

South Cooking Lake Marsh Boardwalk

As a Cooking Lake resident, I am very pleased to learn about the boardwalk proposal and have no concerns with having it pass through my backyard. There is an abundance of wildlife through spring and summer in Grandview Bay – and I hope this new access will bring some much needed attention to the plight of Cooking Lake.

Cooking Lake is dying – and very quickly. This is a well-known fact for people living along the lake, but is really not on most Albertan's radar who tend to focus their sights west rather than east. What should make people stand up and take notice is that the entire watershed is dying. This includes all of the Beaver Hills moraine; Miquelon, Oliver, Joseph, Ministik, Cooking, Hastings and Beaver Hills Lakes.

This is not current news. Conservationists have been reporting on this evolving condition for 80 years. The Beaver Hills Biosphere Association has done a commendable job documenting state of the watershed and actively educating and promoting wetlands rehabilitation and conservation. But this effort has not addressed the root of the problem. A 1977 engineering study predicted Cooking Lake would disappear in 65 years. There have been a couple of short wet periods since that may have prolonged the exact end date but generally, we are on track to have 36 square km of dry mud thistle seed-bed for our next generation.

We, collectively, have a rather urgent decision to make. We can watch the steady march of hyper eutrophication take place from a beautiful new boardwalk – complete with signage explaining the process. And we may not even need to concern ourselves with a long-term maintenance plan. Or, we can reconsider the engineering interventions proposed in 1977 to stabilize all the lakes and wetlands within the Beaver Hills watershed.

We have a duty to take action because the area contains one of only nineteen world recognized UNESCO designated biosphere reserves in Canada, and is a protected area of 1572 square km. We should also do this because human interference triggered an irreversible degradation that is on-going. The declining lake levels and loss of wetlands is not simply due to natural climatic cycle, although that variation has done a good job of masking the truth.

The knob and kettle wetlands landscape is precariously balanced on a height of land just east of Edmonton. Its ecosystem was first recognized for being unique in 1911 when a substantial part was protected as a bird sanctuary. The effects of land development around the perimeter are not thought to have contributed to lowering of lake levels although continuous withdrawal of groundwater for farms and towns would have some effect. Oil and gas drilling development has attracted some criticism but is unlikely to have had a significant impact. Climate change will certainly accelerate the demise but does not explain the 100-year trend... So what happened?

A project in 1929 to dig a 9.5 mile canal from the southern tip of Miquelon Lake may have been the trigger point for the subsequent 100-year ecocatastrophe. At that time, Miquelon was a single water body of 1900ha. Three years later, the lake had become three separate bodies, the level in the southern basin was down approximately 10ft, and the Camrose canal was abandoned. Even after filling in the canal inlet, the lake did not recover. Miquelon Lake Provincial Park is on the southern shore of the remaining shrinking saline water body which is now down 18.5 ft and contains less than half the volume of its former glory. No water has flowed from Miquelon L into the Beaver Hills watershed since 1925.

Recommendations in the 1977 study to stabilize the wetlands were to supply water from North Saskatchewan River to raise Miquelon 10ft, Oliver and Joseph 6ft, Ministik 9ft. Cooking Lake would need to come up 7ft to begin feeding Hastings Lake. At this point water would start to once again report to Beaver Hills Lake and ultimately return to the North Saskatchewan River.

The project is no small undertaking. Would the 100-year anniversary of a seemingly small mistake not be a perfect time to make amends? I am hopeful this boardwalk is just the beginning for a much larger allocation of resources necessary to recover lake levels in the Beaver Hills Moraine.

Ken Quackenbush

March 2022