## Lake Allatoona Association Key Issues in the Revision of the U. S. Army Corps of Engineers (USACE) Water Control Manual Water Supply & Drought Storage

## Outline

The value of each gallon of water that passes through the Lake has dramatically increased since the 1940's. The Lake plan then and since has focused almost entirely on flood control and electric power – very little to no value has been assigned to the use of water for local consumption or use. The USACE has not changed its operations of the Lake to recognize this dramatic shift of value.

Nothing we seek would compromise the overriding purpose of flood risk management. We merely wish the USACE to take advantage of modern technologies without increasing the risk of flooding. We ask the USACE to use best-management practices and be proactive to conserve precious water assets. Our proposed changes are minor tweaks to a complex system, but which would have an enormous benefit due to the modern-day high value of water.

During January and February of 2013, over 50 billion gallons of water were needlessly drained from the Lake (on top of at least that amount previously drained-out in December and January for routine winter drawdown) and dumped into the Gulf of Mexico to the benefit of nothing; this was absolutely wasted water. This happens most every year. At current local water utility costs, this waste represents over \$200 million of wasted water this year in just two months! Further, if just 20% of that wasted water had been retained for use moving into the historic drought of 2006, the entire drought restriction impact for Cobb, Cherokee, Paulding and Bartow Counties could have been prevented. If the USACE would adopt our proposal, there would have been no drought impact to water supply (locally) in 2006/2007.

The fact that the lake's 37,000 acres are exempted by the federal government from local property tax assessments means that about \$ 3 million has been removed from (primarily) Cherokee and Bartow County tax rolls; that amount would exceed the entire county general fund budgets of those two counties. If this amount was collected at prevailing rates, it would result in elimination of all, or almost all, such county property taxes.

The USACE states in its draft EIS on the Allatoona WCM update that it has discretion to raise pool operations levels. In light of the enormous societal value of lake water, the USACE should move immediately to modernize its regulations to conserve as much water and follow court mandates to consider the water supply potential of the lake – including raising operational pool levels across all months as is possible and cease the routine dumping of water into the ocean.

## Comments

- The USACE should conduct a comprehensive financial analysis that would analyze the comparative costs and benefits of water use for local power generation as compared to use for water supply.
- The USACE in its draft EIS to its WCM update states that it does not provide navigation releases from Allatoona. That being the case, the USACE should openly provide a full analysis of its past practices in support of Alabama Power Company's hydro-power release requests, to demonstrate that APC's associated water release practices do not, indirectly, use Allatoona water to support navigation in Alabama.
- The USACE should modernize its procedures to be proactive in seeking conservation of lake water in the face of developing drought conditions and seasonal water use demand/benefits, rather than continue tardy reactive decision-making that wastes water downstream. As an example, the USACE has the ability during normal seasons to lower the Lake over two feet within 24 to 36 hours and the National Weather Service Forecasts now provide the USACE more than a week of advance notice of major rain-making systems.
- The USACE should conduct updated or new feasibility studies regarding strategies to increase Lake-water retention
  without increasing flood risks through increased discharge capacities and drought-insurance water conservation.
  In addition, the USACE should purchase flood easements in the Cartersville Etowah River corridor (instead of
  decreasing discharge capabilities by 33%) and construct downstream Etowah and Oostanaula river reregulation
  storage facilities.

- The USACE should modernize its flood risk management procedures, in order to account for the totality of modern major weather event forecasting capabilities and the actual flood event history of the past 60 years, to demonstrate the historically improved flood control margins over the 1950's assumed design criteria.
- The USACE should publically disclose, in the format of its 5-week Lake level forecast, an April-through-September lake levels comparison of its "historical average elevation" compared to the levels that could have resulted if wasteful ocean water dumps had not occurred.

## Questions

- Please explain why the 5-week lake level forecast so routinely and commonly way out of line with actual results during the reservoir re-filling season? Please describe in detail how the USACE's daily practices use various real-time local weather and hydrographic data to develop its operating decisions as to reservoir outflow decisions so as to conserve water.
- 2. Please explain, in detail, the specific USACE procedures that are used during the dry-season-months that result in water conservation decisions at the expense of downstream (APC) power generation support.
- 3. Please explain where, if any, the USACE Zone 2 management policies look forward rather backward, to conserve water for local use, when there are developing drought conditions?
- 4. Please provide a cost analysis that shows a comparison of hydropower generation water costs and benefits as compared to the market value of locally sold water (about ½ cent per gallon).
- 5. Please provide a cost analysis of the subsidies given to electric companies through the artificially low (as compared to prevailing peak-season electricity market rates) costs charged them for water releases to generate power during the dry season months of July, August and September.
- 6. Please provide a cost analysis that compares the subsidies given to the occasional Alabama River barge shipment through Alabama Power water releases that are based on Allatoona water (focused on such shipments' alternate rail shipping costs) to the market value of locally sold water (about ½ cent per gallon).
- 7. How much of Alabama Power's typical request of water releases goes to provide for Alabama River navigation support during the dry season months of July, August and September?
- 8. If Alabama Power is approved to raise the level of its Lake Martin reservoir, how will the USACE insure and publically disclose that Allatoona water does not indirectly get used to provide for that capacity, since reduced Tallapoosa River flows would at some point have to be offset by Coosa River flows to meet stated USACE downstream navigational, power generation and environmental flows?
- 9. What is the annual total USACE cost per ton (water flow, dredging, lock and dam management) to provide for the barge shipments along the Alabama River between Montgomery and Claiborne Lock? How much water volume is provided annually to support such shipments (separate from M&I contracts and low-flow minimums)?
- 10. Given the abundance of available modern technology as to hydrologic and meteorological predictions and management, and the large value of water locally, please explain why flood risk management criteria and policies cannot be tweaked and improved to provide for more advanced discharge flexibilities, with significantly increased abilities to store more lake water at all times, as compared with the way things have been done since 1950.
- 11. Please provide details as to how the USACE uses and integrates NOAA field data and major weather system forecasting information to conserve water, rather than to just release water needlessly downstream simply because the rule-curve dictates so.
- 12. In light of modern weather system forecasting capabilities, please explain why excess and valuable early spring Lake water inflows should not be conserved through implementation of a higher pool level as a buffer to the typical/natural dry-season inflow/outflow minimum mismatch, so that late summer pool levels are not so damaging to drought-period water supply requirements and to routine recreation needs.