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To whom it may concern:

Despite the severe inadequacies of the public engagement process, in which conservation groups were not invited to stakeholder meetings, and the insufficient advertising and short time allowed for the public review period, Public Pastures – Public Interest (PPPI) has obtained and reviewed public documents pertaining to CanPacific Potash’s Project Albany greenfield potash solution mine near Sedley, Saskatchewan, and we have very serious concerns about this proposed development. The proposed project will have irreversible and direct negative effects on upland and wetland habitat, as well as wildlife, within the project site. Furthermore, the huge amount of freshwater that is required for the potash to be retrieved, given that this water will be completely removed from the water cycle, is not sustainable. Based on the information provided in the reports prepared by SNC Lavalin, PPPI feels that the proposed Project Albany is not in the best interest of Saskatchewan and its residents, and should not receive approval.

Although it will be situated on cultivated land, the plant site for this project includes 51 ha of wetlands that will be destroyed when the plant is constructed. Of particular concern is that these wetlands contain four plant species that are tracked by the Saskatchewan Conservation Data Center: upland white goldenrod, plains rough fescue, narrow-leaved water plantain, and Engelmann’s spike rush, with the last two species also being designated as Species of Conservation Concern (SOCC). Furthermore, the plant site footprint is situated right next to native prairie hilltops which border Wascana Creek. Two sharp-tailed grouse leks were detected on these hilltops, and will most likely be disturbed and abandoned as a result of disturbance from the nearby plant construction and operation activity. The proposed potash plant site should be shifted so as not to destroy these wetlands and not to disturb the existing leks.

The total well field of the project includes ~4,394 ha of grassland/pastures, ~1,002 ha of wetlands and ~ 802 ha of riparian areas. The grasslands and wetlands threatened by the Albany solution mine project are almost all within the Aspen Parkland Ecoregion. The Nature Conservancy of Canada estimates that the natural habitat within this ecoregion has been reduced to less than 10% (Nature Conservancy of Canada). Furthermore, this habitat is under continual threat of being lost, as it has the highest rate of conversion in the Great Plains (World Wildlife Fund Plowprint Report 2017). Many statements in the Environmental Impact Statement (EIS) confirm that natural habitats will be destroyed or degraded as a direct result of the project. Some examples of these statements include:

- “Native dominant, modified grasslands, wetland, and plant SOCC habitat may be lost or altered/fragmented.”
- “Linear infrastructure may create pathways for the spread of invasive and weedy species into terrestrial, wetland, and plant SOCC habitat even after weed control measures are applied.”

- "Because of the project location, it is anticipated that weedy and invasive species will be present throughout the lifespan of the project. The weed management program is expected to minimize the spread of weeds, but total eradication is not possible."
- "... native dominant and modified grasslands are present throughout the well field area. There is potential for habitat loss and/or alteration during the construction of well pads and associated infrastructure, including the clearing and stripping of land prior to construction. The potential for grassland habitat loss and/or alteration will continue throughout operations during expansion of the well field."

These admissions should immediately trigger the disqualification of this proposal unless the proponent can revise their plan with a requirement to avoid all native grassland and other sites containing SOCC entirely.

We also find much of the language within the EIS document to be misleading. Within the EIS, the native grasslands within the project boundary have been characterized as "native dominant". We take issue with this, as these grassland quarters have not been cultivated. They are surrounded by cultivated landscapes, and some non-native grasses and forbs have encroached along their margins, but this does not disqualify them from their status as native grasslands worthy of protection. The high concentration of grassland obligate species and the 13 species at risk found during the SNC-Lavalin surveys confirms the value of these small grasslands as functional habitat. Within the proposed project area, the grasslands and wetlands were found to contain 146 species, with only 26 of those being non-native species. Thus, the use of the term "native-dominant" is inappropriate and misleading. Similarly, the Study Area section of the Technical Proposal states that, "The land is highly modified, and essentially no native Saskatchewan landscape remains in the area." The term "native Saskatchewan landscape" is ambiguous and unclear, and appears to be used to minimize any concerns about actual habitat loss. This statement is simply untrue and irresponsible.

Other examples of word choice throughout the EIS document are also similarly misleading. There are also numerous bald, unsupported statements in the EIS that are intended to assure the regulator that there will be no significant environmental impact from the project. One of the more egregious examples we found of this was: "Although some wetlands, aspen stands, and modified grasslands will be lost due to development of the project, the residual effects are not significant and unlikely to result in significant cumulative effects." There is no supporting evidence offered for this assertion, and to determine the validity of this statement, the regulator would need an independent third-party review of the project and a comparison to similar developments with baseline data to properly assess effects on habitat and species, including cumulative effects. There are other similarly misleading statements in the EIS document.

Another issue we have identified is that throughout the EIS, every commitment to avoid harm or destruction to natural habitats or species of conservation concern is qualified with "where possible" or "when possible". Alarming, the EIS document uses the word "possible" more than 180 times, and many of those are qualified with an "if", "when", or "where". This wording leaves the proponent with ample room to excuse habitat loss and degradation. The EIS identifies grasslands, shrubs and/or trees, i.e. native habitats, as making up 8.9% of the KL 262 lease area. While this may sound insignificant, 8.9% of 50,000 ha is still more than 4400 ha. There has been no accurate estimate provided in the reports to show how much habitat will be destroyed, or how many kilometers of roads, pipelines, and other linear features will be constructed on grasslands, nor how many well pads will be constructed on grassland. The "priority well field" includes 283 ha of grassland and 54 ha of wetlands. While neither the proponent

nor their contracted consultant seems to be revealing how many well pads and associated linear features will be placed on these habitats, it seems fair to assume that a “priority well field” would have many—perhaps as many as 30, given the overall estimate of 275 for the entire project. The native grassland parcels should be considered sensitive features themselves, and no well pads should be constructed on them. If this project results in even half of the natural habitat within the project area being destroyed/disturbed to such a degree that biodiversity and species at risk on these areas are lost, then that alone should be reason enough for the Ministry to reject this proposal and call for a new plan, one that would completely avoid these last few remaining parcels of native grassland in the region. Recent estimates show that as little as 13.7% of grasslands may remain in the province of Saskatchewan (Doke Sawatzky 2018). Therefore, avoiding habitat destruction or disturbance “when possible” is not good enough. Approval for this project should not occur unless every “where” or “when” possible is changed to “at all cost,” as in “native grasslands and habitat for SOCC will be avoided at all cost.”

We are also concerned that neither the proponent nor their contracted consulting firm, SNC Lavalin, have addressed the extreme difficulty of restoring native grassland once it has been disturbed. The Technical Proposal states, “If native moist mixed grassland habitat [no mention of the Aspen Parkland grasslands that form the majority of the grassland on the site] is discovered within the study area, mitigation will be developed should any disturbance be required. Any areas of native grassland disturbed during construction will be re-seeded using native grass seed blends selected to mimic the local graminoid community. This will allow for the successful encroachment of associated forb and shrub species, promoting the re-establishment of a diverse native grassland community.” This may sound promising to someone with little experience in ecological restoration; however, industry has proven repeatedly that due to the complexity of grassland structure and the persistence of invasive weed species, the reclamation of grasslands back to their native state is next to impossible. Well pads should be constructed on cultivated fields only. Furthermore, the plan for wetland compensation through restoring wetlands is weak. Even when designed thoughtfully, wetland restoration is notoriously difficult. What works 100% of the time is leaving established wetlands alone.

The province’s Activity Restriction Guidelines (ARGs) outline allowable activity periods and setback distances for wildlife and nests. However, even if the ARGs are followed, unacceptable risk to habitat and wildlife will likely still occur. Southern Saskatchewan has currently been experiencing drought conditions for the past few years, and given that the biological surveys were only conducted in 2017 and 2018, the survey data almost certainly under-represented the variety of species and their abundances. Furthermore, wetland species such as northern leopard frogs and horned grebes, for example, would likely have been both more abundant and more widely-distributed throughout the project site in wetter years. Also, while the ARGs inhibit disturbance within a certain distance from a species or feature, such as a lek or nest, they do not prevent construction on native grassland. They are also not enforced, and industry companies frequently ignore these guidelines completely with no consequences. The guidelines also do not prevent habitat destruction, because construction is permitted as soon as breeding season is finished, leaving the habitat severely degraded once the species return in spring. Furthermore, the reports provided by SNC Lavalin provide no estimation of how species at risk may be affected at a radius from disturbances fragmenting the habitat, or of the effects of any necessary vertical structures on species known to avoid these types of structures.

We also have major concerns over impacts on water in the Qu’Appelle Basin. Project Albany would use a significant amount of water, drawn from Lake Diefenbaker, via the Buffalo Pound Reservoir, from 1,000 m³/h to 1,650 m³/h or 8,760,000 to 14,454,000 cubic meters per year. In comparison, the City of Regina



uses 27,000,000 cubic meters per year. While the majority of Regina's water is returned to the water cycle via release of treated water into Wascana Creek and other means, a large portion of the potash mine's water will end up as brine injected underground, removing it from the water cycle. This amount will range from 7,049,975 to 5,880,515 cubic meters per year in the start-up period to 5,663,705 or 4,851,580 cubic meters per year after start-up. Is it wise to be withdrawing this fresh water from the earth's water cycle?

The Ministry has already approved two other potash mines within a 35 km radius of Sedley that would likewise extract great volumes of water from the water cycle. If a third one is approved and even two of the three go into production, the volumes of water lost to communities and ecosystems in the Qu'Appelle watershed could make climate change adaptation that much more difficult in Southern Saskatchewan. With climate science predicting water challenges for the province—reduced source water from glaciers and snow pack in the mountains, and more frequent and intense droughts—in decades to come, Saskatchewan should conserve all the water it can, rather than allow millions of cubic meters to be removed from the water cycle through salinization and storage in underground caverns. The withdrawal of wetlands has an impact on wildlife habitat as well as affecting the water cycle. These many questions regarding the required water supply for the Project Albany should raise alarm bells. It is abundantly clear from the Technical Proposal and EIS documents that neither the proponent, nor its contractor, nor the Province's Ministry of Environment will be able to ensure that there will be no loss of habitat for Species of Conservation Concern if the plan were to be approved as planned. This, combined with the unsustainable water usage of this potash development project, has led Public Pastures – Public Interest to conclude that CanPacific Potash's Project Albany solution potash mine should not be approved. If approval is granted, at a minimum the proponent must be able to guarantee that no construction, including the plant site, well pads and associated infrastructure, will occur on habitats being used by species of conservation concern.

Sincerely,

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On behalf of Public Pastures – Public Interest

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