

## Lake Level Management

Over the past few years a number of riparians have expressed concern about the water level of Lake Leelanau. Some individuals expressed frustration that the high water level caused flooding of their lawns or foundation or both. Other people were concerned that low water levels caused navigation problems. Some have communicated with the Lake Leelanau Lake Association (LLLA). Some have contacted the Dam Authority.

Clarification about the legally mandated water level and the responsibility for maintaining that level may be of value to our riparians and others who use and enjoy Lake Leelanau.

The water level of Lake Leelanau was set by a court order (File No. 78-610-2-P2) dated October 16, 1978, in the Circuit Court of the County of Leelanau. That court order set the lake level at 589.21 feet above mean sea level, plus zero inches, minus 2 inches from April 15th to November 15th as measured at the dam. After November 15th the lake level is set 12 inches lower at 588.21 feet above mean sea level until the following April.

The Leelanau County Dam ~~Board~~<sup>Authority</sup> has the responsibility to oversee the maintenance and operation of the dam system to control the lake level as mandated by the court order. ~~A specific County~~<sup>An assigned</sup> employee is assigned to monitor the lake level, monitor weather conditions and adjust the dam gate to maintain the water level to comply with the Court order. During extreme weather events such as heavy rains over the entire watershed the lake level may temporarily exceed the court mandated level for a period of time. The county dam operator adjusts the dam gate to bring the lake level back to the court order level.

The lake levels as shown on the Lake Leelanau Lake Association website are generated by three electronic sensors that were calibrated by physical surveys at each location, one at the dam, one at the narrows and one at Birch Point on south lake. Periodically, staff gauge readings are taken to verify that the electronic lake level sensors are reading correctly. If the sensor readings do not agree with the staff gauge readings, an adjustment is made to the electronic sensor. If a sensor cannot be brought into agreement with the physical staff gauge reading the sensor is replaced.

The point of this explanation is to let everyone know that the Lake Leelanau Lake Association displays the information about the lake water levels and temperatures on their webpage, but the responsibility for maintaining the water level resides with the County Dam ~~Board~~<sup>Authority</sup> and the County employee operating the dam to keep the lake level in compliance with the court order.

*Authority*