Town Hall Meeting to Discuss the Issues the Lake is Facing

February 26, 2023 from 2:00 – 4:00 at South Cooking Lake Hall – Everyone Welcome! South Cooking Lake was once a large continuous lake with two main basins and a depth of almost 20 feet. It had a healthy bird population and was a popular recreational destination in the summer. In recent years its surface area has shrunk to about 60% and its deepest point is less than 3 feet. The north and south basins are no longer connected and the north basin resembles a marsh rather than a lake.

The past summer saw the water line retreating so quickly that the ecologically sensitive shoreline habitat couldn't keep pace. The result was extensive mud flats both along the shore and in places in the lake. Mud-flats are ill-suited to nesting shore birds. Summer recreational water use has disappeared.

Study work analyzing local weather and correlation of precipitation with water level has been completed for the period from late 1800's to present. Cooking Lake has undergone a steep decline in water depth since 1999. Even in years with above normal rainfall, as in 2020, the lake recovery was small and short lived. The lakes of the Beaver Hills – Miquelon, Larry, Oliver, Ministik, Cooking, Hastings, and Beaverhills form a single watershed. In a typical watershed, upstream lakes and streams flow either continuously or intermittently into lower lakes. But all of the large body lakes have lost so much water that that they are no longer connected.

In fact, the lake may be at a tipping point where shallower, warmer water temperature will increase the evaporation rate such that natural recovery is <u>not possible</u>. The lake could become a collection of small marshes that will appear and disappear with the climate cycle. It will be a lake no more.

Water quality also changes with the loss of flow thru the watershed. Nutrients and salts that are present in the water become increasingly concentrated. There is no natural removal mechanism for this and, at some point, degraded water quality could become unpalatable for wildlife.

Our small project group met with representatives from Beaverhills Biosphere (BHB), North Saskatchewan Watershed Alliance (NSWA), Strathcona County, Strathcona Museum, Alberta Lake Management Society (ALMS), and filmmaker Dylan Reade on November 10, 2022. At that meeting we shared our findings. We have since been invited to present to the BHB science committee and at an upcoming seminar. We are very optimistic that a formal watershed management project steering committee will be established with BHB and NSWA support.

Recovery of Cooking Lake and other area lakes is a long-term goal. What this means in terms of environment, recreation, social and economic benefits for Strathcona County is up to residents to determine. It is critical that we have a voice at the planning table when it comes time to set actions and timelines. We all should be concerned. **Anyone who like to learn more is encouraged to come out on Sunday February 26 at 2:00 to the South Cooking Lake Community Hall.** For more information, contact **Ken** at **quackenbush.ken@gmail.com**.