

## **ORANGE WATER & SEWER AUTHORITY**

Quality Service Since 1977

December 13, 2004

Mr. Steven Stewart
Town Manager
Town of Carrboro
301 West Main Street
Carrboro, North Carolina 27510

SUBJECT: INFORMATION REGARDING OWASA'S RATES, BOND DEBT AND RELATED ITEMS

Dear Steve:

The Orange Water and Sewer Authority Board of Directors request that the enclosed information be provided for your January 11, 2005 Board of Aldermen meeting. Susannah Holloway, OWASA Board member, and I will be attending this meeting.

As always, please let me know if you need additional information or assistance.

Sincerely,

Ed Kerwin

**Executive Director** 

**Enclosures** 

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Ms. Sarah Williamson, Town Clerk



### ORANGE WATER & SEWER AUTHORITY

Quality Service Since 1977

#### **MEMORANDUM**

TO:

**Board of Directors** 

FROM:

Ed Kerwin

DATE:

December 10, 2004

SUBJECT:

Information Regarding OWASA Rates, Bond Debt and Related Items

The following information is provided as requested by the Board of Directors. (Attached as background information is John Smith's letter of October 28, 2004.)

#### 1. What are OWASA's current total debt and debt per customer?

OWASA's bond debt as of June 30, 2004 was \$102,054,545. With 19,229 customer accounts, this represents an average debt of \$5,300 per account.

### 2. What is the estimated level of OWASA's bond debt in 15 years?

Our financial plans for the next 15 years include borrowing \$28 million in 2007 and \$20 million in 2010. Assuming constant annual debt payments on these new bonds, and recognizing that existing debt will be paid down to \$39 million, OWASA's total debt in 2019 would be about \$67 million, which is 33% less than the current total debt. With the estimated addition of 450 new customer accounts per year, this would represent an average debt of about \$2,600 per customer in 2019 compared to the present average of \$5,300. These long-term estimates are based on many assumptions. Especially important is the assumption that OWASA's currently adopted 15-year Capital Improvements Plan (CIP) remains unchanged.

Past and projected outstanding debt and annual debt payments are shown below:

Year	Outstanding Debt	Annual Debt Service Payment	Number of Customer Accounts	Outstanding Debt per Customer Account	Debt Service Payment per Customer Account	Notes
1987	\$22,215,000	\$2,122,404	11,300	\$2,000	\$188	Actual
2005	\$102,054,545	\$7,772,895	19,229	\$5,300	\$404	Actual
2019	\$67,000,000	\$9,308,487	25,979*	\$2,600	\$358	Projected

<sup>\*</sup> Assumes the addition of 450 new customer accounts per year

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Because "customer accounts" include single family as well as large-scale commercial and institutional accounts, these numbers do not represent the amount of debt service paid per average residential account.

## 3. In the next 15 years, how much will the typical monthly OWASA bill increase?

The average monthly water and sewer bill for a typical residential customer using 6,000 gallons per month is now \$56.45. In 15 years, the typical bill could be about \$100, which would represent a compound increase of about 5 percent per year. More than half of that projected increase would likely result from normal inflationary growth. The costs of ensuring an adequate, safe water supply and high quality, reliable water and wastewater services by expanding, replacing and renovating facilities where needed, of course, are at the heart of OWASA's mission, budget and rate-making decisions.

Because OWASA rates in 2019 will reflect budget, policy, and planning decisions made by future Boards of Directors, the 2019 bill amount estimated above may be of only limited accuracy.

# 4. If the loss of drinking water revenues for the water reuse project is passed on to the OWASA customer base, how would average monthly water bills be affected?

The use of reclaimed water will reduce the volume of potable water sales, which in turn will reduce OWASA's net water revenues. Either an offsetting increase in the water rates and/or decrease in operating, maintenance, and capital expenses would be needed to assure that OWASA has sufficient revenues as the water reuse system is implemented. For the long-term, as discussed in more detail below, reuse is also expected to reduce or defer the need to expand water system capacities and these savings will be reflected in future budget and rate decisions and customers bills.

Our best current estimates are that monthly water and sewer bills for typical residential customers would have to initially increase by no more than about 2 to 4 percent to offset the anticipated potable water revenue reduction. The effects of water reuse on OWASA's future water revenues and rates are now being evaluated in more detail and will be fully considered as OWASA moves forward with this project.

The revenue and rate effects in a given year will depend on factors such as:

- (1) the rate at which the reclaimed water system is implemented over a period of vears:
- (2) other demand factors such as customer growth and per capita water use:
- (3) demand management efforts that may be initiated;
- (4) the extent to which OWASA can offset revenue loses by cost reductions and deferrals in a given budget year; and
- (5) how much of OWASA's fixed costs that are now recovered through the drinking water rate will be recovered through the reclaimed water rates.

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Although the reuse system may require some near-term increases in water rates, the reclaimed water system is expected to provide substantial cost savings over the long-term through the deferral of major water supply and treatment facility expenditures. This will reduce certain long-term capital costs that OWASA customers would otherwise bear, thereby helping to keep water rates lower than they would otherwise be without the water reuse system in place.

In addition to studying the water revenue effect and rate requirements, OWASA is also studying the savings and rate benefits that would result from the deferral of certain major capital improvements, such as an additional water supply source (Jordan Lake) and water treatment plant expansion, that would not be needed if water reuse is implemented. The reclaimed water system will also provide substantial improvements in water supply reliability by reducing the community's future vulnerability to droughts.

These benefits and revenue effects were discussed in a staff report entitled "Proposed Water Reclamation and Reuse System: An Overview of Key Financial Issues and Implications," which was presented to and discussed by the Board of Directors' Budget and Financial Planning Committee on January 7, 2004. As noted above, these effects will be further quantified during the coming months and considered as plans for the water reuse system are finalized.

Regardless of the approach taken to offset the reduction in potable water revenues, the capital, operating, maintenance, and management support costs of the reclaimed water service will be fully recovered through reclaimed water rates that will be calculated and adopted in the future.

# 5. What is OWASA's approach to long-range planning, including financial planning?

The tools that we now use for long-range capital and financial planning include:

- The Board of Directors' Strategic Financial Planning and Management Document
- 50-year Comprehensive Water and Sewer Master Plan (updated annually)
- 15-Year Capital Improvement Plan (updated annually)
- 15-Year Financial Planning Model and projections (updated annually)
- Long-Range Water Conservation and Demand Management Program (currently under development)

About a year ago, the Board of Directors decided that OWASA should conduct a new comprehensive rate study and strive to improve its long-range financial modeling tools. These measures will augment our understanding of the effects that customer growth, facility service levels, and capital improvements will have on revenue requirements and future customer rates. These tools will also enable us to evaluate the financial implications and trade-offs between traditional supply-side capacity expansions versus

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less traditional demand-side strategies, such as water reuse, a comprehensive long-term conservation program, and so forth.

## 6. What will be the primary source of water for the expanded Quarry Reservoir?

Although OWASA will have the capacity to pump excess water from the Cane Creek Reservoir, the expanded quarry reservoir will be filled primarily with water pumped from University Lake.

Please let me know if you have any questions or need further information.

Ed Kerwin

**Executive Director** 

Attachment

c: Robert Epting
John Greene
Pat Davis
Greg Feller
Ed Holland
Kevin Ray

100 Evans Ct Carrboro, NC 27510 October 28, 2004

Mayor Michael Nelson Carrboro Board of Aldermen Carrboro Town Hall 301 W. Main St Carrboro, NC 27510

Dear Mayor Nelson and Members of the Board of Aldermen:

Please accept my resignation from the OWASA Board of Directors, effective immediately. I have enjoyed my work with OWASA over the past five years and appreciate the opportunity of serving Carrboro and its residents. Because I know replacing me will cause you some inconvenience, I want to briefly explain-why I am taking this action.

When I was first appointed some five years ago, I considered the issues facing the Board and chose several on which to concentrate. OWASA was completing a major long-term planning effort regarding anticipated future water and sewer needs, and I took an active interest in helping them complete this 50-year Master Plan. Much of the detailed discussion and decision-making took place in OWASA's Natural Resources and Technical Sub-Committee (NRTS), and it was there that I was best able to contribute.

A resulting issue was the decision to purchase a stone quarry to be used as an eventual reservoir to meet OWASA's projected demand for additional raw water supply. This was a complex issue with many pros and cons. One strong positive factor was that by using this quarry reservoir, which would be filled from excess water coming from the Cane Creek watershed, OWASA could assure that this raw water supply would meet the same high water quality standards as our current supply. No such guarantee would be possible had we elected to use Jordan Lake as our preferred long-term source. Again, the details of this complex set of decisions were worked out in NRTS, including the decision to purchase the quarry out-right and to include in the lease agreement with the mining company provisions that assure that the quarry will be excavated over the next twenty-five years to the dimensions necessary for it to meet the needs of the community. Again, those details were worked out during numerous discussions within the NRTS Committee, in which I was a member and an active participant.

Recently, I have become increasingly concerned about OWASA's long-term financial structure, the amount of debt it is incurring or plans to incur, and its rising rates. Consequently, I asked to be assigned to the OWASA Budget and Finance Committee and have served on it for the past year. And, as I anticipated, it has been in this context where detailed discussions of financial issues have taken place. To give some sense of the financial issues facing OWASA, consider the following: OWASA has incurred debt that currently totals approximately \$100 million, which averages out to some \$5,000 per customer. Over the next fifteen years, total debt is expected to rise to some \$250 million. That averages out to \$10,000 to \$12,000 per customer, depending on growth in the number of customer accounts. During that same time, the average household monthly bill is expected to rise from approximately \$50 dollars a month now to over \$100 a month then. Pushing rates even higher is OWASA's recent decision to move forward on a Reclaimed Water project with the University. If all costs resulting from anticipated loss of revenues for the complete project as currently envisioned are passed on to the OWASA customer base, average household monthly bills are likely to rise to \$115 to \$120 a month.

In order to address these and other financial issues in a detailed and fair way, OWASA should undertake a long-term financial planning effort, similar to earlier long-term planning effort re. water and sewer capacity. It should address the expected cash flows, levels of debt to be incurred, and anticipated effects of conservation and reuse measures. It should include models

and tools to allow OWASA to project financial implications for various growth, weather, and demand fluctuation scenarios. I have introduced these ideas in the Budget and Finance Committee and was looking forward to developing them further during my remaining time on the Board.

However, I have recently been removed from that committee, against my wishes and against my repeated requests to be reappointed. As a result, I feel that I have been marginalized within the Board and, as an outsider, that I will be unable to address these important financial concerns effectively. As the composition of the Budget and Finance Committee currently stands, all four of its members are Chapel Hill appointments. I have the utmost confidence in their capabilities and integrity, but Carrboro needs a seat at that table. While I believe in the abstract that I could provide effective representation for Carrboro in these matters, I also believe that the current politics of the Board make it unlikely that I will have the opportunity to do so. Consequently, I hope that by appointing someone else in my place, Carrboro can once again be represented in the way it needs to be, particularly in crucial financial considerations that are currently under way.

One final note: I want to provide a heads-up to the Aldermen. We have been fortunate in the past to have had highly competent and conscientious Boards at OWASA. As a result, you could assume that matters were being handled in a thorough, thoughtful, and competent manner. And, as a further result, you did not need to provide close oversight of the Board. I don't believe you can make those assumptions at this time. In my opinion, the Board has become increasingly political. At times, decisions appear to be made more on a basis of personality and personal alliances than from thoughtful, informed consideration. As an example, I have seen the Board go on record voting against a member's request (mine) to have OWASA's legal council explain and justify a legal opinion he had offered, but that the member thought was questionable, that could result in significantly higher rates for OWASA customers. In my opinion, that action constitutes willful failure of Board to provide due diligence. Consequently, I believe Carrboro's elected officials need to attend more closely to the deliberations and actions of the OWASA Board of Directors than it has needed to in the past.

Again, thank you for the opportunity of serving Carrboro. I hope I will be able to do so in some other capacity in the future.

Cordially,

John B. Smith

cc: Mayor Kevin Foy Chapel Hill Town Council Chairman Barry Jacobs Orange County Commissioners