November 19, 2017

The Honourable Catherine McKenna  
Minister of Environment and Climate Change  
House of Commons Ottawa, Ontario Canada  
K1A 0A6

Dear Minister McKenna,

RCE Saskatchewan is a Regional Centre of Expertise (RCE) on Education for Sustainable Development (ESD) acknowledged by the UN University in 2007.\(^1\) Our RCE brings together scholars and community practitioners dedicated to advancing ESD in our region and research in ESD. This mobilization of regions by the UN University was initially in support of the *UN Decade on Education for Sustainable Development* (2005-2014) and now advances the *UNESCO Global Action Programme on ESD* (GAP).\(^2\) We see ESD as essential in achieving the UN Sustainable Development Goals (SDGs)\(^3\) meant to guide the global development agenda until 2030, including, but not restricted to, goal 4 on education. We are pleased to be able to assist the Government of Canada in its formal commitment to the United Nations to achieve these goals.

As you may be aware, there is increasing public concern in Southern Saskatchewan regarding a proposed project, the *Common Ground Drainage Diversion* Project, that would divert water from the Quill Lakes Watershed, a closed watershed basin, into the north end of Last Mountain Lake located within a different basin. This northern portion of the Lake is the location of the *Last*

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Mountain Lake Migratory Bird Sanctuary\textsuperscript{4} which is, in turn, located within the \textit{Last Mountain Lake National Wildlife Area} (NWA).\textsuperscript{5} Last Mountain Lake is part of the Qu’Appelle River Watershed. Academic members and local experts of RCE Saskatchewan along with those living in the Qu’Appelle River Watershed including First Nations communities are concerned about the potential addition of poor quality water with higher salt content being introduced into Last Mountain Lake and further downstream. The degradation of upstream water occurs, in part, because prior to its diversion into Last Mountain Lake it will pass through two lakes, Kutawagan Lake (4000-5000 Total Dissolved Solids (TDS)) and Pel Lake, that have a much higher salt content than Last Mountain Lake (1400-1800 TDS). This degraded salinated water could potentially affect many aspects of the natural environment including fish, wildlife, and plants, while negatively impacting the use of water for local and regional livelihoods including agriculture, fishing, hunting, and recreational uses.

RCE Saskatchewan had intended to provide our concerns directly to the Government of Saskatchewan’s Ministry of Environment through the environmental assessment process under the provincial \textit{Environmental Assessment Act}. This Act would have made the diversion proposal public (which to date has not been done) as well as allowing for public input, including scholarly and local expertise gathered by the RCE. As you can see from the attached letter from Wes Kotyk, Assistant Deputy Minister, Saskatchewan Ministry of Environment, dated September 8, 2017, and addressed to Mr. Kerry Holderness, Chair of the Quill Lakes Watershed Association (QLWA)—the proponent of the project—the province has determined that this project does not require an \textit{Environmental Impact Assessment} (EIA) as it has not been deemed a “development” under the \textit{Environmental Assessment Act}. Within the letter there are several quite serious errors in determination under section 2(d) of the Act. These include:

- section b): a failure to acknowledge that water is a provincial resource under the provincial \textit{Water Security Agency Act}\textsuperscript{6} and that large volumes of freshwater will likely be degraded as a result of the diversion project;
- section d): the documented widespread public concern downstream of which the Ministry was aware prior to issuing this letter; this includes a letter specifically to the Minister of Saskatchewan Environment, the Honourable Scott Moe, from the Calling Lakes Ecomuseum, a flagship project of RCE Saskatchewan, raising many concerns dated June 15, 2017 (see attached)


\textsuperscript{6} Section 38(1) of the Saskatchewan \textit{Water Security Agency Act} states: “The property in and the right to the use of all ground water and surface water is, and is deemed always to have been, vested in the Crown.” Available at: \url{http://www.qp.gov.sk.ca/documents/English/Statutes/Statutes/W8-1.pdf}
and to which the Minister officially replied on July 26, 2017 (see attached); Saskatchewan Environment was also aware of earlier public concerns of a similar proposed diversion that were raised in the fall of 2015 through public consultations; these were shared directly to the Ministry that at that time rejected the Kutawagan Creek Diversion as an option based on public opposition.  

- section f): a failure to acknowledge potentially significant adverse impacts on the environment. It is this final point that is most relevant to Environment and Climate Change Canada so we will elaborate on our concerns in more detail.

The provincial decision letter indicates that the proposed *Common Ground Drainage Diversion Project* would divert 7,000,000 m³ of surface water toward Last Mountain Lake. Presumably this amount is annually (though the Minister’s letter does not state this and we have no means to verify the amount given lack of public access to the proposal). Of importance, however, is whether this 7,000,000 m³ is an average and whether it would be more in high runoff or high precipitation years; for the project to serve its intended purpose this would presumably need to be the case. Furthermore, how would this water amount be measured, monitored, and enforced? Normally within a Conservation and Development (C&D) authority such as the Quill Lakes Watershed Authority (QLWA) that is proposing the development, the C&D authority is meant to cover the full extent of parties effected by the water diversion and thereby internalize the externalities that can occur by drainage from one party that benefits to another party that is harmed. In this case, however, the membership of the Quill Lakes Watershed Authority does not include significant Rural Municipalities, towns/cities, and First Nations reserves on Last Mountain Lake and in the Qu’Appelle system that would be harmed by the degraded water quality.  

None of the Rural Municipalities surrounding Last Mountain Lake (RM 280, 251, 250, 221, 220, 219, 190)⁸ and significant communities on that Lake are part of the QLWA governing body (much less other RMs, First Nations Reserves, towns, and cities on the Qu’Appelle River System further downstream). In effect, the drainage proposal subverts the very purpose of a C&D authority by using it, perversely, to aggregate a benefit to those who are part of the Quill Lakes River Basin and part of the governance of the C&D and impose a negative externality on those who are not part of that watershed. This implies the Quill Lakes Watershed Authority as an

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⁸ Currently the QLWA as a 14 member body is governed by a board of 11 members with representatives from the Rural Municipalities of Mount Hope (No. 279), Prairie Rose (No. 309), Osborne (No. 310), Lakeside (No. 338), Leroy (No. 339), Ponass Lake (No. 367), Spalding (No. 368), St. Peter (No. 369), Town of Wynyard, Town of Wadena, and Village of Quill Lakes.

active proponent of the project will have an ongoing structural conflict of interest in seeking to impartially and objectively measure, monitor, and enforce the flow rate in a way that remedies the harms to those downstream. Furthermore, it is an inappropriate authority given its limited mandate focused on drainage. An Environmental Impact Assessment by a proper authority would evaluate the opportunity cost of this drainage option against all other options, where these costs specifically include environmental criteria upfront and in a precautionary way, before sanctioning any activity. A further concern is the lack of appropriate environmental expertise by the QLWA (along with a lack of expertise in other areas). This lack of expertise is acknowledged by the Government of Saskatchewan that has had to establish a special inter-departmental committee to work with the QLWA. This has occurred presumably because the QLWA as an outside structure is having to take on responsibilities it was never designed to do. This is occurring, in part, due to the Provincial Government failing to discharge its appropriate jurisdictional responsibilities and utilize its own extensive internal expertise through normal processes that include an Environmental Impact Assessment. It is concerning that the Province’s Water Security Agency (WSA) has taken a project for which they were the proponent, created a supposedly arm’s length third party (the Quill Lakes Watershed Association), and put this complex project into their hands. The QLWA Association does not have the capacity nor the technical expertise of the WSA in these matters.

Furthermore, the Saskatchewan Ministry of Environment’s letter rejecting the need for an Environmental Impact Assessment states that according to the proposal the intended 7,000,000 m$^3$ diversion will “lower the lakes by .6 m”. Unfortunately this statement from the Provincial Ministry lacks precision as it doesn’t say over what period of time this 60 cm reduction will take place. Furthermore, as the goal of the project is to mitigate the flooding of the Quill Lakes, presumably “lower the lakes by .6 m” is referring to the Quill Lakes: Big Quill Lake and Little Quill Lake (a possible interpretation—though less credible given the flood mitigation goal—is that “the lakes” refers to Kutawagan Lake and Pel Lake; see analysis below). Assuming the goal is a 60 cm reduction in the Quill Lakes (a reasonable goal given the measured rise in lake levels and a reduction in water level that might mitigate flooding), these numbers are highly

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10 Both a federal and a provincial Environmental Assessment would require a review of the "alternatives to the project", and a justification of why the project was selected from those alternatives. Under the approval process that has been set out by Saskatchewan Ministry of Environment, it would now be irrelevant to the regulators whether or not the proposed project is the best solution.


questionable. Saskatchewan’s Water Security Agency (WSA) engaged KGS Group Consulting Engineers to produce a flood mitigation report released in 2016. KGS report presented and evaluated a number of alternatives to mitigate flooding impacts of the Quill Lakes. One of the options presented referenced a Kutawagan Creek diversion of 27,000,000 m³ per year which was predicted to result in a lowering of the Quill Lakes by 10 cm over 5 years, and 42 cm over 50 years. How is the now proposed 7,000,000 m³ per year diversion going to possibly achieve a 60 cm reduction in the Quill Lakes? Presumably this 60 cm reduction is the amount needed to adequately meet the purposes of the project, namely flood mitigation. This means that since the Kutawagan Creek diversion from the KGS study only achieves a 42 cm reduction in the Quill Lakes over 50 years with a diversion of 27,000,000 m³ per year, the proposed goal of a 60 cm reduction in the Quill Lakes through the project proposal has to be well over this larger water volume (not 7,000,000 m³). It is our understanding that any diversion over 10,000,000 m³ into a different watershed requires a federal Environmental Impact Assessment. On the other hand, if (oddly) the 60 cm reduction in the Ministry’s letter refers to a goal for a reduction in the level of Kutawagan Lake and and Pel Lake, and we assume the Minister’s letter is correct that the project intends only a diversion of 7,000,000 m³ annually then the actual impact on Quill Lakes water levels is negligible. Using the same data from the KGS study, the Kutawagan Creek diversion of 27,000,000 m³/year led to a 10 cm reduction of the Quill Lakes over 5 years; this implies that the proposed 7,000,000 m³/year diversion will amount to only a 2.6 cm reduction in the Quill Lakes water levels over 5 years (amounting to a mere 0.51 cm/year). This provides such a minimal reduction in the Quill Lakes it would not substantially contribute to Quill Lakes flood mitigation efforts. Nor would it justify the economic costs of the project and and the likely adverse risks to Last Mountain Lake outlined below. As such, this second interpretation of the Provincial Ministry’s 60 cm water reduction statement as applying to Kutawagan Laka and Pel Lake is not credible. However, this leads back to the original analysis of the actual diversion proposal being well over 27,000,000 m³ per year.

The 7,000,000 m³/year diversion figure is also low for a further important reason. 39% of the Quill Lakes' current average inflow is due to illegal drainage. Yet despite the Saskatchewan

14 KGS. 2016. P. 87, Table 13, “Kutawagan Creek Diversion Option.”
15 The KGS study also identifies a reduction of water level under 6 cm over 5 years as a minor overall reduction: “The [KGS] model results indicated that the short term (5 year) average reduction in water level on Big Quill Lake between the base case and the various options ranged from 0 m and 0.42 m, with about half of the options only having a minor overall reduction of 0.06 m or less.” (KGS 2016, p. 85). Furthermore, the Kutawagan Creek diversion in the KGS study is presumably modeled at 27,000,000 m³ not 7,000,000 m³ due to the marginal benefit of such a low amount of water diversion on Quill Lakes water levels.
16 KGS. 2016. p. 77, Table 11.
Ministry of Environment’s media release of July 14, 2016, where it committed itself to closing unapproved drainage works into the Quill Lakes Area, we are not aware of any action having been taken by the Province since that date on this commitment. That there is no such intention is partly confirmed by the Minister of Environment’s own comments in his Letter of July 6, 2017, to Aura Lee MacPherson where the Minister surprisingly raises skepticism about the impacts of man-made illegal drainage. Furthermore, in this letter he actively promotes the Province’s Agricultural Water Management Strategy focusing on drainage networks as the primary solution to the problems in the area (having established the previously mentioned special committee to advise the Quill Lakes Watershed Association, an entity whose purpose (despite its name suggesting a wholistic management structure) is focused on water diversion through drainage). This analysis is ultimately of importance because if the Province is not planning to engage in closure of illegal drainage upstream accounting for 39% of the problem, an even greater amount of water will need to be diverted into Last Mountain Lake in order to mitigate flooding in the Quill Lakes Area. Based on the information publicly available, one of the few justifications we can see for claiming only 7,000,000 m$^3$ will be diverted each year through this project is political rather than empirical: namely that under the Canadian Environmental Assessment Act (CEAA 2012) “Regulations Designating Physical Activities”, a surface water diversion of 10,000,000 m$^3$ or more from a natural water body into another natural water body would require a Federal Environmental Impact Assessment. Even if this 7,000,000 m$^3$ amount somehow were a credible average diversion, with anticipated climate and precipitation variation on the prairies due to climate change we can expect much larger volumes needing to be diverted at a given time or during a given year (something Minister Scott Moe acknowledges as a primary concern in his own letter of July 26, 2017), thereby likely surpassing the 10,000,000 m$^3$ amount in individual years.

As an RCE we have further concerns regarding the potential impacts of the introduction of higher Total Dissolved Solids (TDS) into Last Mountain Lake resulting from the proposed water diversion. Last Mountain Lake already has a high level of total dissolved solids (TDS). Rather than being a reason to allow the introduction of water with even higher levels of TDS into the Lake, this should be seen as a reason to provide extra protection to the lake and its water quality. Zooplankton, which are a major source of food for fish, are especially sensitive to TDS while

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18 Minister Scott Moe states: “In your letter you state that the Quill Lakes flooding is man-made. While agricultural drainage may have contributed to the current situation, it is important to note that the main factor has been the well above normal amounts of precipitation in the area over the last number of years.” [emphasis added] (Letter to Aura Lee MacPherson, July 26, 2017). There is no empirical basis given for the Minister’s skepticism of his own department’s commissioned KGS report citing 39% of the current situation being due to illegal drainage.
Perch and Northern Pike are also sensitive to higher salinity that the proposed diversion would likely cause. Introducing higher TDS water could also have a cumulatively increasing impact on the quality of the lake water over time, and may impact some areas more than others as the saline water will not necessarily mix evenly with the total lake volume—it has a tendency to concentrate in certain areas. Lastly, we are concerned that there may be other pollutants such as ammonia and chlorides, that have not been properly reviewed due to the failure to conduct an Environmental Impact Assessment.

The absence of an Environmental Impact Assessment also means that the duty to consult First Nations communities will be impaired. It is precisely through an Environmental Impact Assessment process that the local knowledge and expertise of First Nations communities pertaining to the natural environment would be gathered. Even if First Nations communities are consulted later on in the process (e.g., on the issuance of the Aquatic Habitat Protection Permit and the issuance of the Approval to Construct and Operate Drainage works), without an Environmental Impact Assessment there is unlikely to be much information on potential impacts of the project to actually consult on. The appropriate experts will not have been brought in to do a science-based assessment, review the potential impacts of the project, and complete adequate modeling and other studies. While an Environmental Impact Assessment is publicly transparent, in the absence of such an assessment the process is likely to be opaque with much information continuing to be hidden from the public over and above the current inability of the public to examine the actual proposal. We are aware that Pasqua First Nation has already formally expressed their dismay to Saskatchewan Environment at the lack of a Provincial Environmental Impact Assessment as part of the Province’s duty to consult.19

Lastly, RCE Saskatchewan sees the proposed project through the lens of the 17 UN Sustainable Development Goals (SDGs). There seem to be a number of win-win solutions at the local and regional level for current and future generations affected by the management of this watershed that are currently not being contemplated. Rather than contaminating fresh water through the proposed diversion, we see freshwater on the prairies as an important resource that could play a key role in advancing local sustainable livelihoods—especially given the extremely dry summer experienced on the prairies in Saskatchewan this past summer—something anticipated with climate change models. The relevant SDGs in our view include: goal 2 (to promote sustainable agriculture), goal 6 (on sustainable management of water), goal 9 (on building resilient

infrastructure), goal 12 (on ensuring sustainable production patterns), goal 14 (on protecting and
enhancing life in the water), goal 15 (on promoting sustainable use of terrestrial ecosystems), and
lastly (and perhaps most importantly in this case) goals 16 (on promoting just, peaceful and
inclusive societies including building effective, accountable, and inclusive institutions) and 17
calling for the promotion of partnerships for achieving the SDGs. We are, to date, deeply
disappointed at the disruption and impairment of local and regional social networks in our region
that the current proposal is creating due to a failure to contemplate win-win solutions.

In light of these considerations and, in particular the absence of a Provincial Environmental
Impact Assessment being conducted, **we are making a formal request of your Ministry,**
**Environment and Climate Change Canada, to designate the Common Ground Drainage
Diversion Project under the Canadian Environmental Assessment Act, 2012 (CEAA 2012) in order to conduct a Federal Environmental Assessment of the project.** This is, in part, due to:

1. **our understanding that under the “Regulations Designating Physical Activities” a**
diversion of 10,000,000 m$^3$ or more from a natural water body into another natural water body
requires a Federal Environmental Impact Assessment. Despite what has been stated in the
original proposal, based on the evidence at hand we see the project’s diversion goal of a 0.6 m
reduction in the Quill Lakes well exceeding the 10,000,000 m$^3$/year diversion amount needed to
target a Federal EIA (i.e., using the findings of the KGS study in relation to a Kutawagan Creek
diversion of 27,000,000 m$^3$/year providing a reduction under 0.6 m and the goal of providing any
reasonable level of flood mitigation).

2. **We are also aware that Environment and Climate Change Canada “is primarily**
responsible for administration of the ‘pollution prevention provisions' of the *Fisheries Act*
including section 36 which prohibits the deposit of deleterious substances to water frequented by
fish, unless the deposit is authorized by regulation under the Act or other federal legislation.”
Again we see a Federal Environmental Impact Assessment being conducted as a prerequisite for
this determination, especially in light of the concerns we raise above concerning the likely
impairment of fish habitat in Last Mountain Lake due to salinization and introduction of other
substances.

3. **Finally, we assume that Environment and Climate Change Canada also has powers to**
protect and preserve both the *Last Mountain Lake Migratory Bird Sanctuary* and the *Last*

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20 Specific pollution and prevention provisions of the *Fisheries Act* administered by Environment and Climate Change Canada to conserve and protect fish habitat include: “sections 4.1(1), (3) and (4), 4.2(4), 4.3, 4.4, 5(1) and (2), paragraph 37(1)(b),
subsection 37(1.1) and (2), paragraphs 37(3)(a) and (b), subsections 37(4) and (5), subsections 38(1) and (2), paragraphs 40(3)
(a.1) and (d), subsection 42.1(1), subsections 71(2) to (4), subsection 71.1(1), section 73, subsection 75(3), section 76, paragraphs
79.2(d) and (h), subsection 79.4(2) and (3), 79.7(4)(b), subsections 89(1) to (3) and section 91 of the Act. See Fisheries and
Mountain Lake National Wildlife Area (NWA) that will be the most directly impacted natural areas as a result of this diversion. In the absence of any provincial Environmental Impact Assessment of this project we are hopeful that Environment and Climate Change Canada would exercise its full powers to protect the first bird sanctuary in North America established in 1887 and this National Wildlife Area.

Given the urgency of the current situation and the potential for the project to begin construction in the very near future we are also requesting that **Environment and Climate Change Canada call an immediate halt to any permitting and/or other developments related to the Common Ground Drainage Diversion Project** until such a time as your Ministry has been able to gather the requisite information needed to come to a determination in relation to our above requests of the Ministry for a Federal EIA.

Thank you for considering these requests for what has proven to be a difficult situation for the downstream communities potentially affected by this proposed development and, more generally, the citizenry of Saskatchewan committed to long term goals of sustainable development and wise use of our freshwater resources in an era of profound climate change impacts on the Canadian prairies. Feel free to contact us if you have any questions or concerns or if we might be of further assistance in relation to our requests. **As this process is now very time sensitive, we would ask for an acknowledgement that you have received this letter and a reply as soon as possible to our requests.** We have also cc’d others in the Government of Canada with responsibilities and/or interests in items that we have alluded to in this correspondence. We look forward to hearing from you.

Sincerely,

Dr. Roger Petry, Co-coordinator
RCE Saskatchewan
roger.petry@uregina.ca
306-585-5295

Dr. Garth Pickard, Co-coordinator
RCE SK Sustainable Infrastructure Working Group
Garth.pickard@uregina.ca
306-533-9487
Aura Lee Macpherson, Chair
Calling Lakes Ecomuseum, RCE SK Flagship Project
324Katepwa@gmail.com
306-539-6903

Attachments (3):


cc. Hon. Ralph Goodale, Minister of Public Safety
cc. Shauna Sigurdson, Regional Director Prairie North Region, Canadian Environmental Assessment Agency
cc. Kerry Hecker, Protected Areas Manager, Canadian Wildlife Service, Environment and Climate Change Canada
cc. Dale Nicholson, Regional Director General, Central and Arctic Region, Fisheries and Oceans Canada