

Alberta Environment and Parks - Fish and Wildlife Stewardship Renewable Energy Referral Report

The NU-E Corp Lethbridge 1 Solar Power Project (the Project) proposed by NU-E Corp (the Proponent) was reviewed by the Alberta Environment and Parks – Fish and Wildlife Stewardship (AEP-FWS) regional wildlife contact for renewable energy projects. AEP-FWS has reviewed the proposed location, mitigation strategies, including associated infrastructure and construction plans, and post-construction monitoring and mitigation program. Project information was presented by the Proponent in a submission dated July 2022 and accepted by AEP-FWS on July 4, 2022 and updated by the Proponent in a response to information requests on September 7, 2022.

The AEP-FWS review of the NU-E Corp Lethbridge 1 Solar Power Project was guided by the AEP-FWS policy document, *Wildlife Directive for Alberta Solar Projects* (October 2017; hereafter called the *Directive*) and the *Post-Construction Survey Protocols for Wind and Solar Energy Projects* (January 2020; hereafter called the *PCMP Protocol*). The Proponent must follow the *Directive* and *PCMP Protocol* for requirements on siting, pre-construction surveys, construction, operation, and post-construction monitoring and mitigation plans.

This referral report summarizes the review undertaken by AEP-FWS that was restricted to reviewing information provided in the submitted documents, completed by Bear Tracks Environmental Services Ltd. and Keneco Environmental Inc. on behalf of the Proponent, and applying the wildlife standards and best management practices for the siting, construction and operation of the wind facility. This office undertook no independent on-site assessment. This Renewable Energy Referral Report is not intended to relieve any party from any liability if there are detrimental effects to wildlife or wildlife habitat during construction or operation that were not identified and mitigated for in the documents submitted. It is the responsibility of the Proponent to ensure compliance under all other policy and legislation, including but not limited to the *Alberta Wetland Policy*, *Water Act*, *Code of Practice for Watercourse Crossings*, *Environmental Protection and Enhancement Act*, *Alberta Wildlife Act*, *Migratory Bird Convention Act*, and *Species at Risk Act*. Federal requirements may differ from AEP-FWS policy, therefore additional consultation may be necessary. AEP-FWS review does not eliminate the need for review by other branches of the Environment and Parks Department, Government of Canada or other governing bodies. This referral report summarizes the potential risks to wildlife and wildlife habitat based on the information provided to AEP-FWS.

Signature:  Date: September 20, 2022
Printed Name and Position: Jason Unruh, Wildlife Biologist, South Region, Red Deer, Alberta

Signature:  Date: September 20, 2022
Printed Name and Position: Jamie Kalla, Wildlife Biologist, South Region, Spruce Grove, Alberta

Referral Report Summary

Please see the body of this report along with supporting information found in the project application and the AEP *Wildlife Directive for Alberta Solar Energy Projects* for details on specific topics within this summary.

The Lethbridge 1 Solar Power Project has been sited entirely on cultivated land, and avoids higher quality habitat, breeding habitat, and key features for species at risk, which aligns with the *Directive*. Project infrastructure will be sited within the 100 m buffer of one seasonal wetland, however, this wetland does not provide breeding habitat for sensitive amphibians and the proponent has committed to mitigations which will reduce the risk to wildlife and wetland habitat. Therefore, AEP-FWS has determined the risk to wetlands is low.

AEP-FWS has determined the risk to breeding birds and overall bird risk is low, based on limited diversity, avian activity, and avoidance of high quality habitat. The project has been sited to avoid all wildlife features, including the house, nest, den and lek of species of management concern; therefore, the risk to wildlife features is considered low. AEP-FWS has also determined the risk to wildlife from the project fence is low.

The project is sited within an area known to have high snake activity. The proponent has provided an appropriate Snake Protection Plan, which will be implemented during construction and operations. This aligns with the *Directive*, and AEP-FWS has assessed the risk to sensitive snakes as low.

AEP-FWS has determined the NU-E Corp Lethbridge 1 Solar Power Project proposed by NU-E Corp, poses a low risk to wildlife and wildlife habitat, based on Project siting, limited wildlife use in the area, and commitments made by the Proponent to mitigate and monitor wildlife impacts. This AEP-FWS Renewable Referral Report expires on September 20, 2027.

<i>Project Information</i>	<i>Project Details</i>
Project Name	NU-E Corp Lethbridge 1 Solar Power Project
Municipality/County	Lethbridge County
Project MW	10.7 MW
Proponent Name	NU-E Corp
Consultant Name	Bear Tracks Environmental Services Ltd.
Project Documents Submitted ¹	<ul style="list-style-type: none"> Renewable Energy Project Submission Report for the NU-E Corp Lethbridge 1 Solar Power Project Snake Protection Plan for NU-E Corp Lethbridge 1 Solar Power Project 20220831 AEP Initial Review Questions_Lethbridge1Solar_NU-E Response
Date of Referral Report Expiry	September 20, 2027
Overall Risk Ranking	Low Risk

¹ Note: various clarifications and edits of the original documents are discussed in the subsequent files and these changes are to supersede the original documents.

PROJECT SITING

Native and Critical Habitats

Risk Ranking: Not Applicable Low Moderate High High Unmitigated

Infrastructure sited within suitable habitat or applicable setbacks: Yes No

Comments/Mitigation: The project is sited entirely on cultivated land, which aligns with the *Directive*.

Wetlands

Risk Ranking: Not Applicable Low Moderate High High Unmitigated

Infrastructure sited within suitable habitat or applicable setbacks: Yes No

Comments/Mitigation: Project infrastructure is planned to be sited within the 100 m buffer of one seasonal wetland (fenceline and solar panels will be 34 m from the wetland edge). Environmental conditions for sensitive amphibian surveys were met, and no sensitive amphibians were observed within the 100 m of this wetland; therefore, it does not appear to be a breeding pond for sensitive amphibians. The proponent has committed to mitigation measures (outlined in the documents reviewed) to reduce the risk to sensitive amphibians and wetland habitat while working within the wetland buffer. Since the wetland buffer has been cultivated through in the past and no sensitive amphibians were observed during surveys, AEP-FWS has assessed the risk to wetlands and wildlife as low.

WILDLIFE FEATURES

Raptor Nests (Sensitive and Non-Sensitive)

Risk Ranking: Low Moderate High High Unmitigated

Is the project sited within the wildlife range/zone? Yes No Not Applicable

Was the survey completed according to the Standards? Yes No Not Applicable

Is the project sited within the setbacks? Yes No

Comments/Mitigation: The project is sited within the Sensitive Raptor range layer, and appropriate raptor nest surveys were conducted. One active red-tailed hawk nest was detected, and the 100 m buffer will be avoided by the project. This aligns with the *Directive*, and AEP-FWS has assessed the risk to raptor nests as low.

Sharp-tailed Grouse

Risk Ranking: Low Moderate High High Unmitigated

Is the project sited within the wildlife range/zone? Yes No Not Applicable

Was the survey completed according to the Standards? Yes No Not Applicable

Is the project sited within the setbacks? Yes No

Comments/Mitigation: The project is sited within the Sharp-tailed grouse range layer, and appropriate lek surveys were conducted. No leks or sharp-tailed grouse were observed during surveys. This aligns with the *Directive*, and AEP-FWS has assessed the risk to sharp-tailed grouse as low.

Snakes (Hibernacula & Habitat)

Risk Ranking: Low Moderate High High Unmitigated

Is the project sited within the wildlife range/zone? Yes No Not Applicable

Was the survey completed according to the Standards? Yes No Not Applicable

Is the project sited within the setbacks? Yes No

Comments/Mitigation: The project is sited within the Sensitive Snake Habitat layer. While no specific surveys were required for sensitive snakes, the project is sited within an area known to have high snake activity. The proponent has provided an appropriate Snake Protection Plan, which will be implemented during construction and operations. This aligns with the *Directive*, and AEP-FWS has assessed the risk to sensitive snakes as low.

BIRD RISK

Breeding Birds

Risk Ranking: Low Moderate High High Unmitigated

Comments/Mitigation: During breeding bird surveys, only one species at risk (SAR) was observed in low abundance, and there is no high quality breeding bird habitat within the project area. Breeding bird abundance during surveys was relatively high, but this is likely due to breeding bird use of higher quality surrounding habitat. The project does not present an elevated risk to breeding birds, and AEP-FWS has assessed the risk to breeding birds as low.

Bird Risk

Risk Ranking: Low Moderate High High Unmitigated

Comments/Mitigation: Bird abundance was relatively low during spring and fall migration surveys. There is no attractive stop over habitat for migrating birds within the project area. This aligns with the *Directive*, and AEP-FWS has assessed the overall bird risk as low.

Other Wildlife Risks

Guy Wires

Risk Ranking: Not Applicable Low Moderate High High Unmitigated

Comments/Mitigation: Guy wires will not be required for this project.

Collection Lines

Risk Ranking: Low Moderate High High Unmitigated

Comments/Mitigation: Collector lines have been sited underground, which aligns with the *Directive*.

Fencing

Risk Ranking: Low Moderate High High Unmitigated

Comments/Mitigation: The proposed fence design will allow the passage of small animals under the fence, allow the movement of larger animals around the Project, and the design will avoid increasing wildlife entrapment or collision risk, which aligns with the *Directive*; therefore, AEP-FWS has assessed the risk to wildlife from project fencing as low.

Ground Disturbance and Vegetation Management

Risk Ranking: Low Moderate High High Unmitigated

Comments/Mitigation: Vegetation removal and vegetation management will be planned outside the breeding bird season (April 15 to August 15). However, if vegetation removal or management is required during the breeding season, a nest sweep will be conducted prior to the work and no activities will occur within a 100 m buffer around active nests. Nest sweeps will also be done prior to herbicide application within the affected areas. This aligns with the *Directive*, and the risk has been assessed as low.

Post Construction Monitoring Plan

Risk Ranking: Low High High Unmitigated

Has the Proponent committed to post-construction monitoring that follows requirements outlined in the *PCMP Protocol*? (Post-construction monitoring reports must be submitted to AEP-FWS and the AUC annually by the end of January following the mortality monitoring period). Yes No

Post Construction Mitigation Plan

Risk Ranking: Low Moderate High High Unmitigated

Has the Proponent identified appropriate post-construction mitigation to address risk to wildlife or wildlife habitat as per the intent of the Directives? Yes No