Dawn and Chris Lund PO Box 582 Leland, MI 49654

October 10, 2022

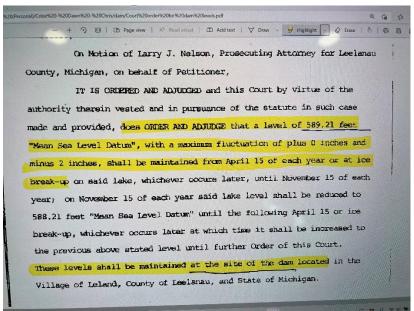
Leland Dam Authority 8527 E. Government Center Dr. Suttons Bay, MI 49682

Dear Leland Dam Authority Members:

Thank you members Christensen and Popa for attempting to respond to my our questions earlier this month. We wanted to follow up with the Authority to try and resolve the questions surrounding the level of Lake Leelanau as we feel they were not resolved.

**Table 1** Below is a snapshot of the wording from the court order dated October 1978 which clearly outlines the ordered levels and site at which the level needs to be maintained. Please note the ordered level is 589.21 feet with a maximum fluctuation of plus 0 inches and minus 2 inches from April 15<sup>th</sup> (or ice breakup) to November 15<sup>th</sup>. The order indicates "These levels shall be maintained at the site of the dam located in the Village of Leland."

**TABLE 1 - Court Order** 



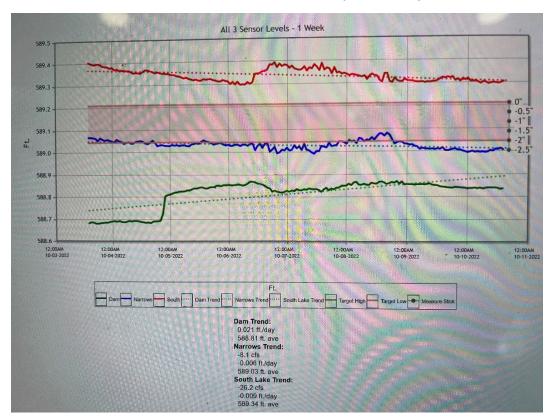
The Lake Leelanau Lake Association's website (<a href="https://lakeleelanau.org/lake-levels/">https://lakeleelanau.org/lake-levels/</a>) publishes the levels at three sensors throughout the lake (Table 2). One is located at the dam, one is located in the narrows and one on the South end. The LLLA also clearly states

on their website "the court ordered levels are measured at the dam (the green line)" and has notes about the graph as quoted below:

"A few notes on the graphs:

- The court-ordered levels are measured at the dam (the green line).
- The ordered levels are: level raised to 589.21 feet after April 15th or last ice and lowered to 588.21 feet after November 15th.
- Both the high and low targets are measured at the dam."

TABLE 2 – Lake Leelanau Lake Association Website Graph of Weekly Lake Levels



The graph above is basically a week snapshot of the levels, with the red box indicating the high and low court ordered levels. You can see that the green line which is the line as measured at the dam does not fall within that box.

**Table 3** below is a graph showing the history of the lake levels since 2016. We drew two extended black lines on the initial red box to more easily depict the high and low court ordered levels. You can see the green line basically does not meet the court ordered low level since 2017. Also, in conversations with the Authority members, it was stated they focus more on the blue line because the level can not be measured "at the dam". The Lake

Leelanau Association publishes the level "as measured at the dam" (the green line) so that data is available. There are also "tick" marks on the bridge which corresponds with the LLLA sensors so there shouldn't be a question as to the accuracy of the levels as measured at the dam. I have corresponding pictures of the tick marks at the bridge with the published lake levels on the LLLA website below as well which would also indicate the sensors are recording properly (Tables 4A & B)

Table 3 - Lake Level History

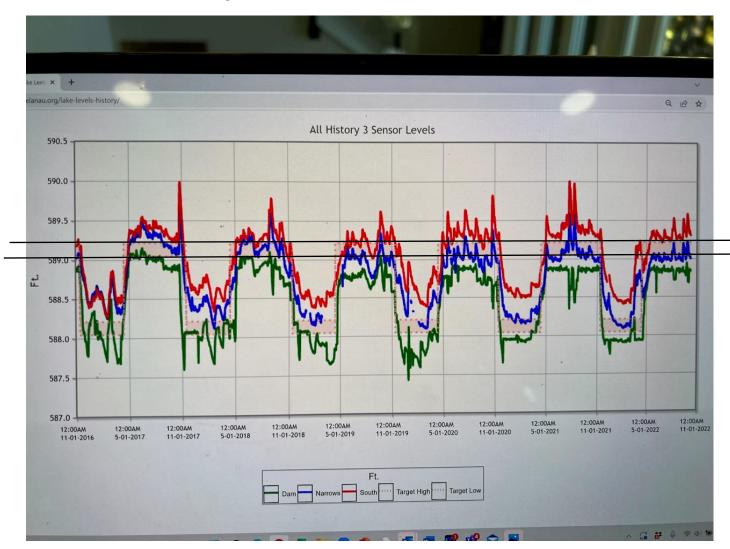
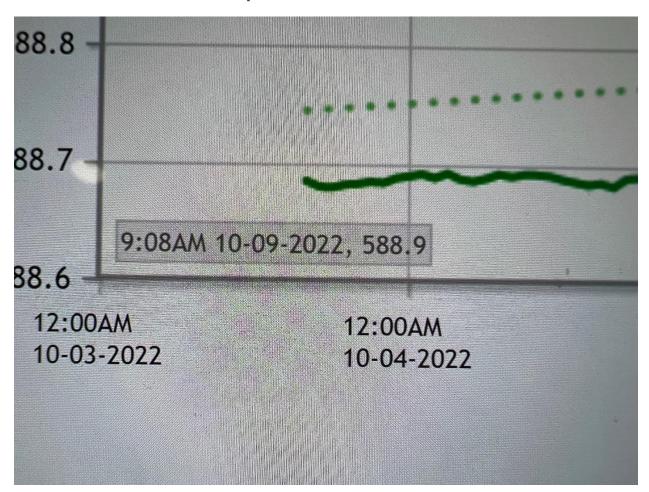


Table 4 A - Picture of the Bridge level tick mark October 9 at 9:07 AM



Table 4 B - Picture of the LLLA published level sensor October 9 at 9:08 AM



In addition in the picture below, you can see there is a dark line "stained" in the wall of where the level used to be. This is basically at the court ordered level of 589.21, and obviously, the level has come down greatly to a new dark line stain and even now lower

water level. This picture shows the level at least 6 inches lower than the court ordered minimum. These tick marks also match very closely to the published Lake Leelanau Lake Association website levels, as measure at the dam when this picture was taken at the bridge.



I have property on the river, the south end and mid-north end and have lived in Leelanau County for 52 years. The levels of the lake throughout the year have been very low and continued to decline. I have watched this be a navigational hazard in the Leland river as boats try to drive down the middle of the river to avoid the shallower edges, causing near head-on collisions. This becomes an extremely challenging safety hazard as increasing kayakers and paddle boarders try to navigate the river as well. The compounding effect of not following the court order, as well as the river filling in over the years will only create a more urgent safety issue.

We are asking the Leland Dam Authority to review the pertinent data that is available to them and follow the court order by raising the level to 589.21 each year between April 15th and November 15th as measured at the dam and use the maximum fluctuation allowance of minus 2 inches only occasionally as it was intended and not as the court ordered minimum.

Sincerely,

Dawn and Chris Lund