

ORANGE WATER AND SEWER AUTHORITY

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

MEMORANDUM

TO:

Board of Directors

THROUGH:

Ed Kerwin COL

FROM:

Ed Holland

DATE:

January 7, 2010

SUBJECT:

Final Recommendations for OWASA's Long-Range Water Supply Plan Update

Background

At its December 8, 2009 meeting, the Board's Natural Resources and Technical Systems (NRTS) Committee addressed three substantive issues that were raised after the draft Water Supply Plan Update report was released for public comment in July 2009. These were presented in a December 4, 2009 staff memo to the NRTS Committee, included here as Attachment 1. Based on those discussions, the Committee recommended the following on December 8 (please see NRTS meeting summary, included as Attachment 2):

- Future demand forecasts, as currently presented in the draft report, should remain unchanged.
- Anticipated revenue reductions should be excluded from the net present value life-cycle cost calculations of demand management strategies, such as reclaimed water, mandatory water restrictions, etc.
- The recommendation to purchase water before declaring future Water Supply Shortages should remain in the Final Report, but the text should note that other opinions were received from elected officials.

Carrboro Response

That same evening (December 8, 2009), the Carrboro Board of Aldermen adopted a resolution accepting OWASA's draft Long-Range Water Supply Plan Update, but opposing the recommendation to purchase water before declaring future Water Supply Shortages. A copy of the Carrboro resolution is included here as Attachment 3. (We previously reported that several members of the Chapel Hill Town Council expressed similar views after our September 14, 2009 presentation of the draft Water Supply Plan Update.) At Carrboro Mayor Mark Chilton's suggestion, Randy Kabrick, Ed Kerwin, and I met with Mayor Chilton on December 11, 2009. The Mayor provided his personal insight on the Aldermen's resolution, emphasizing the Carrboro community's strong conservation ethic as well as the expectation that OWASA would provide advance notice or an "advisory" that water supply and demand conditions could result in the purchase of water from another utility.

Long-Range Water Supply Plan Update January 7, 2010 Page 2

Staff continues to recommend that we purchase water (if available) before declaring a future Water Supply Shortage. We do not believe that re-introducing a formal Advisory stage to the Conservation Standards (and requiring approval of the three governing boards) is necessary; however, staff agrees that we should continue the practice of keeping our customers and local governments fully informed about OWASA's water supply status. We will make every effort to notify all customers in advance of an impending need to purchase water if reservoir storage and demand conditions do not improve in the near future. Such notice could provide additional motivation to reduce water use and avoid the need for a Water Supply Shortage declaration, which would impose mandatory use restrictions and rate surcharges. Staff believes that clarifying comments of this nature can be incorporated into the final Long-Range Water Supply Plan Update.

Action Needed

Board discussion of the NRTS Committee recommendations and Carrboro resolution; guidance to staff on changes to be made for the draft Long-Range Water Supply Plan Update Final Report.

Next Steps

• January 28, 2010: Board consideration/adoption of Final Report.

We look forward to your discussion and guidance.

Edward A. Holland, AICP

Planning Director

Attachments

Long-Range Water Supply Plan Update - Proposed Changes for Final Report

Background

OWASA's Draft Long-Range Water Supply Plan Update Report was released for public review on July 23, 2009 per direction of the Board of Directors, with the expectation that substantive comments would be received and considered before the Board adopted a Final Report. The full draft report and appendices were posted on OWASA's website; news releases, email notices, and Blue Thumb publicity were issued; the report's Executive Summary was mailed to the local governing boards with a letter from the Board Chair requesting an opportunity to present principal findings and recommendations; and a community meeting was scheduled to receive comments from the general public and other interested stakeholders.

Presentations were made to the Town of Chapel Hill's Sustainable Community Visioning Task Force (September 2, 2009), the Chapel Hill Town Council (September 14, 2009), the Orange County Board of Commissioners (November 5, 2009), the Carrboro Board of Aldermen (November 10, 2009), and at OWASA's televised community meeting (November 11, 2009). Questions and comments were received during active and lively discussions with the local boards. The Carrboro Board of Aldermen indicated their intent to prepare written comments that would be considered at the Aldermen's December 8 meeting and then submitted to OWASA. Four members of the general public attended the November 11 community. Email inquiries or comments were received from six correspondents.

Issues

Three substantive issues emerged from the meetings and email correspondence:

Purchase Water Before Declaring a Water Supply Shortage — One of the draft report's three Primary Recommendations is that OWASA purchase water [provided that it is available] before declaring a Water Supply Shortage in the future, in order to minimize the inconvenience and potential hardship of additional use restrictions and rate surcharges on customers, and to minimize the de-stabilizing financial effects on OWASA.

Multiple members of our local governing boards commented that while they understood the financial/economic rationale for this recommendation, they generally disagreed with it and expressed concern about the principle of purchasing water from others before making further sacrifices in our own community.

<u>Staff Recommendation</u>: Staff supports the recommendation as presented and recommends that it remain unchanged in the Final Report.

Water Demand Forecasts – Commenters recognized the uncertainties inherent in 50-year demand forecasts, but one email correspondent who offered a number of particularly thoughtful and constructive technical comments believed that the forecasts are unrealistically low, and that reduced customer demands will return to pre-drought/pre-recession levels in the near future.

<u>Staff Comment and Recommendation</u>: The demand forecast methodology and assumptions were reviewed and discussed with professional planning and economic development staff of Carrboro, Chapel Hill, Orange County, UNC, and UNC Hospitals. All agreed that the methods and assumptions were reasonable and based on the best information currently available. OWASA staff recommends that the demand forecasts remain unchanged in the Final Report. We will, of course, continue to monitor water demand and local development trends and will recommend any adjustments that may be indicated in the future.

Permanent Revenue Reductions Should Not Be Included in the Life-Cycle or Net Present Cost Calculations of Demand Management Strategies Such as Reclaimed Water, Mandatory Water Restrictions, etc.

<u>Staff Comment and Recommendation</u>: This issue was raised during one of the public presentations and subsequently discussed by staff. We agree that reduced revenues resulting from demand reduction strategies should not be included in the Net Present Cost calculations used to compare the various water supply alternatives and will adjust the Appendices and report table accordingly. We will note these revenue impacts in the text of the report.

Next Steps

- December 8, 2009: NRTS Committee discussion and development of recommendation(s) to be presented to the full Board.
- December 10, 2009: During his announcement, Mr. Rimer will summarize the Committee's discussions
 on the report, present any formal comments received from the Carrboro Alderman (if available) and, if
 possible, present the NRTS Committee recommendations to full Board. Board guidance to staff.
- January 14, 2010: As necessary, continue deliberations on the final recommendations to be presented in the Long-Range Water Supply Plan Update Report.
- January 28, 2010: Board consideration/adoption of Final Report.

Edward A. Holland, AICP

Planning Director

Orange Water and Sewer Authority Natural Resources and Technical Systems Committee December 8, 2009, 8:30-10:00 a.m. OWASA Boardroom Meeting Summary

Members Present

Alan Rimer (Chair), Mac Clarke, Joy Preslar, William Stott, Randy Kabrick (Ex-Officio)

Other Board Members Present

None

Staff Present

Jan Bryant-Berry, Mason Crum, Pat Davis, John Greene, Ed Holland, Ed Kerwin, Kevin Ray, Stephen Winters

Visitors Present

None

Long-Range Water Supply Plan Update - Proposed Changes for Final Report

The Committee supported the three staff recommendations presented in Attachment 1 of the 12/4/09 NRTS agenda package:

- Purchase water, if available, before declaring future Water Supply Shortages
- · Future demand forecasts to remain unchanged
- Anticipated revenue reductions to be excluded from the net present value life-cycle cost
 calculations of demand management strategies, such as reclaimed water, mandatory water
 restrictions, etc.

The Committee agreed that the "purchase water" recommendation should remain in the Final Report, but the text should acknowledge that other opinions were received from local elected officials. It was also noted that the eventual development and execution of secure long-term agreements to purchase or sell water will likely require modifications to the Water and Sewer Management, Planning, and Boundary Agreement, to which OWASA is a party, along with Carrboro, Chapel Hill, Hillsborough, and Orange County. The Committee's recommendations will be reported to the Board of Directors on December 10, 2009 with a proposal for action on January 14, 2010.

Mountains-to-Sea Trail

Mason Crum reviewed the Mountains-to-Sea Trail (MST) proposal, provided as Item #2 in the December 10, 2009 Board of Directors agenda package. The Committee supported staff's recommendations to proceed as proposed in those agenda materials.

Forestry Stewardship Plan

Pat Davis reviewed the status of the Forestry Stewardship Plan being developed for OWASA lands (Attachment 3 of the Committee's 12/4/09 agenda package). The Committee was in consensus with the staff recommendations to:

- Begin implementing forest management activities on OWASA's 490-acre Cane Creek Wildlife Mitigation lands (the Buckhorn Game Land) in 2010, subject to approval by the Board of Directors
- Schedule a presentation by our forestry consultant (David Halley, True North Forest Management Services) for one of the Board of Directors' January meetings

Automated Meter Reading (AMR)

(This item was deferred to the next meeting, due to lack of time.)

Biosolids Management

Ed Holland provided a verbal update of efforts to optimize OWASA's liquid land application and dewatered cake composting operations. Hazen & Sawyer's Hydraulic and Treatment Capacity Study, now underway at the Mason Farm WWTP, will identify potential opportunities for optimizing chemicals used to treat the rotary press filtrate, and will also identify potential side-stream processes that might cost-effectively divert the filtrate from the WWTP treatment train. Findings are expected within the next several months.

Alan Rimer and Randy Kabrick noted the need to compare carbon footprint impacts, as well as financial costs, of the various biosolids management options.

Mr. Rimer asked staff to update the Committee at its next meeting about Orange County's plans for a biosolids task force or community forum.

Next Meeting

The next Committee meeting will be scheduled in early February, 2010. Principal topics will include the deferred staff report on AMR technology and a further update of biosolids issues.

Adjournment

The meeting was adjourned at approximately 10:00 a.m.

Meeting Summary Prepared by:

Ed Holland, Planning Director

A RESOLUTION ACCEPTING THE REPORT ON THE OWASA DRAFT LONG-RANGE WATER SUPPLY PLAN UPDATE Resolution No. 77/2009-10

WHEREAS, the Board of Aldermen requests periodic updates on any changes to OWASA's draft Long-Range Water Supply Plan, and

WHEREAS, OWASA requested to present the highlights and recommendations of the draft Water Supply Plan Update to each affected governing board and receive feedback before the end of the calendar year; and

WHEREAS, the staff of OWASA did make such a presentation to the Board of Aldermen on November 10, 2009; and

NOW THEREFORE BE IT RESOLVED, that the Board of Aldermen of the Town of Carrboro do hereby accept the report given to them at the November 10, 2009 meeting, except for the following:

Section 1. Option 6 on page 17 of the draft plan reads as follows:

It is more cost-effective to reduce the drawdown of OWASA's reservoirs (equivalent to supplementing the supply) by purchasing available water [from Cary via Durham] than by implementing additional water use restrictions. Purchases offer an additional degree of fiscal control by enabling the supplemental source to be effectively turned on or off as needed, in contrast to mandatory restrictions, whose residual effects on customer behavior (and on water/sewer revenues) persist substantially longer than the temporary need for reduced consumption. ... If sufficient water is available from other sources, it is recommended in the future that OWASA purchase water before declaring a Water Supply Shortage in order to minimize the inconvenience and potential hardship of additional use restrictions and rate surcharges on OWASA customers and to moderate the financial effects on OWASA.

The Board of Aldermen is opposed to this option. The Board is of the opinion that this practice sends an inaccurate and confusing message to OWASA customers. This practice implies that during times of shortage, rather than conserving, a "financial fix" would be to purchase water from a neighboring jurisdiction.

Section 2. Given the outstanding work done by OWASA and the jurisdictions in Orange County to protect the University Lake and Cane Creek water supply, the Board currently supports purchasing water from Cary via Durham only in extreme situations, as has been done on occasion in the past.

Section 3. This resolution shall become effective upon adoption.