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November 28, 2017

Anna Kessler
Project Manager
Canadian Environmental Assessment Agency
Prairie and Northern Region
Canada Place
Suite 1145—9700 Jasper Avenue
Edmonton AB TSJ 4C3

Dear Ms. Kessler:

The Saskatchewan Environmental Society (SES) would like to add our voice to the **request to 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.** We appreciate the opportunity to have the CEEA consider our input on the Quill Lakes Watershed Association (QLWA) Common Ground Drainage Project.

With respect to water issues, SES often works with many groups, including providing technical assistance where appropriate. We advocate for effective water stewardship with the primary emphasis on source water protection. Our input into the discussion related to this proposed project is informed by a review of assessments made by the Saskatchewan Water Security Agency and technical reports by the KGS Group, by Golder and Associates, and by R. Halliday & Associates. It also includes information collected during attendance at meetings with the Last Mountain Lake and Qu'Appelle Lakes groups as well as presentations from representatives of QLWA. We have made several field visits to the area, and have engaged in discussions with concerned stakeholders who have contacted our office.

Our position is: 1) that key information about the project has either been left out or is based on questionable analysis related to the potential benefits and the considerable negative environmental impact on Last Mountain Lake and on the lakes in the Qu'Appelle chain; and, 2) that the provincial government is in error for stating the project is not a "development" requiring an EIA.

The QLWA has said their Kutawagan Diversion proposal is designed to reduce the water level in the Quill Lakes by diverting water away from the Quill Lakes and into Last Mountain Lake. They used a projection of lowering the water level in the Quill Lakes by 0.6 m each year by diverting 7,000,000 m³ of water per year away from the lake through this project. We used their figures to calculate the impact that the



diversion of 7,000,000 m³ of water actually would have on Quill Lakes, with its surface area of about 635 km². The calculation would be $7,000,000 \text{ m}^3 / (635 \times 1,000,000 \text{ m}^2) = 0.01 \text{ m}$ or about **half an inch**. It would not even be close to creating the **0.6 m** (almost 2 feet) drop in water level in the Quill Lakes, as stated by QLWA. The proponents also state that the Quill Lakes have risen 22 feet (6.7 m) in the last 13 years. That works out to an average of 1.7 feet per year (0.5 m). **A reduction of water to create a drop of 0.6 meters** would require removing about **420,000 dam³**, far more volume than the **7000 dam³** they are proposing.

In other words the outlet they describe would be ineffective as proposed. However, the proposal, as part of the Kutawagan Diversion project, to build a diversion structure to intercept water from the upland drainage systems, a 8760 km² area that is primarily farmland, is a concern. While being characterized in the discussion by QLWA as being “fresh water”, the diverted water will be far from potable. The diversion channel will result in the transfer of drainage water off the farmland into Last Mountain Lake. This farmland includes large acreages of wheat and canola. Wheat is subject to heavy applications of nitrogen fertilizer, and canola is treated with neonicotinoids. Studies show that about 50% of the nitrogen and up to 90% of pesticides used in farming leach into the water system. This polluted water can be expected to flush through the Kutawagan Lake and Pel Lake area into the Last Mountain Lake. What is really problematic is that this nutrient, pesticide and salt loading can be expected to occur in the immediate area of the **Last Mountain Lake National Wildlife Area** which includes the **Last Mountain Lake Migratory Bird Sanctuary**. The greatest concentration of polluted water will occur in the most important and environmentally sensitive location on Last Mountain Lake.

Another environmental issue that isn't addressed is the predicted impact of climate warming and precipitation variation. We can expect much larger volumes of water needing to be diverted at a given point in time due to severe storms and related flooding. These flood cycles can be predicted to lead to increased salinity as well as nutrient and pesticide loading in Last Mountain Lake. Nitrogen pollution, especially under warmer climate conditions, can lead to large algae blooms that choke out other plant species while contaminating drinking water. Neonicotinoids have been shown to have a negative impact on not only bees but also to impair the growth and survival rates of several species of migratory birds and on fish. This area is currently under more extensive research.

From the social perspective we feel the First Nations communities in the Last Mountain and Qu'Appelle watershed have not been consulted. Our position is that simply disseminating information does not meet the criteria of “duty to consult”.

Finally, we suggest the Saskatchewan Ministry of Environment is in error when referencing the provincial Environmental Assessment Act section 2 (d) as the reason for not requiring an EIA. We propose that the following section of the Act, **(vi) have a significant impact on the environment** (Environmental Assessment Act 2(d), Saskatchewan), actually indicates that an EIA should have been required.

In summary, our concerns are that the proposal, as it exists, fails to show any benefit related to flooding in the Quill Lakes, fails to show the negative impacts that farm land drainage through salty lakes into Last Mountain and the Qu'Appelle chain can be expected to have, and fails to build in the risk factor of climate change related to severe storms. We also feel the provincial government is in error related to addressing what is clearly an inter-watershed diversion project, for failing to adequately assess the value of, and the foreseeability of the significant negative impact on, the **Last**



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Mountain Lake National Wildlife Area and the **Migratory Bird Sanctuary**. Equally concerning has been the failure to address downstream concerns of the people impacted, especially the First Nations communities.

We greatly appreciate your time and consideration.

Most Sincerely,

A handwritten signature in black ink that reads 'Bert Weichel'.

Bert Weichel
President, Saskatchewan Environmental Society