



ORANGE WATER AND SEWER AUTHORITY

Quality Service Since 1977

March 20, 2009

Mr. Roger Stancil
Chapel Hill Town Manager
405 Martin Luther King Jr. Boulevard
Chapel Hill, NC 27514

**SUBJECT: INFORMATION FOR THE MARCH 26, 2009 ORANGE COUNTY
ASSEMBLY OF GOVERNMENTS (AOG) MEETING
REGARDING JORDAN LAKE**

Dear Roger;

Please include the enclosed information with the agenda materials for the March 26th AOG meeting. The following summary information is provided:

- Proposed Jordan Lake Nutrient Management Rules – OWASA's perspective
- Update of OWASA's Long-Range Water Supply Plan

As you know, the OWASA Board has a regular Board meeting the evening of March 26th; however, Randy Kabrick, OWASA Board Chair and Ed Holland, OWASA Planning Director will attend the AOG meeting.

Sincerely,

Ed Kerwin
Executive Director

Attachments

c: Laura Blackmon, Orange County Manager (w/attachments)
Eric Peterson, Hillsborough Town Manager (w/attachments)
Steve Stewart, Carrboro Town Manager (w/attachments)
OWASA Board of Directors (w/attachments)
Robert Epting, OWASA General Counsel (w/attachments)

UPDATE OF OWASA'S LONG-RANGE WATER SUPPLY PLAN – MARCH 20, 2009

PURPOSE: To report on OWASA's Long-Range Water Supply Plan Update project.

BACKGROUND: Portions of OWASA's water supply plan have been updated periodically since 2000, but the severe droughts of 2001-02 and 2007-08 highlighted the need to revisit underlying assumptions and the relative costs and benefits of supply and demand management options that were evaluated previously as well as several others that have not been considered before. Key questions being addressed include:

- What scenarios of population growth, density, and development should we anticipate for the 50-year (2060) planning period?
- What combination of water supply and demand management tools will best meet future needs?
- What should be the relative roles of reclaimed water, additional conservation, Jordan Lake, or other supply/demand management options?
- What are the tradeoffs among financial cost, drought vulnerability/reliability, water quality, local water supply "autonomy," and other high level concerns?

OWASA has hired Hazen and Sawyer, a nationally recognized engineering firm, to provide technical and economic analyses and to evaluate the estimated yields of existing and potential supply sources. OWASA staff is generating new water demand forecasts; further analyzing the costs and benefits of additional conservation initiatives; and will prepare the draft Long-Range Water Supply Plan Update, which will incorporate Hazen and Sawyer's technical information and review. OWASA will seek feedback from the local governments and community stakeholders during the summer and fall of 2009 and then incorporate those comments into a revised draft that the OWASA Board will consider for final approval later in 2009.

CURRENT STATUS: Hazen and Sawyer recently delivered preliminary information (still under review by OWASA staff) about the costs and additional yield of seven supplemental water supply options: expanding the Stone Quarry Reservoir; developing Jordan Lake intake, pumping, and transmission facilities; developing a permanent Haw River intake, pumping, and transmission facilities near Old Greensboro Road in southwestern Orange County; expanding the Cane Creek Reservoir; expanding University Lake; removing accumulated sediment from University Lake; and building a new dam and reservoir on Sevenmile Creek in central Orange County. Additionally, the consultant estimated how much water OWASA would need to obtain through its Cary/Durham interconnection in order to avoid critical shortages under different drought and demand conditions. Cost-benefit information will be developed in the near future on demand-management options, including the expanded use of reclaimed water and additional conservation initiatives, such as plumbing fixture rebates. OWASA staff has developed a new spreadsheet model for estimating future water demands under variable scenarios of community growth and has consulted with Carrboro, Chapel Hill, and University planners for input.

JORDAN LAKE: OWASA recently joined the Jordan Lake Partnership with the Towns of Apex, Cary, Hillsborough, Holly Springs, Morrisville, Pittsboro, the City of Durham, and the Counties of Chatham, Orange, and Wake. The Partnership's goal is to "collaboratively define Jordan Lake's role in a long term sustainable and secure regional water supply for the Research Triangle Region." Initial efforts will be on gathering, reviewing, and refining relevant water supply information from Partnership members (demands, conservation measures, supply sources, future needs, etc.). Depending in large part on the findings of its Long-Range Water Supply Plan Update project, OWASA may then participate in the Jordan Lake Western Intake Preliminary Planning Project that the Partnership will pursue.