



Environmental Protection Operations Directorate
Prairie & Northern Region
9250 49 St
Edmonton, AB T6B 1K5

November 29, 2021

ECCC File: 4194-10-3/6333
CIAR File: 83135

Wajeeha Siddiqui
Impact Assessment Agency of Canada
1145-9700 Jasper Avenue
Edmonton, AB T5J 4C3

By email to: Wajeeha.Siddiqui@iaac-aeic.gc.ca

Dear Wajeeha Siddiqui,

RE: Federal Authority Advice Record Request for the Horsefly Regional Emergency Spillway Project under the Impact Assessment Act

ECCC has reviewed the information provided for the above-noted project (the Project) as requested by the Impact Assessment Agency of Canada's (the Agency) November 8, 2021 letter.

Our advice is based on ECCC's mandate in the context of the *Species at Risk Act* (SARA), the *Migratory Birds Convention Act 1994* (MBCA), pollution prevention provisions of the *Fisheries Act*, and the *Canadian Environmental Protection Act 1999* (CEPA).

ECCC will provide support and provide our expertise to the Agency on an as-needed basis, when matters pertaining to our mandate and expertise are requested.

The Project Lead listed below can be considered your “one-window” contact into ECCC for coordination of ECCC’s participation in future on this project.

- Abigayle Blackmore, Environmental Assessment Officer, at (780) 239 3894 or abigayle.blackmore@ec.gc.ca
- The ECCC Prairie and Northern Region EA Generic Inbox at EASouthPNR@ec.gc.ca.

Sincerely,

A handwritten signature in black ink, appearing to read "Margaret", with a stylized flourish at the end.

Margaret Fairbairn
A/ Regional Director
Prairie and Northern Region

Cc: Gillian Brown, A/Head EA South, Environmental Assessment-Prairie and Northern Region
Abigayle Blackmore, Environmental Assessment Officer, Prairie and Northern Region
Heather Konopski, Environmental Assessment Officer, Prairie and Northern Region

Attachment: ECCC’s Federal Authority Advice Record

ATTACHMENT: November 8, 2021

Federal Authority Advice Record

Response due by November 28, 2021

Horsefly Regional Emergency Spillway Project – Municipality of Taber

Agency File: 005811

Department/Agency	Environment and Climate Change Canada (ECCC)
Lead Contact	Abigayle Blackmore
Full Address	Edmonton Eastgate 9250 49 St. Edmonton, AB T6K 1B5
Email	Abigayle.Blackmore@ec.gc.ca
Telephone	780-239-3894
Alternate Contact	Heather Konopski: Heather.Konopski@ec.gc.ca

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1. Is it probable that your department or agency may be required to exercise a power or perform a duty or function related to the Project to enable it to proceed?

If yes, specify the Act of Parliament and that power, duty or function.

Please note the following requirements that may apply to this project:

Species at Risk Act permits

For species listed in Schedule 1 of the *Species at Risk Act* (SARA) as Extirpated, Endangered or Threatened, a permit may be required from ECCC (section 73 of SARA) for activities that affect a listed terrestrial wildlife species, any part of its critical habitat, or the residences of its individuals, where those prohibitions are in place. Such permits may only be issued: if all reasonable alternatives to the activity that would reduce the impact on the species have been considered and the best solution has been adopted; all feasible measures will be taken to minimize the impact of the activity on the species or its critical habitat or the residences of its individuals; and if the activity will not jeopardize the survival or recovery of the species. Permits are also required by those persons conducting activities that contravene the critical habitat destruction prohibitions (subsection 58(1)).

Prohibitions are in place for individuals and residences on federal lands in a province, reserve or any other lands under the *Indian Act*, or lands under the authority of the Minister of the Environment, and for birds listed under the *Migratory Birds Convention Act, 1994* wherever they occur regardless of land tenure.

Furthermore, prohibitions may be in force on land other than federal land pursuant to other orders or regulations under SARA. It is possible that further prohibitions may come into force in the future through orders in Council for individuals, residences and critical habitat on non-federal lands and/or through ministerial order for critical habitat on federal lands. It is also possible that, over the course of the assessment or after the assessment, additional species could be listed under SARA; permits may be required for Project activities that affect these additional species. Proponents are advised to monitor for such developments on the SARA Registry <https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry.html>.

Examples of activities that could require a *Species at Risk Act* permit include:

- Species surveys that would affect individuals or residences;
- Site preparation (clearing, grubbing, site access, staging, blasting);
- Construction and operation of temporary and permanent works and infrastructure;
- Creation of new roads, rail lines, or power lines;
- Infilling of wetlands or watercourses;
- Any monitoring that requires capture/release of individuals; and
- Sensory disturbance effects (artificial lighting, noise, vibration, human activity, vehicular traffic).

ECCC will require detailed information on the potential effects of the Project, including locations and/or occurrences of species at risk, their use of habitat and critical habitat within the Project area, and specific effects on federal land, before ECCC can determine whether a SARA permit is required.

Links to publicly available documents:

- [Guidelines for permitting under Section 73 of *Species at Risk Act*](https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/policies-guidelines/permitting-under-section-73.html)
<https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/policies-guidelines/permitting-under-section-73.html>
- [Species at Risk Permitting Policy](https://species-registry.canada.ca/index-en.html#/consultations/2983)
<https://species-registry.canada.ca/index-en.html#/consultations/2983>

In the event that a SARA permit is required, ECCC would evaluate and determine consultation requirements, if any.

If a permit is issued, the description of the activity and how SARA's preconditions were met will be posted on the SARA Registry here: <https://species-registry.canada.ca/index-en.html#/permits>

If not fully described in the Initial Project Description, the Proponent should provide any anticipated need for species at risk permits during all phases of the Project in the Detailed Project Description if possible. The Proponent is encouraged to collect and submit the information necessary to determine if a SARA permit is required during the impact assessment process, and to submit their application well in advance of the proposed activities to avoid delays.

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2. Is your department or agency in possession of specialist or expert information or knowledge that may be relevant to the conduct of an impact assessment of the Project?

Specify as appropriate.

ECCC has specialist or expert information that may be relevant to the impact assessment in the areas listed below. In each of these subject areas we have expertise related to establishing an adequate baseline, assessing potential effects to biophysical valued components, effectiveness of mitigation measures, methods for monitoring and follow-up, as well as information regarding federal policies, standards, and regulations that may be relevant to the assessment. (Note that ECCC does not assess proposed projects for regulatory compliance, but instead provides technical input to the Agency to inform the assessment). Once the scope of the Project and of the assessment are established by the Agency, this list may change if additional Project activities or components should come into scope.

Air Quality: ambient air quality; sources of emissions; emissions estimation and measurement; atmospheric transport, transformation and dispersion modelling; and follow-up monitoring.

Greenhouse gas emissions and climate change: estimations of greenhouse gas (GHG) emissions (net and upstream); carbon sinks; GHG mitigation measures and determination of Best Available Technologies/Best Environmental practices (BAT/BEP); credible plans to achieve net-zero GHG emissions by 2050; climate change science to inform evaluation of potential changes to the environment and project resilience to effects of climate change; climate change policies; and national GHG projections.

Water quality and quantity: surface water quality insofar as it could affect fish and fish habitat, and migratory birds; water quality predictions and modelling; contaminant sources for surface water; wastewater, seepage and runoff effects; management of contaminated soils or sediments; freshwater dredging; hydrology (streamflow rates data and modelling, flooding and extreme events management, drainage control, water levels, water balances); geochemistry; follow-up and monitoring.

Wildlife, species at risk, and habitat: priority species and places as outlined in the *Pan-Canadian Approach to transforming species at risk conservation in Canada*¹; migratory birds, their nests, eggs, and habitat; COSEWIC² assessed species, species at risk, individuals, their residences, habitat and critical habitat including recovery strategies, action plans and management plans; ecological function of wetlands; ecotoxicology.

Environmental emergencies: emergency management planning and guidance; atmospheric transport and dispersion modelling of contaminants in air; fate and behaviour, hydrologic trajectory modelling of contaminants in water.

Climate and Meteorology: long-term climate patterns and norms, and weather.

3. (a) Has your department or agency considered the Project; exercised a power or performed a duty or function under any Act of Parliament in relation to the Project; or taken any course of action that would allow the Project to proceed in whole or in part?

Specify as appropriate.

ECCC has not considered, exercised a power or performed a duty, or taken any course of action as part of the Project.

(b) Please include a description of consultation activities that would occur with Indigenous groups if your department or agency has to exercise a power or perform a duty or function related to the Project, and how potential impacts to Indigenous groups are addressed by your department or agency.

If a SARA permit is required, ECCC would evaluate and determine if consultation is needed.

(c) Please include a description of opportunities for public participation if your department or agency has to exercise a power, or perform a duty or function related to the Project.

As per section 73 of the *Species at Risk Act*, there is no public participation in the process to issue a SARA permit.

4. Has your department or agency had previous contact or involvement with the proponent or other party in relation to the Project? (for example, enquiry about methodology, guidance, or data; introduction to the project)

Provide an overview of the information or advice exchanged.

Based on information readily available, ECCC Prairie and Northern Region has not had any involvement with the Proponent or other parties that would be relevant to the assessment of this Project.

¹ <https://www.canada.ca/en/services/environment/wildlife-plants-species/species-risk/pan-canadian-approach/species-at-risk-conservation.html>

² Committee on the Status of Endangered Wildlife in Canada

5. Does your department or agency have additional information or knowledge not specified, above?

Specify as appropriate.

Not at this time.

6. From the perspective of the mandate and area(s) of expertise of your department or agency:

- I. Indicate whether the description of potential effects presented in the Initial Project Description sufficiently characterizes potential project effects— including direct and incidental effects, and effects within federal jurisdiction. Provide advice on whether these effects may be adverse and whether your regulatory instruments could be used to address these effects.
- II. Identify any additional potential adverse effects of the Project that are not described in the Initial Project Description and their linkage to effects, effects within federal jurisdiction, and direct and incidental effects
- III. Indicate any issues that should be addressed in the detailed project description that would inform a full understanding of how the Project's potential effects to areas of federal jurisdiction are effectively being mitigated and managed. Please be as specific as possible and include a description of any anticipated residual and/or potential significant adverse effects.
- IV. Indicate the issues that should be addressed in the impact assessment of the Project, should the Agency determine that an impact assessment is required.

For each issue identified, provide a concise, plain-language summary that is appropriate for inclusion in the Summary of Issues.

Under the *Impact Assessment Act* (IAA), ECCC provides below scientific and technical information and knowledge on subjects within the department's mandate. Beyond the requirements of the IAA, ECCC has also identified other certain acts and regulations that may be applicable to the project. There is a possibility that by complying with these other regulatory requirements, the proponent may be able to reduce some of the effects of the project on the environment. ECCC notes that this is not a comprehensive list of all applicable regulatory requirements that may apply to a project. ECCC also notes that the Impact Assessment process is a planning tool, and project compliance with ECCC's acts and regulations does not necessarily mean that a project would not result in negative effects.

Air Quality

Construction

The construction of canals, culverts, spillways, and re-alignment of highways and roads requires the use of on-road vehicles and mobile off-road equipment, which has the potential to adversely affect air quality. More specifically, the combustion of fossil fuels can result in the emission of "criteria air contaminants" such as sulphur oxides (SO_x), nitrogen oxides (NO_x), volatile organic compounds (VOCs), and fine particulate matter (PM_{2.5}) which are dispersed to the surrounding region during construction activities. Construction activities that cause a physical disturbance to land, such as earth moving, and transportation, can also introduce particulate matter (including dust) to the surrounding region. Emission of air pollutants can result in local or regional degradation of ambient air quality, with potential impacts on human health, as well as on sensitive ecosystem receptors.

When contaminants settle out of the air in the surrounding environment, their deposition may result in adverse impacts to terrestrial and aquatic ecosystems. Emissions of NO_x and SO₂ may also lead to acidification and potential exceedance of ecosystems' critical loads. Air contaminant emissions can result in contamination of nearby land and waterbodies, and may affect plants, wildlife, and fish and fish habitat.

The aforementioned potential effects to air quality are presented in the Initial Project Description in Table 19.1 and summarized in Section 19.1.5 and should be addressed in the Detailed Project Description.

Greenhouse Gas Emissions and Climate Change

The construction, operation, and decommissioning of the proposed Project may result in greenhouse gas (GHG) emissions or impact to carbon sinks, and may hinder or contribute to the Government of Canada's ability to meet its commitments in respect of climate change. Furthermore, the Project has the potential to be affected by future climate change, possibly resulting in impacts to the environment. Climate change may alter the likelihood or magnitude of sudden weather events such as extreme precipitation that can contribute to flooding, as well as contribute to longer-term changes such as sea level rise, permafrost thaw and changes to migration patterns. Changes related to warming are already evident in many parts of Canada, and are projected to continue in the future with further warming. If not properly considered, such changes may cause issues such as equipment failures that can threaten the environment and human health and safety, interrupt essential services, disrupt economic activity, and incur high costs for recovery and replacement.

The Strategic Assessment of Climate Change³ (SACC) (published in October 2020) provides guidance related to climate change throughout the impact assessment process. The SACC outlines information that the Proponent should provide during the impact assessment process on GHG emissions, impact of the project on carbon sinks, impact of the project on federal emissions reduction efforts and on global GHG emissions, GHG mitigation measures; climate change resilience; the circumstances in which an upstream GHG assessment will be required; and the circumstances in which a credible plan to achieve net-zero GHG emissions by 2050 will be required.

More details are provided in the draft *Technical Guide Related to the Strategic Assessment of Climate Change: Guidance on quantification of new GHG emissions and impacts on carbon sinks, mitigation measures, net-zero plan and upstream GHG assessment*, August 2021⁴.

Climate Change Resilience

Given projected changes in future climate for the Project area, climate change considerations are relevant to the Project review. There is potential for climate change to affect the Project, which, in turn, may have impacts on the surrounding environment (e.g. through accidents or malfunctions). Climate changes in the Project area, such as possible changes in mean and extreme precipitation and temperature and related environmental conditions, may alter baseline conditions, with implications for climate sensitive aspects of Project design and associated effects on the environment.

ECCC anticipates that the Proponent may be required to provide information in their Detailed Project Description on how the Project is resilient to, and at risk from both the current and future impacts of a changing climate. For example, Project components and activities for which climate change resilience could be important for this Project include future flood mitigation. The Proponent has provided some discussion on increased frequency and intensity of precipitation, changes in hydrology such as timing of flow and volume, and increased temperature in the winter and spring. If the Proponent is required to conduct an Impact Statement, further information would be required through the Tailored Impact Statement Guidelines (TISG) on how the Project is resilient to and at risk from both the current and future impacts of a changing climate.

Water Quality and Quantity

Linear projects

The activities linked to the construction, operation, and decommissioning of linear projects can have adverse effects on the quality of groundwater and surface water, as well as on the hydrological regimes of watercourses and water bodies. However, the Project is largely within the footprint of existing linear disturbances.

Construction, excavation, and upgrades to canals, bridges, culverts, and water control structures may cause erosion and result in deposition of soils and sediments to waterbodies. Soils and sediments can also enter waterbodies through streambed disturbance. These suspended solids can have adverse

³ Strategic Assessment of Climate Change Published, October 2020
[da0c733a7425a807aa9f08cfc6f62919_2021_Strategic_Assessment_of_Climate_Change_Report_EN.pdf \(ehq-production-canada.s3.ca-central-1.amazonaws.com\)](#)

⁴ [Draft Technical Guide Related to the SACC: Guidance on quantification of net GHG emissions, impact on carbon sinks, mitigation measures, net-zero plan and upstream GHG assessment](#)

effects on water quality. The coulee habitat and wetland habitats within the reservoirs are the most sensitive ecosystem components and assessment of effects should concentrate on these areas.

The Proponent states that the Project will operate (i.e. discharge to the Oldman River) in flood events above the 100 year return period (section 9.2.2 Initial Project Description (IPD)) which indicates very rare use (1% chance for each year). The Proponent also states that the Project will be used to mitigate floods like those that occurred in 2010, 2011, 2013, 2014, and 2018 (section 7 IPD). A discussion of the actual frequency of use would be pertinent for characterizing the benefit of the Project and for assessing effects that may be repeated for each operation such as disturbance of habitat in the coulee to the Oldman River or in the reservoir wetlands.

Activities that could result in deposit of contaminants to surface waters include watercourse crossings, construction and maintenance of access roads, rail bridges and culverts, road realignment, and excavation or movement of soils, sediments or rocks. Disturbance of soils, rock, streambanks, and streambeds during construction or operation may cause erosion and/or sedimentation leading to mobilization and deposition of sediments in surface waters and elevated levels of total suspended solids. These suspended solids can have adverse effects on water quality. In addition, impacts to surface water quality could result through runoff and unexpected events, such as a spill. Surface water quality may also be degraded by increased runoff/mobilization of agricultural chemicals (e.g. pesticides, herbicides, fertilizers) and other contaminants due to agricultural practices. Discharges of canal waters potentially containing elevated levels of contaminants to natural surface waters may cause impacts to the receiving water body. Erosion of known hazards, such as the landfill site on the north bank of the coulee leading to the Oldman River, could also affect water quality. Water impoundments, such as construction of a wetland involving submerging of vegetation, may result in mobilization of mercury. Water quality may also be degraded by hydrological changes. If downstream dilution capacity is reduced, contaminant concentrations in surface water from existing downstream inputs (such as any municipal and industrial sources) could increase. The deposition of airborne particulate matter generated by the Project could also be a source of surface water contamination.

Adverse effects to water quality could, in turn, result in adverse effects to sensitive ecosystem receptors, such as fish and fish habitat, migratory birds, plants and wildlife. These adverse effects could be reduced through mitigation measures and confirmatory monitoring.

The following potential effect pathways were not described in the Initial Project Description but should be included in the Detailed Project Description:

- The Project proposes to create a spillway from the irrigation canal system to the Oldman River. If water quality is poorer in the irrigation canals than the water quality in the Oldman River, there is the potential for temporary, localized changes in surface water quality in the Oldman River during operation of the spillway.
- The Project proposes construction of and expansion of wetlands. Water impoundments have the potential for mobilization of mercury and methylmercury production.

In addition, minimal information is provided on the potential for erosion and sedimentation effects, or mitigation and monitoring to prevent erosion/sedimentation effects. These issues should be addressed in the Detailed Project Description.

Wildlife, species at risk, and habitat

Linear disturbance

The activities linked to the construction, expansion, operation, and decommissioning of a linear project and associated infrastructure could have negative effects on terrestrial wildlife, including migratory birds and species at risk (amphibians, arthropods, birds, lichens, terrestrial mammals, mosses, reptiles, and vascular plants) listed on the *Species at Risk Act* (SARA), their habitat (e.g., wetlands) and critical habitat.

The nature of effects to wildlife and habitat (including residences and critical habitat defined under the SARA) can vary based on a number of factors, including: project location, duration, scale, and configuration; ancillary project activities (e.g., land clearing, dredging, and flaring); existing cumulative effects; the type of habitat that may be disturbed; and sensitivity of species found in the Project area. The pathway through which potential effects are conveyed will depend on the land, air, and water constituents associated with the site along with the behavioral adaptability, presence and interaction with the species limiting factor (e.g., habitat supporting staging, nesting, roosting or foraging) and population resilience.

Migratory birds and species at risk and their habitat

Individual mortality and the destruction of nests and eggs or any other structure necessary for the reproduction and survival of species at risk could occur during all project phases, particularly during site preparation, right-of-way maintenance and project dismantling. Mortality in migratory birds and species at risk could also occur because of collisions with vehicles or infrastructure related to the Project. Accidental oil or chemical spills could also have adverse effects if these substances make their way into the habitats frequented by migratory birds and species at risk. There is a higher risk that these effects would be more severe for migratory birds that are also species at risk and species where habitat is sensitive to disturbance (e.g., wetlands) or where there is already a high degree of cumulative effects to habitat or individuals.

Linear projects can cause the loss, fragmentation and alteration of habitat, and can negatively impact the reproduction, migration and wintering of affected species. There is the potential for removal of habitat important for nesting, foraging, staging, and overwintering migratory birds. Linear disturbances may also have other negative effects on wildlife, particularly by facilitating the movement of predators in the area, thereby increasing predator abundance, distribution and hunting efficiency or creating connectivity issue within the habitat.

Migratory birds and species at risk could be affected by sensory disturbances during the construction, operation, and decommissioning of the Project. Some examples of potential sources of sensory disturbance include noise from various project activities, lights, vibrations from excavation and blasting work and the operation of machinery, as well as the presence of workers. The amount, duration, frequency, and timing of noise are important to understand potential effects. Sensory disturbance may make adjacent habitats unsuitable for use by wildlife and cause avoidance effects in many species.

ECCC has identified species at risk which have ranges that overlap the Project area. Table 1 listing some of the potentially affected species is attached to this submission. These species include Ferruginous Hawk (Threatened), which also has extensive Critical Habitat in the Project area, including within the Project footprint and laydown areas. This species has also been observed in the Project area at Horsefly Lake Reservoir and Taber Lake as recently as 2021. Ferruginous hawks nest on elevated structures as well as the ground, and therefore have multiple potential types of residences that must be considered during Project scheduling and construction. Conservation of native prairie grassland (potentially present along shores of Lake Taber, Horsefly Lake Reservoir, some sections of the canals, and at the coulee draining into the Oldman River) is important for the recovery of this species.

Horned Grebe (Special Concern), Short-eared Owl (Special Concern), Chestnut-collared Longspur (Threatened), Common Nighthawk (Threatened), Bank Swallow (Threatened), Barn Swallow (Threatened), Bullsnake (Special concern), and Prairie Rattlesnake (Special concern) have ranges that overlap the Project area, and have also been observed in the area.

ECCC notes that due to the nature of the Project (increased conveyance of surface water), impacts may occur outside of the Project footprint, in the connecting waterbodies of Taber Lake and Horsefly Lake Reservoir. Taber Lake in particular contains habitat for colonial nesting birds as well as Critical Habitat for Ferruginous Hawk. Water level fluctuations and shoreline disturbance during construction and operation of the expanded channels and conveyance structures may affect these habitats.

The Initial Project Description does not sufficiently describe and characterize potential effects; these effects are expected to be fully described and characterized in the Detailed Project Description, and in applicable subsequent documentation of the Project. These effects may include wildlife mortality as a result of construction activities and habitat alteration or loss for wildlife due to expansion and operation of the canals. A pre-construction survey plan should describe surveys methods and identify species and habitat types to be surveyed.

ECCC has also identified potential interactions of the Project with species at risk whose ranges overlap with the Project area (see attachment), some of which are migratory birds. The Proponent should identify in the Detailed Project Description these potential interactions, their potential adverse effects, and propose avoidance or mitigation measures to eliminate or reduce these effects.

There are regulatory instruments and legislation in place to avoid harm to migratory birds and individuals and residences of species at risk that are also migratory birds. Since the Project is not located on Federal Lands, there are no federal regulatory instruments for other species at risk that can be used to mitigate the effects on species at risk and critical habitat. In the absence of applicable regulatory tools, the *Species at Risk Act* requires that effects on species at risk and their critical habitat must be identified, avoided, mitigated and monitored by the Impact Assessment Agency should an IA be required (i.e., SARA s. 79).

Wetlands

The activities linked to the construction, operation, and decommissioning of a linear disturbance could have negative effects on wetlands and their ecological functions. Carrying out the Project, particularly the activities related to construction, is likely to alter existing hydrological regimes essential for maintaining wetlands, if present, and thus affect the quality or availability of habitat for migratory birds and other wildlife. The destruction and modification of wetlands is likely to cause negative effects on or harm migratory birds and species at risk that use these areas for breeding and migration, as well as for foraging or resting areas. A linear disturbance is also more likely to create introduction and dispersal pathways for invasive species. The spread of invasive species may pose a threat to wetlands.

Environmental Emergencies

Construction

The proposed construction Project includes the widening of canals, culvert upgrades, placement of drop structures and spillways and discharging to Oldman River. As such, there is potential for adverse environmental effects from accidents and malfunctions, such as spills of hazardous materials including fuel, oil and machine fluid and fires. Adverse effects to air quality, water quality, wildlife and wildlife habitat could result from the accidental release of high concentrations of hydrocarbons and other contaminants to surrounding waters. Optimized spill prevention, preparedness and response measures and systems will be important given the risk of spills of hazardous substances to the environment, especially to nearby waterways and environmentally sensitive areas.

Margaret Fairbairn

Name of Departmental / Agency Responder

A/Regional Director, Environmental
Protection Operations

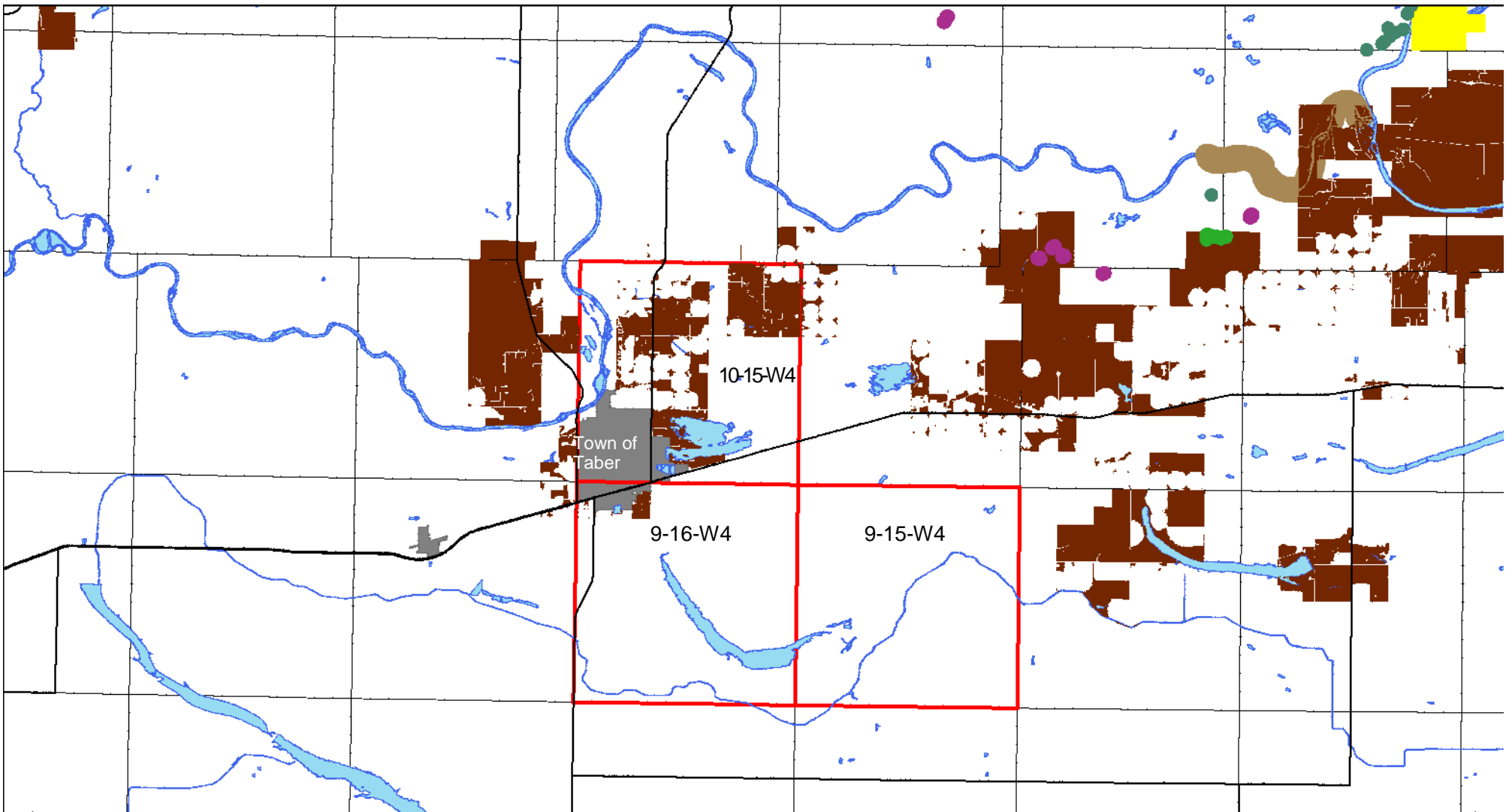
Title of Responder

November 29, 2021

Date

Table 1: Species at Risk with potential to interact with the Project based on the location of identified critical habitat, recorded species occurrences, and/or spatial overlap with described species ranges

Species Common Name	SARA Schedule 1 Designation	Notes
Species with critical habitat (CH) and/or reported occurrence in or near the Project area		
Ferruginous Hawk (CH, occurrence)	Threatened	Not protected by the <i>MBCA</i>
Bank Swallow (occurrence)	Threatened	<i>Migratory Birds Convention Act</i>
Barn Swallow (occurrence)	Threatened	<i>Migratory Birds Convention Act</i>
Horned Grebe (occurrence)	Special concern	<i>Migratory Birds Convention Act</i>
Common Nighthawk (occurrence)	Threatened	<i>Migratory Birds Convention Act</i>
Short-eared Owl (occurrence)	Special concern	Not protected by the <i>MBCA</i>
Canada Warbler (occurrence)	Threatened	<i>Migratory Birds Convention Act</i>
Chestnut-collared Longspur (occurrence)	Threatened	<i>Migratory Birds Convention Act</i>
Bullsnake (occurrence)	Special concern	Not protected by the <i>MBCA</i>
Prairie Rattlesnake (occurrence)	Special concern	Not protected by the <i>MBCA</i>
Birds listed on Schedule 1 of the Species at Risk Act which have ranges that intersect the Project area		
Burrowing owl	Endangered	Not protected by the <i>MBCA</i>
Gypsy Cuckoo Bumblebee	Endangered	Not protected by the <i>MBCA</i>
Little Brown Myotis	Endangered	Not protected by the <i>MBCA</i>
Greater Short-horned Lizard	Endangered	Not protected by the <i>MBCA</i>
Ferruginous Hawk	Threatened	Not protected by the <i>MBCA</i>
Loggerhead Shrike, <i>excubitorides</i> subspecies	Threatened	<i>Migratory Birds Convention Act</i>
Common Nighthawk	Threatened	<i>Migratory Birds Convention Act</i>
Bobolink	Threatened	<i>Migratory Birds Convention Act</i>
Sprague's Pipit	Threatened	<i>Migratory Birds Convention Act</i>
Olive-sided Flycatcher	Threatened	<i>Migratory Birds Convention Act</i>
Thick-billed Longspur/McCown's Longspur	Threatened	<i>Migratory Birds Convention Act</i>
Lark Bunting	Threatened	<i>Migratory Birds Convention Act</i>
Chestnut-collared Longspur	Threatened	<i>Migratory Birds Convention Act</i>
Big Sand Tiger Beetle	Threatened	Not protected by the <i>MBCA</i>
Yellow Rail	Special concern	<i>Migratory Birds Convention Act</i>
Baird's Sparrow	Special concern	<i>Migratory Birds Convention Act</i>
Long-billed Curlew	Special concern	<i>Migratory Birds Convention Act</i>
Western Grebe	Special concern	<i>Migratory Birds Convention Act</i>
Horned Grebe	Special concern	<i>Migratory Birds Convention Act</i>
Short-eared Owl	Special concern	Not protected by the <i>MBCA</i>
Peregrine Falcon	Special concern	Not protected by the <i>MBCA</i>
Western Tiger Salamander	Special concern	Not protected by the <i>MBCA</i>
Great Plains Toad	Special concern	Not protected by the <i>MBCA</i>
Bullsnake	Special concern	Not protected by the <i>MBCA</i>
Northern Leopard Frog	Special concern	Not protected by the <i>MBCA</i>
Prairie Rattlesnake	Special concern	Not protected by the <i>MBCA</i>
Transverse Lady Beetle	Special concern	Not protected by the <i>MBCA</i>
American Badger <i>taxus</i> subspecies	Special concern	Not protected by the <i>MBCA</i>
Wolverine	Special concern	Not protected by the <i>MBCA</i>
Nine-spotted Lady Beetle	Under consideration (COSEWIC Endangered)	Not protected by the <i>MBCA</i>
Western Bumblebee, <i>occidentalis</i> subspecies	Under Consideration	Not protected by the <i>MBCA</i>



All SAR Critical Habitat 2021 Oct 04

Common Name (English)

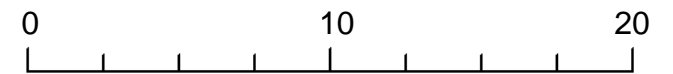
- Bank Swallow
- Ferruginous Hawk** Present in Project Area
- McCown's Longspur
- Small-flowered Sand-verbena
- Smooth Goosefoot
- Tiny Cryptantha

Horsefly Spillway Project Area

Highway

Town or Village

Waterbody



Kilometres

Projection: NAD 1983 UTM 12N

Scale 1: 250,000