

# Memo



**To:** Francis Dube  
**From:** Dave McKenna  
**cc:** Keley Akwiwu, Paul Clow  
**Date:** August 29, 2023  
**Subject:** Response to ECCC Regarding Species at Risk and Migratory Birds – Kimmirut, NU WWTP  
**Our File #:** 20-2790

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## 1.0 Introduction

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This memo provides the response to ECCC question #4 for the Kimmirut WWTP project, based on questions posed in the ECCC letter to the Nunavut Water Board on July 11, 2023 (*RE: 3BM-KIM1929 – Government of Nunavut – Community and Government Services (GN-CGS) – Hamlet of Kimmirut – Application for Water Licence Amendment*) regarding the approach to be followed to address mitigation of impacts to migratory birds on the project site.

## 2.0 Response

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The Federal *Species at Risk Act* (SARA) provides protection to species in Canada listed under Schedule 1 as extirpated, endangered, threatened, or special concern (Government of Canada 2002). Under Section 32(1) of the SARA it is unlawful to:

*“...kill, harm, harass, capture, or take an individual of a wildlife species that is listed as an extirpated species, an endangered species, or a threatened species.”*

Under Section 33 of the SARA it is unlawful to:

*“...damage or destroy the residence [habitat] of one or more individuals of wildlife species that is listed as an endangered species or threatened species...”*

(Government of Canada 2002).

Under the SARA, these prohibitions apply to all species listed under Schedule 1 as extirpated, endangered, threatened, or special concern on Federal lands; however, on private land, these prohibitions apply only to aquatic species and migratory birds listed under Schedule 1 as extirpated, endangered, threatened, or special concern.

## 2.1 Methods

A desktop review was completed for species at risk (SAR) with historical or potential occurrences at the Project site and surrounding area (i.e., within 1 km of the Project site boundary). For the purposes of this Project, a plant or wildlife SAR is a species that meets one or more of the following criteria:

- Listed under Schedule 1 of the Federal Species at Risk Act (SARA) as special concern, threatened, endangered, or extirpated (Government of Canada, 2023);
- Listed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) as special concern, threatened, or endangered (Government of Canada, 2023); and
- Listed under the Nunavut Conservation Data Centre (Government of Nunavut, 2023).

SAR information was also obtained and reviewed from publically-available data, reports and literature including:

- Government of Canada SAR Public Registry (Government of Canada, 2023) used to identify plant and wildlife species listed under the SARA located at the Site;
- Committee on the Status of Endangered Wildlife in Canada (COSEWIC) Reports used to identify SAR distributions and habitat requirements.
- eBird Canada historical bird observation data (eBird Canada, 2023); and
- NatureServe Explorer (NatureServe, 2023) for information on rare and endangered species and ecosystems.

## 2.2 Results

Based on their known distributions and habitat requirements, four species of bird SAR have the potential to occur in the Project site and surrounding area (Government of Canada, 2023); however, It is unlikely that any of the identified species will occur at site based on the site conditions and there are no documented occurrences of any of the four species at the project site. The Project Site falls within Environment Canada Nesting Zone N10 with a migratory bird nesting window of May 17 to August 19 (ECCC, 2023).

A list of SAR with historical occurrences or potential to occur within the Project site or surrounding area, including their designated status and habitat preferences is detailed below in **Table 1**.

**Table 1: SAR with potential to occur in the Project Site and Surrounding Area**

Species		Status			Habitat Preferences
Common Name	Scientific Name	Provincial	COSEWIC	SARA	
Eskimo Curlew	<i>Numenius borealis</i>	SH	Endangered	Endangered	Eskimo Curlew are a possibly extinct species, and their present day habitat use is unconfirmed. Previously, their breeding habitat consisted of treeless upland tundra with dwarf shrubs and grassy tundra meadows. During fall migration, the birds used a variety of coastal and terrestrial habitats, with documented fall migration routes through the Hudson Strait. They forage in areas of crowberry, salt marsh, meadows, pastures, old fields, intertidal flats and sand dunes (COSEWIC, 2009).
Ivory Gull	<i>Pagophila eburnea</i>	S1BS1N	Endangered	Endangered	Ivory Gull typically inhabit pack ice and ice edges around islands or headlands. For nesting they are fairly flexible using islands, cliffs, inland mountain, nunataks, beaches, and floating blocks of ice. After breeding, they can occur on beaches near human settlements in the Arctic. This species has historically identified nesting colonies on Baffin Island (Environment Canada, 2014) (eBird Canada, 2023), (All About Birds, 2023).
Red Knot	<i>Calidris canutus</i>	S3S4B	Endangered	Endangered	Red Knot nest in high Arctic habitats not frequented by humans, on dry tundra slopes with sparse stunted willow or mountain avens, often far from the coast but usually on warm, sunny slopes facing south or southwest. While incubating, knots forage in wetter habitats, usually not far from the nest. Once young are able to fly, they move toward sedge meadows and lakeshores, feeding heavily in preparation for their long migration. Migrating and wintering knots use marine habitats—sandy beaches, saltmarshes, lagoons, mudflats of estuaries and bays, and mangrove swamps that contain an abundance of invertebrate prey. This species has been historically identified on Baffin Island (ECCC, 2017), (eBird Canada, 2023), (All About Birds, 2023).
Red-necked Phalarope	<i>Phalaropus lobatus</i>	S3B	Special Concern	Special Concern	Red-necked Phalaropes breed around lakes, bogs, and marshes in the Arctic tundra and tundra-forest boundary. They overwinter out at sea in places where currents or upwelling that brings plankton to the surface, or small groups may spend winters on inland ponds. They typically nest on mossy hummocks lines with sedges and grasses close to standing water. This species has historic sightings along the southern half of Baffin Island near the site (COSEWIC, 2014), (eBird Canada, 2023), (All About Birds, 2023).

Notes:

COSEWIC - Committee on the Status of Endangered Wildlife in Canada

Government of Canada (2021) Species at Risk Public Registry, eBird Canada (2019) database, and NatureServe Explorer (2022) lists searched additionally.

Provincial Conservation Status: SH= Possibly Extirpated, S1= Critically Imperiled, S2=Imperiled, S3=Vulnerable, SNR=No Status Rank, SH=Possibly Extirpated, - = not applicable

### 2.3 Recommended Mitigation Measures

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The following outlines mitigation measures that should be applied to minimize Project impacts to wildlife.

- Waste generated during construction and operation shall be stored in an appropriate manner (e.g., wildlife proof bins) and managed regularly so as not to attract wildlife or allow for release of waste to the environment;
- Restrict construction activities to the approved boundaries of the Project Footprint;
- Schedule vegetation clearing and maintenance outside of the migratory bird nesting window from May 17 to August 19 (ECCC, 2023), where feasible;
- Where vegetation clearing is required within the migratory bird nesting window, a pre-disturbance nest sweep with a buffer of 50m from the disturbed area should be conducted, prior to removal of vegetation;
- If vegetation clearing is required within the migratory bird nesting window, conduct bird deterrent activities prior to May 17 to discourage nesting within the Project Footprint.
- Revegetation upon construction completion where feasible;
- Take any other necessary measures to ensure that all construction activities comply with the federal *Migratory Birds Convention Act*, *Species At Risk Act*, or are otherwise approved by the Canadian Wildlife Service;
- Prohibit on-site personnel or visitors to harass and/or feed wildlife;
- Schedule construction activities between 8am and 8pm to limit noise impacts during territorial and mate calling periods, typically occurring outside of daytime hours, as well as to provide wildlife with an opportunity to move through the area during night hours; and,
- Provide a large berth, and allow wildlife to calmly disperse when encountered on and/or near the Project Footprint.

## 2.4 References

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- All About Birds. 2023. Bird Info & Tools. Obtained on August 17, 2023 from <https://www.birds.cornell.edu/home/>
- Cornell Lab of Ornithology. 2023. eBird [web application]. Cornell Lab of Ornithology, Ithaca, New York. Accessed August 17, 2023 from <https://ebird.org/home>
- COSEWIC. 2009. COSEWIC assessment and status report on the Eskimo Curlew *Numenius borealis* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. vii + 32 pp. ([www.sararegistry.gc.ca/status/status\\_e.cfm](http://www.sararegistry.gc.ca/status/status_e.cfm)).
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- Environment Canada. 2014. Recovery Strategy for the Ivory Gull (*Pagophila eburnea*) in Canada. Species at Risk Act Recovery Strategy Series. Environment Canada, Ottawa. iv+ 21 pp.
- Environment and Climate Change Canada. 2017. Recovery Strategy and Management Plan for the Red Knot (*Calidris canutus*) in Canada. Species at Risk Act Recovery Strategy Series. Environment and Climate Change Canada, Ottawa. ix + 67 pp.
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- Government of Canada. 2023. Species at Risk Public Registry. Accessed on August 17, 2023 from <https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry.html>
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- NatureServe Network Biodiversity Location Data accessed through NatureServe Explorer [web application]. NatureServe, Arlington, Virginia. Accessed August 17, 2023 from <https://explorer.natureserve.org/>