

Government of Gouvernement des Northwest Territories Territoires du Nord-Ouest

Via Email

Ms. Jody Pellissey Executive Director Wek'èezhìı Renewable Resources Board 102A 4509 49 AVENUE YELLOWKNIFE NT X1A 1A7

August 1, 2025

Dear Ms. Pellissey:

<u>Submission of Wildlife Management and Monitoring Plan for the Dehk'è Frank Channel Bridge Relocation Project.</u>

The Government of the Northwest Territories' Department of Infrastructure (GNWT-INF) is pleased to submit the attached Wildlife Management and Monitoring Plan (WMMP) to the Wek'èezhìı Renewable Resources Board (WRRB) for their review and approval, in accordance with Section 12.5.1 of the Tłıcho Agreement.

As part of the Land Use Permit (LUP) and Water Licence (WL) application process for the Dehk'è Frank Channel Bridge Relocation (DFCB) Project, the GNWT-INF submitted the WMMP to the Wek'èezhìı Land and Water Board (WLWB) on May 2, 2025. The WMMP went through a public comment period between May 13, 2025 and June 24, 2025, and the responses to the public comments have been uploaded to the WLWB's Online Review System. A document history table (revision details) and the attached Conformance Table 1 are provided to show how and where the public comments have been incorporated into the WMMP. Pre-construction and construction-related activities, including camp establishment and material laydown, are scheduled to begin by September 2, 2025.

Should you have any questions or concerns please contact me at (867) 767-9086 ext. 31127 or by email at Chaudary_Murtaza@gov.nt.ca or Benjamin Bey at (867) 767-9083 ext. 31058 or by email at Benjamin_Bey@gov.nt.ca at your earliest convenience.

Sincerely,

For

Chaudary Murtaza Manager, Structures -Bridges Department of Infrastructure

Conformance Table 1 - Wildlife Management and Monitoring Plan

Reviewer	WLWB Register and Water	Section	Proponents Reponses
	License/Land Use Permit Public Comments (June 24, 2025)		Revisions made to WMMP (July 8, 2025)
Wek'eezhii Renewable Resources Boa			2023)
WRRB-1	Comment:	WMMP Document Maintenance	The first paragraph of the
William I	This section should be updated to	and Control	Document Maintenance and
	reflect the WRRB's wildlife co-	and control	Control section has been updated
	management authority in the		to read as "Final plan details
	area, specifically GNWT's		must be approved by the
	requirements under the Tłycho		Government of the Northwest
	Agreement to submit all wildlife		Territories Department of
	management actions to the		Infrastructure (GNWT-INF) and
	WRRB for review and approval as		the Wek'èezhìı Renewable
	per section 12.5.1. This		Resource Board (WRRB) as per
	requirement is also outlined in		Section 12.5.1 under the Tłicho
	the process and content		Agreement and under the
	guidelines for WMMPs under the		Wildlife Act."
	Wildlife Act (NWT).		
	Recommendation.		
	Update this section.		
WRRB-2	Comment:	Section 1.3 - WMMP Distribution	The Distribution List in Section 1.3
	The WRRB is not listed on the	List	has been updated with the Wek'èezhìı Renewable
	distribution list.		Resource Board
			Resource Board
	Recommendation.		
	Please add the WRRB to the		
	distribution list		
	distribution list		
WRRB-3	Comment:	Section 5.2 - WMMP Records	Section 5.2 has been updated as
	Minimal information is currently		follows:
	gathered in the wildlife sightings		
	log.		 Species and number
			observed

Conformance Table 1 - Wildlife Management and Monitoring Plan

	Recommendation. The WRRB requests the following additional information is recorded during wildlife sightings - number of animals observed, age (if known), sex (if known), other observations (health, behaviour, etc).		 Condition-health observations Male/Female and age (if known)
WRRB-4	Comment: There does not appear to be any reporting protocol for the WMMP. Recommendation. The Board requests an annual WMMP summary report be produced and sent to the WRRB for each year of construction. This report should include a summary of the wildlife observations and incidents that have occurred that year.	Section 6 - WMMP Reporting	Section 6.0 has been updated as follows: An annual summary report will be submitted to the WRRB that will document any and all wildlife observations and incidents. Additionally, the report will include a summary of any mitigation measures employed during the construction period. It is assumed that this summary would be acceptable as part of the Water License Annual Report requirement. Should a standalone report be required, one can be provided to WRRB.



DISTRICT:	TŁĮCHQ-KIEWIT GENERAL PARTNERSHIP	DATE:	25 June 2025
DOCUMENT:	WILDLIFE MANAGEMENT AND MONITORING PLAN	REV:	С





Dehk'è Frank Channel Bridge Replacement – Phase 2

WILDLIFE MANAGEMENT AND MONITORING PLAN

Prepared for the

Wek'èezhìı Land and Water Board (WLWB)

Project Name: Dehk'e Frank Channel Bridge Replacement - Phase 2

Project Number: 20035161

TKGP Document Number: TKGP-ENV-PLN-0004

GNWT Document Number:

Classification:

Document Category: PLAN

Rev	Date yyyy-mm-dd	Reason for Issue	Developed By Reviewed By		Approved By
А	2025-03-21	Issued for review	Jill Attwood	Dave Green	Alexandre Fossey
В	2025-04-07	Issued for review	Jill Attwood	Dave Green	Deodat Deotetien
С	2025-06-25	Revised to address comments	Dave Green	Jill Attwood	Deodat Deotetien



DISTRICT:	: TŁĮCHQ-KIEWIT GENERAL PARTNERSHIP		25 June 2025
OCUMENT:	WILDLIFE MANAGEMENT AND MONITORING PLAN	REV:	С



REVISION DETAILS

D

Rev	Document Page Number	Revised Section	Revised Subsection/ figures	Description of Change
С	3	Document Maintenance and Control	1 st paragraph	Acknowledged authority of WRRB for WMP approval in NWT
С	5	Definitions and Acronyms		Added WRRB
С	7	Section 1.3 Distribution List	list	Added WRRB
С	19	Section 5.2 Records		Added additional details to be recorded for wildlife sighting records
С	20	Section 6 Reporting added	Section and text	Added WRRB requirement to report annually with a summary of wildlife observations and incidents from the previous year

DOCUMENT MAINTENANCE AND CONTROL

The Tłicho-Kiewit General Partnership (TKGP) Project Environmental Manager or designate is responsible for the distribution, maintenance and updating of the Wildlife Management and Monitoring Plan (WMMP). Final plan details must be approved by the Government of the Northwest Territories Department of Infrastructure (GNWT-INF) and the Wek'èezhìı Renewable Resource Board (WRRB) as per Section 12.5.1 under the Tłicho Agreement and under the Wildlife Act.

Changes that do not affect the intent of the document are to be made as required on a regular basis (e.g., phone numbers, names of individuals, etc.). Document updates will be issued as per the document distribution list. The document holder is responsible for adding new and/or removing obsolete pages upon receipt of updates

Additional copies of the WMMP can be obtained from the TKGP Environmental Manager or designate and/or the GNWT-INF representative responsible for the Dehk'è Frank Channel Bridge Replacement Project.



DISTRICT:

DOCUMENT:

TŁĮCHQ-KIEWIT GENERAL PARTNERSHIP

DATE:

25 June 2025

С



WILDLIFE MANAGEMENT AND MONITORING PLAN

REV:

Dehk'è Frank Channel Bridge Replacement – Phase 2

TABLE OF CONTENTS

1. INTRODUCTION	5
1.1 OBJECTIVE	5
1.2 PROJECT CONTACTS	5
1.3 DISTRIBUTION LIST	6
1.4 APPLICABLE LEGISLATION	6
2. PROJECT DETAILS	7
3. POTENTIAL CONSTRUCTION IMPACTS	9
3.1 TERRESTRIAL ENVIRONMENT	9
3.2 AQUATIC ENVIRONMENT	9
3.3 SPECIES AT RISK	10
4. MANAGEMENT	11
4.1 ENVIRONMENTAL AWARENESS AND TRAINING	11
4.2 HABITAT AND AVOIDANCE PROTECTION	11
4.3 TIMING OF CONSTRUCTION ACTIVITIES	12
4.3.1 BIRD MITIGATION MEASURES	12
4.4 BEST MANAGEMENT PRACTICES	14
4.4.1 EQUIPMENT OPERATIONS	14
4.4.2 CLEARING AND GRUBBING ACTIVITIES	14
4.4.3 BLASTING ACTIVITIES	14
4.4.4 WILDLIFE	15
4.4.5 PROTECTION OF WATER QUALITY	15
4.5 SPECIFIC WILDLIFE SPECIES MANAGEMENT	16
4.5.1 SPECIES AT RISK	16
4.5.2 BEAR MANAGEMENT	17
4.5.3 MOOSE AND CARIBOU	17
4.5.4 WOLVES AND FOXES	17
4.5.5 WILDLIFE MORTALITIES	17
5. MONITORING	18
5.1 ITEMS TO BE MONITORED	18
5.2 RECORDS	18
6. REFERENCES	20
APPENDIX A - PROJECT DESCRIPTION MAPS	21
APPENDIX B – WILDLIFE TRACKING LOG	22



DISTRICT:	TŁĮCHQ-KIEWIT GENERAL PARTNERSHIP	DATE:	25 June 2025

С



4

LIST OF FIGURES

Eigur,	۰ <i>۱</i> 1۰	Environment	Canada	Mocting	Calendar	11
rigui	5 4 . I.		Canaua –	INGSUIIG	Caleriual	12

LIST OF TABLES

Table 2.1: Project Schedule	8
Table 3.1: Summary of SAR Screening	

DEFINITIONS AND ACRONYMS

DOCUMENT:

CGB Community Government of Behchoko

COSEWIC Committee on the Status of Endangered Wildlife In Canada

DFO Fisheries and Oceans Canada

ECCC Environment and Climate Change Canada ESCP Erosion and Sediment Control Plan

GPS Global Positioning System

GNWT Government of the Northwest Territories

GNWT-ECC Government of the Northwest Territories Department of Environment and Climate Change

GNWT-INF Government of the Northwest Territories Department of Infrastructure

GNWT-Lands Government of the Northwest Territories Department of Lands

MBCA Migratory Bird Convention Act

Project (or DFCB Project) Dehk'è Frank Channel Bridge Project

SARA Species at Risk Act

TKGP Tłıcho-Kiewit General Partnership

TG Tłicho Government

WLWB Wek'èezhìı Land and Water Board
WMMP Wildlife Management and Monitoring Plan

WMP Waste Management Plan

WRRB Wek'èezhìı Renewable Resource Board



NERAL PARTNERSHIP

25 June 2025

DATE:

REV:

C Dehk'è Frank Channel Bridge Replacement – Phase 2

Northwest Territoires du

5

1. INTRODUCTION

DOCUMENT:

1.1 OBJECTIVE

This Wildlife Monitoring and Management Plan (WMMP) has been developed for use by the Department of Infrastructure of the Government of the Northwest Territories (GNWT-INF) and Tłicho-Kiewit General Partnership (TKGP) for the Dehk'è Frank Channel Bridge (DFCB) Replacement Project (the Project). Located within the boundaries of the Community Government of Behchoko (CGB) and in the Highway 3 corridor, the project involves building a new bridge just north of the existing one, which will subsequently be deconstructed as it has reached its useful life. The Project also involves reconfiguring the Highway 3 approaches to the new bridge, demolishing the existing approaches and the development of a temporary camp facility to house the construction work force.

This Wildlife Monitoring and Management Plan (WMMP) is to be used as a reference guide to assist TKGP Team in the protection of known Wildlife and Bird Species that could utilize portions of or be present in and around the project site. The project is occurring in an area of pre-existing infrastructure and pre-disturbance. As such, the potential impact is considered low to wildlife and bird species. Analysis of the project work has identified activities that are considered to be of most risk. This WMMP addresses the impacts and required mitigation measures for the construction activities in the Project area to protect fish, wildlife, vegetation and their respective habitats. This WMMP will provide information on these items for Project personnel to include in the planning of construction activities. This will allow the work to meet the following objectives:

- Protect fish and fish habitat
- Protect wildlife and wildlife habitat
- Protect Migratory bird nesting habitat
- Identify species of concern
- Provide mitigation measures where impacts are unavoidable

Revisions will be submitted to the WLWB for review and approval prior to those revisions becoming effective.

1.2 PROJECT CONTACTS

Primary GNWT-INF contact:

Chaudary Murtaza, Manager, Structures and Bridges Government of the Northwest Territories – Department of Infrastructure Box 1320 Yellowknife, NT X1A 2L9

Phone: (867) 767-9089 ext. 31127 Email: Chaudary Murtaza@gov.nt.ca

Primary TKGP Contact:

Robert Cornell, Project Director 100 Borden Drive, Bay 25, Stanton PlazaYellowknife, NT, X1A 2P2

Cell: 514-609-9965

Email: Robert.Cornell@kiewit.com

	DISTRICT:	TŁĮCHQ-KIEWIT GENERAL PARTNERSHIP	DATE:	25 June 2025	Government of Government des Northwest Territories du Territories Nord-Ouest
TŁĮCHQ-KIEWIT PARTNERSHIP TKGP-ENV-PLN-0004	DOCUMENT:	WILDLIFE MANAGEMENT AND MONITORING PLAN	REV:	С	Dehk'è Frank Channel Bridge Replacement – Phase 2

1.3 DISTRIBUTION LIST

Once approved by the WLWB and, if applicable, the Mackenzie Valley Land and Water Board, this plan and the subsequent revisions will be distributed by the TKGP Environmental Project Manager to:

- TKGP Project Manager
- TKGP Site Supervisors
- TKGP Communication Manager
- GNWT- INF Environmental Manager
- GNWT INF Project Manager
- All other applicable GNWT-INF Employees
- Inspector, GNWT Department of Lands (GNWT-Lands)
- Wek'èezhii Renewable Resource Board
- Water Resource Officer North Slave Region, GNWT Department of Environment and Climate Change
- Environmental Protection and Waste Management Division, GNWT
- Tłicho Government (TG) Representatives Community Government of Behchoko Representative

1.4 APPLICABLE LEGISLATION

The following list outlines the legislation and regulations that have been identified as most applicable to the Habitat Protection and Compensation Plan:

- Tlicho Land Use Plan
- Northern Land Use Guidelines
- Environmental Protection Act
- Fisheries Act
- Wildlife Act
- Best Management Practices Fish and Wildlife Habitat Management
- Migratory Birds Convention Act
- Species at Risk Act

JUNE 2025



25 June 2025

С

DATE:

REV:

Northwest Territoires du Territories Nord-Ouest

Dehk'è Frank Channel Bridge Replacement – Phase 2

2. PROJECT DETAILS

DOCUMENT:

The Dehk'è Frank Channel Bridge is located at km 243.8 on Yellowknife Highway (HWY-3), approximately 100 km west of Yellowknife and within the territory of the Community Government of Behchoko, which has been established in 2005 under the Tłicho Community Government Act. The bridge has now reached its current lifespan capacity and requires replacement. Replacement of the bridge provides safe passage of the river for the neighborhood communities of Edzo, Behchoko (Rae) and Frank Channel, while ensuring the sustainability of the Northwest Territories transportation infrastructures. The new bridge will feature two traffic lanes, with an additional 1.5 meters on the north side of the deck to accommodate a dedicated pedestrian sidewalk, ensuring safe crossing for foot traffic. The bridge design will support a road corridor speed of 90 km/h.

Located just north of the existing bridge, the construction of the new bridge will require the temporary installation of causeways and ice bridges. These temporary structures will also be necessary for the deconstruction of the existing bridge. Furthermore, the approaches to the new bridge will be relocated and reconfigured, necessitating the demolition of the current infrastructure.

Additionally, a construction camp will be established for the duration of the project, expected to span three years. Work on the camp will begin in the fall of 2025 as part of the site mobilization, and it will be dismantled as part of the site restoration in 2028. The camp will be designed to accommodate 60-90 workers, providing dormitories and all necessary facilities to support the workforce.

The maps of the project are in Appendix A.



25 June 2025 C Dehk'è

DATE:

REV:

Northwest Territoires du Territoires du Territoires Rond-Ouest

Dehk'è Frank Channel Bridge Replacement – Phase 2

Table 2.1: Project Schedule

DOCUMENT:

Activity	Year	Start-Up Month	Duration (Months)	Work near (less 30 m) or in Frank Channel
Mobilization to site	2025	September	1	No
Clearing & Access to West and East abutments	2025	October	1	Yes (only on the banks)
Drill & Shoot Outcrop rock for the East and West temporary accesses	2025	October - November	1	Yes
Build East and West causeway(s)	2025- 2026	Between November - February	0,5	Yes
Build Ice Bridge	2026	January	2	Yes
Transport Materials to Island & Build Island causeway	2026	Between January - February	1	Yes
Flexifloat Installation North side of Causeways for Construction	2026	April	7	
Build Foundation from Island	2026	February	2	Yes
Complete Bridge Sub-Structure	2026	June	3	Yes
Build Ice Bridge for Island Girder & Work on Bridge Structure	2026	September	5	Yes
Concrete Precast Panels Installation from Island	2027	January	3	Yes
Complete Precast Panels and Superstructure	2027	April	3	No
Remove the top of the Island causeway & Build a temporary deconstruction causeway under the existing bridge	2027	Between March – April	1	Yes
Flexifloat Installation North Side of Causeways for Construction	2027	June	2	Yes
Complete Bridge Deck & Paving	2027	Мау	5	Yes above water only, outside the OHWM
Roadway Traffic Switch on New Bridge	2027	December	1	No
Build Ice Platform: Existing Structure Deconstruction Work	2028	January	4	Yes
Remove the temporary deconstruction causeway	2028	March	1	Yes
Existing Roadway Demolition & all Site Restoration	2028	April	6	Yes (only few weeks for bank restoration and fish habitat reinstatement)
Project completion	2028	November	1	No

This is a provisional schedule based solely on current knowledge and the project's stage of development. This schedule is therefore subject to change as the design progresses and constructability is further analyzed. Likewise, this schedule may be modified as a result of delays beyond TKGP's control in obtaining certain permits from the relevant authorities. Any new information concerning this schedule will be communicated to WLWB representatives as soon as it becomes available.

TŁĮCHQ-KIEWIT PARTNERSHIP
TKGP-ENV-PLN-0004

DISTRICT:	T

TŁĮCHQ-KIEWIT GENERAL PARTNERSHIP

DATE:

25 June

2025

Coormented of Coormented the Northwest Territories du Territories Nord-Ouest

Dehk'è Frank Channel Bridge

9

 DOCUMENT:
 WILDLIFE MANAGEMENT AND MONITORING PLAN
 REV:
 C
 Dehk'è Frank Channel Brid Replacement – Phase 2

3. POTENTIAL CONSTRUCTION IMPACTS

Construction activities and the introduction of a workforce can have impacts that, if not properly managed, can lead to the degradation or destruction of:

- Terrestrial environments
- Aquatic environments
- Species at Risk

3.1 TERRESTRIAL ENVIRONMENT

The terrestrial environment represents the terrestrial biota and its habitat. This includes the forest and vegetation communities including its wildlife, bird and other species habitat located in the Project area. The main concerns regarding the potential impacts of the Project's construction activities on the terrestrial environment include the following:

- The effects of interactions between construction personnel and wildlife.
- Increased pressure and mortality rates for wildlife due to higher levels of traffic I the area.
- Increased potential for waste and litter being deposited in Project areas.
- The displacement of wildlife from habitat either by direct removal or from the effects of construction activities (e.g., noise, dust, etc.).
- Temporary and permanent loss of wildlife habitats.
- Harassment and feeding of wildlife can disrupt natural patterns and behavior.
- · Attracting wildlife to the camp area where food and waste is stored

3.2 AQUATIC ENVIRONMENT

A large portion of the construction activities for the Project take place in or near waterways. Activities may result in short and long-term impacts to fish habitat and areas below the high-water mark. Short term impacts are likely to result from temporary works such as clearing and grubbing, causeways, in-water installations, blasting and removals. Potential impacts include:

- Loss or alteration of fish habitat.
- Obstruction of fish passage.
- Altered drainage patterns.
- Water quality degradation.
- Loss or impairment of food or nutrient supply to fish populations.
- Fish mortalities.
- Increase in number of personnel in the Project area could lead to an increase in fishing.

TŁĮCHQ-KIEWIT PARTNERSHIP
TKGP-ENV-PLN-0004

DISTRICT:	TŁĮCHQ-KIEWIT GENERAL PARTNERSHIP	DATE:	25 June 2025
DOCUMENT:	WILDLIFE MANAGEMENT AND MONITORING PLAN	REV:	С



3.3 SPECIES AT RISK

The Natural Resource Solutions Inc. 2021 report for Pre-development Environmental Review indicates that 12 species at risk have been identified to potentially occur within the project area with 3 of those deemed very likely to occur (species discussed in Section 4.3.1.1).

The identified SAR species with a high or moderate potential to occur in the Project area are summarized in Table 3.1 using the following rankings:

- 1. A moderate probability indicates suitable habitat is present, and the habitat is in the known range of the species, but there have been no recent recordings of the species within the project corridor.
- 2. A high probability indicates suitable habitat is present and there have been recent recordings of the species within the project corridor.

Table 3.1: Summary of SAR Screening

Species	Listing	Presence Likelihood
Myotis, Little Brown (bat)	Endangered (Schedule 1)	Very likely
Wood Bison	Threatened (Schedule 1)	Confirmed
Barn Swallow	Threatened (Schedule 1)	Probable
Common Nighthawk	Special Concern (Schedule 1)	Probable
Evening Grosbeak	Special Concern (Schedule 1)	Unlikely
Harris's Sparrow	Special Concern (Schedule 1)	Unlikely
Horned Grebe	Endangered (Schedule 1)	Probable
Lesser Yellowlegs	Threatened (Schedule 1)	Very Likely
Olive-sided Flycatcher	Special Concern (Schedule 1)	Probable
Red-necked Phalarope	Special Concern (Schedule 1)	Probable
Rusty Blackbird	Special Concern (Schedule 1)	Very likely
Short-eared Owl	Threatened (Schedule 1)	Unlikely

Source: NRSI, 2021

The project area is largely within the boundaries of anthropogenic pre-disturbance (highway right-of-way and quarry). As such the main concerns for potential impact from construction include:

- Vegetation clearing.
- Existing bridge demolition.
- The effects of interactions between construction personnel and wildlife.
- Increased pressure and mortality rates for wildlife due to higher levels of traffic I the area.
- The displacement of wildlife from habitat either by direct removal or from the effects of construction activities (e.g., noise, dust, etc.).



DISTRICT:	TŁĮCHQ-KIEWIT GENERAL PARTNERSHIP
Dio mao m	regord wearn server are rather than

Dehk'è Frank Channel Bridge
Replacement – Phase 2

11

25 June

2025

С

DATE:

REV:

4. MANAGEMENT

Mitigation measures are intended to minimize potential impacts from construction activities on aquatic and terrestrial habitats, vegetation resources and wildlife. The TKGP environmental management strategy will use a variety of mitigation practices for habitat and species protection during the Project as follows:

- Awareness Training
- Habitat Avoidance and Protection

DOCUMENT:

- Timing of Construction Activities
- Best Management Practices for Construction Activities
- Specific Wildlife Management

4.1 ENVIRONMENTAL AWARENESS AND TRAINING

Prior to construction activities, the TKGP Environmental Team shall ensure that all on-site workers are presented with indoctrination and awareness training through the Project's mandatory orientation. The orientation training will consider the measures required by this WMMP in achieving the objectives stated in Section 1.1.

The orientation will include:

- Basic understanding of the protection of breeding birds through the Migratory Bird Convention Act and Species at Risk Act.
- Tree clearing is permitted from September 1 to April 30 of each year.
- In the event tree clearing is required outside of the permitted timing window, there is a protocol for the completion of bird nesting surveys in advance of any clearing.
- Requirements relating to habitat protection through good housekeeping practices.

Attendance of the orientation shall be documented and filed on site and made accessible throughout the duration of the project.

4.2 HABITAT AND AVOIDANCE PROTECTION

Construction activities will be kept within the design footprint of the Project within the boundaries.

All in-water work (causeways, blasting, in-filling, etc.) requires the involvement of the TKGP Project Environmental Manager (PEM) and regulatory approval.

Snow stockpiles will be located a minimum of 15 m away from any waterbody or crossing. Where practical TKGP will stockpile snow as far as possible from nearby waterbodies or crossings and will ensure that appropriate erosion and sediment controls are in place to mitigate sedimentation during warm periods and spring freshet.

As a condition of employment, hunting and fishing or possession of firearms within the Project area is not allowed by any TKGP personnel.

The use of personal vehicles, all-terrain vehicles, snowmobiles, firearms and watercraft by Project personnel is not allowed within the Project area.

All in or near water blasting will be conducted in accordance with the DFO's "Guidelines for the Use of Explosives In or Near Canadian Fisheries Waters."

Mitigation measures will be implemented to ensure the control of invasive species. Activities include ensuring vehicles and marine equipment are cleaned and inspected prior to arrival on site. Soil and rock to be used is from locally sourced quarries.

	DISTRICT:	TŁĮCHQ-KIEWIT GENERAL PARTNERSHIP	DATE:	25 June 2025	Government of Government des Northwest Territories du Territories Nord-Ouest
TŁĮCHQ-KIEWIT PARTNERSHIP TKGP-ENV-PLN-0004	DOCUMENT:	WILDLIFE MANAGEMENT AND MONITORING PLAN	REV:	С	Dehk'è Frank Channel Bridge Replacement – Phase 2

4.3 TIMING OF CONSTRUCTION ACTIVITIES

4.3.1 BIRD MITIGATION MEASURES

The following mitigation measures have been developed for birds within the Project:

- Where feasible, construction activities related to site preparation will occur outside of sensitive seasons for migratory birds. This season for the Project Area is May 1 to August 31 as indicated by the mapping zones and calendar tools developed by ECCC for general nesting periods of migratory birds. Figure 4.1 below shows the nesting periods for the nesting zones the Project falls within (C8).
- If clearing outside of the sensitive timing window is not feasible, the site will be inspected by a biologist, prior to clearing, to check for the presence of nests.
- If demolition of structures occurs, an avian sweep by a qualified avian biologist will be conducted to determine if nests are present.
- Workers shall conduct a sweep of the construction area daily, prior to work activities, to ensure no nests are located on the bridge structure or equipment. Nest searches must take place within 24-hours of the works.
- Heavy machinery is recommended to be moved daily throughout the migratory birds breeding window to prevent nesting.
- Staff will be briefed by the Project Environmental Department on measures to take when nesting birds are observed on site. Including any necessary deterrents required on potential nesting sources (i.e. netting, bird tape, decoys etc.)
- If active nests are identified, those areas must be buffered and left undisturbed until the nest is no longer active.
- Signage will be installed to advise construction staff of bird nesting presence (including appropriate setbacks from nests).

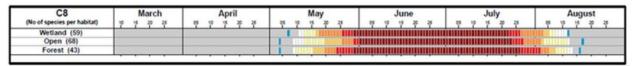


Figure 4.1: Environment Canada – Nesting Calendar

JUNE 2025 12



DISTRICT:	TŁĮCHQ-KIEWIT GENERAL PARTNERSHIP

Overment of Cooperament des Northwest Territories du Territories Nord-Ouest

Dehk'è Frank Channel Bridge Replacement – Phase 2

25 June

2025

С

DATE:

REV:

4.3.1.1 SPECIES AT RISK

The Natural Resources Solutions study indicated the high probability of 3 species for which breeding windows apply.

LITTLE BROWN MYOTIS

Little Brown Myotis Summer roosts: include anthropogenic structures, tree cavities, under the bark of trees, rock crevices and caves (NRSI 2021)

Mitigation proposed for the protection of the species will include:

- Removal of natural vegetation and other potential roosting structures avoided between May 1 and October 31
 of any given year.
- In the event that removals for critical work can not comply with this window, a qualified biologist will conduct a survey to clear areas and structures for removals or indicate locations of roosting for protection with established buffers and signage.

LESSER YELLOWLEGS AND RUSTY BLACKBIRD

DOCUMENT:

Both species are listed as Threatened in Schedule 1 under the Endangered Species Act.

The breeding Habitat of the Lesser Yellowlegs is known to be in semi open woodlands and wet meadows interspersed with marshes, bogs, and ponds. They can also be found nesting in altered habitats (gas line right-of-way and mine clearings) (NRSI 2021)

The breeding habitat of the Rusty Blackbird corresponds closely to the boreal forest. Within this biome, its habitat is characterized by forest wetlands, such as slow-moving streams, peat bogs, sedge meadows, marshes, swamps, beaver ponds and pasture edges (NRSI 2021)

Mitigation proposed for the protection of the species will include:

- Removal of natural vegetation and other potential roosting structures avoided between May 1 and August 30 of any given year.
- In the event that removals for critical work can not comply with this window, a qualified avian biologist will
 conduct a survey to clear areas for removals or indicate locations with nesting presence for protection with
 established buffers and signage.

4.3.1.2 FISHERIES SPAWNING TIMING WINDOW

In water work or construction will be scheduled to avoid fish spawning periods, with the exception of the Flexifloat setup and relocation. These periods are set by Fisheries and Oceans Canada (DFO) who base the timing of the period on the following factors:

- Species of fish present.
- If the water body is considered a cool, cold or warm water body.
- If the fish present in the waterbody spawn during the spring and/or fall.
- The geographical region in which the water body is located.

The Project activities are primarily located within the narrows section of the Dehk'è Frank Channel and it has been assumed that inwater construction activities will be constrained by timing windows as authorized by DFO.

4.3.1.3 WORKING WITHIN RESTRICTED TIMING PERIODS

Contact the PEM if construction activities are scheduled or will extend into one of the above periods. The PEM will develop a mitigation plan in consultation with the applicable regulatory agencies that if acceptable, will allow the work to proceed.

TŁĮCHQ-KIEWIT PARTNERSHIP
TKGP-ENV-PLN-0004

DISTRICT:	TŁĮCHQ-KIEWIT GENERAL PARTNERSHIP	DATE:



14

25 June

2025

С

REV:

4.4 BEST MANAGEMENT PRACTICES

DOCUMENT:

4.4.1 EQUIPMENT OPERATIONS

- Operate construction equipment only within the designated construction site and access roads. Verify with supervisor or Environmental Department.
- Operators will be responsible for inspecting their machines for oil/fuel leaks and will coordinate repairs of any identified leaks prior to working in sensitive areas.
- Follow Kiewit fueling procedure.
- Report all spills. If a series of continued equipment failures such as hose breaks are observed, TKGP will
 undertake additional measures to increase inspections and/or replace potentially faulty equipment.

Additional best management practices and mitigation measures are provided in Spill Prevention and Contingency Plan.

4.4.2 CLEARING AND GRUBBING ACTIVITIES

Clearing refers to the cutting and salvaging of merchantable timber and disposing of all other trees, logs and brush. Grubbing consists of the removal and disposal of roots and stumps.

- Areas to be cleared will be marked and clearing activities will not extend beyond the limits.
- Plan site layout to use previously cleared areas as much as possible.
- Minimize grubbing wherever possible.
- Plan to clear areas in the late fall/winter months when the ground is frozen, if possible.
- Considering soil and ground conditions, continually monitor before and after operation, consult with supervisor to predict where future problems may occur.
- Plan primary trails for the machinery to use that would have the least impact (make use of high points or rock outcrops) and have the greatest load bearing capacity.
- Plan turnaround trails and keep to primary trails. Avoid excessive use of turnarounds.
- Avoid falling trees outside of the property limits or in water bodies. If necessary, remove debris from streams and adjacent lands not within the designated Project area.
- Sediment released from grubbed material must be controlled to prevent entry to any water body. Where
 appropriate, perimeter mitigation measures will be utilized to reduce the potential for contamination of water
 (perimeter controls options can be found in Section 4.2 of the Erosion and Sediment Control Plan).

4.4.3 BLASTING ACTIVITIES

Blasting in or near waterways is to follow the Fisheries and Oceans Guidelines for the Use of Explosives in or Near Canadian Fisheries Waters. As outlined in these guidelines, the detonation of explosives in or adjacent to fish habitat has been demonstrated to cause disturbance, injury and / or death to fish and marine mammals, and / or the harmful alteration, disruption or destruction of their habitats, sometimes at a considerable distance from the point of detonation. The project will ensure that all mitigation measures (such as pre-visual sweeps, count downs and blast mats) and all monitoring program elements will be followed as prescribed by all Project permits and approvals.

TŁĮCHQ-KIEWIT PARTNERSHIP
TKGP-ENV-PLN-0004

DISTRICT:	TŁĮCHQ-KIEWIT GENERAL PARTNERSHIP	DATE:	25 June 2025
DOCUMENT:	WILDLIFE MANAGEMENT AND MONITORING PLAN	REV:	С



4.4.4 WILDLIFE

Reduce interaction between construction personnel and wildlife by maintaining all sites free of wildlife attractants such as food, garbage, petroleum products or other materials with a strong odor. Personnel will be trained on the importance of not feeding wildlife and that disciplinary measures will occur should site personnel not respect the requirements.

- Where garbage containers are required, ensure containers are inaccessible to wildlife or wildlife resistant.
- Obey speed limits and be observant for animals on roadways.
- Fishing, hunting, feeding or harassing wildlife on the project site is prohibited.
- Signs and road markers will be posted to inform drivers of speed limits.
- Communicate the presence of wildlife to other drivers and on-site project personnel.
- Constructed embankments should not be too steep as to avoid creating barriers to wildlife movements. Slopes will be provided at suitable locations to enable crossing.
- Light pollution resulting from night lights may impact wildlife habitat and corridor use. The following work procedures and equipment can be used to minimize light spill:
 - Minimize nighttime construction activity in and around waterbodies and stream crossings where possible.
 - Use directional lighting to focus on the construction area and away from waterbodies and stream crossings.
 - Use only the required amount of lighting.
 - Turn off unnecessary lighting.
- Remove brush and vegetation, as necessary, from the sides of access roads to increase sightlines and reduce vehicle and animal collisions.

4.4.5 PROTECTION OF WATER QUALITY

- If water has accumulated in the work area and requires pumping out do not discharge to the natural environment without the approval of the Environmental Department. All construction water needs to be routed to the proper control devices (see the Erosion and Sediment Control Plan, Section 4.4 Water Conveyance Controls and End Treatment for options).
- Curing water from concrete activities requires pH testing prior to discharge to a water body and will be tested by the Project Environmental Manager.
- Water pumped from work areas or any runoff or effluent directed out of the work site shall have disturbed soil
 particles removed by water conveyance controls or end treatment as per Section 4.4 of the Erosion and
 Sediment Control Plan prior to discharge into water bodies.
- Washing of equipment must be performed where water can be properly contained and removed by vac truck off-site or at an approved wash location.
- Any equipment entering water bodies must be clean and free of any grease, oil or fine sediments.
- Snow from plowing or removal operations is not to be piled within 15m of near water bodies or crossings. Observed stockpiles will be promptly removed.

JUNE 2025

TŁĮCHQ-KIEWIT PARTNERSHIP
TKGP-ENV-PLN-0004

DISTRICT:	TŁĮCHQ-KIEWIT GENERAL PARTNERSHIP	DATE:	25 June 2025



С

4.5 SPECIFIC WILDLIFE SPECIES MANAGEMENT

DOCUMENT:

Wildlife in the area is consistent with that found throughout the boreal forest in the southern Northwest Territories. TKGP will ensure the general mitigation measures are implemented as required to reduce potential impacts on these species.

Other species of wildlife not classified as species of concern are also present within the Project area. Although not classified as species of concern, the goal of this plan is to minimize impacts for all wildlife as part of TKGP's environmental stewardship. From past projects, TKGP has determined that there is an increased chance of interaction with certain species over the duration of the Project. Specific procedures have been developed to manage any interactions in such a manner that causes the least amount of disruption possible to the wildlife in question.

4.5.1 SPECIES AT RISK

Wood Bison is an identified Species at Risk in the area and there is a known presence of Bison along Highway 3. Occurrence of the species in the area will be due to their travel through the Project Area.

Normally wood bison are not known for aggressive behavior towards humans. However, they are large, powerful animals and can become unpredictable, especially during breeding season or when they feel threatened. If animals become too numerous and are deemed a safety hazard the PEM will consult GNWT-ECC. All personnel working on Project sites will receive Environmental Awareness Training. This will include information on wood bison such as avoidance measures and response procedures for encounters. All wood bison sightings will be communicated to the Project Environmental Department and be documented on the Wildlife Sightings Log (See Appendix A).

JUNE 2025



DISTRICT:	TŁĮCHQ-KIEWIT GENERAL PARTNERSHI

Covernment of Northwest Territoires du Territoires Nord-Ouest

Dehk'è Frank Channel Bridge Replacement – Phase 2

25 June

2025

С

DATE:

REV:

4.5.2 BEAR MANAGEMENT

DOCUMENT:

Bears can become a problem due to a combination of an attraction to food sources and habituation to the presence of people. Once identified as a food source, bears will continue to seek food at construction sites. The continued presence of construction personnel may cause the bear to become used to humans. This could lead to a reduction in their fleeing response resulting in increased bear human confrontations.

All personnel working on Project sites will receive Environmental Awareness Training. This will include information on bear awareness such as avoidance measures and response procedures for encountering bears.

Preventing bears from being attracted to the Project sites is the preferred method of avoidance.

- Proper procedures for handling waste and other food sources will minimize the potential of problem bears.
- At the construction camp kitchen, food waste is to be stored in closed containers. Containers will be kept clean and emptied regularly. Waste will be removed from site on a regular basis and hauled to the closest municipal landfill.
- At Project sites, all food waste is to be disposed of in containers inside a building or in one of the "Bear-Proof" garbage bins located outside.
- No food waste is to be disposed of outdoors at any of the sites. Workers must use the appropriate containers
 onsite
- If barbeques are used at the camp, they will be stored inside or in a fenced area while not in use. Grills will be cleaned after each use.

Sightings of bears within construction areas of the Project are to be reported to the Safety or Environmental Departments. Notification will be provided to personnel working within the area of the bear sighting.

If the bear continues to remain in the area the use of deterrents, such as air horns, vehicle horns bear bangers or similar devices can be used in an attempt to scare the bear out of the area. Consult with the Safety or Environmental Department prior to using these devices. If there are repeated sightings of a bear in an area the PEM will contact GNWT-ECC for their assistance and follow all guidance related to escalation of response up to and including trapping and relocation.

4.5.3 MOOSE AND CARIBOU

Moose and Caribou are known to inhabit the area around the Project. Normally these animals are not aggressive and will often flee if disturbed or approached. However, they are wild animals and can be stressed (mating season, if with young etc.) resulting in self-protection through attack. If animals become too numerous and are deemed a safety hazard the PEM will consult GNWT-ECC. All personnel working on Project sites will receive Environmental Awareness Training. This will include information on moose and caribou (ungulates) such as avoidance measures and response procedures for encountering ungulates. All sightings will be communicated to the environmental department and documented on the Wildlife Sightings Log.

4.5.4 WOLVES AND FOXES

Wolves and foxes could be seen in the Project area and both animals will scavenge for food if available. The same measures used to avoid attracting bears are to be used in the case of wolves and foxes. If animals become too numerous and are deemed a safety hazard the PEM will notify GNWT-ECC of the concerns and follow all guidance/direction offered.

4.5.5 WILDLIFE MORTALITIES

Incidents involving vehicle collisions with wildlife such as moose or bear are to be reported to the Environmental Department. Notification will be provided to the GNWT-ECC of the wildlife mortality and a report prepared.

TŁĮCHQ-KIEWIT PARTNERSHIP
TKGP-ENV-PLN-0004

DISTRICT:	TŁĮCHQ-KIEWIT GENERAL PARTNERSHIP	DATE:	25 June 2025
DOCUMENT:	WILDLIFE MANAGEMENT AND MONITORING	REV:	С

PLAN

A	Government of Northwest Territories	Gouvernement des Territoires du Nord-Ouest
		nannel Bridge - Phase 2

5. MONITORING

The implementation of Best Management Practices will be checked to verify they are functioning as intended. The PEM will report directly to the TKGP Project Manager to have work suspended if onsite conditions have, or have the potential to, impact habitat or wildlife outside of approved work areas.

5.1 ITEMS TO BE MONITORED

Onsite monitoring will include but not be limited to the following:

Timing Restrictions:

No un-authorized work taking place or scheduled within restricted periods

Wildlife:

- Any reported sightings
- Evidence of activity within construction area
- Any identified species at risk

Vegetation:

Proper clearing and grubbing procedures

Fish and fish habitat:

- · Any dead or dying fish observed
- Any shoreline work scheduled

5.2 RECORDS

The results of the monitoring activities will be recorded using the Weekly Environmental Checklist. The completed checklists can be found on the Project SharePoint site and TeamBinder.

Encounters with any above listed Species at Risk and wildlife will be recorded in the Project - Wildlife Tracking Spreadsheet by the TKGP Environmental Team or designate, and will contain the following information:

- Date and Time of Incident
- Species and number observed
- Condition-health observations
- Male/Female and age (if known)
- GPS coordinates
- Description of the area where SAR was observed
- Description of activities that were occurring at the time of encounter

JUNE 2025



DISTRICT:	TŁĮCHQ-KIEWIT GENERAL PARTNERSHIP	DATE:	25 June 2025
DOCUMENT:	WILDLIFE MANAGEMENT AND MONITORING	REV:	С

PLAN

REV: С



6. REPORTING

TKGP will provide WRRB with an annual summary report that will document any and all wildlife observations and incidents. Additionally, the report will include a summary of any mitigation measures employed during the construction period. It is assumed that this summary would be acceptable as part of the Water License Annual Report requirement. Should a stand alone report be required, one can be provided to WRRP.

JUNE 2025



DISTRICT:	TŁĮCHQ-KIEWIT GENERAL PARTNERSHIP	DATE:	25 June 2025
DOCUMENT:	WILDLIFE MANAGEMENT AND MONITORING	REV:	С

PLAN

Government of Government des Northwest Territoires du Dehk'è Frank Channel Bridge Replacement - Phase 2

7. REFERENCES

ENVIRONMENT AND CLIMATE CHANGE CANADA, January 2025, https://www.canada.ca/en/environment-climatechange/services/avoiding-harm-migratory-birds/general-nesting-periods/nesting-periods.html

NATURAL RESOURCE SOLUTONS INC. 2021. Dehk'e Frank Channel Bridge Replacement Pre-Development Natural Environmental Review.

JUNE 2025