

Crooked and Round Lake Information Regarding the Kutawagan Diversion Project

The purpose of the petition is to stop all further development of the proposed Kutawagan Diversion Project until the short and long-term environmental assessments have been completed and the direct and indirect impacts on the lakes from Last Mountain through to Round have been communicated to all stakeholders.

We do realize that we cannot allow the Quill Lakes to spill uncontrolled into Last Mountain Lake. However, we believe there are other options to deal with this crisis other than what the Kutawagan Diversion Project. We have recommended to the Premier, the Legislative Assembly and Water Security Agency (WSA) that they consider the use of injection wells as a permanent solution to the Quill Lakes continuous flooding. Injection wells have been used by the Oil, Gas and Mining industries since the 1930's. Injection wells have proven to be very successful in removing waste and brine water.

The Kutawagan Diversion Project proposes to divert 15 million cubic meters of saline water, on average, into the North end of Last Mountain Lake and pass through the Qu'Appelle Chain on an annual basis. This amount could increase to 30 million cubic meters in a flood year. These are Water Security Agency's figures. In order to put this in perspective, in 2014, the flow through of water through the Hyde Monitoring Station was 950 000 cubic meters to Crooked and Round Lake which resulted in our lake rising 12.5 feet.

- Saline water is denser than fresh water when it enters Last Mountain Lake it will sink to the bottom and it will depend upon wind and wave action to spread it through the lake to decrease the impact of the salinity.
- The North end of the Lake is where all the fish spawning occurs, the longer the saline sits in that area, the greater the potential for irreversible damage to the fish population.
- The Fish Biologist from Water Security Agency indicated that the Golder Report was flawed in this aspect and additional studies have to be completed to understand the full extent of the impact.
- The model being used by WSA is very similar but smaller in scale that was done in North Dakota in 2005.
- Devil's Lake is a large saline body that was directly channeled into the Red River and now 10 years later, Manitoba is seeing sulphate levels that are impacting the ability of their water treatment centers.
- WSA is applying for an emergency environmental exemption similar to what they did in 2011 when they drained the Fishing Lakes in the Assiniboine.
- This exemption will require an agreement with the Manitoba government.
- We do not know what level the lakes will raise to
- We do not know what the saline concentration will be downstream
- We do know that the water will come in faster than it is able to leave.

- The WSA has indicated that the new control structure being proposed at Crooked Lake will not increase the capacity of water to leave the lake.
- It is our opinion that the sole beneficiary to this project will be the Department of Highways because they won't have to raise Hwy 6 and 16
- Farmers in the Quill Lakes area are asking to be compensated because their land has already been flooded. They do not want to be bermed as part of the Kutawagan Diversion Project.

Additional Concerns:

- 1) Crooked Lake is above maximum capacity and unable to take on additional water in any type of rain event coupled by trenching because of risk of flooding.
- 2) We are opposed to the addition of saline water into the fresh water of the Qu'Appelle Basin – any part of it. The proposal will raise the total dissolved solids from 1500 mg/L to 2400 mg/L in Last Mountain Lake.
- 3) The proposal will permanently add water to the system which is already maxed.
- 4) The addition of saline water will reduce the water quality.
- 5) It is not clear what the long term impact on fish and all aquatic life will be.
- 6) We are appalled that Water Security Agency is applying for an environmental exemption. This indicates that they have not considered the short and long term environmental impacts of the Qu'Appelle water being used for Agricultural irrigation, cattle, etc.
- 7) Increased water levels in the Qu'Appelle chain could lead to more slumping in the valley, decreased property value, and more loss of property.
- 8) They have not considered the impact of this channeling on any of the lakes south of Last Mountain Lake. There is no analysis so they don't have data.
- 9) There were very poor consultations and none scheduled south of Fort Qu'Appelle.
- 10) Stakeholders throughout the entire chain affected have not been consulted such as First Nations, Nature Sask, etc.

They are only offering an either/or solution which is poorly thought out and appears to be inadequate

For More Information:

1. http://lakes.heavyspace.ca/index.php/Crooked_Lake_and_Round_Lake_Flood_Committee
2. <https://www.facebook.com/CrookedLakeSK>
3. Quill Lakes Face Book Page – search Quill Lakes and ask to join their group
4. Water Security Agency's website – <http://www.wsask.ca>