Water License Application Box 6</p> <p>Land Use Permit Application Box 8</p> <p>Project Proposal Bridge Relocation and Restoration (pages 4.4 - 4.5)</p>	<p>Works, such as the proposed bridge removal, in, on, over, under, through or across navigable waters like Oscar Creek are regulated under the Canadian Navigable Waters Act (CNWA). A work's possible impacts to navigation and corresponding requirements under the CNWA are dependent on the type of waterway and the type of work being undertaken.</p> <p>Navigable waterways may be scheduled (i.e., listed in the CNWA Schedule of Navigable Waters), or non-scheduled. Oscar Creek is not listed in the CNWA Schedule of Navigable Waters and is therefore a non-scheduled navigable water.</p> <p>For non-scheduled navigable waters, only works listed in the Major Works Order require approval under the CNWA. Based on the information provided by the proponent in the project proposal, the removal of the bridge is not a "major work."</p> <p>For works on non-scheduled navigable waters that are not listed in the CNWA Major Works Order, the proponent can 1) voluntarily apply for a CNWA approval, or 2) use the public resolution process set out in the CNWA to get authority to proceed with the work. The CNWA public resolution process allows owners of proposed works on non-scheduled waterways to create their own public notice and resolve comments by themselves. The public resolution process requires a proponent to deposit information on Transport Canada's Navigation Protection Program (NPP) online registry through a Notification of Work and publish a notice inviting public comments. The notice gives the public 30 days to comment on the proposed work and if no concerns are raised, the proponent can proceed with the work without seeking an approval under the CNWA. If there are navigation-related concerns, the proponent and the commenter have 45 days to r</p>	<p>For the purposes of the Board's preliminary screening determination, as the 30-day public comment period on the Common Project Search Registry for the removal of the Oscar Creek Bridge has not closed, Transport Canada's Navigation Protection Program (NPP) cannot comment definitively on the Project's impacts on navigation. However, should no comments be submitted, then based on past experience and that removal of the bridge is proposed to take place when Oscar Creek is frozen, Transport Canada NPP anticipates that provided the Proponent adheres to the requirements of the Canadian Navigable Waters Act, any impacts to navigation will be minimal.</p> <p>Transport Canada will follow-up with the Board should any concerns about the Project's possible impacts to navigation be raised during the 30-day comment period.</p>	Noted.

		<p>concerns are resolved within that timeframe, the proponent may proceed with the work. If the concerns are not resolved after 45 days, the commenter has 15 days to request a decision from NPP. After reviewing the proposed work, public input, and the proponent's proposed mitigations, NPP may require the proponent to apply for a CNWA approval for the work. After reviewing the application, NPP will determine whether the CNWA approval will be issued.</p> <p>The proponent has chosen to use the CNWA public resolution process and posted a notice of work on a non-scheduled navigable water on the Common Project Search Registry on June 5, 2024 (see: <a href="https://nwar-rlen.tc.canada.ca/files-dossiers/2024-612608?GoCTemplateCulture=en-CA">https://nwar-rlen.tc.canada.ca/files-dossiers/2024-612608?GoCTemplateCulture=en-CA</a>). The 30-day public comment period closes on July 5, 2024. Transport Canada's Navigation Protection Program (NPP) has reviewed the proponent's posting on the Common Project Search Registry. Based on the information provided, NPP has determined that use of the CNWA public resolution process for the removal of the Oscar Creek Bridge is appropriate.</p>	
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No.	Topic	Reviewer Comment	Reviewer Recommendation	Proponent Response
Environment and Climate Change Canada (ECCC) - Jennifer Sabourin				
1	ECCC Cover Letter	ECCC Cover Letter	N/A	N/A
2	Topic: Explosives References: 1. Project Description Report (May 14, 2024) 2. Quarry Development Plan (May 2024)	<p>According to Section 4.3.3 (Borrow Source) of the Project Description Report, blasting may be required to facilitate excavation of granular material during the winter construction season. Section 5 (Pit Operation) of the Quarry Development Plan provides the following additional information: "[Quarry] Material is expected to be able to be excavated using mechanical means (i.e., without use of explosives), due to its low moisture content. Use of explosives is discouraged. Should use of explosives be needed, mitigation measures applicable to wildlife and fish and fish habitat protection will be followed, and the appropriate permits will be obtained from NWT regulators.". However, the Project Description Report and Quarry Development Plan lack any information about potential nutrient-related effects associated with nitrogen-based explosives.</p> <p>If used, nitrogen-based explosives and their residues may potentially cause nutrient-related effects in the aquatic environment and possible adverse effects on fish and fish habitat. The Quarry Development Plan should be updated to provide information on potential effects and mitigation measures.</p>	ECCC recommends that the Quarry Development Plan be updated to include information regarding potential nutrient-related effects of nitrogen-based explosives and their residues. Mitigation measures should be identified in Table 5-1 (Mitigation Measures Applicable to Borrow Source Operation) of the plan. The plan should provide guidance on best practices to be followed for use, storage, and management of nitrogen-based explosives to avoid the introduction of explosives and their residues into the aquatic environment.	The Contractor selected by GNWT to conduct the work is required to adhere to the Quarry Development Plan. The plan notes that the use of explosives is discouraged. Should the Contractor need to use explosives for borrow source development, they will be required to obtain appropriate permits from NWT regulators. In this case, the Contractor will also be required to develop an Explosives Management Plan. The Explosives Management Plan is required to include, but not be limited to, safe transportation, storage and use of explosives, and measures to mitigate the use of nitrate-based explosives on the environment. The Explosives Management Plan will be included as a revision to the Quarry Development Plan and will be subject to the review and approval process of the Sahtu Land and Water Board.

3	<p>Topic: In-stream work References: 1. Project Description Report (May 14, 2024) 2. Erosion and Sedimentation Control Plan (May 2024)</p>	<p>Section 4.3.3 (Borrow Source) of the Project Description Report states all work on bridge relocation and restoration will be completed in the winter in low to no flow conditions and no in-stream work is required. However, this section goes on to note that, with the short construction window, contractors may not be able to complete the work during the winter months alone. These statements could be viewed as contradictory, and it is unclear if in-stream work will be required. Per Section 4.3.5 (North Tributary and South Tributary Crossings) of the report, the new winter road alignment requires construction of additional watercourse crossings for the North and South tributaries of Oscar Creek. The North Tributary will be crossed using a single-span bridge and a large-diameter (3.0 m) culvert will be placed at the South Tributary. This section notes that both additional crossings will be constructed in winter, during low or no flow conditions. However, Section 7.5 (Water Quantity and Quality) indicates that in winter Oscar Creek has continuous (perennial) flow of water under the ice. Section 9.4.1.2 (Loss or Alteration of Fish Habitat Below the Ordinary High Water Mark (OHWM)) of the report states that "Construction is planned during frozen conditions; however, if water is present during construction of the South Tributary culvert, applicable measures in DFO's Interim Code of Practice for Temporary Cofferdams and Diversion Channels will be followed (DFO 2020b), as well as mitigations in Letter of Advice 23-HCAA-01660. There is no in-stream work planned at the other two (bridge) crossings." Given that Oscar Creek has continuous (perennial) flow of water under the ice and considering that contractors may not be able to complete the construction work during the winter months, clarification should be provided regarding potential in-stream work for each construction element.</p>	<p>ECCC recommends that the Project Description Report be updated to provide clarification on the possibility of in-stream work for each construction element. Clarification should address the considerations that Oscar Creek has continuous (perennial) flow of water under the ice and contractors may not be able to complete the construction work during the winter months. Updates to the Project Description Report should be reflected in the Erosion and Sedimentation Control Plan.</p>	<p>Please refer to DFO Letter of Advice 23-HCAA-01660, which was included with the applications package.</p> <p>Oscar Creek: Oscar Creek is anticipated to have flow year-round. During winter, an ice platform (bridge) is constructed from which to complete construction activities (in accordance with DFO's Code of practice: Ice bridges and snow fills). This is not considered in-stream work. Work on the Oscar Creek Bridge (removal or installation) may be conducted in the summer, including site restoration (for removal), or installation of the superstructure. No in-stream work will be done within Oscar Creek.</p> <p>North Tributary: The North Tributary is anticipated to have no flow, or to be frozen to bottom in winter.</p> <p>South Tributary: As noted, construction is planned during frozen conditions. The watercourse is anticipated to be frozen to bottom or have no flow; however, if water is present during construction of the South Tributary culvert, applicable measures in DFO's Interim Code of Practice for Temporary Cofferdams and Diversion Channels will be followed (DFO 2020), as well as mitigations in Letter of Advice 23-HCAA-01660.</p>
4	<p>Topic: Decommissioning of existing bridge References: 1. Project Description Report (May 14, 2024)</p>	<p>Section 9.4.1 (Change in Fish Habitat) states that "There will be no instream work or changes to riparian areas related to the decommissioning of the existing clear span bridge across Oscar Creek, therefore it is not assessed as a pathway for change in fish habitat. Changes in fish habitat associated with construction of the three new crossings is discussed in the sections below." As noted in ECCC-1, Oscar Creek is reported to have continuous (perennial) flow of water under the ice. Additionally, contractors may not be able to complete the construction work during the winter months. Clarification is requested whether this context could alter the above statement.</p>	<p>ECCC recommends that clarification be provided whether the following statement is accurate: "There will be no instream work or changes to riparian areas related to the decommissioning of the existing clear span bridge across Oscar Creek", considering that Oscar Creek has continuous (perennial) flow of water under the ice and that contractors may not be able to complete the construction work during the winter months. Section 9.4.1 (Change in Fish Habitat) should be updated as needed to reflect any changes to this statement.</p>	<p>Please see response to ECCC-3.</p>

5

Topic: Mitigation measures and monitoring for in-water work  
References: 1. Project Description Report (May 14, 2024)  
2. Erosion and Sedimentation Control Plan (May 2024)

According to Table 9-5 (Potential Effects and Mitigation Measures for Water Quality and Quantity) of the Project Description Report, in-stream construction will be conducted in the dry season using isolation techniques. However, the Erosion and Sedimentation Control (ESC) Plan contains no information regarding in-stream construction. The ESC plan should incorporate mitigation measures and monitoring for in-water work.

ECCC recommends that Section 2.2 (Mitigation Measures to be Applied) of the Erosion and Sedimentation Control Plan be updated to provide mitigation measures for planned and potential in-water work for each construction element, and associated monitoring provided in Section 3 (Monitoring, Inspection and Response).

The GNWT and its Contractor are required to adhere to the mitigation measures identified in DFO Letter of Advice 23-HCAA-01660. These specific requirements (as reproduced below) will be added to the Erosion and Sedimentation Control Plan:

- Plan in-water works, undertakings and activities to respect timing windows to protect fish, including their eggs, juveniles, spawning adults
- Install a temporary ice bridge or snow fill using the mitigations listed in the Code of practice: Ice bridges and snow fills (dfo-mpo.gc.ca)
- Conduct in-water undertakings and activities during periods of low water levels or frozen conditions
- Screen intake pipes to prevent entrainment or impingement of fish;
  - o Use the code of practice for water intake screens
- Limit impacts on riparian vegetation to those approved for the work, undertaking or activity;
  - o Limit access to banks or areas adjacent to waterbodies
  - o Construct access points and approaches perpendicular to the watercourse or waterbody
  - o Re-vegetate the disturbed area with native species suitable for the site
- Restore stream geomorphology (i.e., restore the bed and banks, gradient and contour of the waterbody) to its initial state;
- Avoid introducing sediments (e.g., silts, clays and sand) in the water
- Develop and implement an erosion and sediment control plan to avoid or minimize the introduction of sediment into any waterbody during all phases of the work, undertaking or activity; and
  - o Conduct all in-water works, undertakings or activities in isolation of open or flowing water to reduce the introduction of sediment into the watercourse
  - o Monitor the watercourse to observe signs of sedimentation during all phases of the work, undertaking or activity and take corrective action
- Develop and implement a response plan to avoid a spill of deleterious substances.

As part of updates to Project Management Plans, DFO Letter of Advice 23-HCAA-01660 will be attached to the Erosion and Sedimentation Control Plan as Appendix A.

Additionally, the following mitigations will be added to Table 2-3 of the Erosion and Sedimentation Control Plan in regard to potential effects from in-water works releasing sediment into watercourse:

- In-stream construction will be conducted in the dry, using isolation techniques.
- Temporary isolation for the placement of rip rap and removal of culverts will follow the interim standard: in-water site isolation (DFO 2023).

References:  
 DFO. 2023. Interim standard: in-water site isolation. Available at <https://www.dfo-mpo.gc.ca/pnw-ppe/codes/interim-provisoire/site-isolation-confinement-aire-travail-eng.html>. Accessed June 2024.

6	<p>Topic: Turbidity monitoring References: 1. Erosion and Sedimentation Control Plan (May 2024)</p>	<p>Section 3.1 (Monitoring During Bridge and Culvert Installation) of the Erosion and Sedimentation Control Plan indicates that turbidity levels will be measured only during the removal of sediment control structures and proposes to monitor the performance of sediment control measures visually during bridge and culvert installation. Section 3.1.2 (Turbidity Criteria and Response) proposes to use the Canadian Council of Ministers of the Environment (CCME) Canadian Water Quality Guidelines for the Protection of Aquatic Life turbidity guideline as the response criteria.</p> <p>ECCC notes that turbidity is a more informative parameter when it is used as a surrogate to monitor levels of total suspended solids (TSS). The TSS parameter has a more direct effect on fish than turbidity, therefore, it is preferred to use the TSS guideline as the response criteria, instead of the turbidity guideline. It is standard practice to establish a site-specific TSS/turbidity relationship and measure TSS indirectly using turbidity as a surrogate. Periodic confirmatory TSS samples should also be collected.</p> <p>TSS/turbidity monitoring should be conducted during installation and removal of the sediment control structures and during in-water work. It is not sufficient to monitor sediment control visually during in-water work. Section 3.1.1 (Turbidity Monitoring Method) proposes that turbidity monitoring would occur once every three hours just prior to, during, and after removal of sediment control, until turbidity levels reach baseline levels (upstream transect). It is unclear whether this frequency is adequate as the plan does not indicate whether construction work will be in-stream or isolated. Monitoring once every three hours would be inadequate for in-stream work. Additional details should be provided.</p>	<p>ECCC recommends that Section 3 (Monitoring, Inspection and Response) of the Erosion and Sedimentation Control Plan be revised to incorporate the following aspects:</p> <ul style="list-style-type: none"> <li>- Use the CCME total suspended solids (TSS) guideline to inform monitoring criteria and response;</li> <li>- Establish a site-specific TSS/turbidity relationship using regression curve(s) and measure TSS indirectly using turbidity as a surrogate;</li> <li>- Conduct TSS/turbidity monitoring during installation and removal of sediment control structures and during in-water work to confirm sediment control is effective;</li> <li>- Collect periodic confirmatory TSS samples; and</li> <li>- Indicate whether construction work will be in-stream and/or isolated and clearly set out the appropriate monitoring frequency for each relevant method.</li> </ul>	<p>The GNWT has proposed to use turbidity to monitor water quality during isolation works. The use of turbidity and associated exceedance criteria is consistent with the Fisheries and Oceans Canada (DFO) standard for in-water isolation (DFO 2023). Turbidity measurements are considered an industry standard for monitoring instream activities and are a useful tool to support on-site evaluations of the aquatic environment in a timely manner.</p> <p>The remote location of the Project presents challenges for the collection, transportation, and analysis of site-specific suspended sediment TSS data, which needs to be analyzed in a laboratory. Therefore, turbidity was chosen as the on-site response variable to avoid potential delays acquiring site-specific TSS data, which could affect the evaluation of a TSS exceedance and associated response during instream activities.</p> <p>The turbidity guidelines extrapolated from the TSS guidelines using a TSS-turbidity correlation (Canadian Council of Ministers of the Environment [CCME] 2002) are based on studies (Newcombe 1994; Newcombe and Jensen 1996) using fish species that are also found in the Oscar Creek System (Stantec Consulting Ltd. 2020). Therefore, the average TSS to turbidity correlation coefficient used in the CCME (2002) guideline is anticipated to be applicable to the Project site. The use of an instantaneous increase of 8 NTU above background as the criteria for a turbidity exceedance facilitates early detection of a potential sediment release and supports the implementation of corrective measures in a timely manner.</p> <p>GNWT-INF will revise the Erosion and Sedimentation Control Plan to increase turbidity sampling frequency during in-stream activities. During placement and removal of isolation structures, turbidity monitoring will be conducted at one-hour intervals, and if a turbidity exceedance is observed additional sampling will be done within the plume until downstream t</p>
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7	<p>Topic: Monitoring for leaks  References: 1. Spill Contingency Plan (May 2024)</p>	<p>Section 2.3 (Preventative Measures) of the Spill Contingency Plan provides a list of primary spill prevention measures. Two of these measures include checking for leaks in fuel storage areas and machinery, respectively. The checks/inspections described in these two measures should also include monitoring the area for any staining, as stains may indicate a leak or spill.</p>	<p>ECCC recommends that the spill prevention measures regarding checking fuel storage areas and machinery for leaks in Section 2.3 (Preventative Measures) of the Spill Contingency Plan be updated to include monitoring of the area for any staining that may indicate a possible leak or spill.</p>	<p>The GNWT is of the opinion that the current preventative measures in the plan (reproduced below) are adequate in type and frequency to detect possible leaks or spills associated with the project:</p> <ul style="list-style-type: none"> <li>• Machinery will be maintained and regularly inspected for fuel, oil, or other fluid leaks. Machinery found to be leaking will be withdrawn from service until repaired.</li> <li>• Fuel storage areas will be checked daily for leaks and condition of containers. Damaged containers will be replaced and contents transferred to approved containers.</li> </ul>
8	<p>Topic: Water licence - Annual reporting</p>	<p>ECCC notes that the draft water licence conditions do not specify reporting of water quality monitoring results.</p>	<p>ECCC recommends that the water licence include a requirement to provide the following in the annual report: provide and discuss water quality monitoring results,</p>	<p>The GNWT is not opposed to this. It will be required to be provided to the O/E anyway. Reporting of issues with performance of mitigation and management strategies</p>

		References: Draft water licence conditions	note any exceedances of monitoring criteria or discharge criteria and the circumstances, and describe any response actions.	s is already required under Schedule 1, Part 1, Item i.
9	Topic: Gasoline storage location	<p>Table 2-1 of the Spill Contingency Plan reports there will be 5,000 L of gasoline present on site, including within Tidy Tanks; however, no storage location is specified (currently listed as "0").</p> <p>Additionally, Section 2.3 (Preventative Measures) mentions that "Fuel and lubricants will be stored in containers with secondary containment capable of containing 110% of the largest container" - however Table 2-1 does not make reference to secondary containment that will be used for gasoline.</p> <p>Reference: Spill Contingency Plan; Table 2-1: Type, Amount and Location of Main Hazardous Materials</p>	ECCC recommends the Proponent specify storage location(s) for gasoline, report whether gasoline storage will involve secondary containment, and if so, which type of containment.	The selected Contractor will be required to update existing management plans, including the Spill Contingency Plan, with necessary details in regard to specific storage locations for gasoline and type of secondary containment. Prior to construction, those details will be included within the Spill Contingency Plan as part of this update.
10	Topic: Fuel handling / refueling procedure	<p>The preventative measures listed in Section 2.3 includes a bullet point stating that "Fuel handling and refueling will be in accordance with an Operating Procedure."; however, this procedure is not detailed in the Spill Contingency Plan, and therefore cannot be evaluated for efficacy.</p> <p>It is important to note that the Quarry Development Plan also makes reference to this procedure being contained within the Spill Contingency Plan.</p> <p>Reference: Spill Contingency Plan, Section 2.3 Preventative Measures</p>	ECCC recommends the inclusion of fuel handling and refueling operating procedures in the Spill Contingency Plan.	The selected Contractor will be required to update existing management plans, including the Spill Contingency Plan, with necessary details in regard to their standard operating procedures. Prior to construction, details on fuel handling and refueling will be included within the Spill Contingency Plan as part of this update.
11	Topic: Storage of hazardous wastes	Table 2-1 in the Spill Contingency Plan mentions that liquid hazardous wastes will be stored within tote tanks in a secondary containment facility. The Waste Management Plan does not make reference to storage of hazardous wastes within a secondary containment facility.	ECCC recommends the Proponent update the Waste Management Plan to reflect that hazardous wastes will be stored in a secondary containment facility, and provide details on the type of secondary containment that will be used.	As indicated in Section 2.3.5 of the Waste Management Plan, the storage, management, and disposal of hazardous wastes such as batteries, waste fuel and lubricants, oily rags, fluorescent bulbs, glycol, contaminated soil, and empty fuel drums will be in accordance with the Government of the Northwest Territories' Guideline for Hazardous Waste Management (GNWT-ENR, 2017).
12	Topic: Location of spill response kits Reference: Quarry Development Plan, Table 5-1 Mitigation Measures Applicable to Borrow Source Operation AND Spill Contingency Plan, Section 3.5 Spill Response Equipment	<p>One of the mitigation measures within the Quarry Development Plan (included under Contamination due to accidental releases / spills) specifies that "Emergency spill response kits will be kept in vehicles and at fuel storage locations.". This same wording is also used in Section 2.4 of the Spill Contingency Plan (Reducing Potential Effects); however, vehicles are not included in Section 3.5 (Spill Response Equipment) of the Spill Contingency Plan within the bulleted list of spill response kit locations.</p> <p>Reference: Waste Management Plan, Section 2.3.5 Waste Backhaul AND Spill Contingency Plan, Ta</p>	ECCC recommends the Proponent update Section 3.5 of the Spill Contingency Plan to include vehicles in the list of locations where spill response kits can be found.	The selected Contractor will be required to update specific details of the Spill Contingency Plan (as noted in the plan), including locations for spill kits, prior to construction. The GNWT agrees that project vehicles will each be equipped with spill kits.

		ble 2-1 Type, Amount and Location of Main Hazardous Materials		
13	Topic: Project activities in Bank Swallow habitat within its range	<p>Section 79 of SARA requires the assessor and decision body to ensure that where a project is likely to affect a listed species or its critical habitat, all adverse effects of the project are identified and considered in the assessment of the project. Appropriate measures must be taken to avoid or lessen those effects and include monitoring. Measures should be consistent with applicable recovery documents.</p> <p>Section 79 applies to all listed species on Schedule 1 of SARA including those listed as Special Concern, Threatened, Endangered and Extirpated. As a matter of best practice, COSEWIC-assessed species should be assessed similarly to those listed under SARA.</p> <p>The Proponent has identified the species at risk likely to be found in the project study area, however has not identified all adverse effects of the Project on species at risk; the project area falls within Boreal Caribou critical Habitat, which the developer has not identified.</p> <p>The Project may have additional adverse effects on critical habitat including direct habitat loss, and impacts due to noise, dust or other sensory disturbances.</p> <p>The Project falls within the breeding range of the Bank Swallow and may affect important habitat features for the species.</p> <p>The Bank Swallow, listed as Threatened under SARA, is a colonial species that nests in burrows dug into near vertical faces of exposed sand or soil. They also nest in aggregate pits, construction sites on stockpiles of quarry materials, overburden, and exposed soil banks. The Bank Swallow exhibits high nest site fidelity and will reuse nesting sites and burrows. The residence description for the Bank Swallow is available on the SARA registry here: <a href="https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/residence-descriptions/bank-swallow.html">https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/residence-descriptions/bank-swallow.html</a>.</p> <p>Excavation, construction activities and application of erosion control measures in these areas during the nesting period can inadvertently kill or disturb Bank Swallows, destroy their residence or critical habitat, and may also affect other migratory bird species.</p> <p>Reference: Project Description Report</p>	<p>ECCC recommends the Proponent:</p> <p>a) Identify adverse effects of the Project on the species at risk likely to be affected and their critical habitat;</p> <p>b) Ensure that measures are taken to avoid or lessen those adverse effects and monitor them to inform adaptive management.</p> <p>If the Proponent encounters species at risk, the primary mitigation measure should be avoidance. ECCC recommends:</p> <p>c) Mitigation and monitoring measures be consistent with applicable species at risk Recovery Strategies and Action Plans or Management Plans.</p> <p>d) At a minimum, monitoring should include recording timing and location of observed species at risk, their behavior when encountered, and actions taken by the Proponent to avoid disturbance to the species, its habitat, and/or its residence.</p> <p>e) The Proponent submit monitoring reports to the appropriate regulators and organizations with management responsibility for that species.</p> <p>ECCC recommends the Proponent:</p> <p>a) Take precautions to avoid disturbance to nesting Bank Swallows;</p> <p>b) Ensure staff and contractors are made aware of potential presence and conservation status of the Bank Swallow;</p> <p>c) Prevent Bank Swallows from nesting in areas where operations will be carried out during the breeding season by contouring piles to have slopes of less than 70 degrees prior to their arrival in the spring and by creating suitable nesting habitat in inactive areas with vertical faces of at least 70 degrees; and</p> <p>d) Take particular care in selecting erosion prevention and control measures and implement those measures prior to the nesting season.</p> <p>Proponents are encouraged to consult the attached pamphlet and contact ECCC (<a href="mailto:cwsnorth-scfjord@ec.gc.ca">cwsnorth-scfjord@ec.gc.ca</a>) for further advice.</p>	<p>The Project is in critical habitat for or boreal caribou, as the whole Northwest Territories range (NT1) is considered critical habitat. GNWT-INF assessed the potential effects on caribou habitat at a high level, however, did not quantify how much (ha) caribou habitat is directly (or indirectly) affected and did not include a habitat disturbance report using the NWT Species and Habitat Viewer.</p> <p>For SARA-listed species, such as the bank swallow, the Project Wildlife Management and Monitoring Plan (WMMP) references Beneficial Management Practices for Migratory Birds in the Northwest Territories (GNWT 2020) in both the Project Description Report and WMMP, which includes species-specific mitigation for bank swallow.</p> <p>Reference: GNWT. 2020. Beneficial management practices for migratory birds in the Northwest Territories. Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT.</p>
14	Topic: ECCC Contact Info	The Proponent has provided a wildlife management or monitoring	ECCC recommends the Proponent notify ECCC's Canadian Wildlife	GNWT-INF will add ECCC's Canadian Wildlife Service as a contact



	Information	<p>plan but has not identified ECCC as a contact for instances involving migratory birds.</p> <p>ECCC has management responsibilities for migratory birds under the Migratory Birds Convention Act (MBCA). ECCC should be contacted in instances involving:</p> <ul style="list-style-type: none"> <li>• Interactions and incidents involving the potential disturbance of individuals or nests and any mortality events of these species;</li> <li>• Wildlife monitoring reports and annual reports that pertain to these species; and</li> </ul> <p>Updates to wildlife management and monitoring plans, or their equivalents, in relation to these species.</p> <p>Reference: Wildlife Monitoring and Management Plan</p>	<p>Service (cwsnorth-scfndord@ec.gc.ca) for instances involving: a) Interactions and incidents involving the potential disturbance of individuals or nests and any mortality events of these species; b) Wildlife monitoring reports and annual reports that pertain to these species; and c) Updates to wildlife management and monitoring plans, or their equivalents, in relation to these species</p>	<p>within the Wildlife Management and Monitoring Plan for the following instances:</p> <ul style="list-style-type: none"> <li>• Interactions and incidents involving the potential disturbance of individuals or nests and any mortality events of migratory bird species</li> <li>• Wildlife monitoring reports and annual reports that pertain to migratory bird species</li> <li>• Updates to wildlife management and monitoring plans related to migratory bird species.</li> </ul>
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No.	Topic	Reviewer Comment	Reviewer Recommendation	Proponent Response
Fisheries and Oceans Canada (DFO) - Ms. Anna-Maija LaFlamme				
1		<p>Watercourse crossings have the potential to result in a harmful alteration, disruption, or destruction of fish habitat with associated footprint, infilling; by causing fish passage issues, and/or by causing hydraulic issues resulting in blocked debris movement, erosion, scour, and deposition.</p> <p>Fish passage must be maintained during certain biologically significant periods of the fish's life cycle when migration is important. This includes allowing upstream passage when certain fish species migrate to spawn in the spring or the fall and allowing young of the year fish to move from rearing areas to habitat where they can overwinter. Fish passage should be maintained for those fish that wish to pass at various times of year.</p> <p>DFO defines fish passage as suitable if fish are not delayed in their upstream migration for more than 3 consecutive days during a 1:10 year flow event.</p> <p>The Oscar Creek Bridge Relocation Project report mentions "Culvert design for fish passage will be based on swimming performance analyses by Di Rocco and Gervais (2023) for the fish species with the lowest swimming performance ability that could be present at each crossing".</p>	<p>Please provide flow velocities and the fish species/size used to confirm the culvert was designed for fish passage.</p>	<p>Further analysis regarding fish passage at the south tributary culvert was subsequent to the Oscar Creek Hydrotechnical Design Report (K'alo-Stantec Ltd., 2023) and Project Description Report, and was recently finalized. The Oscar Creek South Tributary Fish Passage Report (K'alo-Stantec 2024) was submitted under separate cover to DFO and will be filed with the SLWB. The report confirms that the culvert has been designed for fish passage in accordance with Alberta Transportation's "Bridge Conceptual Design Guidelines" (Alberta Transportation, 2020) which were prepared with support from Fisheries and Oceans Canada.</p> <p>Reference: Alberta Transportation. (2020). Bridge Conceptual Design Guidelines v.3.0. Accessed June 20 at: <a href="https://open.alberta.ca/dataset/142fb92c-cd6c-4956-961c-acdfab582d1a/resource/3cf5e6c1-f58e-4798-ad49-094041d53c60/download/trans-bridge-conceptual-design-guidelines.pdf">https://open.alberta.ca/dataset/142fb92c-cd6c-4956-961c-acdfab582d1a/resource/3cf5e6c1-f58e-4798-ad49-094041d53c60/download/trans-bridge-conceptual-design-guidelines.pdf</a></p>

No.	Topic	Reviewer Comment	Reviewer Recommendation	Proponent Response
GNWT-ECE - PWNHC (Prince of Wales Northern Heritage Centre) - Naomi Smethurst				
1	Protection of Historical, Archaeological, and Burial Sites	<p>An AOA and AIA (Permit 2017-020) were completed for the Oscar Creek Borrow Sources and Associated access in 2017. However, the proposed footprint described in the 2024 LUP application may exceed the footprint assessed under the 2017 AOA and 2017 AIA. Further work may be required.</p>	<p>Retain draft conditions 29 (Archaeological Overview) and 30 (AIA-High Potential). Remove draft condition 31 (AIA).</p>	<p>The GNWT agrees with the recommendation.</p>



Environmental Protection Operations Directorate  
Prairie & Northern Region  
5019 52<sup>nd</sup> Street, 4<sup>th</sup> Floor  
P.O. Box 2310  
Yellowknife, NT X1A 2P7

ECCC File: 5300 000 066  
SLWB File: S24L8-003



June 17, 2024

via online review system

Natalie Lippa  
Regulatory Specialist  
Sahtu Land and Water Board  
Box 1  
Fort Good Hope, NT X0E 0H0

Dear Natalie Lippa:

**RE: S24L8-003 – Government of Northwest Territories – Oscar Creek Bridge Relocation Project – Type A Land Use Permit and Type B Water Licence**

Environment and Climate Change Canada (ECCC) has reviewed the information submitted to the Sahtu Land and Water Board (SLWB) regarding the above mentioned Type A Land Use Permit and Type B Water Licence.

ECCC provides expert information and knowledge to project assessments on subjects within the department's mandate, including climate change, air quality, water quality, biodiversity, environmental preparedness and emergencies. This work includes reviewing proponent characterization of environmental effects and proposed mitigation measures. We provide advice to decision-makers regarding a proponent's characterization of environmental effects, the efficacy of their proposed mitigation activities, and may suggest additional mitigation measures. Any comments received from ECCC in this context does not relieve the proponent of its obligations to respect all applicable federal legislation.

If you need more information, please contact Jennifer Sabourin at [Jennifer.Sabourin@ec.gc.ca](mailto:Jennifer.Sabourin@ec.gc.ca).

Sincerely,

Jennifer Sabourin  
Acting Senior Environmental Assessment Officer

cc: Eva Walker, Head, Environmental Assessment North (NT and NU)

