

To: Deighen Blakely (DRFMO)

Cc: Josh Strukoff (WSP), Scott Wagner (WSP) and Ron Davis (Brooks Asphalt)

Reference: East Coulee 2024 Tree Clearing for DLO230104 Preparation.

Date: January 25, 2024

From: Kelsey Morin, P.Biol., QEP

The following memo details findings from the wildlife sweep completed on January 19, 2024, for the Drumheller Resiliency and Flood Mitigation Office (DRFMO), as part of East Coulee Berm project, in the community of East Coulee, within the Town of Drumheller.

INTRODUCTION

On January 19, 2024, Kelsey Morin, of Ridge Environmental Planning Ltd., performed an intensive pre-construction survey for nesting and denning wildlife, at work areas, planned as part of the East Coulee vegetation clearing (the Project). The pre-construction survey was based on information provided by DRFMO and WSP on January 17, 2024. Tree clearing was required at the DLO230104 (DLO) location to prepare for instream work occurring in the 2024 construction season.

As a condition of DLO Landscape Analysis Tool (LAT Report 000005FF39), Report ID 36, specifically Condition 1600, a wildlife sweep was required. The wildlife sweep areas included a search of suitable nesting or denning habitat, access routes, and a suitable buffer within each work area.

Buffers were determined based on the Alberta’s *Sweep Protocols* (GoA 2020), suitable habitat, and the level of existing disturbance, within the work areas (e.g., existing road traffic and private land). Project location areas details are shown in **Figure 1**. Project mapping for the structures are found in **Appendix A**.

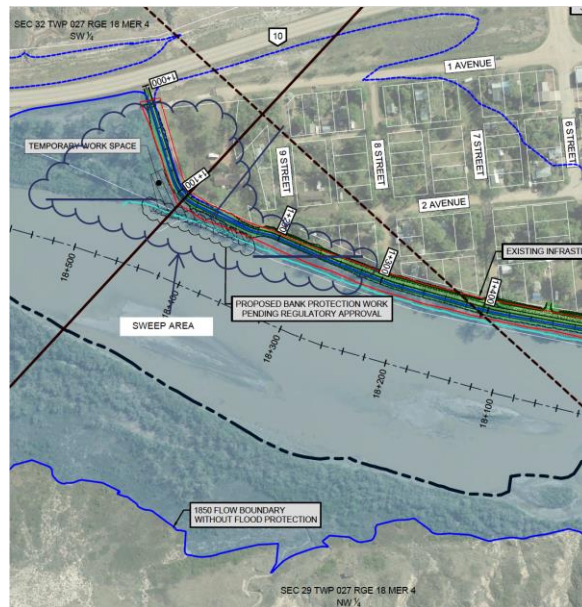


Figure 1 - Project site and buffer (100 m) search area.

WILDLIFE RESTRICTED ACTIVITY PERIODS

The wildlife search included the work areas as provided by DRFMO and WSP (**Figure 1**), plus a 100 m buffer. The search area considered existing disturbances and proposed work activities and as such focused on suitable habitat types that had the potential for nesting and denning. The nest search followed Government of Alberta (i.e., Alberta Environment and Parks [AEP]) recommendations for ground-based wildlife surveys Wildlife Sweep Protocol.

The nests of migratory birds are protected federally under the *Migratory Birds Convention Act, 1994 (MBCA)*. Nests of birds not protected under *MBCA*, in addition to denning wildlife, are protected provincially under the Alberta *Wildlife Act, 2000 (AWA)*.

Considering the different jurisdictional guidelines and legislation providing protection for bird nests, the recommended project-specific Restricted Activity Period (RAP) is from March 1 to August 31, considering:

1. The migratory bird Primary Nesting Period (PNP) for Region B5 (April 30 to August 31; ECCC 2018).
2. Provincial RAP for migratory birds (April 15 to August 15; GoA 2021).
3. Provincial RAP for raptors (March 1 to July 15; ASRD 2011; GoA 2021).

Even though project activities are occurring on Crown Land outside of the Breeding Bird RAP, a wildlife search was conducted to confirm locations of nesting birds and denning wildlife, and allow for the implementation of mitigation measures (e.g., setback buffers, timing guidelines, etc.) to mitigate the risk of incidental take (i.e., inadvertent harming, killing, disturbance or destruction of birds, nests, eggs and denning wildlife). Recommended mitigations are primarily based on Environment and Climate Change Canada's guidance to avoid risk of incidental take of migratory birds (ECCC 2020) and Sensitive Species Inventory Guidelines (GoA 2013).

SEARCH AREA

The search area encompassed proposed work areas as provided by DRFMO/WSP plus a 100-meter buffer. All work activities are contained within the existing ROW. Buffer widths were determined in consideration of the existing types, position, and level of disturbance within the immediate area (i.e., roads/ditches, trail tracks, and adjacent private property). All areas where construction activities will take place were thoroughly inspected for wildlife presence and potential conflicts.

The Project area occurs within the Northern Fescue subregion of the Grasslands Natural Region of Alberta. Key Features of this region include dry southern prairies dominated by drought-tolerant grasses, shrubs, and herbs. Trees are absent except along rivers or in deep coulees where subsurface water is available. (Natural Regions Committee 2006)

Representative photographs of all habitat types are attached.

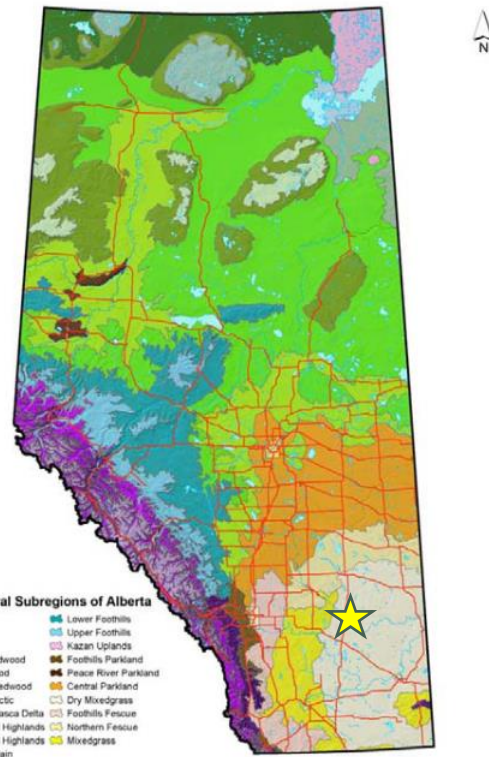


Figure 2 - Natural Subregions of Alberta (GoA 2006)

METHODS

Den searches were conducted using a combination of passive detection techniques (checking for the presence of prints, pray remnants, and scat) and systematically walking the search area to observe denning behavior. A den can be confirmed by physically observing a den structure (often identified by the presence of animal prints, pray remnants, newly excavated material, and/or scat).

RESULTS

Weather conditions were reasonable for conducting den searches, with a median temperature of -22°C (-20°C min and -25°C max), a 20km/h wind created a -28°C windchill. There was some snowfall within the project area within the past 72 hours, but not the past 12 hours in advance of the sweep.

Evidence of wildlife species were incidentally observed within the search area; including vocalization, direct observation, tracks, and other signs (see **Table 1**). Presence of domestic dog and active backyard bird feeders were observed within the search area. No nesting or denning wildlife were observed within the search area.

Vegetation within the work and buffer area consisted of mature cottonwood trees, willows, medium height grasses, and shrubs.

Table 1 - Species observed during bird sweep on January 19, 2024

COMMON NAME	SCIENTIFIC NAME	STATUS		
		AEP	COSEWIC	SARA
American Crow	<i>Corvus brachyrhynchos</i>	Secure	-	-
Black-capped Chickadee	<i>Parus atricapillus</i>	Secure	-	-
Coyote (tracks)	<i>Canis latrans</i>	Secure	-	-
Downy Woodpecker	<i>Picoides pubescens</i>	Secure	-	-
Moose (tracks)	<i>Alces alces</i>	Secure	-	-
Mule Deer (tracks)	<i>Odocoileus hemionus</i>	Secure	-	-
Gray Squirrel	<i>Sciurus carolinensis</i>	Exotic	-	-
White-tailed Deer (tracks)	<i>Odocoileus virginianus</i>	Secure	-	-
White-tailed Jackrabbit	<i>Lepus townsendii</i>	Secure	-	-

RECOMMENDATIONS

The following recommendations are provided based on the results of the nest search:

- Work should begin within ten days of the date of the nest search.
- Work should continue steadily until complete to maintain a continuous disturbance and avoid the possibility of migratory birds (or other wildlife) moving in.
- If construction activity stops for ten or more consecutive days, nest searches must be repeated.
- Minimize the attraction of wildlife by keeping the worksite tidy and free of food waste or other wildlife attractants. Store food in appropriate facilities or vehicles and secure litter, waste, and garbage in appropriate containers.
- If any other nesting (e.g., hawks, owls, migratory birds) or denning (e.g., coyotes, foxes, snakes) wildlife are observed, immediately implement a disturbance buffer of 30 m or greater and contact a Qualified Environmental Professional.

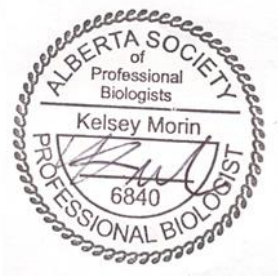
CLOSURE

All work areas are cleared for work to begin as soon as possible. Wildlife search information is valid for ten days from the search date. As such, construction activities should commence as soon as possible.

Should you have any questions or require additional information, please do not hesitate to contact Kelsey Morin at 403-836-5582 or kelsey@ridgeenvironmental.ca.

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REFERENCES

Government of Alberta (GoA). 2015. *Recommended Land Use Guidelines Key Wildlife and Biodiversity Zones*. Environment and Sustainable Resource Development. [online] <https://open.alberta.ca/dataset/5c6e2826-50ab-4d2a-a673-9d703d6b5c52/resource/d8d1b2e9-3a72-471d-9479-56db5ee68210/download/keywildlifebiodiversityzones-apr08-2015.pdf> . Accessed January 2024.

Government of Alberta (GoA). 2013. *Sensitive Species Inventory Guidelines*. Alberta Environment and Sustainable Resource Development. [online] <https://www.alberta.ca/sensitive-species-inventory-guidelines>. Accessed January 2024.

Natural Regions Committee 2006. *Natural Regions and Subregions of Alberta*. Compiled by D.J. Downing and W.W. Pettapiece. Government of Alberta. Pub. No. T/852.

SITE PHOTOGRAPHS



Photo 1 – Approach to clearing area and representative vegetation for clearing (willows).



Photo 2 – Various prints present including hare, and deer.



Photo 3 – Animal trail/corridor for various small mammals west of clearing area.

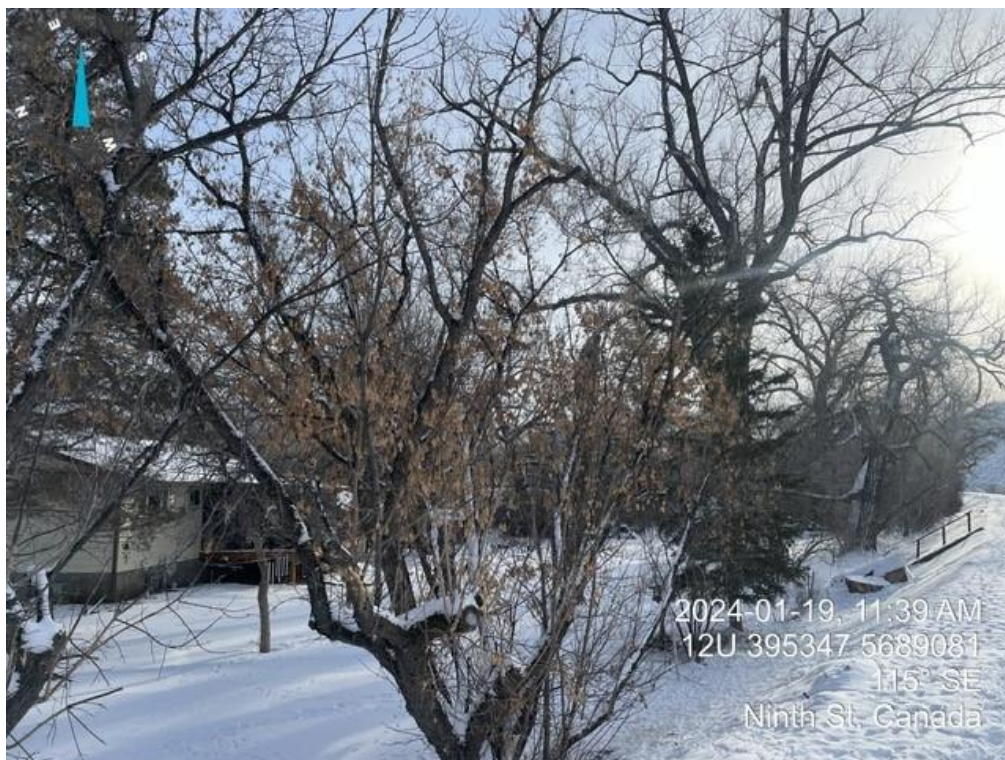


Photo 4 – Vegetation adjacent to the work area (no clearing required here). The shrub contained a grazing Downy Woodpecker (not pictured). A bird feeder was noted behind the shrub.



Photo 5 – Vegetation north of clearing area, consisting of, prickly rose, willows and mature cottonwood trees.



Photo 6 – Site personal flagging clearing areas. Vegetation present to be cleared.