PEACE RIVER REGIONAL DISTRICT

REPORT

To: Chair and Directors Report Number: CS-BRD-231

From: Trish Morgan, General Manager of Community Services Date: May 4, 2023

Subject: Authorization to Conduct Avian Research at Blackfoot Regional Park

RECOMMENDATION #1: *[Corporate Unweighted]*

That the Regional Board authorize Birds Canada to install a temporary research (Motus) station at Blackfoot Regional Park from July to September 2023 to study the movement and behaviour of small flying animals in north-eastern British Columbia.

RECOMMENDATION #2: *[Corporate Unweighted]*

That the Regional Board provide authorization for Environment Canada to use Blackfoot Regional Park as a location to conduct a scientific research project on the Peace River to monitor bank swallows.

BACKGROUND/RATIONALE:

Two associated research projects have been proposed for Blackfoot Regional Park over the summer of 2023. As the land is owned by the Peace River Regional District (PRRD), Birds Canada and Environment Canada staff are requesting authorization from the Board to install a temporary research station and to conduct scientific studies at the park.

If approved, the Motus station would be one of many installed in the region and would assist researchers in studying the movement and ecology of birds and bats locally. Specifically, the station would be used to gather information to support an Environment Canada project studying the migratory connectivity of threatened bank swallows. These projects are related and information about each project is outlined below in more detail.

As part of the project, Birds Canada and Environment Canada are willing to do outreach about Motus and bird migration with park visitors while they're in the area.

Motus Wildlife Tracking System:

The Board is being requested to provide authorization for Birds Canada to install one temporary Motus Wildlife Tracking System at Blackfoot Regional Park. The Motus Wildlife Tracking System is an international collaborative research network dedicated to studying the movement and behavior of small flying animals to inform conservation efforts. Motus uses coordinated automated radio-telemetry arrays with receiver stations distributed across the landscape that detect animals marked with uniquely coded radio-transmitters. The Motus station consists of a small omnidirectional antenna mounted on a pole, connected to a receiver and powered by a solar panel and battery. A general document is attached that outlines more detailed information about hosting a Motus station.

Over the last two years, Birds Canada has installed 15 Motus stations between Dawson Creek, Prince George, and Tsay Keh Dene. In 2023, they are aiming to install another five long-term and three temporary Motus stations (one of which would be at Blackfoot Regional Park). This project intends to build an array of Motus stations across Northeastern BC that will assist local researchers studying the movement and ecology of birds and bats in the region.

This Motus station would support a project studying the threatened bank swallows, as described below. It is proposed that this station would be installed in July and would be removed in September 2023.

Bank Swallow Monitoring:
Environment and Climate Change Canada intend to monitor the location and size of swallow colonies along the river between Canyon Dam and the BC-AB border, and to determine how the swallow diet is influenced by the habitat in the area. Specifically, they are interested in determining whether swallows primarily forage on insects that develop in terrestrial or aquatic ecosystems, and whether their diets contain high levels of mercury. The work will consist of a three-person team capturing swallows at various sites along the river and collecting feathers and blood samples to understand their diet and mercury load. It will also involve tagging bank swallows at breeding sites across Canada and tracking them on their southbound migration using the Motus network.

It is expected that the work will take place for up to three hours a day over a three-day period in mid-July 2023. The work will not impact other park users. All federal and provincial permits necessary to complete this work have been obtained.

ALTERNATIVE OPTIONS:

1. That the Regional Board provide further direction.

STRATEGIC PLAN RELEVANCE:

☒ Not Applicable to Strategic Plan

FINANCIAL CONSIDERATION(S):

None at this time.

COMMUNICATIONS CONSIDERATION(S):

If approved, public notification will be scheduled.

OTHER CONSIDERATION(S):

None at this time.

Attachments:

1. Birds Canada – Ltr Requesting Permission to Install Motus Wildlife Tracking System April 2023
2. Birds Canada – Information on Hosting a Motus Station
3. Environment and Climate Change Canada – Ltr Requesting Permission to access Blackfoot Regional Park for Scientific Research