Springbank Reservoir (SR1) - Summary of Relevant Information from NRCB Hearing

The following is a summary of some of the information provided at the NRCB Hearing into the SR1 project that is relevant to the decision made by IAAC regarding the environmental impacts of the project.

Project Benefits

It is clear from the evidence presented at the Hearing that the benefits provided to Albertans from the SR1 project are uneven. The project provides 1 in 200 year flood protection to residents downstream from the Glenmore Reservoir in Calgary and significantly less than that to residents upstream of the Glenmore Reservoir in Calgary and residents in Rocky View County downstream from SR1. Residents in the towns of Redwood Meadows (on the Tsuut'ina Nation) and Bragg Creek also receive less than 1 in 200 year flood protection from berms to be built in those towns. Interestingly, in a 2015 presentation to the Calgary River Communities Action Group, the Proponent asserted that berms and dykes inevitably fail. From this presentation - "we shouldn't consider ourselves safe from flooding with just one line of defense eg: dykes". This discrepancy in flood protection provided by SR1, in contrast to an alternative project further upstream (MC1) that provides equal protection to all residents along the Elbow River, is not in the public interest.

Evidence was presented that the major influencer of floods is the flow rates of the river (Exhibit 350 Transcript page 156: Matt Wood (Stantec/Proponent) stated "It is the peak, you know, that is the most important when it comes to flood damages, not necessarily the volume."). Yet, the Proponent based their analysis on volume of water to be stored, not on flow rates of the river. In fact, the Proponent was aware that the alternate project it studied (MC1) provided superior protection to SR1 if flow rate was the basis for the decision. (SCLG Aid to Cross No. 1 Ex 360 and SCLG Aid to Cross No. 2 Ex 361 provide a side by side comparison of SR1 to MC1.) This information was not shared by the Proponent during consultation.

As Alternate Means is a factor for its review, IAAC should revisit the comparison of MC1 to SR1 to determine if, in fact, the Proponent chose the right project for the best and most even flood protection for the residents of Alberta along the Elbow River.

Crown Consultation

- Evidence provided by the Stoney Nakoda Nations raises serious questions about the adequacy of consultation. IAAC should review the evidence presented by the Stoney.
- 2) The fact that the Proponent of the Project (Government of Alberta/Alberta Transportation) was forced to make "facilitation payments" to numerous First Nations raises questions regarding both the adequacy of consultation and the merits of the Project. It is of note that none of these payments have been accounted for in the determining the cost of the project. If the Project is in the interest of these First Nations, then why were these payments required? If the Project, in fact, harms these First Nations then how can we be sure that the magnitude of the payments is appropriate to the loss experienced? This is especially of concern with regard to the Erminskine and Kanai Nations where the details of those deals were not disclosed. And if the Project does, in fact, cause damage to First Nations, how can IAAC approve it? And what about the First Nations that were not provided "facilitation payments"? Are their damages uncompensated?
- 3) Evidence provided by the Springbank Community raises serious questions about the adequacy of consultation with the local communities. Compounding this issue is that the local community of Springbank and the surrounding areas are the ones who will bear the brunt of all the negative environmental and social issues of the project. The Proponent acknowledges that the only impacts to the local proximate communities from this project are negative impacts. And yet, these are the communities where the Proponent failed to engage early and often as the Project progressed.

Financial Costs of the Project

It is clear from the evidence provided in the Hearing that not all costs have been accounted for in the determination of the capital and operating costs of the Project. The Proponent has stuck doggedly to their estimate of \$432M in the face of overwhelming evidence that additional costs are a certainty. Not only are they a certainty, but they are known to, and acknowledged by, the Proponent. Why will the Proponent not just add these known costs to the project and attempt to make their case based on updated costs? Their refusal to update costs are a disservice to the public and an affront to the regulatory bodies who are tasked with determining if this project is in the public interest.

Social Costs of the Project

The Proponent has acknowledged that the only impact to the local communities are negative ones. The local community will lose heritage ranches that have operated and contributed to the community since the 1880's. This is a unique and vital part of the history of settling the area west of Calgary. The men and women who opened up this area to settlement are part of the history of Alberta. This is not just a loss of acreage, it is the loss of a unique part of Alberta's history.

The community will be left with a silt laden and dust prone wasteland following a large flood event. The Proponent has attempted to discount this with claims of the infrequency of such events. But in reality the Proponent does not know, nor do any of us know, with what frequency such events will occur.

There are no offsetting public benefits advanced by the Proponent. The Proponent is non-committal on public use of the newly created Crown Land. In the Hearing, conflicting evidence of public access and First Nations use for traditional activity was presented. The Proponent essentially refused to provide concrete evidence regarding land usage and social benefit. Instead, the issue of dealing with competing land usages was deferred to the operator of the project (Alberta Environment and Parks) to sort out.

The Proponent acknowledges that a main thoroughfare through the project area – Springbank Road – will be closed to traffic for extended periods during construction and during a large flood event. This thoroughfare is the main commuter hub through the community. It is also the main thoroughfare for students travelling to the Springbank schools. In the Hearing, evidence indicates that the Proponent had cancelled work to upgrade an alternate route for this thoroughfare because of cost constraints. The proposed alternate route, in its current state, is unsafe for the volume of traffic to be re-routed by Springbank Road closures. Only when brought to the attention of the public through the NRCB process, did the Proponent commit to upgrade the alternate route. This "oversight" is a good example of the lack of care and concern shown by the Proponent to the communities who will be negatively impacted by the project. It should never take "losing face" at a regulatory Hearing for a Proponent to do the right thing.

The Springbank Community proposed numerous conditions to the Proponent in the Hearing to try to advance some positive social consequences for the project. Sadly, most of these proposals were rejected. The only conclusion to draw from this rejection is that the Proponent is OK to impose significant negative consequences on the community surrounding the proposed SR1 project.

Throughout the project's history, the Proponent has chosen a social impact approach of pitting one community against another. There was never an attempt by the Proponent to bring communities together to find solutions that might be a win/win for the impacted communities.

Environmental Impact of the Project

While based on the information presented by the Proponent, the IAAC preliminarily concluded that there were unlikely to be significant negative environment consequences created by the SR1 project, evidence presented at the NRCB Hearing suggests otherwise. The IAAC should carefully review the evidence with regard to these newly brought to light environmental concerns. Evidence presented concludes that there are significant environmental consequences in the areas of air quality, native grasslands, riparian system health, damage to wetlands, silt deposition and wildlife.

With regard to air quality, the Proponent has acknowledged that there may be short term risk to human health. The Proponent also acknowledged errors in their analysis that were identified by an Intervenor. Again, this was only acknowledged when challenged in the Hearing process. The Proponent's lack of care and concern for the communities adjacent to this project is striking. Their solution is to monitor. Monitoring will not provide much comfort if you are on your way to the Emergency Ward with complications from unsafe air quality.

With regard to native grassland, the Proponent argues that it has committed to revegetation plans to reduce effects to native grassland and will implement adaptive management as required. As clearly explained in Ex. 271, pdf 16-18, rough fescue grassland, which is the dominant grassland species in the Project area, is very difficult to revegetate. This has been documented in literature such as Lancaster et. al. which is referenced in Ex. 271 at pdf 17. According to Lancaster et. al. revegetation success of rough fescue grassland has been recorded only on sites that have not been disturbed.

With regard to riparian health, evidence was presented that indicates a significant impact on the downstream riparian habitat and ecological functions of the downstream riparian habitats due to changing river flows. The Proponent's views of river flows was overly influenced by the outflow capacity at the Glenmore Reservoir rather than considering the flow rate that would maintain river processes and does not represent a geomorphic or ecological threshold. The Proponent acknowledged that it did not consider these impacts in its analysis.

With regard to damage to wetlands, the Proponent acknowledges that there will be significant damage to wetlands, and then argues that the damage is not significant. This makes no sense. The Proponent also acknowledges that wetlands will be damaged, not only during construction, but also during flood operations. The damage to wetlands is a significant concern, and IAAC should revisit this area given the evidence presented at the NRCB hearing.

With regard to silt deposition, the Proponent at Ex. 395 Tr. p. 2127 made it clear that the March 2021 revised analysis showed that the areal extent of sediment deposition was dramatically different than it was in the 2018 EIA and SIRs and that the sediment plume is considerably larger than the size of the sediment plume back in the 2018 EIA (in the order of two, three times bigger). The IAAC should revisit this environmental impact in light of this new evidence.

With respect to wildlife, evidence was presented of the abundance of wildlife in the project area. In addition, evidence was presented of the increased diversity of the wildlife in the area. The evidence presented at the Hearing paints a very different picture of the wildlife in the area than the one presented by the Proponent within its Environmental Impact Assessment. The IAAC needs to revisit the impact of the project on the abundant and diverse wildlife in the area given the new evidence presented at the NRCB hearing.

Damage Mitigation

With respect to damage mitigation for the many negative environmental impacts of the project, the Proponent did not present concrete mitigation actions or plans. They presented plans to make plans. There were no operational plans provided by the Proponent providing details for

- a) Fish rescue the Proponent acknowledged that there would be fish mortality and that attempts would be made to rescue stranded fish in the temporary reservoir. They were unable to provide concrete plans, instead indicating that the details would be developed at a later date by the Operator of the Project Alberta Environment and Parks. This is not sufficient to determine that they have mitigated the risk to fish mortality.
- b) Wildlife Rescue details were even more sparse when it came to plans for the rescue of wildlife threatened by Project operations.
- c) Sediment management dealing with the silt deposited by the Project in the thousands of acres that will be impacted has been an everchanging story in this project. What began as "there will

be no silt" has changed to "there will be metres of silt." The impacts of silt deposition over large areas on the native vegetation, air quality and ground water quality were areas the Proponent indicated they would "monitor". Actual actions to mitigate the damage were not provided, but rather deferred to the Operator of the Project to figure out. This is an unacceptable response to the very real damage inflicted on the environment by this Project and provides no comfort that these damages can, in fact, be managed and mitigated.

d) Land Use – evidence provided at the hearing showed that grasslands, as is common in the Project Area, need to be grazed to prevent serious fire hazard. The Proponent provided no evidence of plans to manage the fire risk created by taking this large project area out of agricultural (ie. Ranching) production.

From evidence provided at the Hearing, it is clear that although the Proponent has had 7 years to develop concrete action plans to mitigate environmental damage caused by the Project, they have instead deferred the obligation to mitigate these negative impacts to the Operator of the Project – Alberta Environment and Parks. How can a Project be approved without concrete mitigation actions for serious negative environmental impacts?

Concluding Comments

The evidence presented at the NRCB Hearing provides a different perspective on the SR1 project than the overly positive assessment provided by the Proponent in its Environmental Impact Assessment. It is clear from the evidence that the Proponent has not fully accounted for the negative environmental impacts of the project. It is also clear that in many areas the Proponent has not developed mitigation strategies. The Proponent has an over reliance on monitoring and does not have real strategies for mitigation. This is especially true in the case of ground water and air contamination. Water quality and air quality are too important to not have foolproof mitigation strategies.

It is also clear from the evidence provided that the Proponent's consultation record is more focussed on activity versus outcome. Evidence from the Stoney Nakoda and the Springbank Community paint a very different consultation picture than the overly positive view of the Proponent. The Proponent has relied on "facilitation payments" to opponents of the project versus attempts to deal with the concerns of these stakeholders or to find a project that has fewer negative environment and social impacts and more positive impacts.

The evidence provided at the NRCB hearing provides an opportunity and an obligation for the IAAC to revisit its assessment of the SR1 project. The environmental impacts are much worse than presented in the Environmental Assessment submitted to the IAAC. The consultation record, particularly for First Nations, is not as fulsome and positive as the Proponent has asserted. Should the IAAC conclude that the project should still proceed, then there should be a strengthening of the conditions under which the project should proceed.