Lac Ste Anne

Lake Levels

Since August 2018, Alberta Environment and Parks received numerous complaints regarding dropping lake levels on Lac Ste Anne. Below is a brief overview of the current and historical lake levels and the contributing factors.

Current Lake Levels

There are many factors which influences the quantity or amount of water in Lac Ste Anne. Some of these factors include the lake's drainage basin, precipitation, evaporation, water consumption, groundwater influences, natural and seasonal variability and the outlet channel (beaver dams, etc.). Historical water levels graphs for Lac Ste Anne show that periodic high and low water levels have been a part of the natural history of Lac Ste Anne for many years which is typical for all lake in Alberta. Currently, Lac Ste Anne lake levels are above the normal range (Figure 1 below).

Lake levels can be viewed in real time at the Alberta River Basins website at: https://rivers.alberta.ca/ or by clicking here. There is also an Alberta Rivers: Data and Advisories App which can be downloaded to your Android or iPhone here: https://open.alberta.ca/interact/apps-for-alberta#filter.

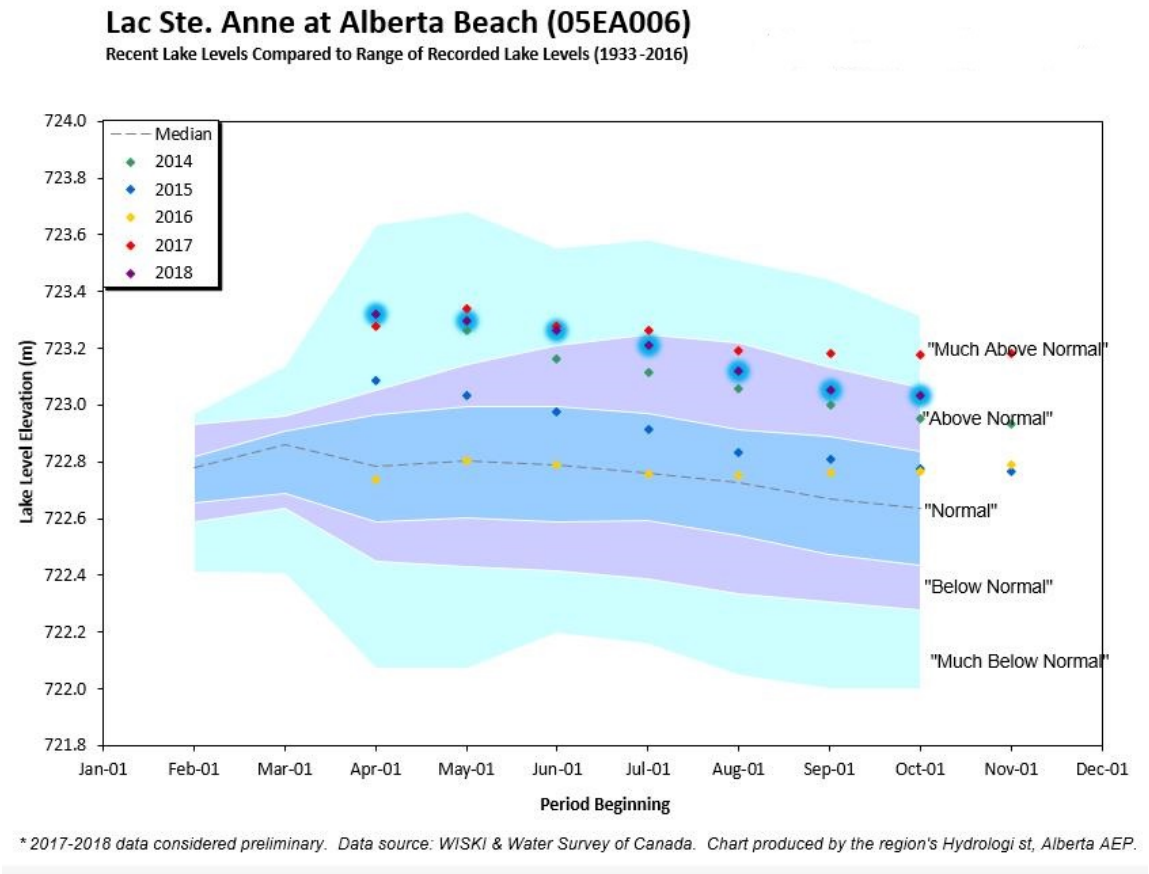

Figure 1: Water Level in Lac Ste Anne in 2018 at Alberta Beach.

Lake Level History[1]

“In 1951, a weir was installed at the outlet of Lac Ste Anne to regulate lake levels (Lane, 1971). In the past, high water levels flooded lakeshore properties and beaches, whereas low water levels hindered boating on both lakes and interfered with whitefish spawning on Lac Ste Anne (Planning Division, Alberta Government, 1980). However, public perception towards the control structure turned negative in the early 1950s, due to high water levels in the lake, and the structure fell into disrepair (Lane, 1971). The old weir is still present at the outlet of Lac Ste Anne but is not in a condition to regulate water levels. The Alberta Government again considered regulating Lac Ste Anne and Isle Lake water levels in the 1970s through the construction of a new weir at the outlet of each lake (Planning Division, Alberta Government, 1980). The study determined that a weir at Lac Ste Anne would not achieve the desired result and could have negative implications downstream (e.g. at Big Lake). Regulation at Isle Lake was feasible but a weir at Isle Lake without one at Lac Ste Anne could exacerbate water level problems at Lac Ste Anne (Planning Division, Alberta Government, 1980). Therefore, it was concluded that water levels should not be regulated on either lake.” For more information on Lac Ste Anne and its watershed please visit the State of the Watershed Report at: https://www.nswa.ab.ca/wp-content/uploads/2017/09/LILSA_SOW_May2017_FINAL.pdf.

Photo 1: Remains of the old weir in 1984.

Photo 2: Remains of the old weir, June 2018.

Photo 3: Remains of the old weir, August 2018.

Department staff will continue monitoring the water levels. However, if residents have any further concerns they can contact Alberta Environment and Parks Information Center:

Alberta Environment and Parks Information Center
Call Toll Free Alberta: 310-3773
Outside Alberta: 1 780 944-0313
Toll Free: 1 877 944-0313
Email: AEP.Info-Centre@gov.ab.ca

Before taking on any construction activity in a waterbody in Alberta, an approval under the provinces *Water Act* must be obtained. Anyone who conducts an activity in a water body without approval may face enforcement action.

[1] North Saskatchewan Watershed Alliance (NSWA), 2017. Isle Lake and Lac Ste Anne State of the Watershed Report. Prepared by the NSWA, Edmonton, AB.