Melanie Daniels
February 3, 2021
Lands and Consultation Office
Louis Bull Tribe
<Contact information removed>

Dear Ms. Daniels,

## RE: Review of Springbank Off-Stream Reservoir Project Draft Environmental Assessment

Louis Bull Tribe (LBT) has been requested to provide comment on the Impact Assessment Agency of Canada's (IAAC) draft Environmental Assessment (EA) Report and potential federal EA conditions for the Springbank Off-Stream Reservoir Project (the Project). At your request, Solstice Environmental Management has reviewed these documents in the context of the interests of LBT relative to the Project. The responses below provide comment regarding the interests of the LBT relative to traditional use of the area, and their Aboriginal and Treaty Rights. In addition, the Consultation office has provided us with insights on the interests of community members relative to traditional land use in this area, and more broadly, Aboriginal and Treaty rights regarding activities on LBT's traditional lands. Additional background information used to support this response also included the following:

- "Response to Louis Bull Tribe's Review Feedback of the SR1 draft Monitoring Plans" table presented at the January 28, 2021 meeting between Alberta Transportation and LBT discussing draft monitoring plans.
- "Springbank Off-stream Reservoir Project Fish and Habitat Offsetting - Concept Options" presentation given at the January 26, 2021 "SR1 Fish Offsetting Group Meeting."
- "DFO Regulatory Review of Springbank Off-Stream Reservoir Project" presentation given at the January 26, 2021 "SR1 Fish Offsetting Group Meeting."

Comments around the reclamation of wetlands, mitigation of residual effects to fish and fish habitat, and cumulative effects are discussed below.

## Reclamation of Wetlands

Alberta Transportation and LBT met January 28, 2021 to discuss draft monitoring plans and concerns brought up by LBT during the review of these plans. The IAAC has responded to these concerns and responses and has determined that these issues have been adequately met. Questions raised at the January 28, 2021 meeting about how the reclamation of wetlands will take place still deserve some comment.

A wetland reclamation plan which incorporates seed application will not be successful, or practically considered at all, for the following reasons:

1) Many wetland species do not establish well from seed and seeds are difficult to obtain;
2) AT states specifically that seed application will not be conducted in wetlands, and that wetland soil transplants will also not be considered. Any discussion of seed application by "native wetland seed mixes" (Section 6.4.2) are presumably for erosion protection during construction and do not reflect wetland species which are lost during operations; and
3) Evidence provided by AT only supports natural revegetation of wetland species via seed dispersal (Little-Devito 2018) or successful wetland species seed establishment via application of
soil conditioners, selective herbicides, and seedbed cultivation (Grose 2011), which AT is not exploring or has explicitly stated it will not do (i.e. herbicide application in wetlands).
According to Section 6.4 .1 of the report, all wetlands within the Project area will likely intersect with the deepest parts of the reservoir where sediment deposition is expected to exceed 10 centimeters to a maximum of 2.36 meters. At these depths, significant alterations to existing wetland habitat and species composition will likely occur. The evidence provided by AT do not describe the effects of wetland ecosystem burial beyond 15 cm of sediment, and do not show that wetland plants will return to a similar level of plant biodiversity or density that could be considered effective natural revegetation at these excessive depths.

Revegetation measures will not be effective through reseeding, no alternative or adaptive management options beyond natural revegetation have been proposed, and successful natural revegetation seems unlikely. AT should be clear about what mitigation options are available beyond wetland replacement or compensation in accordance with the Alberta Water Policy if natural revegetation does not meet revegetation targets.

## Mitigation of Residual Effects to Fish and Fish Habitat

As per the "DFO Regulatory Review of Springbank Off-stream Reservoir Project" presentation given at the January 26, 2021 "SR1 Fish Offsetting Group Meeting", the objective of the Fisheries Act Offsetting Policy is to "counterbalance the residual death of fish and/or harmful alteration, disruption, or destruction of fish habitat resulting from carrying on works, undertakings, or activities authorized under the Fisheries Act." Offsets are applied to compensate for impacts which could not otherwise be avoided or mitigated. Importantly, these offsets need to persist for at least as long as the project impacts are expected to exist. This is reflected in the fourth guiding principle for measures to offset which states: "measures to offset should generate self-sustaining benefits over the long term" (Fisheries and Oceans Canada 2019).

The benefits of some of the offset options presented at the January 26,2021 meeting do not meet this requirement of persisting "at least as long as the adverse effects from the works" (Fisheries and Oceans Canada 2019). The accounting of offsets to residual harmful alteration, disruption, and destruction (HADD) to fish habitat should consider this temporal aspect of offsets in relation to the 100-year expected lifetime of the Project. A system of monitoring should be proposed that will identify when these offsets begin to fail, so that new offset measures can be planned for and implemented.

## Cumulative Effects

The Project will further contribute to regional reductions in already limited lands available to LBT to practice traditional rights, as a result from the increase in disturbance area and infrastructure development. The Project will directly impact vegetation and wildlife communities throughout the Project area and downstream in the watershed. According to a study LBT conducted with ALCES Landscape and Land-Use Ltd., less than 5\% of land remains available in Treaty 6 to practice traditional rights, while cumulative impacts in the area continue to increase. The South Saskatchewan Regional Area, and the Parkland Natural Region, where the Project is located, have had increases in total impacts from 1999 to 2016 at $2.55 \%$ (total area impacted: $78.1 \%$ ) and $2.4 \%$ (total area impacted $51.5 \%$ ), respectively (ABMI 2021). The Tribe is concerned that the additional impacted lands will contribute to this significant negative effect on the ability of Tribe members to continue to practice traditional rights.

The view that the Project is "not likely to cause significant adverse cumulative effects" ignores this trend that a multitude of non-significant effects have already cumulatively made it extremely difficult to practice constitutionally protected Aboriginal and Treaty rights within LBT's traditional territory. In other words, the Proponent does not believe the Project will critically reduce or eliminate current traditional use, even though much of the access to traditional resources throughout the region has already historically been critically reduced and eliminated. Thus, every incremental impact contributes to the continued reduction of this already critically reduced and eliminated ability to practice rights to traditional land use, which results
in LBT Elders and land users incurring increasingly greater costs to travel further away to practice these rights. The IAAC expects that these issues will be resolved through the South Saskatchewan Regional Plan (SSRP).

However, it is not clear how LBT should expect these project level cumulative impacts to be addressed in the SSRP. When the Piikani Nation recommended that the Proponent align with the SSRP by engaging with the Indigenous Wisdom Advisory Panel to "contribute to the assessment of effects of the Project and development of mitigation measures, monitoring, and follow up programs", the Proponent admits that the SSRP is "meant to guide on a broad scale at a regional level not at a project specific level, thus it was not incorporated into the assessment of effects." LBT can presume that all future minor and major projects in this region will also act independently of resource governance decisions at the regional scale, with the assumption that the SSRP will serve to mitigate cumulative effects on their behalf. Considering the Landuse Framework planning process has made very little progress throughout the rest of the province over nearly 15 years following its development, it is difficult to believe there are sufficient resources available to make this happen.

We trust that the contents of this report meet your requirements. Please do not hesitate to contact the undersigned if you have any questions or require further assistance.

Sincerely,

## SOLSTICE CANADA CORP.

<Original signed by>

John Potter, B.Sc., M.F., P.Ag

Senior Environmental Scientist
cc: Shaleigh Raine, Consultation Officer, Louis Bull Tribe

## REFERENCES:

Alberta Biodiversity Monitoring Institute (ABMI). 2021. Land-use Planning Regions: Upper Athabasca Region. The Status of Human Footprint in Alberta. Retrieved February 2021 from https://abmi.ca/home/reports/2018/human-footprint/details.html?id=7

Fisheries and Oceans Canada. 2019. Policy for Applying Measures to Offset Adverse Effects on Fish and Fish Habitat Under the Fisheries Act. Fish and Fish Habitat Protection Program Fisheries and Oceans Canada Ottawa (Ontario). Accessed from https://www.dfo-mpo.gc.ca/pnw-ppe/reviews-revues/forms-formes/apply-policy-politique-applique-eng.pdf February 2, 2021.
Grose, P. 2011. Composted soil conditioner and mulch promote native plant establishment from seed in a constructed seasonal wetland complex. Ecological Management and Restoration. 12: 151-154.

Little-Devito, M., C.A. Mendoza, L.Chasmer, N. Kettridge, and K.J. Devito. 2019. Opportunistic wetland formation on reconstructed landforms in a sub-humid climate: influence of site and landscape scale factors. Wetlands, Ecology and Management. 27: 587-608

