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August 20, 2018

Mark Svenson
Provincial Transportation Environmental Coordinator
Alberta Transportation
3rd Floor Twin Atria Building
4999 98 Avenue
Edmonton, Alberta T6B 2X3

SUBJECT: Technical Review of the Environmental Impact Statement for the Springbank Off-Stream Reservoir Project – Information Request Package 2

Dear Mr. Svenson:

The Canadian Environmental Assessment Agency (the Agency) conducted a technical review of the March 29, 2018 Alberta Transportation Environmental Impact Statement (EIS) for the Springbank Off-Stream Reservoir Project. Federal departments, Indigenous groups, the technical advisory group, and members of the public also reviewed the EIS and contributed technical expertise and knowledge. The federal authorities participating in the review are Environment and Climate Change Canada, Fisheries and Oceans Canada, Health Canada, Natural Resources Canada, Infrastructure Canada, and Transport Canada.

The EIS Guidelines issued on August 10, 2016 describe the information required to support the assessment of effects described in the *Canadian Environmental Assessment Act, 2012* (CEAA 2012), section 79 of the *Species at Risk Act*, and for Canada to fulfil its Crown consultation obligations to the extent possible during the environmental assessment (EA).

While the EIS Guidelines subject areas are addressed in the EIS, the Agency and federal authorities have identified gaps in the information provided. This information is necessary to determine whether the Project is likely to cause significant adverse environmental effects and to inform the Agency's preparation of the EA Report under CEAA 2012.

Attached is Information Request Package 2. The Agency is providing this second package to enable Alberta Transportation to continue gathering essential information in a timely manner. A third information request package will be provided to Alberta Transportation to address the remaining requirements. Written comments received by the Agency regarding the technical review of the EIS are available on the Canadian Environmental Assessment Registry ([Reference #80123](#)). Alberta Transportation is encouraged to review all of the comments submitted as they include detailed information and advice not presented in the Information Request package.

The Government of Canada is integrating consultation with Indigenous peoples into the EA process for the Springbank Off-Stream Reservoir Project, to the extent possible, to fulfill its duty to consult, and where appropriate, accommodate. As noted in the EIS Guidelines, the Crown will rely on information collected for the purposes of the EA to fulfill its duty to consult and inform its assessment of potential impacts on the exercise of Aboriginal or treaty rights. The Agency requests that Alberta Transportation engage with each Indigenous group identified in the EIS Guidelines to gather the required information and discuss outstanding concerns. The Agency encourages Alberta Transportation to support and facilitate the participation of Indigenous groups in this review process.

For responses to all information request items relating to effects of changes to the environment on Indigenous peoples (CEAA 2012 section 5(1)(c)) and potential impacts to Aboriginal and treaty rights, the Agency requests that Alberta Transportation present the input obtained from Indigenous groups, including a description of how that input was integrated into the responses. Points of disagreement between the views of Alberta Transportation and Indigenous groups should be presented, along with a description of efforts undertaken to reconcile these differences and a rationale for conclusions.

The Agency requests that Alberta Transportation provide an updated log documenting all engagement with Indigenous groups undertaken since the completion of the EIS and a list of all traditional land and resource use studies that have been submitted, commenced, and/or completed since the completion of the March 29, 2018 EIS. Please include the anticipated completion date of traditional land and resource use studies currently underway.

In accordance with CEAA 2012, time taken by Alberta Transportation to provide the required information is not included in the legal timeframe within which the Minister of Environment and Climate Change must make her EA decision. On June 29, 2018, the timeline paused at day 110 of 365, when the Agency issued the first package of information requirements.

The Agency and federal authorities will continue to work on the Project EA to understand the environmental effects of the Project. The Agency recognizes the importance of timely decision making based in science and Indigenous knowledge.

The Agency is able to meet and discuss the information requirements, as needed. If you have any questions regarding this letter, please contact me.

Sincerely,

Original signed by Susan Tiege for Jennifer Howe

Jennifer Howe
Project Manager, Prairie and Northern Region

Enclosures:

1. Information Request Package 2 – Springbank Off-Stream Reservoir Project 20-08-2018

cc:

Seamas Skelly, Alberta Transportation
Syed Abbas, Alberta Transportation
Meghan Jurijew, Alberta Environment and Parks
Graham Irvine, Health Canada
Gayle Hatchard, Environment and Climate Change Canada
Veronica Mossop, Natural Resources Canada
Kyle Antonchuk, Fisheries and Oceans Canada
Jackie Barker, Transport Canada
Eli Arkin, Infrastructure Canada

Information Request Package 2

Springbank Off-Stream Reservoir Project

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List of Acronyms and Short Forms

Agency	Canadian Environmental Assessment Agency
CEAA 2012	<i>Canadian Environmental Assessment Act, 2012</i>
CEAR	Canadian Environmental Assessment Registry
DFO	Fisheries and Oceans Canada
ECCC	Environment Climate Change Canada
EIS	Environmental Impact Statement
EIS Guidelines	Environmental Impact Statement Guidelines
FN	First Nations
IR	Information Request
LAA	Local Assessment Area
PMF	Probable Maximum Flood
PMP	Probable Maximum Precipitation
PDA	Project Development Area
RAA	Regional Assessment Area
SSRP	South Saskatchewan Regional Plan
TKU	Traditional Knowledge and Use
TLRU	Traditional Land and Resource Use
TUS	Traditional Use Study
VC	Valued Component

IR2-01

Topic: Impacts to Rights

Sources:

EIS Guidelines Part 2, Section 5

EIS Volume 2

EIS Volume 3A, Sections 14.1.3; 14.5

Piikani Nation – Technical Review of EIS, June 15, 2018 (CEAR #48)

Tsuut'ina First Nation, Ermineskin Cree Nation, and Kainai First Nation – Technical Review of the EIS - Annexes – Combined (CEAR # 46, 47, 50)

Samson Cree Nation – Springbank Off-Stream Reservoir Project Written Submission – June 25, 2018 (CEAR # 52)

Montana First Nation – Review of Springbank Off-Stream Reservoir EIA, June 2018 (CEAR # 51)

Ermineskin Cree Nation and Blood Tribe – Springbank EIS Technical Comments (CEAR # 46, 47)

Context and Rationale:

The EIS Guidelines require that, for each group identified in section 5.1, the EIS presents information on: Aboriginal and treaty rights; potential adverse impacts on rights of each project component and project physical activities; mitigation measures or accommodation to potential impacts; and potential impacts that have not been fully mitigated. The EIS Guidelines provide direction on proponent engagement with Indigenous groups and require that criteria for evaluating impacts to Aboriginal and treaty rights consider input sought by the proponent and/or provided by Indigenous groups.

The EIS does not present information on each Indigenous group's views of their rights and how each Indigenous group was engaged in developing or applying the proposed methodology. Additionally, the conclusions on potential impacts to rights do not consider each Indigenous group identified in section 5.1 of the EIS Guidelines.

The EIS defines treaty rights and Aboriginal rights broadly and states that effects to land and resource use upon which the exercise of rights depend is the measurable parameter for an assessment of potential impacts to rights. The EIS concludes that because effects of the Project on TLRU are predicted to be not significant, impacts on potential or established Aboriginal or

treaty rights are not expected. Indigenous groups have identified problems with the conclusions of the TLRU assessment and dispute the validity of relying on these conclusions for evaluating potential impacts to Aboriginal and treaty rights. For example, the EIS assumptions regarding the relative importance of the project area for the exercise of rights have been refuted by potentially impacted Indigenous groups.

Assessing impact to Aboriginal and treaty rights is not limited to assessing environmental effects on the current use of lands and resources for traditional purposes or on discrete biophysical components such as wildlife. An assessment of impacts to Aboriginal and treaty rights includes consideration of experience, culture, governance, knowledge and other factors, many of which have been labelled “intangible components” in the EIS. The EIS restricts the analysis of potential impacts to rights to the consideration of residual effects on traditional harvesting or physical activities associated with traditional use and does not assess effects to intangible components. The assessment of intangible components is possible and also necessary to understanding potential impacts to Aboriginal and treaty rights.

Indigenous groups, including Ermineskin Cree Nation and Kainai First Nation, as well as the Technical Advisory Group for the Project, requested that the *Methodology for Assessing Potential Impacts on the exercise of Aboriginal and Treaty Rights of the Proposed Frontier Oil Sands Mine* (Mikisew Cree First Nation and the Canadian Environmental Assessment Agency) (Annex 1) be considered in responding to the items below.

Information Requests:

- a) Identify the conditions that support each community’s exercise of their rights, including understanding how historic, existing, and approved activities have affected these conditions. Identify the importance of the Project’s location in relation to the exercise of rights for each Indigenous group listed in the EIS Guidelines.
- b) Identify the pathways for potential impacts of the Project (positive and negative) on the exercise of rights, accounting for the nature of rights, regional/historic/cumulative impacts, community thresholds, cultural landscape, preferred expression of rights, distribution of benefits/impact equity, and present and future generations.
- c) Define the criteria used for assessing the severity of impacts to rights. The criteria may be different from the criteria used to assess the significance of environmental effects and may vary between Indigenous groups.
- d) Considering each of the pathways identified and the criteria developed, provide analysis, discussion, and conclusions on whether the Project will have a low, medium, or high level of impact on the exercise of rights for each Indigenous group.
- e) Describe mitigation measures that specifically address potential impacts to rights and accommodation measures that have been identified through engagement with Indigenous groups. Include any commitments made to mitigation and accommodation.

IR2-02

Topic: Cultural Experience - Experiential Values and Importance of Water

Sources:

EIS Guidelines Part 1, Section 4.3.2

EIS Guidelines Part 2, Sections 5; 6.1.9; 6.3.4

EIS Volume 3A, Section 14; 14.1.3.3

EIS Volume 3B, Section 14; 14.5

Ermineskin Cree Nation – Springbank Off-Stream Reservoir TKU Report (CEAR #46)

Blood Tribe/Kainai – Traditional Knowledge, Land, and Resource Use (CEAR # 47)

Context and Rationale:

The EIS Guidelines direct the proponent to assess changes to the environment that affect cultural value or importance associated with traditional uses or areas affected by the Project as well as any change to, or loss or destruction of, cultural value and heritage. The EIS Guidelines require the proponent to assess the effects of changes to the environment on physical and cultural heritage of Indigenous peoples, and to integrate input from Indigenous engagement and Indigenous knowledge into this assessment (methodology and analysis).

The EIS focuses on potential effects to physical resources associated with land use and culture. The EIS describes perceived limitations to the assessment of, what the proponent labels, “experiential values” noting that potential effects and appropriate mitigation measures can only be meaningfully evaluated by individuals and communities experiencing these values in their cultural context, and that these effects can not be characterized from a Western science perspective. Effective engagement with Indigenous groups as required by the EIS Guidelines is not limited to what can be characterized from a Western science perspective; it should facilitate the evaluation of effects and mitigation measures by the Indigenous groups (individuals and communities) experiencing values in their cultural context, and the subsequent description of these evaluations in the EIS.

Numerous Indigenous groups have identified concerns with potential effects of the Project on cultural experience of the landscape, and associated effects to use and wellbeing. Indigenous groups shared their perspectives through engagement, site visits, and/or TLRU studies. Concerns raised by Indigenous groups include, but are not limited to: quality of use experience and associated changes in cultural practices; changes to spiritual and cultural connections with the affected environment; effects resulting from management of water and treatment of non-human species; the effects of the Project on individual and community identity resulting from changes to

the environment, culture, land use, and intergenerational transfer of knowledge; and impacts to the cultural and spiritual significance of water, as the Project will interfere with the natural flows of water.

Understanding Project changes to the environment that affect cultural value or importance associated with traditional uses or areas and on Indigenous peoples is integral to understanding the potential adverse environmental effects of the Project as per CEAA 2012 section 5(1)(c), the potential impacts to Aboriginal and treaty rights, and opportunities to mitigate or accommodate those impacts.

Information Requests:

- a) Present an assessment of potential changes of the Project to cultural experience/experiential values, including:
 - A description of cultural experience/experiential values identified by each Indigenous group and potential changes to the environment that interact with these.
 - Mitigation measures identified by Indigenous groups (individuals and communities) who may experience these effects, and any commitment made to these mitigation measures.
 - A clear explanation of the methodology for integrating Indigenous knowledge into this assessment.
- b) Describe each Indigenous group's views on the potential impacts of the Project specifically in relation to the cultural and spiritual importance of water.
- c) Describe mitigation and accommodation measures regarding the cultural and spiritual importance of water proposed by Indigenous groups and any commitments by the proponent to these mitigation or accommodation measures.

IR2-03

Topic: Regional Context for Traditional Use and Exercise of Rights

Sources:

EIS Guidelines Part 2 Section 5; 6.1.9; 6.3.4

Piikani Nation – Technical Review of EIS, June 15, 2018 (CEAR #48)

Technical Advisory Group – June 11 and 12, 2018 meetings

Context and Rationale:

The EIS Guidelines require the proponent to assess the effects of changes to the environment on Indigenous peoples, to consider the regional context for traditional use, and to include the views expressed by Indigenous groups on suggested mitigation measures and their effectiveness.

The EIS considers the biophysical context within the RAA for each VC but does not consider Project effects or mitigation interacting with land use management or planning that also affect traditional use.

Land use documents, guidelines, and policies exist in Alberta for various areas. In the project area, the South Saskatchewan Regional Plan (SSRP) is a provincial government plan that recognizes the significance of the South Saskatchewan Region to Indigenous peoples and identifies objectives that serve to protect current use, physical and cultural heritage, sites of importance, and the continued exercise of Aboriginal and treaty rights.

Indigenous groups also identified the Indigenous Wisdom Advisory Panel as a resource the proponent. Alberta Environment and Parks as the ultimate Project operator, could engage this Panel to better incorporate Indigenous perspectives and knowledge into Project planning and monitoring. Advice from such a panel could contribute to the effectiveness of mitigation. Engaging with this Panel could contribute to understanding the potential effects of the Project on Indigenous peoples.

Additional information regarding the Project relative to the direction and outcomes of the SSRP and/or other land use plans and guidelines is necessary to contribute to understanding Project effects and mitigation.

Information Request:

- a) Describe how the Project will align with the existing land use plans, guidelines or policies, including the South Saskatchewan Regional Plan. Describe how the existing land use plans, guidelines or policies were integrated into the planning of the Project,

assessment of effects of changes to the environment on Indigenous peoples, impacts to Aboriginal and treaty rights, and mitigation measures committed to by the proponent.

- b) Describe if and how the Indigenous Wisdom Advisory Panel, or a similar entity, would be engaged and how this engagement could contribute to the assessment of effects and development of mitigation, monitoring, and follow-up programs for the Project.

If the Indigenous Wisdom Advisory Panel was not / will not be engaged, describe why.

IR2-04

Topic: Economic Opportunities

Sources:

EIS Guidelines Part 1, Section 2.1

EIS Guidelines Part 2, Section 5

EIS Volume 3A, Section 17.1.2

EIS Volume 3B, Section 17

Context and Rationale:

The EIS Guidelines require the proponent to describe predicted environmental, economic, and social costs and benefits of the Project and indicate that the EIS will document, from the proponent's perspective, any potential economic impacts or benefits to each Indigenous group that may arise as a result of the Project, and include the perspectives of the Indigenous groups.

The EIS describes the provincial economy, regional labour force, and regional economy. It presents key concerns raised during public and Indigenous engagement and the broad influence of these concerns on the assessment of employment and economy VCs. Limited detail is presented on how the specific concerns and interests of Indigenous peoples will be addressed. For example, Indigenous requests for employment opportunities through construction contracts are noted in the EIS, although no discussion of available opportunities is presented.

Technical Advisory Group participants described the historic and current systemic exclusion of Indigenous peoples from socio-economic benefits of development and expressed the need for pro-active and creative solutions including the purposeful inclusion of Indigenous groups in the economic benefits from projects such as this Project. Indigenous groups identified that project risks are borne by Indigenous groups, such as potential loss of traditional land use, resources, and access, and potential impacts to rights, whereas, benefits are often not present or indirect.

Detail on the economic costs and benefits of the Project to each Indigenous group would contribute to a more meaningful understanding of Project impacts to Indigenous groups.

Information Requests:

- a) Describe the economic opportunities associated with the Project that may be of interest to Indigenous groups, and any commitments to facilitating these opportunities.
- b) Discuss if and how the distribution of economic benefits of the Project to Indigenous groups could contribute to accommodation, including Indigenous groups' views on this matter.

IR2-05

Topic: Federal Lands

Sources

EIS Guidelines Part 1, Section 3.3.2

EIS Guidelines Part 2, Section 6.3.5

EIS Volume 3A, Section 18

EIS Volume 3B, Section 18

EIS Volume 3C, Section 1

Tsuut'ina First Nation, Ermineskin Cree Nation, and Kainai First Nation – Technical Review of the EIS - Annexes – Combined (CEAR # 46, 47, 50)

Context and Rationale:

The EIS Guidelines indicate the EIS must describe changes that may be caused to the environment on federal lands and note that selection of VCs is to include consideration of the effects to federal lands. The federal lands considered in the EIS are reserve lands, specifically the Tsuut'ina Nation Reserve 145 and the Stoney Nakoda Nations Reserves 142, 143 and 144.

Description of Federal Lands

The assessment of potential effects to federal lands in the EIS does not include a description of the environment on federal lands. Existing conditions are described for each VC for the LAA, which may or may not cover portions of the reserve lands considered. To assess effects to federal lands, the state of the environment on federal lands must be understood. The description of federal lands, i.e. reserve lands, should include the current state of the environment from the perspective of the First Nations whose reserve lands will be affected.

Assessment of Valued Components

The EIS extrapolated the conclusions of the assessments for each of the VCs considered in the EIS to predict the significance of effects to reserve lands. The study areas used to inform these conclusions often consider only portions of the Tsuut'ina reserve lands and very rarely overlap with the Stoney Nakoda Nations reserve lands. Further, the EIS does not describe the residual effects of the Project to each VC on reserve lands.

Further assessment is required to understand the effects of all the changes to the environment on federal lands.

Information Requests:

- a) Consider federal lands as a VC and provide an assessment of effects to federal lands that takes into account the entirety of each of the Tsuut'ina Nation Reserve 145 and the Stoney Nakoda Nations Reserves 142, 143 and 144 and any other potentially affected federal lands. Include:
- A description of the current state of the environment on federal lands, prepared with the First Nation whose reserve(s) is being considered. This description may be a narrative of the state of the environment on reserve that focuses on components of the environment of concern or importance to these First Nations.
 - A description the residual effects of the Project on federal lands.
 - A description of the cumulative effects of the Project on federal lands.
 - Mitigation specific to effects on federal lands.
 - A discussion of any areas of uncertainty, including those identified by Indigenous groups, and proposed monitoring and follow-up programs.

IR2-06

Topic: Indigenous and Community Knowledge

Sources:

EIS Guidelines Part 1, Section 4.3.2

EIS Guidelines Part 2, Section 3.3.3

EIS Volume 3A, Section 14

EIS Volume 3B, Section 14

Piikani Nation – Technical Review of EIS, June 15, 2018 (CEAR #48)

Tsuut'ina First Nation, Ermineskin Cree Nation, and Kainai First Nation – Technical Review of the EIS - Annexes – Combined (CEAR # 46, 47, 50)

Samson Cree Nation – Springbank Off-Stream Reservoir Project Written Submission – June 25, 2018 (CEAR # 52)

Montana First Nation – Review of Springbank Off-Stream Reservoir EIA, June 2018 (CEAR # 51)

Ermineskin Cree Nation and Blood Tribe – Springbank EIS Technical Comments (CEAR # 46, 47)

Ermineskin Cree Nation – Springbank Off-Stream Reservoir TKU Report (CEAR #46)

Blood Tribe/Kainai – Traditional Knowledge, Land, and Resource Use (CEAR # 47)

Context and Rationale:

The EIS Guidelines require the proponent to assess effects of changes to the environment on Indigenous peoples, including on current use of lands for traditional purposes, and to provide information to support the assessment of impacts to rights. The EIS Guidelines direct the proponent to take into account community knowledge and Aboriginal traditional knowledge, including integrating knowledge into all aspects of the assessment, including methodology and analysis, and establishing spatial and temporal boundaries. The EIS Guidelines also require the proponent to engage with Indigenous groups to obtain their views, including their views on the effects of changes to the environment on Aboriginal peoples and potential effects of the Project on Aboriginal and treaty rights.

The EIS includes statements that input from Indigenous groups, including Indigenous knowledge, informed the development of the EIS. The EIS states that “[w]hile this information

did not directly affect the significance definition it has been incorporated into the analysis of effects on which the significance determination was based.” The EIS does not present a methodology for how the incorporation of information from Indigenous groups was completed in a meaningful manner. The EIS includes sections on Traditional Land and Resource Use.

With regards to spatial boundaries, the EIS explains that the local assessment areas and regional assessment areas are VC-specific and take into account physical, biological, social, economic, and cultural factors. The EIS states that temporal boundaries are based on the timing of project activities and interactions with VCs. Information is not provided in the EIS regarding Aboriginal traditional knowledge and/or community knowledge sought, provided, and considered in the establishment of spatial and temporal boundaries.

Indigenous groups expressed concerns that all input (meetings, workshops, site visits, and traditional land and resource use studies), including Indigenous knowledge pertaining to the project area, was not considered and therefore, potential environmental effects were not adequately characterized in the EIS. For example, Indigenous groups identified that TUS are critical to understanding wildlife baseline and biodiversity conditions and determining potential residual effects. The EIS does not describe how TUS information was included in the habitat suitability models or baseline surveys.

Information Requests:

- a) Describe the methodology for considering Indigenous and community knowledge, and how issues raised by each Indigenous group, including concerns raised regarding environmental effects and impacts to Aboriginal and treaty rights, have been and/or will continue to be used in Project planning and design, assessment of effects and impacts, selection of mitigation measures, and determining appropriate accommodations. The description should:
 - Demonstrate how Indigenous knowledge, including but not limited to traditional land and resource use, was considered in the selection of VCs, establishing spatial and temporal boundaries, collection of baseline information for each VC, development of proposed mitigation measures, and assessment of environmental effects. Discuss how cultural values, cultural transmission, and intergenerational knowledge transfer were considered in the selection of temporal boundaries.
 - Include a description of any differences between Indigenous knowledge, community knowledge, and Western knowledge and provide an explanation of how different knowledge or perspectives were taken into account.

IR2-07

Topic: Effects on Traditional Land and Resource Use

Sources:

EIS Guidelines Part 2 Section 5; 6.1.9; 6.3.4

EIS Volume 3A, Section 14

EIS Volume 3B, Section 14

Piikani Nation – Technical Review of EIS, June 15, 2018 (CEAR #48)

Tsuut'ina First Nation, Ermineskin Cree Nation, and Kainai First Nation – Technical Review of the EIS - Annexes – Combined (CEAR # 46, 47, 50)

Samson Cree Nation – Springbank Off-Stream Reservoir Project Written Submission, June 25, 2018 (CEAR # 52)

Montana First Nation – Review of Springbank Off-Stream Reservoir EIA, June 2018 (CEAR # 51)

Ermineskin Cree Nation and Blood Tribe – Springbank EIS Technical Comments (CEAR # 46, 47)

Ermineskin Cree Nation – Springbank Off-Stream Reservoir TKU Report (CEAR #46)

Blood Tribe/Kainai – Traditional Knowledge, Land, and Resource Use (CEAR # 47)

Context and Rationale:

The EIS Guidelines require the proponent to assess effects of changes to the environment on Indigenous peoples, including on current use of lands for traditional purposes, and provide information to support the assessment of impacts to Aboriginal and treaty rights. The EIS Guidelines require that baseline information characterise the regional context of each of the paragraph CEAA 2012 5(1)(c) elements and be sufficient to provide a comprehensive understanding of the current state of each VC.

The EIS identifies traditional land and resource use as a VC and notes that changes to the environment as a result of the Project are anticipated to occur primarily within the PDA. Indigenous groups identified the need for additional site-specific information, as the information used in the EIS to predict effects on Indigenous peoples and impacts to rights is incorrect, inappropriate, and/or taken from secondary sources that do not accurately characterize traditional land and resource use that may be affected by the Project. Indigenous groups communicated the need for site-specific information to the proponent through engagement, site-visits, and/or

Traditional Land and Resource Use studies. Without an understanding of the traditional land and resources available for use and accessible within the PDA, effects to current use within the PDA are not clear.

The EIS does not discuss how selecting a RAA for consistency rather than based on pertinent VC specific information influences the assessment of effects. Further, conclusions are drawn with regards to alternative areas in which traditional land use may take place, without supporting evidence. Limited baseline data is presented for land and resource use within the RAA and assumptions about access to Crown and private lands for current use purposes are not substantiated. As conclusions on potential effects are tied to assumptions about use within the RAA, additional baseline data within the RAA and appropriate selection of RAAs is required.

For example, the EIS states that “The Project will remove traditionally harvested plant species from the PDA and affect the distribution and abundance of wildlife and fish species in the LAA; however, the direct and indirect loss of habitat is relatively small compared to the remaining habitat availability in the RAA.” However, certain harvesting sites within the LAA may be preferred by Indigenous land users within the regional backdrop of the RAA.

To view all harvesting sites within the RAA as equal without any regard for preference (e.g. ease of access, high quality and/or quantity, familiarity, family connection) does not allow for a full understanding of the true impacts to Indigenous harvest in the LAA.

Information Requests:

- a) Explain the methodology and how traditional territory for each Indigenous group is reflected in the RAA for traditional land and resource use and include Indigenous groups’ views. If traditional territory was not considered in the selection of the RAA for traditional land and resource use, determine appropriate RAA(s) to use in the assessment of effects to this VC.
- b) Provide an updated assessment of effects to traditional land and resource that:
 - Describes the presence and distribution of traditional resources and traditional land and resource use areas within the PDA, LAA and RAA, and identify the relative importance of these resources and access to and preference for use areas.
 - Describes the pathways of effects to traditional resources and land use identified by Indigenous groups in the PDA, LAA and RAA, and the associated mitigation, monitoring, and follow-up measures. Pathways of effects may include project interactions with or effects on resources, access, and experience.
 - Provides a robust rationale for any conclusions drawn that demonstrably takes into account the views of Indigenous groups.

IR2-08

Topic: Indigenous Health and Country Foods

Sources:

EIS Guidelines Part 2, Section 6.1.9; 6.3.4

EIS Volume 3A, Section 14 and 15

EIS Volume 3B, Section 14 and 15

Ermineskin Cree Nation and Blood Tribe – Springbank EIS Technical Comments (CEAR # 46, 47)

Context and Rationale:

The EIS Guidelines require the proponent assess the effects of changes to the environment on Indigenous peoples, including on current use, health and socio-economic conditions, and physical and cultural heritage, both of which include the consideration of the harvesting and consumption of country foods.

The EIS sections on Public Health draw a link between country foods and health. The information presented is primarily regarding chemical exposure pathways, the quality of country foods, and potential effects to human receptors, from a Western-science, physical health perspective. These sections do not offer a robust discussion of the role of country foods in physical, mental, and spiritual health of Indigenous people. Concerns have been raised relating to the assessment of changes to the environment and effects on Indigenous peoples health and wellbeing.

The EIS acknowledges the Project would limit access to areas where country foods are available and actively harvested, and this could lead to food scarcity if there is a high dependency on the affected land area for food. The EIS describes a “conservative approach” applied in the assessment which assumes that traditional land use, including the harvesting of country foods, occurs within the project area. In contrast, the conclusions of the assessment of effects assumes that there is limited access to private lands and points to the absence of site specific information and consumption rate estimates to minimize the relative importance of the Project area.

Potentially affected Indigenous groups have provided evidence to support their use of the lands within the PDA and have noted that the PDA may play an important role in community wellbeing.

Additional information is required regarding the potential effects of the Project on country foods availability and access, and associated effects to Indigenous peoples’ use, health and wellbeing.

Information Requests:

- a) Provide information on the availability of and access to country foods of importance to each Indigenous group, within the PDA, LAA and RAA, a description of the pathways of effects to these foods, project specific mitigation measures, and a revised effects assessment. Include consideration of:
 - the role of country foods from a holistic health perspective that accounts for physical, mental, and spiritual health of individuals and communities.
 - the role of country foods in Indigenous food sovereignty as it relates to health, wellbeing, governance, and rights.
- b) Describe how findings on country foods affect the assessment of effects of changes to the environment on Indigenous peoples' current use, health and socio-economic conditions, and physical and cultural heritage. Provide updated effects assessments as necessary.

IR2-09

Topic: Project Area Land Use and Access

Sources:

EIS Guidelines Part 2, Section 6.1.9; 6.3.4

Volume 1, Section 1.3.2.1; 1.3.2.2

Louis Bull Tribe – EIS Review Submission, June 18, 2018 (CEAR # 49)

Piikani Nation – Technical Review of EIS, June 15, 2018 (CEAR #48)

Louis Bull Tribe – EIS Review Submission, June 18, 2018 (CEAR # 49)

Tsuut'ina First Nation, Ermineskin Cree Nation, and Kainai First Nation – Technical Review of the EIS - Annexes – Combined (CEAR # 46, 47, 50)

Ermineskin Cree Nation and Blood Tribe – Springbank EIS Technical Comments (CEAR # 46, 47)

Context and Rationale:

The EIS Guidelines require the proponent to assess the effects of changes to the environment on Indigenous peoples' current use of lands for traditional purposes, including any changes to the alienation of lands from Indigenous traditional use.

The EIS discusses potential effects to current use in four land classifications (A, B, C, and D) associated with the project area throughout the project lifecycle. The descriptions of the classifications do not fully indicate the extent to which access to the lands for current use or the exercise of rights would be allowed to continue, reduced, or eliminated. The effects assessment of the proposed land classifications is therefore incomplete.

Indigenous groups and current land owners confirmed that lands within the PDA are currently used by multiple Indigenous groups for traditional purposes and the exercise of rights. With the development of the Project, these lands would be converted to Crown land. While the creation of Crown land could create possibilities for further access to lands on which rights can be exercised, the land uses proposed in the EIS would serve to restrict and reduce access from that which currently exists.

Access to lands and waters is essential for Indigenous peoples' current use of lands for traditional purposes, physical and cultural heritage, and health and socio-economic conditions as well as for the exercise of Aboriginal and treaty rights. Additional information is required to fully understand the effects of changes in land availability and use on Indigenous peoples.

Information Requests:

- a) Provide clarity and rationale for the proposed land classifications. Include:
 - Details on the level of access anticipated and/or the parameters and criteria for determining the level of access to all areas. For example, given the reservoir is expected to be used infrequently and seasonally, provide a rationale for restricting access to Area B year round.
 - With respect to Area A, clearly define “low impact recreation” and identify current use opportunities that would be permitted. Describe whether and how Indigenous peoples will be engaged in the reclamation and design of this conservation area.
 - Describe the reasonably foreseeable land use options given the anticipated state of the environment within the PDA and how these have been considered in selecting land classifications. For example, Area C has options for grazing through public leases and will be privately stewarded; describe if and how options for Indigenous stewardship of this area have been considered.
- b) Discuss the potential effects to Indigenous peoples and impacts to the exercise of Aboriginal and treaty rights associated with the varying degrees of access associated with the proposed land classifications.
 - Describe information provided by Indigenous groups pertaining to land use in the PDA and revise or justify conclusions that the removal of access to Areas B, C, and D, and potentially restricted activities within area A, does not constitute a long-term loss of available resources or access to lands.
 - Provide a discussion of land access, mitigation, and accommodation that identifies means of addressing the potential net loss of lands on which rights can be exercised.
 - Provide the details of an access management plan for each area during all phases of the project, including information on how access could be managed to enhance Indigenous groups’ access to traditional lands.

IR2-10

Topic: Physical and Cultural Heritage

Sources:

EIS Guidelines Part 2, Section 5; 6.1.9; 6.3.4

EIS Volume 3A, Section 13 and 14

EIS Volume 3B, Section 13 and 14

Context and Rationale:

The EIS Guidelines require the proponent to assess effects of changes to the environment on Indigenous peoples, including on physical and cultural heritage and on any structure, site, or thing that is of historical, archaeological, paleontological, or architectural significance. The EIS Guidelines direct the proponent to follow the *Technical Guidance for Assessing Physical and Cultural Heritage or any Structure, Site, or Thing that is of Historical, Archaeological, Paleontological, or Architectural Significance under the Canadian Environmental Assessment Act, 2012*. The Technical Guidance directs the proponent to consider all aspects of cultural heritage, including practices, traditions, customs, as well as associative cultural landscapes that are distinguished by the power of their spiritual, artistic, or cultural associations, rather than their surviving material evidence. Further, the EIS Guidelines require consideration of the loss or destruction of and changes in access to physical and cultural heritage and sites of importance, as well as changes to the cultural value or importance associated with physical and cultural heritage and sites of importance.

The EIS describes the regulatory and policy setting for the assessment of potential effects on historical resources, with a focus on the requirements of the Alberta *Historical Resources Act*, and indicates Historical Resources Impact Assessments for archaeology and paleontology were completed and informed (but are not included in) the environmental assessment. The primary risk mitigation measure provided in the EIS is that “Alberta Transportation will follow current industry best practices and comply with all provincial and federal legislation. Should additional heritage resources be encountered, Alberta Transportation will follow current Alberta Culture and Tourism policies and guidelines.”

Physical and cultural heritage and sites of importance that need to be considered under CEAA 2012 are not limited to those recognized by Alberta Culture and Tourism or the provincial *Heritage Resources Act*. Indigenous communities raised concerns with the physical and cultural heritage and sites of importance that would be destroyed by the Project and asked for ongoing mitigation, including but not limited to Indigenous monitoring. It was noted that the EIS underestimates the cultural significance of the area.

For the purposes of the federal environmental assessment, appropriate mitigation measures must be determined for the identified potential effects. Additional detail regarding physical and cultural heritage, as it is considered under CEAA 2012, is required for a meaningful understanding of the effects of the Project on Indigenous peoples.

Information Requests:

- a) Provide additional information and revised assessments of effects on physical and cultural heritage on any structure, site, or thing that is of historical, archaeological, paleontological, or architectural significance as per the Technical Guidance and EIS Guidelines. With regards to mitigation proposed:
 - Identify where the Alberta Culture and Tourism policies and guidelines will address and mitigate potential effects to each of the instances of physical and cultural heritage and sites of importance identified in these assessments. Identify where additional guidance may be required. Identify how any gaps will be addressed.
 - Where Alberta Transportation is committed to following best practices, describe the best practices that will be implemented, the origin of the best practice, and include an explanation of how these best practices can specifically address the concerns of Indigenous groups and the identification and protection of physical and cultural heritage and sites of importance to Indigenous peoples.
 - Describe mitigation measures and best practices identified by Indigenous groups, including any commitments to these mitigation measures.
 - Provide the details of monitoring plans and follow-up plans for potential effects to physical and cultural heritage and sites of importance including a description how Indigenous groups will be involved in plan design and implementation.

IR2-11

Topic: Wildlife – Culturally Important Species

Sources:

EIS Guidelines Part 2, Section 5; 6.1.8, 6.1.9; 6.2.3; 6.3.4

EIS Volume 3A, Section 11.5

EIS Volume 3B, Section 11.4

Tsuut'ina First Nation, Ermineskin Cree Nation, and Kainai First Nation – Technical Review of the EIS - Annexes – Combined (CEAR # 46, 47, 50)

Samson Cree Nation – Springbank Off-Stream Reservoir Project Written Submission – June 25, 2018 (CEAR # 52)

Context and Rationale:

The EIS Guidelines require the proponent to identify changes to key habitat for culturally important species and assess the effects of changes to the environment on Indigenous peoples. The EIS Guidelines indicate that with regards to current use, the EIS must consider fish, wildlife, birds, plants, or other natural resources of importance and that the views of Indigenous groups regarding VC selection must be taken into account.

The effects assessment in the EIS for construction and dry, flood and post flood operations includes a broad determination of significance on wildlife and biodiversity. Conclusions on significance are discussed broadly without a clear connection to each species assessment. The potential for significant adverse effects to specific species may not be reflected in significance determinations for wildlife and biodiversity overall.

The EIS includes a list of the wildlife indicator species considered in the EIS and the rationale for selection. While Indigenous groups have proposed additional and/or alternative indicator species, it is not evident if or how this input was considered. Species of importance identified by Indigenous groups include amphibians, wild horses, bison, osprey, beavers, bald eagles, moose, and deer. In assessing the broad effects of the Project on wildlife and biodiversity, the EIS does not allow for a meaningful understanding of potential effects to individual species of importance to Indigenous peoples, and related effects of changes to the species on Indigenous peoples.

Additional detail and accurate characterisation of species presence is required to understand baseline species abundance and distribution, predict changes to those species from the Project, and support the assessment of effects to Indigenous peoples.

Information Requests:

- a) List the species identified by Indigenous groups as species of importance and provide a rationale for how the indicator species selected allow for a robust understanding of potential effects to each of these species of importance. Where an adequate understanding of potential effects to the species of importance cannot be determined using the indicator species, conduct and present an assessment of potential effects to that species.
- b) Include an updated effects assessment and significance determination for each species of cultural importance. Update the effects assessment and significance determination for the wildlife and biodiversity VC as necessary.
- c) Describe opportunities for and commitments to pre-construction surveys for species of importance to Indigenous groups and the development of species-specific mitigation measures prior to construction based on the results of these surveys.

IR2-12

Topic: Wildlife - Regional Assessment Area

Sources:

EIS Guidelines Part 1, Section 3.3.3

EIS Guidelines Part 2, Section 6.1.8, 6.1.9; 6.2.3; 6.3.4

EIS Volume 3A, Section 11.1.5

Tsuut'ina First Nation, Ermineskin Cree Nation, and Kainai First Nation – Technical Review of the EIS - Annexes – Combined (CEAR # 46, 47, 50)

Context and Rationale:

The EIS Guidelines indicate that the spatial boundaries used in the EA may vary depending on the VC. The EIS Guidelines also require the proponent to document changes to key habitats for culturally important species and species important to Indigenous current use of resources, and the effects of these changes on Indigenous peoples, including on current use and physical and cultural heritage.

The EIS describes the boundaries of the wildlife RAA as extending 15 km beyond the PDA and justifies the size of the RAA by explaining it is large enough to encompass the average home range of a female grizzly bear, which would also include home ranges of other wildlife species that have relatively smaller home ranges. Given the variance in species of importance, ecological boundaries such as habitat types, watersheds, and topography as they relate to wildlife should be considered in establishing the RAA boundaries. Range size alone may not adequately take into account the placement of species home ranges.

As the characterization of effects on wildlife species of cultural importance depends on the habitat suitability and species presence within the RAA, the selection of the RAA should take into account species specific information. Additional information and rationale is required to understand changes to key habitat for culturally important species.

Information Request:

- a) Provide additional rationale to justify the use of a 15 km buffer around the PDA to assess project effects on all components of the wildlife and biodiversity effects assessment. Describe how this 15 km buffer allows for adequate consideration of the ecological boundaries most relevant for each species of cultural importance. Identify any limitations associated with the RAA selected and how these limitations are considered and accounted for in mitigation planning and effects determinations. Revise effects assessments for each species and the wildlife and biodiversity VC as necessary.

IR2-13

Topic: Wildlife - Habitat Modelling

Sources:

EIS Guidelines Part 2, Section 6.1.8, 6.1.9; 6.2.3; 6.3.4

EIS Volume 3A, Section 11.2; 11.5; 11.6

EIS Volume 3B, Section 11.4; 11.5

EIS Volume 4, Appendix H, Attachment 11

Piikani Nation – Technical Review of EIS, June 15, 2018 (CEAR #48)

Tsuut'ina First Nation, Ermineskin Cree Nation, and Kainai First Nation – Technical Review of the EIS - Annexes – Combined (CEAR # 46, 47, 50)

Context and Rationale:

The EIS Guidelines require the proponent to characterize and describe riparian habitats and wetlands, to identify ecosystems that are sensitive or vulnerable, and to identify changes to key habitat for culturally important species. The EIS Guidelines also require the proponent to assess the effects of changes to the environment on Indigenous peoples, including on current use and physical and cultural heritage.

The EIS states that habitat suitability models for each key indicator were based on assessing the suitability of each wildlife habitat type or ecosite phase in providing the necessary life requisites (e.g., food, cover, security) to meet seasonal habitat requirements. The four-class rating scheme assigned for each key indicator by ecosite phase and structural stage (vegetation vertical profile) was described in a limited manner.

The EIS states that while limited species occurrence data was available in the LAA to verify the habitat suitability models, the models provide a reasonable prediction of habitat suitability based on current knowledge and peer-reviewed literature. Additional evidence of the current knowledge or literature used was not described and there is no discussion on how the limitations of the habitat suitability models affect prediction confidence for effects on wildlife and biodiversity.

Habitat suitability modelling for elk and grizzly bear, species of importance to Indigenous peoples, apply buffers to establish the zone of influence of existing disturbances, including buffer areas along linear disturbances. The rationale for these buffers is not clearly presented. For instance, the EIS notes that elk have been shown to avoid roads, which can affect habitat use and distribution to varying degrees and for varying distances from the roads. While pertinent studies

are referenced, Indigenous groups have noted that there are numerous studies on elk behaviour which would provide a more robust discussion on suitable buffer distances, with a focus on local habitat, and studies in Alberta.

Additional information is required to understand the Project changes to habitat for species of cultural importance and effects of these changes on Indigenous peoples.

Information Requests:

- a) Describe, in detail, the classes in the four-class wildlife habitat rating scheme and explain the information used to build the models so they are representative of the habitat suitability in the LAA.
- b) Provide detail on the current knowledge and/or literature used to support the position that the suitability maps provide a reasonable assessment of potential project effects.
- c) Describe the community knowledge and Indigenous knowledge provided regarding species occurrences and how this knowledge was considered in the development of habitat suitability. If community knowledge and Indigenous knowledge were not used, provide revised models using all available data sources or a rationale as to why that information was not included.
- d) Provide a discussion of how limitations of habitat suitability models affect prediction confidence for effects on wildlife and biodiversity, and how this affects the assessment of effects of changes to the environment on Indigenous peoples.
- e) Provide rationale, with additional information, to justify and explain the buffer distances applied in the elk and grizzly bear habitat suitability models.

IR2-14

Topic: Wildlife - Survey Timing, Detection and Mitigation

Sources:

EIS Guidelines Part 2, Section 6.1.8, 6.1.9; 6.2.3; 6.3.4

EIS Volume 4, Appendix H

Samson Cree Nation – Springbank Off-Stream Reservoir Project Written Submission – June 25, 2018 (CEAR # 52)

Context and Rationale:

The EIS Guidelines require the proponent to identify changes to key habitat for culturally important species and assess the effects of changes to the environment on Indigenous peoples, including on current use and physical and cultural heritage.

The EIS describes the methods used in gathering baseline data, including for species that were identified as important to Indigenous groups. The methods used to complete the amphibian and yellow rail surveys do not follow the timing guidelines provided in the Sensitive Species Inventory Guidelines (Alberta Environment and Sustainable Resource Development, 2013, Sensitive Species Inventory Guidelines) which could impact detection rates. As these species have been identified as important to Indigenous groups, accurate characterisation of species presence is required to understand baseline species abundance and distribution, predict changes to those species from the Project, and support the assessment of effects to Indigenous peoples.

Information Requests:

- a) Provide a rationale for survey timing for western toad and yellow rail and explain how potential impacts of survey timing on detection rates were considered in the understanding of baseline conditions, assessment of effects, and proposed mitigation.
- b) Describe opportunities for and commitments to pre-construction surveys and how these may serve to determine additional appropriate mitigation measures.

IR2-15

Topic: Wildlife - Habitat Connectivity and Wildlife Movement

Sources:

EIS Guidelines Part 2, Section 2.2; 6.1.8, 6.1.9; 6.2.3; 6.3.4

EIS Volume 3A, Section 11

EIS Volume 3B, Section 11

Piikani Nation – Technical Review of EIS, June 15, 2018 (CEAR #48)

Louis Bull Tribe – EIS Review Submission, June 18, 2018 (CEAR # 49)

Stoney Nakoda Nations – Alberta Transportation Workshops, February and March 2018

Montana First Nation – Review of Springbank Off-Stream Reservoir EIA, June 2018 (CEAR # 51)

Samson Cree Nation – Springbank Off-Stream Reservoir Project Written Submission – June 25, 2018 (CEAR # 52)

Context and Rationale:

The EIS Guidelines require the proponent to identify changes to key habitat for culturally important species and assess the effects of changes to the environment on Indigenous peoples. The EIS Guidelines also require the proponent to conduct an alternative means analysis that addresses project design components related to environmental effect mitigation.

Concerns were raised about project effects to wildlife movement, including movement and migration of species of cultural importance. The EIS acknowledges the Project will result in changes to wildlife movement, including residual effects. However, the assessment of wildlife movement involves a high degree of uncertainty. Several project components may be barriers to movement, and the extent to which structures will be hindrances will vary based on project design features, wildlife species, and wildlife choosing to cross or not cross barriers. In addition to project components that may create barriers to movement, fences, such as the fence around the project infrastructure (Area D), which crosses the Elbow River overlap with areas of importance to wildlife migration. The specific location of fencing (for example at watercourse crossings or near highway 22 modifications) is not clear. Alberta Transportation indicated that fences will be “wildlife friendly” although detail is not provided.

Recognizing the high degree of uncertainty associated with changes to wildlife movement resulting from the Project, the EIS identifies the need for a monitoring and follow-up program, although sufficient detail on the development, content, and implementation of the program to

support a meaningful understanding of potential adaptive management and mitigation throughout the lifetime of the Project is not provided.

Indigenous groups identified potential mitigation measures related to wildlife movement that are not reflected in the EIS. For instance, during a meeting on March 20, 2018 between Alberta Transportation and Stoney Nakoda Nations, facilitated by the Canadian Environmental Assessment Agency, Alberta Transportation committed to further inquiry into the degree to which the diversion channel crossing under Highway 22 may serve as a wildlife crossing and means of improving this potential wildlife use of the diversion channel in dry conditions. While some mitigation measures are proposed in the EIS, if changes to the project design or operation are not successful to reduce potential impacts to wildlife movement, other actions to improve wildlife movement may be required.

Additional information is required to understand project interactions with wildlife movement and proposed mitigation, and to fully characterize potential changes to wildlife movement and the effects of these changes on Indigenous peoples.

Information Requests:

- a) Provide additional detail on areas of uncertainty regarding wildlife movement throughout the PDA, LAA and RAA, and how species are predicted to respond to each project component during construction and dry, flood, and post flood operations.
- b) Provide evidence pertaining to the suitability of the diversion channel to serve as a wildlife crossing underpass, including:
 - Supporting information to demonstrate that successful ungulate crossings can be achieved with the proposed cover materials for the diversion channel and channel features/conceptual design to achieve this success.
 - A description of uncertainty regarding the successful use of this structure by ungulates, and how uncertainty in use can be or is being reduced.
 - An updated description of project design features intended to improve wildlife use and any proposed actions to be undertaken to modify the planned diversion channel to improve wildlife movement or a rationale for not undertaking these changes. Describe alternatives that may be considered and have been identified by Indigenous groups.
 - An updated effects assessment to reflect this information, as appropriate.
- c) Explain in detail how fencing will prevent public access and concurrently permit wildlife access. Include a description of fence permeability as it relates to elk and grizzly bear.
- d) Considering information from a thorough review of existing literature, describe the potential benefits related to wildlife movement and mortality of an overpass over Highway 22 at various locations connected to the project area and discuss the feasibility of overpass options. Include a discussion of Indigenous groups' views on wildlife crossings, mitigation, and accommodation.

- e) Provide details of wildlife mitigation, monitoring, and follow-up plans that support a clear understanding of project effects to wildlife movement over time and adaptive management that may be required.

IR2-16

Topic: Wildlife - Restricted Activity Periods

Sources:

EIS Guidelines Part 2, Section 6.1.8, 6.1.9; 6.2.3; 6.3.4

EIS Volume 3A, Section 11.4

Montana First Nation – Review of Springbank Off-Stream Reservoir EIA, June 2018 (CEAR # 51)

Context and Rationale:

The EIS Guidelines require the proponent to identify changes to key habitat for culturally important species and assess the effects of changes to the environment on Indigenous peoples, including on current use and physical and cultural heritage. Restricted activity periods may serve to protect species of cultural importance to Indigenous peoples.

The EIS identifies seasonal and regulatory parameters for construction timing as restricted access periods. Restricted access periods for species of management concern vary and construction has the potential to affect some species more than others. Avoidance of restricted activity periods for all species of management concern is not feasible as these periods span the entire calendar year. The EIS indicates that site specific mitigation for wildlife habitat features will be identified during pre-construction surveys, that efforts will be made to avoid the restricted access period for the key wildlife and biodiversity zone along the Elbow river, and that if the restricted access period cannot be avoided, a wildlife mitigation and monitoring plan will be developed.

A more thorough understanding of which restricted access periods are not likely to be avoided and associated mitigation and follow-up requirements is required to understand potential impacts to wildlife species of cultural importance.

Information Requests:

- a) Provide an updated project schedule reflecting which restricted access periods may be avoided and which may not be avoided. If this level of detail is not possible, identify when, within the general project timeline this information will be available and how this information will be shared with Indigenous groups.
- b) Provide details of wildlife mitigation, monitoring, and follow-up plans for restricted access periods that are unlikely to be avoided.

IR2-17

Topic: Wildlife - Elk

Sources:

EIS Guidelines Part 2, Section 6.1.8, 6.1.9; 6.2.3; 6.3.4

EIS Volume 3A, Section 11

EIS Volume 3B, Section 11

Volume 4, Appendix H

Montana First Nation – Review of Springbank Off-Stream Reservoir EIA, June 2018 (CEAR # 51)

Tsuut'ina First Nation, Ermineskin Cree Nation, and Kainai First Nation – Technical Review of the EIS - Annexes – Combined (CEAR # 46, 47, 50)

Context and Rationale:

The EIS Guidelines require the proponent to identify changes to key habitat for culturally important species and assess the effects of changes to the environment on Indigenous peoples. The EIS Guidelines indicate that, with regards to current use, the EIS must consider fish, wildlife, birds, plants, or other natural resources of importance.

The EIS identifies that Tsuut'ina Nation noted that the Project is an environmentally sensitive area that comprises an important ungulate winter range, and describes the overlap of the LAA and RAA with the key wildlife and biodiversity zone for elk. Limited information is provided in the EIS on the relative importance of the LAA in the regional context for elk. There is uncertainty in the effects assessment, as significance determinations rely on the suitability of the RAA. Understanding the Project effects within the RAA through which elk are moving is needed in order to consider the concerns of elk migration and movement.

The EIS describes wildlife survey methods and results, including information about species habitat, presence, and movement and the results of winter tracking and remote camera surveys conducted within the LAA. Specific movement surveys are described, although dominant movement patterns to allow for understanding of potential project effects to elk movement patterns are not included.

The EIS acknowledges the construction of the Project may cause the loss of winter ungulate habitat and increase habitat fragmentation in the project area. A description of the context for population trends and threats, to understand how loss of winter ungulate range in addition to increased fragmentation will impact elk in the area, is missing. The EIS acknowledges potential

effects related to access roads but does not specify the location of these roads relative to key wildlife and biodiversity zones.

Elk have been identified as a species of importance to Indigenous peoples. Additional information on elk presence, distribution, use of the PDA, LAA and RAA, pathways of effects, and proposed mitigation is required to assess the changes to elk from the Project and the effects of these changes to Indigenous peoples.

Information Requests:

- a) Describe the relative importance of the PDA and LAA to elk and revise the assessment of effects to elk, to include a:
 - description of regional data from Western and Indigenous knowledge sources and a comparison of the results of project studies and surveys with this regional data. Explain any discrepancies between the information sources and supplement project studies with available regional data in a revised assessment as appropriate;
 - description of dominant elk movement patterns through the region and how project effects relate to this context; and,
 - description of elk population trends and threats and how trends and threats may change as a result of the Project. Include discussion of any population viability analysis undertaken to support the conclusion that the Project is unlikely to pose a long-term threat. If population viability analysis was not undertaken, discuss the information used to support the concept of minimal threat to persistence or viability.
- b) Clarify whether or not proposed access roads overlap with the key wildlife and biodiversity zones. If there is overlap, provide the details of an access management plan for the Project, including consideration of access for traditional use.
- c) Clarify how remote camera locations were selected and how habitat types were considered in the selection of remote camera locations. Provide a figure of remote camera locations overlaid with habitat types.
- d) Describe if and how the option of habitat offsets was considered to further mitigate the loss of high and moderate suitability habitat for elk.

IR2-18

Topic: Wildlife - Grizzly Bear

Sources:

EIS Guidelines Part 2, Section 6.1.8, 6.1.9; 6.2.3; 6.3.4

EIS Volume 3A, Section 11

EIS Volume 3B, Section 11

EIS volume 4, Appendix H, Attachment 11A

Montana First Nation – Review of Springbank Off-Stream Reservoir EIA, June 2018 (CEAR # 51)

Samson Cree Nation – Springbank Off-Stream Reservoir Project Written Submission – June 25, 2018 (CEAR # 52)

Context and Rationale:

The EIS Guidelines require the proponent to identify changes to key habitat for culturally important species and assess the effects of changes to the environment on Indigenous peoples. The EIS Guidelines indicate that with regards to current use, the EIS must consider fish, wildlife, birds, plants, or other natural resources of importance.

The EIS includes grizzly bear as an indicator species in the wildlife and biodiversity assessment. The baseline data for grizzly bear, including movement from radio-collared grizzly bears as well as data from field surveys, is limited. The habitat modelling presented is unclear as to whether all pertinent factors were considered for grizzly bear, such as elevation and aspect. Consequently, the understanding of potential impacts to grizzly bear may be limited. The wildlife and biodiversity assessment concludes that the Project is likely to have a greater adverse effect on ungulate and amphibian movement compared to effects on birds and grizzly bears. This conclusion is based on the understanding that grizzly bear use of the Elbow River valley is more common than the grizzly bear use of the habitats where the diversion channel and reservoir would be constructed. Given the data limitations, the understanding of grizzly bear habitat and movement areas may be incomplete.

The Project is predicted to have a low risk of wildlife mortality based on proposed mitigation measures during the construction phase. Further analysis by calculating the number of potential mortalities expected based on the increased traffic volumes resulting from the Project, may contribute to understanding mortality risk for large mammals. The determination of overall effect to grizzly bears is unclear, given the information presented in the EIS identifies multiple pathways of effects.

Grizzly bears were identified as a species of cultural importance. A thorough understanding of potential effects and mitigation for grizzly bear is necessary to assess the changes to grizzly bears from the Project and the effects of these changes to Indigenous peoples.

Information Requests:

- a) With regards to habitat, describe the limitations of the data used to predict baseline conditions and pathways of effects to grizzly bears, and the subsequent selection of mitigation measures. Provide reasoning for excluding elevation and aspect from the grizzly bear habitat suitability model, or update the model accordingly. Integrate results of model updates into the assessment of effects.
- b) With regards to mortality, explain whether and how increases in traffic volumes associated with the Project were considered in the assessment of risk of wildlife mortality. If increased traffic volumes were not considered in the assessment, integrate this into the assessment and provide the results.
- c) Identify additional mitigation measures and/or clarify proposed mitigation, including:
 - A description Project effects and mitigation relative to existing best practices and recommendations.
 - Specific measures that could be considered to mitigate impacts to grizzly bear overall and during spring feeding.
 - Details of a project-specific strategy or plan to proactively reduce human-grizzly bear conflict considering the Project will have a high magnitude impact on grizzly bear habitat. Include appropriate responses in the event of a human-bear interaction.
 - Where provincial strategies or policies may serve as mitigation, identify specifics that mitigate changes to grizzly bears and effects of those changes on Indigenous peoples.

IR2-19

Topic: Vegetation - Plants Species of Cultural Importance

Sources:

EIS Guidelines Part 2, Section 6.1.8; 6.1.9; 6.2.3; 6.3.4

EIS Volume 3A, Section 10

Piikani Nation – Technical Review of EIS, June 15, 2018 (CEAR #48)

Tsuut'ina First Nation, Ermineskin Cree Nation, and Kainai First Nation – Technical Review of the EIS - Annexes – Combined (CEAR # 46, 47, 50)

Context and Rationale:

The EIS Guidelines require the proponent to present baseline information for riparian, wetland, and terrestrial environments, including the identification of ecosystems that are vulnerable with a focus on species at risk or ecosystems of social, economic, cultural, or scientific significance. The EIS Guidelines also require baseline data regarding wetlands that are most likely to be affected by project activities and information on plants of importance for traditional use including harvesting areas.

The EIS presents a limited description of baseline data for plant species and wetlands of importance to Indigenous peoples, including species presence, abundance, and distribution in the PDA and LAA. The EIS identifies 250 site locations surveyed for baseline data of wetland and vegetation. Most of these sites were located in the PDA, with a limited number located outside of the PDA but within the LAA. The EIS does not indicate the number or locations of surveys relative to different ecosite types. Further, the reporting of baseline data within the PDA is inconsistent regarding species of management concern and species of cultural importance. The EIS identifies that three plant species were observed during rare plant surveys in the PDA but also states that effects on plant species of management concern from vegetation clearing are not anticipated because none were observed in the PDA.

The EIS presents 77 traditional use plant species identified by reviewing secondary sources of traditional ecological knowledge and indicates that 41 of these species were observed within the PDA. The EIS states that there was no indication that these plants were being used by Indigenous groups and, without consideration of plant species-specific effects, that because the species were generally common and widespread, the effects of the Project on traditional use plant species would be low. The EIS does not provide supporting justification for the statement that “Due to the lack of information of rare plant occurrences in the RAA, a loss of a single rare plant occurrence at the local scale does not imply a significant effect at the regional scale.” The conclusion that traditional use of species will not be affected because the plants may be accessed

elsewhere requires sufficient documentation of the opportunities to access plants of importance elsewhere, including information on specific locations, abundance, accessibility, and preference.

The EIS describes the RAA for vegetation and wetlands as selected to encompass an average home range of a female grizzly bear. The RAA used to provide context for the assessment of potential project effects should be relevant to the valued component, in this instance vegetation and wetlands. The scope of the RAA for vegetation and wetlands is required to meaningfully understand the potential project cumulative effects on vegetation and wetlands, including plant species and wetlands of importance to Indigenous peoples.

Indigenous groups indicated they were not engaged by Alberta Transportation to determine which rare traditional plants to include in surveys, to determine if the rare plants identified are traditionally important species, or to develop species-specific mitigation for the species of management concern that might be found within the PDA that may be removed by the project.

Validation of and/or additional information is required to meaningfully understand the potential project effects on plant species and wetlands of importance to Indigenous peoples.

Information Requests:

- a) Explain how the plant survey methods adequately support understanding of different ecosite types, and the presence, abundance, and distribution of plant species of cultural importance to Indigenous peoples. Describe the level of engagement of Indigenous groups in survey design and implementation, and discuss how sample locations and distribution are representative of plant species of importance to Indigenous peoples.
- b) Justify the use of the home range of a female grizzly bear as the RAA for vegetation and wetlands, taking into account baseline conditions, pathways of effects, plant species and wetlands of importance to Indigenous peoples, and wetland functions.
- c) Clarify and provide additional detail on the presence, abundance, and distribution of plant species of cultural importance/traditional use throughout the PDA, LAA and RAA.
- d) Provide a description of species-specific mitigation measures for plant species and wetlands of importance to Indigenous peoples observed within the PDA.
- e) Update the assessment of residual effects and significance determination for vegetation and wetlands considering the responses to a, b, c and d above regarding plant species of importance to Indigenous peoples.

IR2-20

Topic: Vegetation - Flood and Post Flood Habitat Fragmentation

Sources:

EIS Guidelines Part 2, Section 6.1.8; 6.1.9; 6.2.3; 6.3.4

EIS Volume 3B, Section 10.1; 10.2; 10.3

Tsuut'ina First Nation, Ermineskin Cree Nation, and Kainai First Nation – Technical Review of the EIS - Annexes – Combined (CEAR # 46, 47, 50)

Context and Rationale:

The EIS Guidelines require the proponent to identify changes to key habitat for culturally importance species and changes to resources, including plants, and access to areas for gathering.

The EIS states that “Filling and draining of the reservoir, as well as reservoir sediment partial cleanup, would not fragment patches of native plant communities.” However, flooding, scouring, erosion and deposition of sediment could effectively destroy/bury native plant communities, particularly native grasslands, and would have a similar effect as clearing and fragmentation, which was not assessed.

Understanding all potential pathways of effects to vegetation and wetlands is required to meaningfully assess the potential project effects on vegetation and wetlands, including culturally important plant species, and the effects of such changes to Indigenous peoples.

Information Request:

- a) Describe the potential for vegetation and wetland fragmentation to result from filling and draining of the reservoir and sediment clean up. Update the effects assessment to include fragmentation as a pathway of effect for vegetation and wetlands, including plant species of cultural importance.

IR2-21

Topic: Vegetation – Reclamation, Revegetation and Land Use

Sources:

EIS Guidelines Part 2, Section 6.1.8; 6.1.9; 6.2.3; 6.3.4

EIS Volume 3A, Section 9; 10

EIS Volume 3B, Section 9; 10

EIS Volume 4, Appendix D

Piikani Nation – Technical Review of EIS, June 15, 2018 (CEAR #48)

Louis Bull Tribe – EIS Review Submission, June 18, 2018 (CEAR # 49)

Tsuut'ina First Nation, Ermineskin Cree Nation, and Kainai First Nation – Technical Review of the EIS - Annexes – Combined (CEAR # 46, 47, 50)

Ermineskin Cree Nation – Springbank Off-Stream Reservoir TKU Report (CEAR #46)

Blood Tribe/Kainai – Traditional Knowledge, Land, and Resource Use (CEAR # 47)

Natural Resources Canada (NRCan) – Comments on the EIS, June 19, 2018

Context and Rationale:

The EIS Guidelines require the proponent to identify changes to key habitat for culturally important species and changes to resources, including plants, and access to areas for gathering. The EIS Guidelines also require a description of the potential to return affected areas to pre-project conditions to support traditional practices.

The EIS describes revegetation as mitigation for potential impacts to soil, vegetation, wildlife, and biodiversity, however detail on revegetation planning is not provided causing uncertainty regarding the effectiveness of revegetation as a mitigation measure. For example, the EIS does not explain what is meant by “the degree practical”, anticipated challenges, or adaptive management strategies in relation to revegetation. The EIS describes a progression of revegetation in the PDA consistent with proposed end land uses, however there is no discussion of a strategy for this progression, such as target ecosite types or planting prescriptions.

The EIS presents conflicting information regarding potential effects on vegetation and wetlands from flood and post-flood operations. The EIS suggests that project effects are not anticipated because plant communities are expected to recover post flood, while also suggesting that native

upland plant communities will be permanently replaced by three different types of modified grasslands and that wetland areas will be replaced by graminoid dominated marsh.

The EIS states that permanent loss of traditional plants is not anticipated because the plants would recover naturally over time. However, consideration of the traditional use species does not coincide with the types of vegetation the EIS describes as expected to recover after inundation during the Design Flood. For instance, all submerged upland and wetland communities would be lost along with many associated upland and wetland traditional use plant species. The assessment lacks adequate information to demonstrate that successful grassland and wetland (marsh) recovery could occur and support traditional plants and subsequent uses.

Indigenous groups have identified forested ecosystems as important to current use, cultural heritage, and the exercise of Aboriginal and treaty rights. The EIS indicates that approximately 25% of the vegetation cover types in the LAA are forest (broadleaf, coniferous, mixed and shrub). Natural Resources Canada indicated that this is a significant amount of forested area that will continue to expand as long as fire is restricted in the foothills. The EIS does not consider potential effects to land use and the various species (plant, bird, mammal and insect species) that utilize forested ecosystems. To limit effects of the Project on forest ecosystems during construction and operation, a forest regeneration plan should be developed to include plans for tree seeding or planting activities considering the forested habitat that was present prior to the Project. Since it is expected that forested ecosystem, grasslands, and forested wetlands will be affected by the Project, an integrated forest management plan for different flooding restraint and release scenarios is required to demonstrate how project effects to the different types of riparian vegetation will be mitigated.

Revegetation strategies are relevant to the mitigation of other project effects, such as soil erosion and introduction of invasive plants. For construction and dry operations, the EIS indicates that the strategy for mitigation of soil erosion for stockpiles will be defined upon finalization of detailed construction plans. Indigenous groups recommended the revegetation of stockpiles with native species of importance to Indigenous communities. There is potential for invasive species to spread and establish in disturbed areas during project clearing and construction, and in the reservoir area (throughout dry operations and following draw down). Limited information is provided on invasive species management. For example, there is no description of vectors for invasive species propagation within the project area, or best management practices including seeding prescriptions to minimize introduction of invasive plants.

The EIS includes a list of broad mitigation associated with biodiversity and maintaining or restoring biodiversity throughout each phase of the Project. However, criteria or thresholds for monitoring and measuring the effectiveness of mitigations to re-establish biodiversity, including biodiversity necessary to support traditional land uses on reclaimed areas, are not discussed.

A meaningful understanding of changes to vegetation and wetland habitat, and the effects of those changes to Indigenous peoples, requires thorough and accurate information on reclamation and revegetation as it relates to the continued presence, abundance, and distribution of resources and access to these resources for gathering.

Information Requests:

- a) Present evidence to support claims of natural reestablishment of vegetation, including species of importance to Indigenous groups, and of successful grassland and marsh recovery.
- b) Update the effects assessment for vegetation and wetlands to account for revegetation plans and anticipated loss of or changes to species of cultural importance. Include:
 - A discussion of how revegetation will mitigate project effects and support habitat for plant and wildlife species of importance and end land uses of Indigenous peoples.
 - Options for planting native plant species of importance to Indigenous peoples, for all phases of the Project. Include information on selection/development of seed mixes, seed sources and local procurement opportunities.
 - A description of integrated forest management plans for construction and operation, taking into account different flooding restraint and release scenarios, and forest regeneration plans for uplands, forested wetlands, and coulee areas.
- c) Describe specific mitigation to prevent and control the establishment and spread of invasive species, including regulated weeds, throughout all phases of the Project.
- d) Describe follow-up program elements to monitor the effectiveness of returning the project area landscape to a full pre-disturbance suite of native plant species that support biodiversity and continued use by Indigenous peoples.

IR2-22

Topic: Soil Quantity and Quality and Land Use

Sources:

EIS Guidelines Part 2, Section 6.1.8; 6.1.9

EIS Volume 3A, Section 9.2.3; 9.7.2; 10; 11

EIS Volume 3B, Section 9.5.2; 10; 11

Piikani Nation – Technical Review of EIS, June 15, 2018 (CEAR #48)

Context and Rationale:

The EIS Guidelines require the proponent to present information on the characterization of soils in terrestrial and riparian environments and an overall description of changes related to landscape disturbance, including changes to vegetation and plant communities. The EIS Guidelines also require the proponent to assess the effects of changes to the environment on Indigenous peoples. Soil quantity and quality affects vegetation and thus habitat, which in turn can affect current use.

The EIS states that soil inspection sites were distributed throughout the LAA but does not provide an overlay of inspection locations relative to the project footprint. The absence of this information creates uncertainty in understanding the representativeness of field inspection locations relative to the proposed disturbance to terrain and soils, and the soils specifically affected by project components.

In assessing effects to soil from flood and post flood operations, the EIS notes that in the reservoir, the change in soil quality and quantity is predicted to be a long term, adverse and irreversible effect of high magnitude, but due to the project area no longer being used for agriculture these effects on soil are considered not significant. This conclusion does not consider the soil quality and quantity requirements for other components of the environment (e.g. vegetation, wildlife, biodiversity and wetlands), or the suitability of affected soils for land uses other than agriculture such as Indigenous land use.

Understanding the effects of changes to soil quality and quantity on other VCs and the effects of changes to those VCs on Indigenous peoples is necessary to assess project effects to current use of land by Indigenous peoples.

Information Request:

- a) Identify which soil profile data collection sites were located within the PDA. Provide a figure showing locations of soil inspections in the PDA, LAA, and in relation to project components and the construction footprint.

- b) Provide an assessment of how changes to terrain and soil conditions might impact Indigenous land use, including impacts resulting from associated effects to terrestrial resources (e.g., vegetation, wildlife, biodiversity, wetlands), independent of the significance of the effects to terrestrial resources.
- c) Describe mitigation measures for soil quality and quantity, and discuss the need for a follow-up and monitoring plan for effects to soil conditions and associated impacts to Indigenous land use.

IR2-23

Topic: Navigation

Sources:

EIS Guidelines Section 6.3.5

EIS Volume 3A Section 12.4.2

Alberta Transportation Responses to CEAA Annex 2: A) Early Technical Issues, May 11, 2018

Transport Canada Comments on the EIS - June 18, 2018 (CEAR # 31)

Context and Rationale:

The EIS Guidelines require that the proponent assess any changes or alterations to access into the areas used for traditional purposes, including changes to waterways that affect navigation. Additionally, in the responses to CEAA Annex 2, Alberta Transportation indicated its intent to opt-in to the *Navigation Protection Act*.

The EIS states that some recreational boating occurs on the river in the PDA and LAA and the right of safe public navigation of any waterway must be maintained during construction and operation. The EIS indicates that during construction, the substantial interference with public navigation of the Elbow River would be avoided through the creation of a permanent portage around the in-stream water in-take components.

Transport Canada indicated that the diversion inlet, debris deflector, and safety or sedimentation booms or works from the spillways that may encroach on the Elbow River are components of the Project that may affect navigation.

Project effects to navigation have the potential to affect the ability to navigate, and the experience of navigation, both of which may impact Indigenous land use, cultural heritage, and exercise of Aboriginal and treaty rights. Additional details are required in order to understand potential effects to navigation from the Project.

Information Requests:

- a) Describe current navigation practices of the Elbow River and how project components and project phases may affect those navigation practices.
- b) Describe Indigenous navigation practices on the Elbow River and potential project effects to the ability and experience of navigation and the exercise of rights. Include a discussion of how navigation relates to land use, culture, and the exercise of rights, and how these interests may be impacted by effects on navigation.

- c) With regards to the proposed permanent portages proposed, clarify: who will be responsible for constructing and maintaining permanent portages; anticipated need for, timing, and location of portages; potential environmental effects from portage construction and maintenance; and effects of the portages on Indigenous groups' use and experience of the Elbow River.

Annex 1 – Mikisew Cree First Nation – Methodology

<https://ceaa-acee.gc.ca/050/documents/p65505/122764E.pdf>