



# ORANGE WATER AND SEWER AUTHORITY

*A public, non-profit agency providing water, sewer and reclaimed water services  
to the Carrboro-Chapel Hill community.*

December 21, 2012

Mr. Stephen Smith, Chairman  
NC Environmental Management Commission  
McMillan & Smith  
205 W. Martin Street  
P. O. Box 150  
Raleigh, NC 27602

**SUBJECT: REQUEST TO CONVERT OWASA'S EXISTING LEVEL II JORDAN LAKE  
WATER SUPPLY STORAGE ALLOCATION TO LEVEL I**

Dear Mr. Smith:

I am writing on behalf of the Orange Water and Sewer Authority (OWASA) Board of Directors to request that OWASA's existing Level II allocation of the Jordan Lake water supply storage pool be converted to Level I, so that we may conclude interlocal government contractual arrangements needed to access and use our allocation during extended periods of severe drought or unforeseen operational emergencies.

As you know, OWASA provides water, sewer, and reclaimed water services to approximately 80,000 residents of the Carrboro-Chapel Hill community, to the University of North Carolina at Chapel Hill (UNC), and to UNC Health Care. Our Board of Directors is appointed by the Towns of Chapel Hill and Carrboro, and Orange County. A resolution adopted by the OWASA Board is attached to this letter, and the reasons for our request are explained below.

OWASA's primary water supply sources are the University Lake, Cane Creek, and Quarry Reservoirs located in Orange County. Our reservoir storage capacity will increase around 2035 when an expansion of the Quarry Reservoir is completed. These sources are expected to meet the water supply needs of our service area through 2060 under most circumstances – thanks to the substantial and sustained demand reductions achieved by our customers during the past ten years and to the reclaimed water system (funded primarily by UNC), which now provides more than ten percent of our community's total water needs.

The occurrence of two historic droughts within the past ten years has illustrated the limits of our capacity to meet customer needs during extended periods of severe droughts – even when mandatory water use restrictions are in place. Our vulnerability will be greatest until OWASA's expanded Quarry Reservoir is available in the mid-2030s. We firmly believe that it is prudent to improve the reliability of our system with a more diverse and redundant array of supply options, and converting OWASA's Jordan Lake Level II allocation to Level I is a critical step in this process.

Jordan Lake has been an important part of OWASA's long-range water resource strategy since we first received a storage allocation in 1988. Our approach has been to maximize the use of our local water supply sources by promoting water use efficiency, conservation, and reclaimed water use. Jordan Lake

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represents an “insurance policy” that can supplement our local supplies during extended periods of severe drought or unforeseen operational emergencies.

OWASA does not have direct access to our allocation, but we can obtain water from Jordan Lake through the interconnected systems of the Town of Cary and City of Durham. We can receive up to 7 million gallons per day (mgd) of treated drinking water through our existing interconnections with Durham. After the severe drought of 2007-2008, Cary and Durham increased the capacity of the interconnections between their systems, so that Durham can now receive more than 9 mgd from Cary, which obtains its water directly from Jordan Lake.

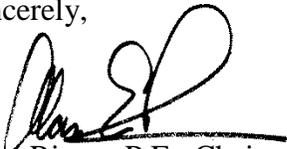
OWASA has existing water purchase and sale agreements with Durham and Cary, and we are currently engaged in staff discussions to develop new or modified agreements. These agreements will secure OWASA's permanent ability to cost-effectively purchase water under appropriate conditions of supply and demand in order to avoid depleting our University Lake/Cane Creek/Quarry Reservoir sources during extended periods of severe drought or operational emergencies.

All three parties recognize that new or modified water transfer agreements should be put in place before, rather than during, the next severe drought. It is likely that any supplemental water needed under such conditions would come from Cary (Jordan Lake) via Durham; but both Cary and Durham staff have stated that water provided during an extended drought would have to come from OWASA's own Level I Jordan Lake allocation, rather than from theirs. Consequently, obtaining a Level I is a critical step in the process of concluding the interlocal arrangements needed to access and use our allocation.

We are proud of our community's accomplishments in permanently reducing water demands through increased efficiency, conservation, and reclaimed water use – all of which will remain critical in the future. We are similarly proud to be collaborating with our neighboring utilities in joint efforts to optimize the use and allocation of our region's finite water resources. We hope that you agree and will grant OWASA's request to convert our Level II allocation to Level I.

Please feel free to contact Ed Kerwin, Executive Director, at 919-537-4211 or [ekerwin@owasa.org](mailto:ekerwin@owasa.org) if you have any questions or need further information.

Sincerely,



Alan Rimer, P.E., Chair  
OWASA Board of Directors

Attachment

cc: Mr. Tom Reeder, Director, NC Division of Water Resources  
OWASA Board of Directors  
Ed Kerwin, OWASA Executive Director  
Robert Epting, OWASA General Counsel

**RESOLUTION AUTHORIZING A REQUEST TO THE NC ENVIRONMENTAL  
MANAGEMENT COMMISSION TO CONVERT OWASA'S EXISTING JORDAN  
LAKE LEVEL II WATER SUPPLY STORAGE ALLOCATION TO LEVEL I**

**WHEREAS**, OWASA is responsible for providing current and future customers with a reliable, sustainable, and cost-effective supply of high quality drinking water at all times, and is committed to making the highest and best use of our local water resources; and

**WHEREAS**, OWASA's water conservation and reclaimed water programs, which are key components of our sustainable resource management strategy, have successfully and consistently reduced water consumption during the past ten years among all customer groups; and

**WHEREAS**, as a result of these efforts by all customers, OWASA's Cane Creek, University Lake, and Quarry Reservoirs are able to meet the community's expected water supply needs through 2060 under most circumstances; and

**WHEREAS**, notwithstanding these significant achievements, we will become increasingly susceptible to extended periods of extreme drought, especially until the expanded Quarry Reservoir is available in the mid 2030s; and

**WHEREAS**, it is prudent for OWASA to proactively plan and prepare for extreme droughts as well as operational emergencies; and

**WHEREAS**, the B. Everett Jordan Reservoir (Jordan Lake)' has been recognized as an element of OWASA's long-range water supply planning since the NC Environmental Management Commission first approved a Level II water supply storage allocation for OWASA in 1988; and

**WHEREAS**, OWASA's current *Long-Range Water Supply Plan (as Revised through April 20, 2012)* identifies Jordan Lake as a necessary "insurance policy" for use during future periods of extended drought or operational emergencies, especially until OWASA's expanded Quarry Reservoir is available in the mid-2030s; and

**WHEREAS**, staff of the NC Division of Water Resources (DWR) has advised OWASA that any use of Jordan Lake water, even for temporary or emergency use, must come from a Level I allocation; and the staffs of the Town of Cary and City of Durham have stated that OWASA must have its own Level I allocation as a prerequisite for any new or modified transfer agreements that would guarantee water to OWASA under specified conditions; and

**WHEREAS**, it is now apparent that OWASA must have a Level I allocation to use Jordan Lake under any short or long-term circumstances, including the existing Mutual Aid agreements with Cary and Durham; and

**WHEREAS**, DWR staff has expressed the opinion that OWASA's intended use of Jordan Lake as part of its strategy to minimize the risks of reservoir depletion during severe droughts or water supply emergencies is a sound and valid approach to water supply contingency planning and not inconsistent with 15A NCAC 02G.0504(b) of the Jordan Lake water supply

## Resolution Requesting Conversion to a Level I Allocation

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allocation rules, which states that *"the Commission will assign Level I allocations of Jordan Lake water supply storage based on an intent to begin withdrawing water within five years of the effective date of allocation."*

**NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF ORANGE WATER AND SEWER AUTHORITY THAT:**

1. The Executive Director is hereby directed to send a letter to the NC Environmental Management Commission that includes the following elements:

- A request to immediately convert OWASA's existing Level II Jordan Lake water supply storage allocation to Level I, and
- A statement of OWASA's intended use of Jordan Lake to supplement the supply of water available in OWASA's primary supply sources (University Lake, Cane Creek Reservoir, and Quarry Reservoir) during infrequent periods of extended drought or operational emergencies.

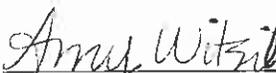
2. The Board hereby reaffirms that OWASA shall only purchase water from other communities or obtain water from its Jordan Lake storage allocation during periods of increased drought risk after it has declared a Stage 1 Water Supply Shortage per OWASA's State-approved Water Shortage Response Plan and OWASA's Conservation Standards as incorporated therein.

3. Any decision to invest OWASA funds in capital facilities needed to fully access its Jordan Lake allocation and/or to make periodic payments to Durham and/or Cary under the terms of new or modified water sales agreements will be based on an objective assessment of the likely risks and benefits of the proposed investment or expenditure; and, such an assessment will include the consideration of the costs and benefits of alternative approaches.

Adopted this 13<sup>th</sup> day of December 2012.

  
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Alan E. Rimer, P.E., Chair

ATTEST:

  
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Amy Witsil, Secretary