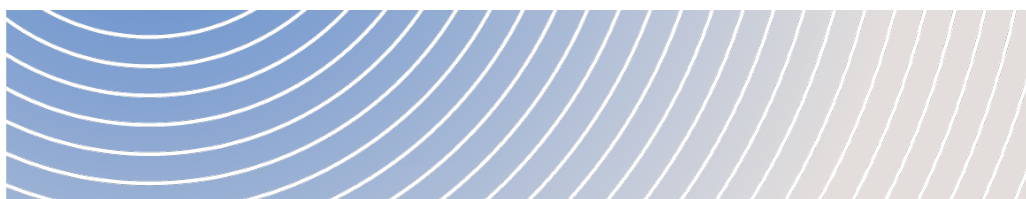




Impact Assessment
Agency of Canada

Agence d'évaluation
d'impact du Canada

Analysis of Alberta Transportation and Economic Corridors' Proposed Changes to the Springbank Off- Stream Reservoir Project



FINAL REPORT

JUNE 2025

Canada^{ca}



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1. Introduction

Alberta Transportation and Economic Corridors (the Proponent)¹ is proposing to construct infrastructure to mitigate flooding on lands in and adjacent to the Elbow River, approximately 15 kilometres west of Calgary, Alberta. The Springbank Off-Stream Reservoir Project (the Project), as proposed, would be located in a floodplain drainage area of the Elbow River and its tributaries, and would divert flood water during extreme flood events from the Elbow River to a temporary reservoir constructed in a natural topographic low, including agricultural land and wetlands. The flood waters would be stored in the temporary reservoir before being diverted back into the Elbow River. The purpose of the Project is to prevent and reduce flood damage on infrastructure, water courses, and people in the City of Calgary and downstream communities.

The Project was subject to an assessment under the *Canadian Environmental Assessment Act, 2012* (CEAA 2012). On July 8, 2021, the former Minister of Environment and Climate Change determined that the Project was not likely to cause significant adverse environmental effects and could proceed subject to conditions prescribed in the [Decision Statement](#). The Decision Statement contains 115 legally binding conditions, which include mitigation measures and follow-up program requirements that the Proponent must comply with throughout the life of the Project. The Proponent began construction of the Project in April 2022.

Section 68 of the *Impact Assessment Act* (IAA) provides the Minister of Environment and Climate Change with the legislative authority to amend a decision statement to add new conditions, and to remove or modify existing conditions. The Minister of Environment and Climate Change must be of the opinion that adding, removing or modifying a condition does not increase the extent to which the effects of the Project, as assessed during the environmental assessment, are adverse. The decision included in a decision statement cannot be changed.

Condition 2.17 of the Decision Statement requires the proponent to notify the Impact Assessment Agency of Canada (IAAC) in advance of carrying out any proposed change to the Project. On May 2, 2023, the Proponent informed IAAC of proposed changes to the Project in the document titled [Notification from TEC to IAAC of changes to the Springbank Off-Stream Reservoir Project \(May 2, 2023\)](#), consisting of changes to fencing. The Proponent also provided additional information on July 11, 2023, September 29, 2023, October

¹ The Impact Assessment Agency of Canada was notified after the writing of this report of a change to the Proponent's contact information. The Ministry representing the Government of Alberta for the Springbank Off-Stream Reservoir Project changed from *Transportation and Economic Corridors* to *Agriculture and Irrigation*.



16, 2024 and February 11, 2025 in the documents titled [*Additional information 1 from TEC to IAAC for changes to the Springbank Off-Stream Reservoir Project \(July 11, 2023\)*](#), [*Additional information 2 from TEC to IAAC for changes to the Springbank Off-Stream Reservoir Project \(September 29, 2023\)*](#), [*Additional information 3 from TEC to IAAC for changes to the Springbank Off-Stream Reservoir Project \(October 16, 2024\)*](#) and [*TEC response to IAAC on comments received during the public comment period related to changes to the Springbank Off-Stream Reservoir Project \(February 11, 2025\)*](#).

IAAC conducted an analysis of the proposed changes and their potential adverse environmental effects within federal jurisdiction, including impacts on the rights of Indigenous Peoples, to assess:

- whether the changes constitute a new or different designated project under the *Physical Activities Regulations* (the Regulations) and therefore require an impact assessment under the IAA; and
- whether any changes (including addition or removal) may be required to the key mitigation measures and follow-up requirements included as conditions in the Decision Statement.

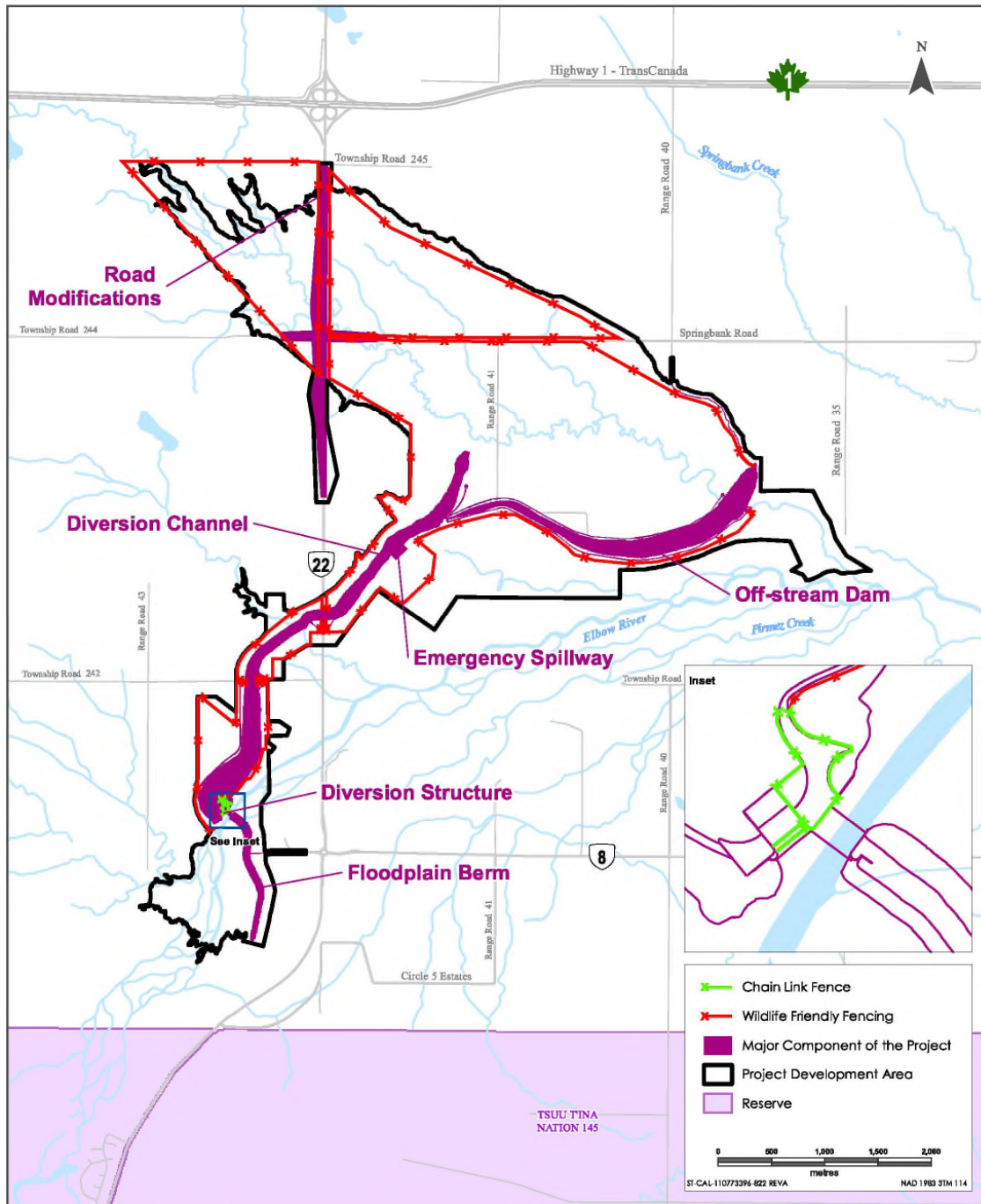
IAAC's analysis is summarized in this report.

2. Proposed Changes to the Project

The project development area includes privately owned land which was to be purchased by the Proponent in order to carry out the Project. During the environmental assessment, the Proponent identified that the existing fencing within the project development area was either 4- or 5-strand barbed wire fencing. The landowners along Highway 22 had 5-strand barbed wire fencing, and the landowners along Springbank Road had 4-strand barbed wire fencing, both to prevent livestock from accessing these roads as the landowners would be liable for incidents and damages from vehicular accidents with livestock. The Proponent stated, during the environmental assessment, that it planned to remove all fencing that overlapped with the project development area at the onset of construction and install wildlife-friendly fencing around the perimeter of the project development area, as identified in Figure 1 below. Wildlife-friendly fencing is designed with a smooth, non-barbed, low top wire that allows ungulates or other wildlife to jump over the fence and a smooth bottom wire that is high enough for ungulates or other wildlife to crawl underneath the fence, therefore reducing potential effects to wildlife.



Figure 1 – Fencing proposed during the environmental assessment



Source: [Alberta Transportation to the IAAC: Responses to Information Request Round 1 Part 2, Figure IR 15-1 \(May 2019\)](#)



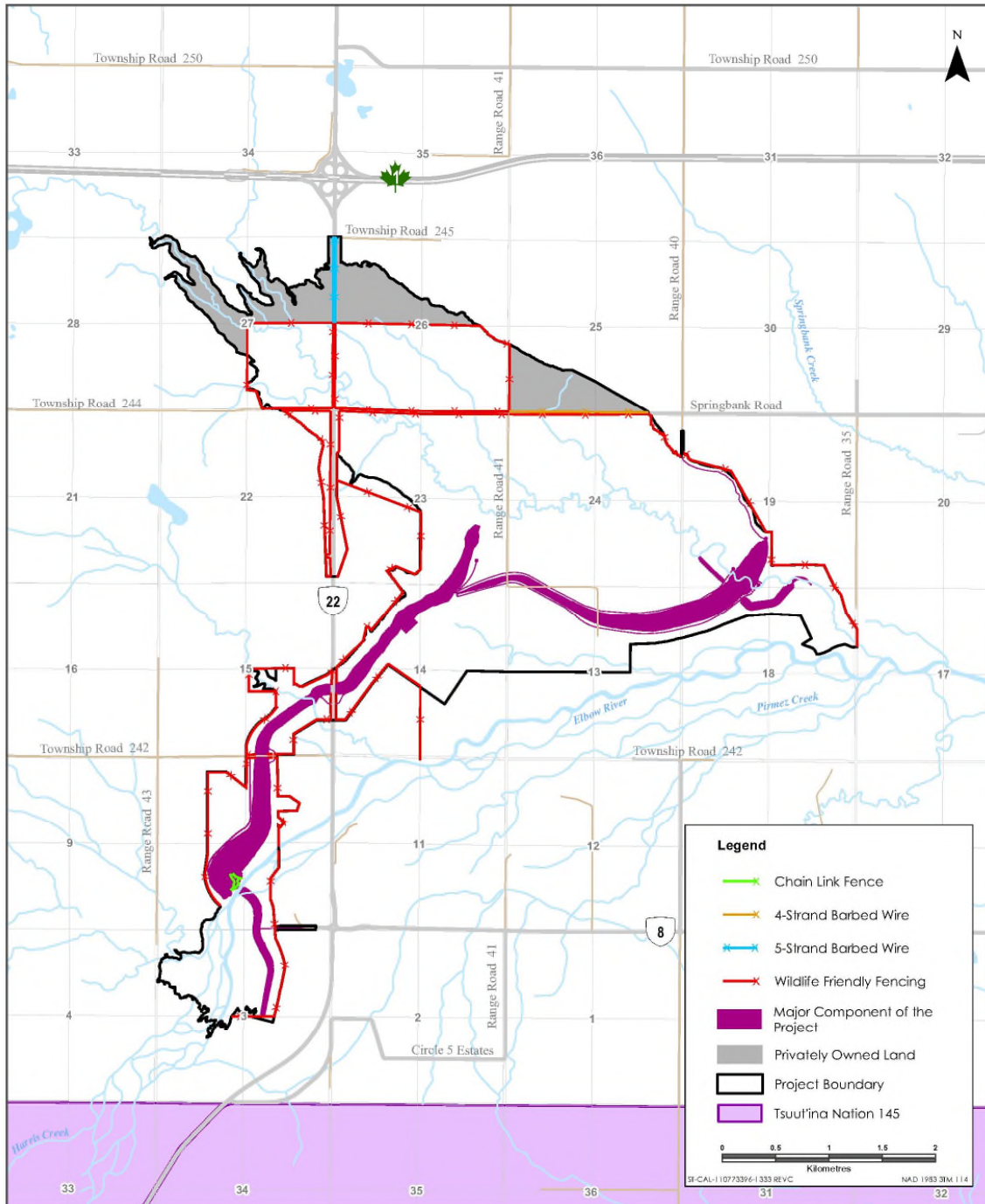
During the environmental assessment for the Project, Indigenous groups raised concerns to IAAC regarding adverse environmental effects from the Project on wildlife movement, and specifically identified grizzly bear western population and ungulates, among others, as traditional resources or species of interest for their subsistence use in spiritual, cultural, health and for socio-economic purposes. To address these concerns, wildlife-friendly fencing was identified in IAAC's Environmental Assessment Report as a key mitigation measure. As a result, condition 8.5 in the Decision Statement currently requires the Proponent to install the proposed fencing according to the map referenced above to avoid adverse effects to grizzly bear western population (*Ursus arctos*) and ungulates.

Following the environmental assessment, the Proponent entered into utility right-of-way agreements with three landowners located north of Springbank Road instead of land purchase agreements as initially planned for reasons outside of the Proponent's control, such as landowners not wanting to sell their full parcels of land. The utility right-of-way agreements provide the ability for the Government of Alberta to access the parcel of land for construction (the construction footprint area that overlaps with the parcel of land), dry and flood operations, and post-flood phases of the Project, while allowing these landowners to maintain full ownership of their parcel of land. The general public and Indigenous groups will not have direct access to these parcels as they remain privately owned livestock operations unless permission is sought to access the lands from the landowners themselves.

As a result, the Proponent proposes to reinstall 4- and 5-strand barbed wire fencing along two segments along Highway 22 and Springbank Road where the adjacent land remains privately owned, as identified in Figure 2 below, to minimize the potential for livestock access to these roads.



Figure 2 – Proposed revised fencing



Sources: Base Data - Government of Canada, Thematic Data - Government of Alberta
Service Layer Credits:

Disclaimer: This map is for illustrative purposes to support this Strategic project; questions can be directed to the issuing agency.

Source: [Additional information 3 from TEC to IAAC for changes to the Springbank Off-Stream Reservoir Project \(October 16, 2024\)](#)



2.1 Applicability of the Regulations

The Regulations identify the physical activities that constitute designated projects that may require an impact assessment. On its own, the proposed changes to the Project are not a physical activity as described in the Regulations. Consequently, IAAC is of the view that the changes do not constitute a new or different designated project that may require a new impact assessment. Additionally, IAAC is of the view that the changes in fencing are a necessarily incidental component of the Project, given that the fencing will be installed and maintained by the Proponent during all phases of the Project.

3. Consultation and Engagement

3.1 Proponent's Engagement

The Proponent indicated that they have been engaged in communication with Indigenous groups on the proposed changes to the Project and made them aware that parcels of land originally planned to be acquired by the Proponent were going to remain privately owned as a result of utility right-of-way agreements between landowners and the Proponent. The Proponent indicated in its submissions to IAAC that it is still engaged and working with Indigenous groups through the First Nations Land Use Plan Advisory Committee, as required by condition 8.11, to support the development and implementation of the Land Use Plan, which includes ensuring, among many things, that lands accessible to Indigenous groups and the public are identified. The Proponent reiterated that the changes in fencing relate to lands that remain privately owned and as such the Proponent has no jurisdiction to allow access by Indigenous groups to these lands. The Proponent concluded that the proposed changes to fencing will not change the residual effects from the Project or the conclusions in IAAC's Environmental Assessment Report as they relate to the current use of lands and resources for traditional purposes.

3.2 IAAC's Consultation

IAAC reached out to Indigenous groups and Environment and Climate Change Canada (ECCC) in relation to the proposed changes to the Project as presented below. IAAC also held a public comment period from November 14 to December 13, 2024, on the draft Analysis Report to request views on the Proponent's proposed changes to the Project from Indigenous groups, government authorities and the public, and to provide an opportunity for further comment before providing advice to the Minister of Environment and Climate Change on potential amendments to the Decision Statement. The results of the public comment period have been considered in IAAC's analysis and in determining if changes (including the addition or removal) to key mitigation measures and/or follow-up requirements included as conditions may be recommended to address the concerns and issues expressed.

3.2.1 Indigenous Consultation

On July 24, 2023, IAAC sent notification letters to the following Indigenous groups, as listed in the Decision Statement, on the proposed changes to the Project, and invited comments on the potential adverse environmental effects and impacts on rights from the proposed changes:

- Blood Tribe (Kainai Nation);
- Ermineskin Cree Nation;
- Foothills Ojibway First Nation;
- Ktunaxa Nation Council;
- Louis Bull Tribe;
- Otipemisiwak Métis Government (formerly Métis Nation of Alberta – Region 3);
- Métis Nation of British Columbia – Region 4;
- Montana First Nation;
- Piikani Nation;
- Samson Cree Nation;
- Siksika Nation;
- Stoney Nakoda Nations;
- Tsuut'ina Nation; and
- Shuswap Band.

On November 14, 2024, IAAC also sent letters requesting comments from the above Indigenous groups on the draft analysis of the proposed changes to the Project, including proposed amendments to the Decision Statement. Comments were received during the public comment period from Tsuut'ina Nation, Siksika Nation and Stoney Nakoda Nations related to the proposed change to the Project and are summarized below in Section 4. Blood Tribe (Kanai Nation) and Ermineskin Cree Nation submitted comments indicating that feedback regarding the proposed changes to the Project have been shared directly with the Proponent for their consideration.

3.2.2 Consultation with Federal Authorities

IAAC also sought the expertise of ECCC on the proposed changes to the Project to inform the analysis of potential effects on wildlife. A summary of their views expressed is provided below in Section 4.1.2.

4. Potential Adverse Environmental Effects

The following is an analysis of whether any of the changes to fencing would increase the extent to which the effects of the Project, as assessed during the environmental assessment, are adverse. The analysis informed whether amendments may be recommended to the mitigation measures and follow-up requirements included as conditions in the Decision Statement.

4.1 Wildlife Species of Cultural Importance

4.1.1 Proponent's Assessment

During the environmental assessment, the Proponent predicted that residual effects from the Project on wildlife movement during construction and dry operations would be moderate in magnitude. As a result, the Proponent was required to implement measures to reduce these effects, including removing existing barbed wire fencing and installing wildlife-friendly fencing along the perimeter of the Project, allowing wildlife passage, as indicated in condition 8.5 of the Decision Statement.



In their May 2, 2023, submission, the Proponent outlined that the reinstallation of 4- and 5-strand barbed wire fencing along two segments of privately owned land near Highway 22 and Springbank Road may have adverse effects on wildlife movement and potentially result in injury, reduce access to forage and cover, and increase predation risk for younger animals. Conversely, 4- and 5-strand barbed wire fencing may deter ungulates from attempting to cross Highway 22 and Springbank Road, resulting in fewer animal-vehicle collisions. The Proponent indicated that while the additional fencing proposed for installation around the perimeter of the utility right-of-way may require ungulates to jump over or crawl under fencing more frequently, it is not expected to create incremental barriers to wildlife movement. Additionally, the Proponent proposes not to install fencing along the northern perimeter of the privately owned lands as initially planned, reducing potential barriers to wildlife movement. Finally, when installing the wildlife-friendly fencing, the Proponent proposes to adjust the location of the fencing to avoid removing trees and shrubs.

The Proponent concluded that while they have proposed to reinstall 4- and 5-strand barbed wire fencing along two segments of privately owned land, the remaining wildlife-friendly fencing in the project development area will support wildlife movement. Overall, wildlife movement, including for bird species, will be improved in comparison to conditions prior to the Project, as many 4- and 5-strand barbed fences are being removed as part of the Project. As such, the Proponent is of the view that the reinstallation of 4- and 5-strand barbed wire fencing along two segments of privately owned land near Highway 22 and Springbank Road would not result in changes to the characterization of residual adverse effects or the conclusions related to changes in wildlife movement as described during the environmental assessment for the Project. The Proponent maintained that no additional mitigation measures and follow-up requirements are needed to address the proposed changes to the Project. The Proponent added that the effectiveness of the wildlife-friendly fencing in supporting wildlife movement throughout the project development area and the local assessment area will be evaluated during the implementation of the Wildlife Mitigation and Monitoring Plan by monitoring wildlife use of fencing and crossing success.

4.1.2 Views Expressed

ECCC is of the view that the proposed barbed wire fencing will hinder wildlife movement and has the potential to impale or snag animals that try to cross, including juvenile wildlife, and migratory birds that are flying low. Therefore, ECCC recommends only installing wildlife-friendly fencing throughout the project development area, and if this is not feasible, implementing additional mitigation measures in areas proposed for barbed wire fencing that include the following:

- installing an adjustable wire fencing with staple lock or fence clips, and clipping wires together when cattle are not on site;
- leaving gates open when cattle are not present; and
- any other method that allows wildlife to cross safely according to the Alberta Landholder's Guide to Wildlife Friendly Fencing.

Siksika Nation expressed support for these mitigation measures and requested that they become required in order to address impacts on juvenile wildlife, grizzly bears and migratory birds. Given that the fencing on privately owned land is the responsibility of the landowner, the Proponent confirmed that they shared ECCCs recommended mitigation measures with the landowners for consideration and implementation.

Stoney Nakoda Nations shared concerns relating to the Proponent's assessment of effects from the Project changes on wildlife movement and suggested that further understanding of potential impacts is needed, including whether the 4- and 5-strand barbed wire fencing along Highway 22 could potentially push wildlife further north or west and prevent south-to-north movement due to the reservoir, and result in wildlife avoiding the project development area altogether. They also suggested that a single new underpass is inadequate to mitigate effects on wildlife movement from the 5-strand barbed wire fencing that is proposed in the northern section of Highway 22. Stoney Nakoda Nations and Siksika Nation requested that monitoring of the impact of the proposed fencing, including cumulative effects on wildlife, be undertaken to verify impacts to wildlife and their movement and implementation of additional measures if the results indicate that the fencing is a barrier to wildlife movement. The Proponent responded that they are committed to monitoring wildlife crossing success at wildlife-friendly fence locations and implementing adaptive management should crossing success fall below established thresholds. Any fencing on privately owned lands is the responsibility of the landowner. The Proponent also indicated that wildlife habitat usage and movement within the local assessment area is being monitored during construction and will continue for 3 years post-construction during dry operation.

Tsuuti'ina Nation commented that they support the proposed changes to segments of the fencing.

4.1.3 IAAC's Analysis

IAAC is of the view that the reinstallation of 4- and 5-strand barbed wire fencing along two segments of privately owned land near Highway 22 and Springbank Road may have potential adverse effects on wildlife movement and could potentially harm migratory birds. However, given that the two parcels of land are



privately owned, and the desire of landowners to protect their cattle with 4- and 5-strand barbed wire fencing along their properties, the Proponent is limited in controlling this component of the Project.

As a result, IAAC encourages the Proponent to follow-up with the private landowners to promote the implementation of the measures suggested by ECCC, as outlined in section 4.1.2 of this report, in order to allow safe passage of wildlife along the two parcels of privately owned land.

Additionally, as mentioned by the Proponent, the effectiveness of the wildlife-friendly fencing in supporting wildlife movement throughout the project development area and the local assessment area will be evaluated during the implementation of the Wildlife Mitigation and Monitoring Plan, allowing for adaptive management as applicable.

Therefore, IAAC recommends to the Minister that condition 8.5 of the Decision Statement be amended to replace the requirement of installing fencing according to a map of planned fencing with a requirement to mitigate adverse effects to wildlife by using wildlife-friendly fencing in areas that are in the care and control of the Proponent, unless otherwise required for safety reasons. This requirement aligns with the purpose of the original mitigation measure identified in the environmental assessment: to address potential adverse environmental effects from the Project on wildlife movement for species that are traditional resources or species of interest used for spiritual, cultural, health and socio-economic purposes. The proposed amended condition is below.

*8.5 The Proponent shall implement measures to mitigate effects of the Designated Project on the movement of grizzly bear western population (*Ursus arctos*) and ungulates, including:*

*8.5.1 installing, prior to construction, and maintaining during all phases of the Designated Project, an underpass under Highway 22 where it crosses the diversion channel to allow safe passage for grizzly bear western population (*Ursus arctos*) and ungulates; and*

8.5.2 utilizing wildlife-friendly fencing for all fencing required for the Designated Project, unless otherwise required for safety reasons or if the fencing is in locations that are not in the care and control of the Proponent, taking into account Alberta Conservation Association Landholder's Guide to Wildlife Friendly Fencing. As part of the annual report for the Designated Project referred to in condition 2.10, the Proponent shall provide the Agency with a current map of Designated Project fencing. The Proponent shall maintain the fencing during all phases of the Designated Project.



The proposed revised condition will also require the Proponent to provide IAAC with a current map of the fencing associated with the Designated Project in order to support compliance verification of the fencing, given that the Proponent proposes to adjust the location of the fencing to avoid removing trees and shrubs.

4.2 Rights of Indigenous Peoples

During the environmental assessment for the Project, IAAC conducted an assessment, with respect to Indigenous Peoples, of adverse effects resulting from changes to the environment on health and socio-economic conditions, current use of lands and resources for traditional purposes, physical and cultural heritage, and structure, site or thing that is of historical, archaeological, paleontological or architectural significance, which informed the assessment of impacts on the rights of Indigenous Peoples as recognized and affirmed in section 35 of the *Constitution Act, 1982*. Mitigation measures and follow-up requirements were developed and included in the Decision Statement as enforceable conditions.

4.2.1 Proponent's Assessment

As noted in Section 3.1 of this report, the Proponent indicated that given existing requirements in the Decision Statement in relation to land use, and that the two parcels of land with 4- and 5-strand barbed wire fencing remain privately owned and are not within the care and control of the Proponent, the proposed changes to fencing will not change the residual effects from the Project or the conclusions in the Environmental Assessment Report as they relate to Indigenous Peoples.

4.2.2 Views Expressed

Siksika Nation expressed concern that the Proponent negotiated right-of-ways instead of purchasing the privately-owned land and making it accessible to Indigenous groups and the public as planned. It was indicated that the change would result in impacts to the available lands over which Indigenous groups have priority to exercise their rights. The Proponent indicated that purchase agreement discussions with each landowner advanced following the environmental assessment decision, and in some cases, landowners did not want to sell their full parcels of land.



4.2.3 IAAC's Analysis

IAAC understands that during the environmental assessment the Proponent committed to acquiring privately owned lands, and that this would result in a positive effect from the Project on Indigenous People by enhancing opportunities for exercising treaty rights and the current use of lands and resources for traditional purposes. IAAC also understands that acquiring some of the initially identified privately owned land was not feasible in cases where landowners no longer wanted to sell their full parcels of land.

IAAC is of the view that the Project will continue to enhance opportunities for Indigenous People but to a slightly lesser degree than originally proposed. Based on this information, IAAC concludes that, the findings in the original environmental assessment report with respect to the significance of effects on Indigenous People remain the same, taking into account existing mitigation measures and follow-up program requirements identified as conditions in the Decision Statement.

IAAC is also of the view that the existing mitigation measures and follow-up program requirements included in the Decision Statement and the recommended amendment are sufficient with respect to accommodating any potential impacts to rights in relation to the proposed changes to the Project. IAAC notes that existing condition 8.8 requires the Proponent to develop a Land Use Plan to support Indigenous groups' use of the project development area, including ensuring First Nations have priority over other users of the land within the project development area for traditional use activities and providing maps of areas identified for traditional use activities. Additionally, condition 8.11 requires the Proponent to establish a First Nation Land Use Advisory Committee to support the development and implementation of the plan referred to in condition 8.8, including jointly identifying issues to be discussed by the Committee such as in relation to the shared use of the project development area.

Therefore, IAAC recommends no additional changes to mitigation measures and follow-up program requirements and associated conditions in the Decision Statement with respect to impacts to the exercise of rights of Indigenous Peoples in relation to the proposed changes to the Project.

5. Conclusion

IAAC is in the opinion that, based on the information provided by the Proponent, ECCC, and Indigenous groups, the proposed changes to the Project will not increase the extent to which the effects of the Project, as assessed during the environmental assessment, are adverse, taking into account existing mitigation



measures and follow-up program requirements identified as conditions in the Decision Statement and the recommended amendment to condition 8.5.

IAAC recommends amending condition 8.5 to:

- require the use of wildlife-friendly fencing in areas that are in the care and control of the Proponent, unless otherwise required for safety reasons; and
- provide IAAC with a current map of Project fencing annually in order to support compliance verification of the fencing.

A summary of the proposed amendments related to the changes to the Project are presented in Table 1.

Table 1 – Proposed amendments to the Decision Statement

| Original (2021) | Proposed Amendment (2025) |
|---|---|
| <p>8.5 The Proponent shall install and maintain, during construction and operation, one underpass under Highway 22 where it crosses the diversion channel and wildlife friendly fences to provide passage for grizzly bear western population (<i>Ursus arctos</i>) and ungulates. The Proponent shall install the wildlife friendly fences as identified in Figure IR 15-1 submitted in the Response to Information Requests Round 1 Package 2 (Canadian Impact Assessment Registry Reference Number 80123, Document Number 1260), taking into account Alberta Conservation Association <i>Landholder’s Guide to Wildlife Friendly Fencing</i>, to prevent access by livestock and allow safe passage for wildlife. The Proponent shall maintain the fences during all phases of the Designated Project.</p> | <p>8.5 The Proponent shall <u>implement measures to mitigate effects of the Designated Project on the movement of grizzly bear western population (<i>Ursus arctos</i>) and ungulates, including:</u></p> <p>8.5.1 <u>installing and maintaining during construction and operation, an underpass under Highway 22 where it crosses the diversion channel to allow safe passage for grizzly bear western population (<i>Ursus arctos</i>) and ungulates; and</u></p> <p>8.5.2 <u>utilizing wildlife-friendly fencing for all fencing required for the Designated Project, unless otherwise required for safety reasons or if the fencing is in areas that are not in the care and control of the Proponent, taking into account Alberta Conservation Association <i>Landholder’s Guide to Wildlife Friendly Fencing</i>. As part of the annual report for the Designated Project referred to in condition 2.10, the Proponent shall provide the Agency with a current map of Designated Project fencing.</u> The Proponent shall maintain the fencing during all phases of the Designated Project.</p> |

Additional administrative amendments are recommended to update the Proponent’s name and contact information, annual reporting dates, provide clarity, support translation consistency, address typos and numbering. Those proposed amendments, in addition to the amendments related to the changes to the



Project, are included in the respective English and French versions of the proposed amended Decision Statement.