

OWASA and Our Water Supply

(This article was prepared by Ed Holland, AICP, OWASA Planning Director, in conjunction with a February 6, 2012 Special Topics presentation for the Town of Chapel Hill's 2020 Comprehensive Plan initiative.)

OWASA customers used almost 30 percent less water in 2011 than in 2001, and today's consumption rate is lower than at any time since 1993. This remarkable accomplishment has been achieved through the sustained efforts of all water users in our community: residential, commercial, University, and more. Thanks to UNC's multi-million dollar investment in reclaimed water facilities, 11 percent of our total water demand is now being met with highly treated wastewater from OWASA's Mason Farm Treatment Plant – rather than from our drinking water supplies. This is a tremendous benefit to our entire community.

Because of these efforts, OWASA's local Cane Creek, University Lake, and Quarry Reservoir water supplies can meet our expected needs under most circumstances for the next 50 years – but it is essential that these gains in efficiency be sustained. OWASA remains committed to water conservation through customer awareness and education, targeted technical assistance, conservation pricing, and support for increased water efficiency in new and renovated buildings.

To meet our long term needs, the most effective and least costly addition to our water supply will be the expansion of OWASA's Quarry Reservoir located west of Carrboro. However, that expanded supply won't be available until 2035. We will be increasingly vulnerable to severe drought until then, which is why OWASA needs the additional "insurance policy" of Jordan Lake. Although we're entitled to an allocation of the Jordan Lake water supply assigned by the State of North Carolina, we do not consider Jordan Lake to be part of OWASA's regular Cane Creek—University Lake—Quarry Reservoir supply system. *Rather, Jordan Lake represents a supplemental source that would be used to meet our customer's needs during extended droughts or operational emergencies.*

Our water system is connected to the Town of Hillsborough, City of Durham, and Chatham County through existing pipelines that allow us to send or receive treated drinking water. Durham is similarly connected to the Town of Cary, which withdraws all of its drinking water from Jordan Lake. Because OWASA has no direct access to Jordan Lake, the only economically feasible way to obtain our water at this time is through partnership arrangements with Cary and Durham. Existing mutual aid agreements allow us to exchange water during relatively

short periods of need, but those agreements must be modified, or new ones negotiated, to secure the ability to obtain water during an extended drought.

Most importantly, we must first justify to the North Carolina Environmental Management Commission that OWASA be allowed to retain its existing allocation, which is an essential element of our long-range water supply and drought management plans.

OWASA is especially well-positioned to meet the near- as well as long-term needs of the community we serve. Our future is bright – thanks to our customers’ strong and sustained conservation ethic, UNC’s continued use of reclaimed water, the OWASA Board’s commitment to prudent financial investment in our infrastructure, and a diverse water supply portfolio (which includes Jordan Lake). We appreciate the opportunity to serve our customers and greatly appreciate the community’s collective efforts to sustain the irreplaceable water resources needed to ensure that Carrboro and Chapel Hill remain vibrant and prosperous for generations to come.