USACE Water Control Manual Impact on Lake Lanier

The recently released Water Control Manual (WCM) by the USACE documents extensive changes that will impact Lake Lanier. In summary:

The short version:

- Metro Atlanta is granted their request for increased water withdrawals to account for population growth estimates for 2050.
- Lake Lanier water level and recreation to be 'slightly adverse affected' according to the WCM.
- Operating plan calls for entering drought operations sooner.
- Our challenge is to minimize the impact on Lake Lanier from increased growth.

Now for the longer version (but less than the 1,048 page WCM):

Georgia's request for increased water withdrawals from Lake Lanier and the Chattahoochee River below Buford Dam for 2050 have been granted in the WCM. If left intact by the soon to be released ruling of the Special Master in the Florida versus Georgia lawsuit, these withdrawals will insure the economic growth for the Metro Atlanta area. The Georgia request for withdrawals was modified during the course of the WCM development to account for the withdrawal needs based on lower population growth estimates and to extend the time period for the requested withdrawals from 2040 to 2050.

What we really should worry about is not just the withdrawal rates but the return rates as well. The net consumptive use is the important part. In simplistic terms, 'net consumption' is the difference between withdrawals and returns.

However, coupled with the increased water withdrawals are expectations of increased water return rates to both Lake Lanier and the Chattahoochee River below Buford Dam. The return rates are expected to increase from 29% for the Lake Lanier municipalities above Buford Dam to 43% by 2050 and from 82% to 95% for counties below Buford Dam for the same time period for a total of 73% for the Metro Atlanta area in 2050. So the increase in withdrawals is offset by increases in returns but will still result in an increase in net consumption.

However, with increased net consumption from Lake Lanier there will be less water stored in the lake. In fact, the WCM's proposed operating plan documents that there will be a 'slightly adverse impact' on lake levels for recreation. More specifically, the WCM documents that under the 2050 water usage there would be 4% increase or 15 more days each year that the lake will be below 1066, which is the defined Initial Impact Level (IIL) for recreation benefits. The WCM categorize this as 'slightly adverse impact' under the modeling evaluation that was done to support the WCM findings.

But even the 'slightly adverse impact' can be mitigated by increased returns and water conservation.

Withdrawing less can be achieved with even more aggressive conservation initiatives. Returning more can be achieved by reducing dependence on septic tanks for waste treatment or by reducing the amount of water that is lost to our watershed due to interbasin transfers. Currently the interbasin transfers from Metro Atlanta to the watersheds that flow to the Atlantic Ocean amount to over 1 feet in lake elevation each year. By returning that water back to the lake and to the river below Buford Dam, the net consumptive use would be decreased significantly.

The WCM also imposes a change to reservoir operations during drought periods. Currently when the composite storage of all reservoirs on the Chattahoochee River drops into Zone 4, drought operations are initiated. Under the new WCM, drought operations will be triggered when the composite storage drops into Zone 3. This will have a positive impact on how water is released from the reservoirs which should benefit Lake Lanier.

Absent in the WCM is a decision by the USACE to support increasing the full pool level of Lake Lanier from 1071 to 1073. The discussions in the WCM by the USACE relate to concerns over flood control and technical issues regarding the saddle dikes on either side of Buford Dam.

In summary, the new WCM is positive for the population growth projections for Metro Atlanta. The Lake Lanier Association will continue to work with USACE and other federal and state agencies to minimize any negative impacts on Lake Lanier. The lake is a powerful economic and quality of life driver for the counties surrounding the lake, which are experiencing some of the highest growth rates in Georgia.

The pressures brought about by increased growth are addressed by LLA's multiple programs including Shore Sweep, solar lights, rip rap, abandoned boats, siltation and more.

For more information and to join LLA visit www.lakelanier.org.

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