

Keuka Lake Level Objectives – How They Evolved

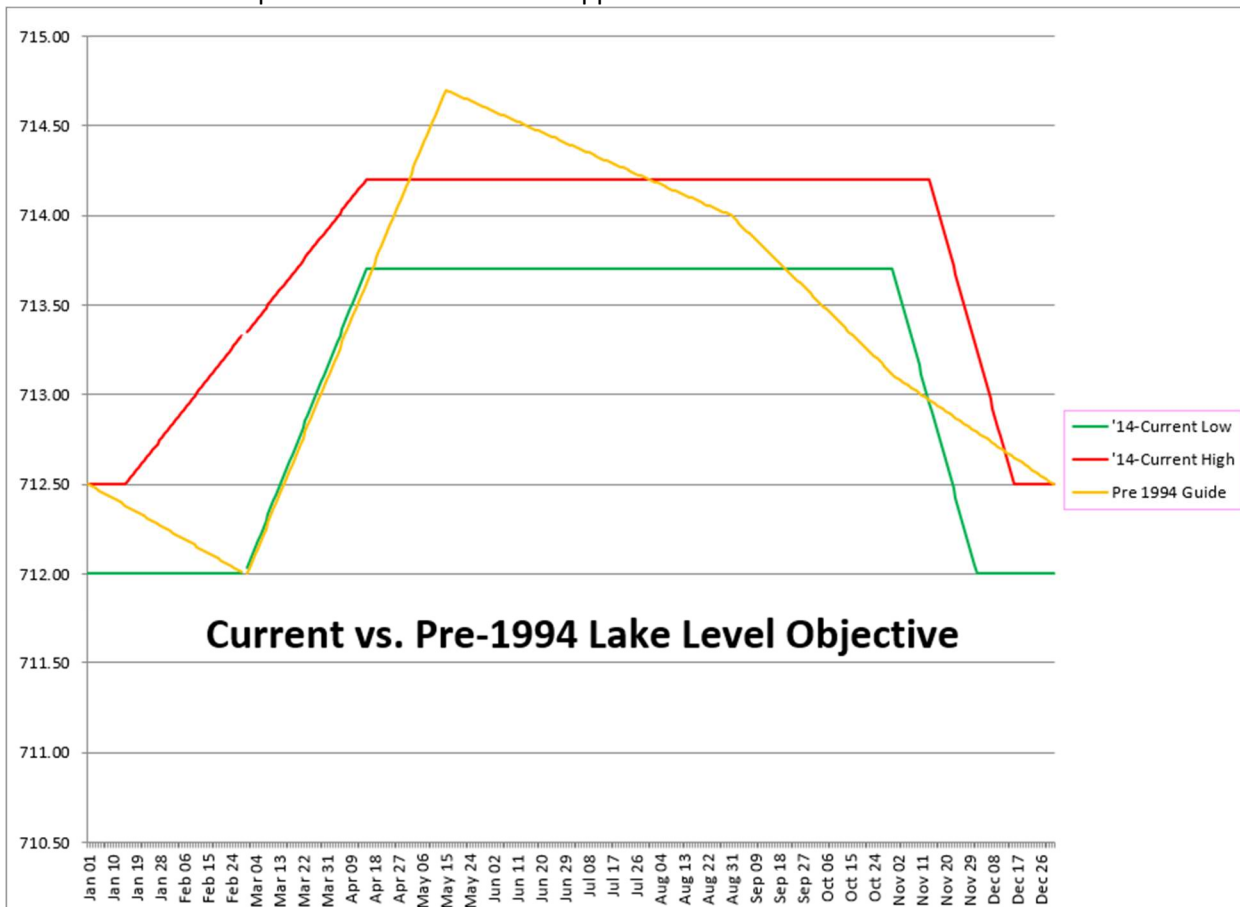
Over the past 30 or so years KLOC has developed and utilized several different daily lake level objectives. In addition, the Army Corps of Engineers (USACOE) provided a suggested lake level objective or every day of the year.

The original lake level curve was developed after the 1956 flood and was generated largely because there were limited options with only the two Andrews gates and the single Birkett gate. Then, with the 1972 Agnes flood, it really highlighted the need for more gates. Finally, funding and construction was completed for the 3 additional gates in 1994/95, which gave KLOC the opportunity to generate what became today's lake level objectives, which basically has been their level objectives for past 18 years.

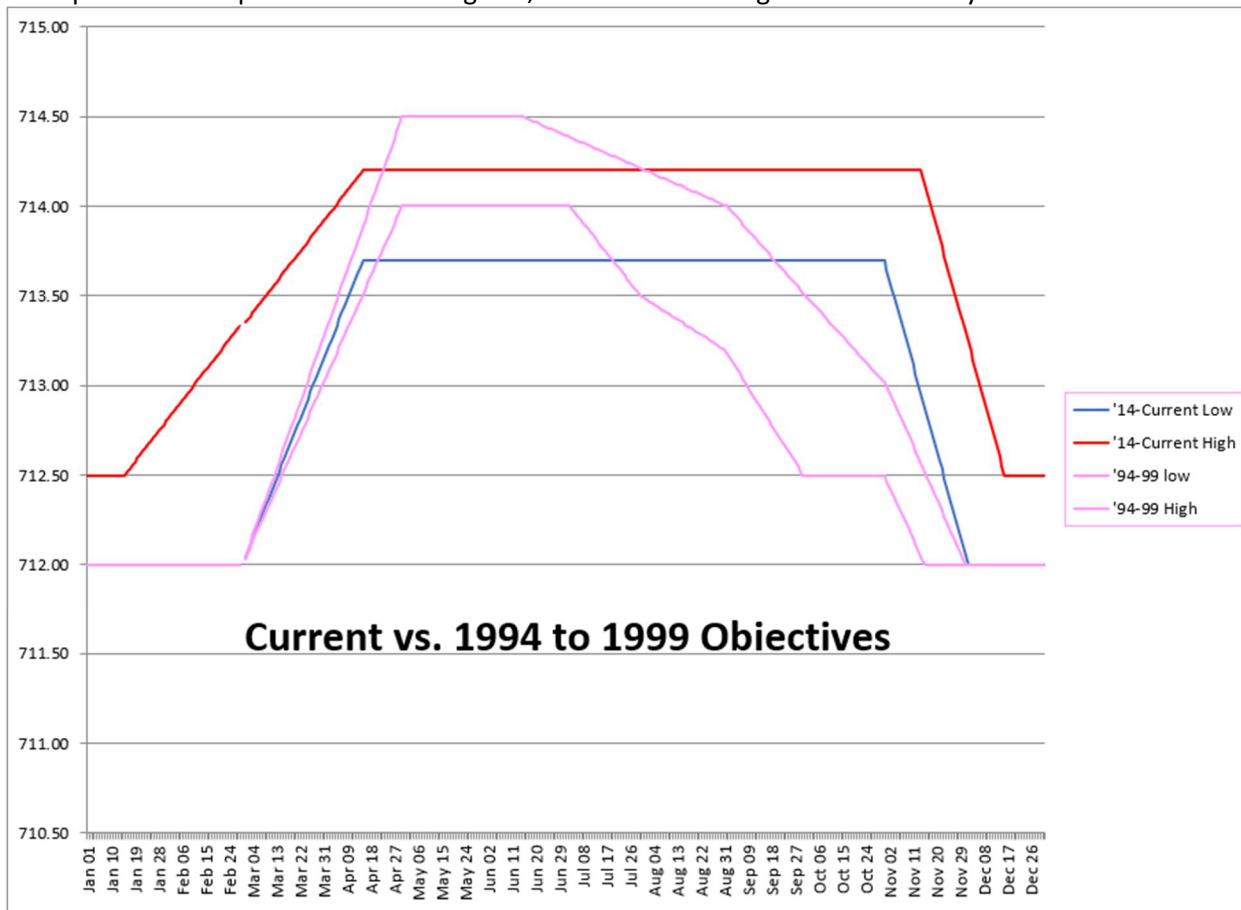
The following level objectives have been developed:

- Pre-1994
- 1994 – 1999
- 1997 – USACOE Reservoir Regulation Manual
- 1999 – 2004
- 2004 – 2014
- 2014 – current

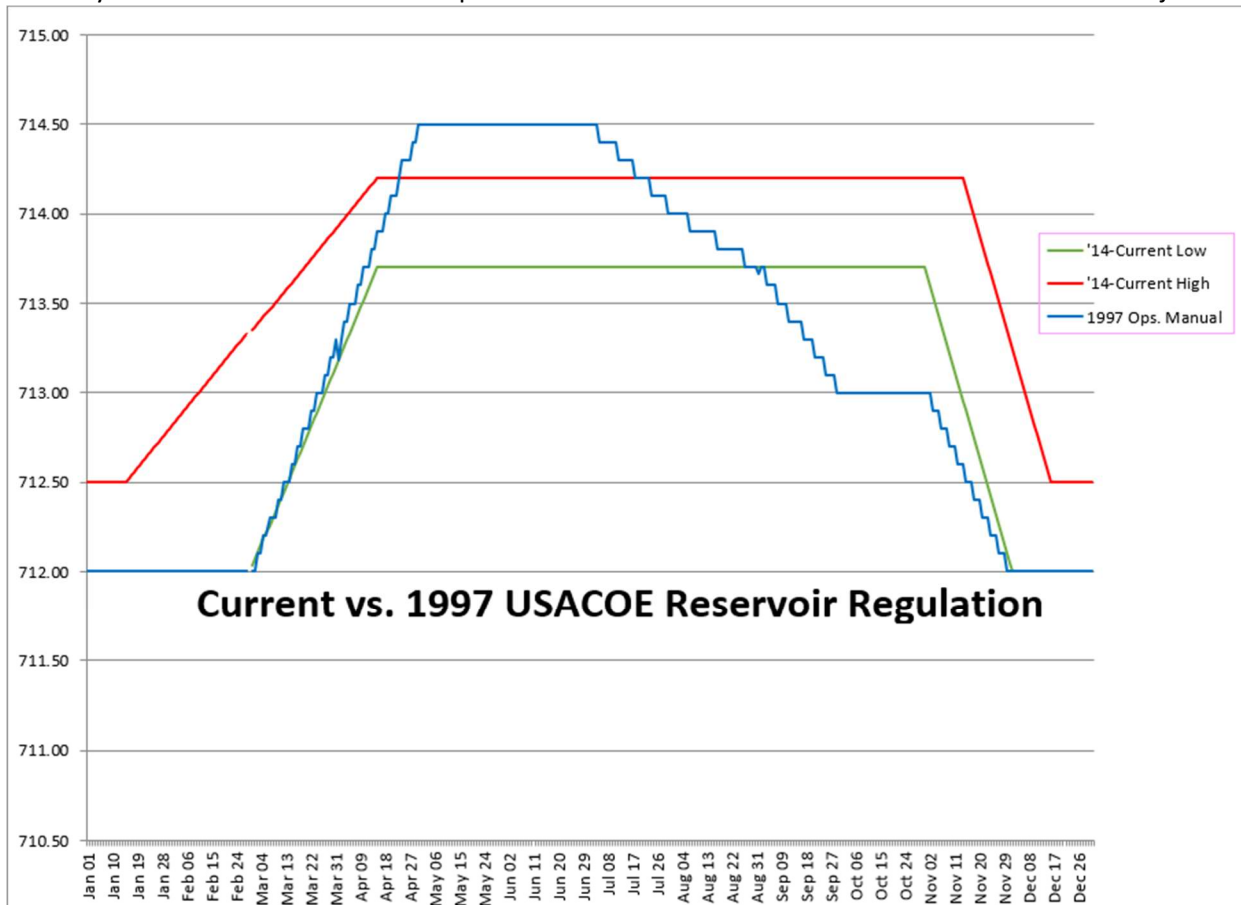
The chart immediately below compares our current objectives with the curve that was used prior to 1994. When these objectives started, I do not know. As stated above, this was prior to having the existing 6 gates and we only had 3. Notice the level objective of 714.7' in mid-May, which is over 5" higher than our current high objective. Imagine the shoreline owner complaints which must have happened.



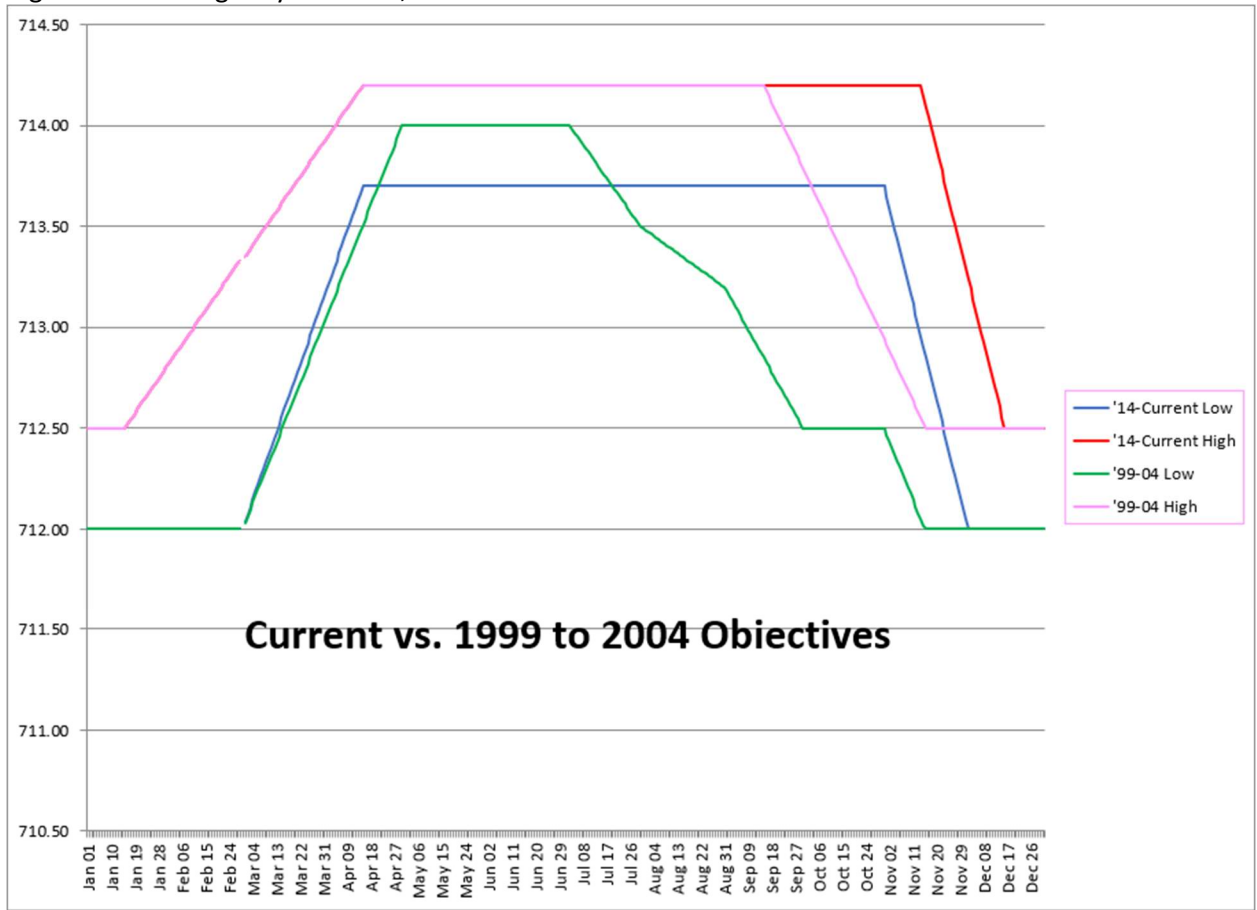
From 1994 until 1999 the following shows the objectives, compared to our current objectives. This was generated in anticipation of completion of the new gates, but still had the higher 715.5' in May & June.



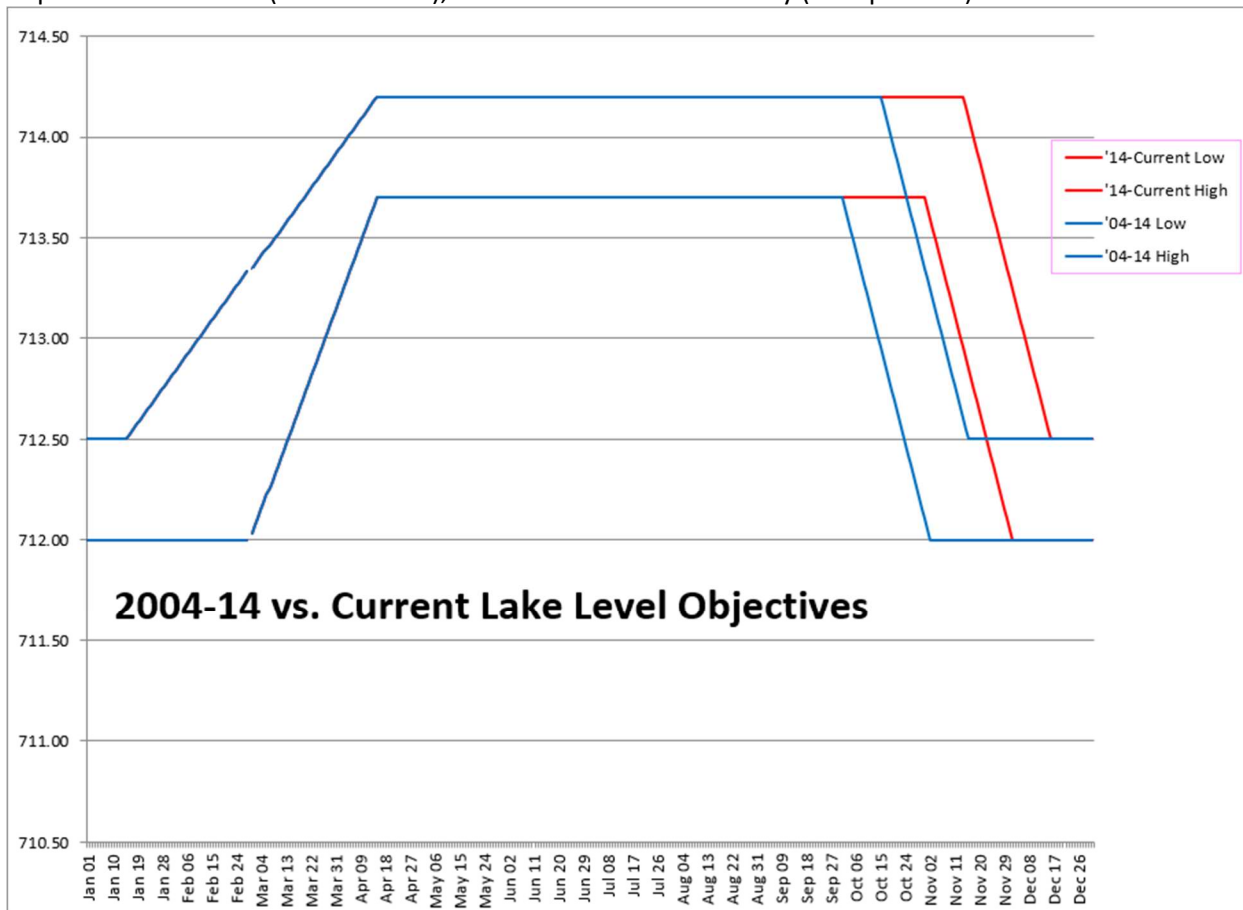
In 1997 the USACOE published the Reservoir Regulation Manual which defines a specific lake level objective for every day, and not a range. The following compares those objectives with the current objectives. It defines a level of 714.5' in May and June, which I am sure was not popular with many shoreline owners, along with boaters not happy with low levels in late summer and fall. The manual has some great information, but it appears that the level objectives were never used by KLOC. They determined that a min. and max. objective range was a much better way the manage the level, just like most other lakes in the US. The USACOE manual provides excellent information and suggestions, but KLOC can define what they determine is most appropriate for Keuka. Both the USACOE and NYSDEC inspect the gates annually and review KLOC's lake level procedures and have never had an issue with their level objectives.



Then, from 1999 to 2004 the following were the objectives compared to the current objectives. This eliminated the higher level during May and June, but still created some low water issues for boaters in late summer and fall.



From 2004 to 2014 the following were the objectives (shown in blue), along with the delayed fall drawdown implemented in 2014 (shown in red), which is where we are today (blue plus red).



The next chart show all of the various objectives vs. the current ones on the same chart.

