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: **Finance Committee**
John Young (Chair)
Terri Buckner
Michael Hughes
Heather Payne
Amy Witsil
Alan Rimer (*ex-officio*)

THROUGH: Ed Kerwin

FROM: Stephen Winters, CPA

DATE: October 4, 2013

SUBJECT: Finance Committee Meeting – October 10, 2013

The Finance Committee will meet on Thursday, October 10, 2013, at 5:30 PM in the OWASA Boardroom. The agenda will be:

- Review and discuss OWASA's Financial Management Policy

  Background: The current Financial Management Policy (the Policy) was approved on January 26, 2012 (see Attachment 1). The policy is considered a "model" by many of OWASA's peers, consultants and UNC's Environmental Finance Center.

  The purpose of this agenda item is to discuss potential modifications to the policy that the Finance Committee may choose to propose to the Board of Directors. The following are topics the Board and / or staff has expressed interest in revisiting.

  - Reserves policies – We have three reserves. The Policy specifies the minimum target balances for each of the reserves and specifies how the funds may be used. However, the use of funds is not restricted by law.
  - Financial Performance Objectives – The Policy specifies several financial performance objectives for the organization and we report our status relative to these objectives each quarter.

  The Finance Committee will discuss whether aspects of the Policy with respect to the topics listed above, or others, should be modified.

  See Attachment 2 for more information and analysis regarding the Policy.

  Committee Action Requested: Review and discuss potential changes to OWASA's Financial Management Policy.

- Review and discuss the FY 2015 budget process and timeline

  Background: During the development of the FY 2014 budget, the Finance Committee expressed interest in being involved in the budget process earlier than in prior years.

See Attachment 3 for more information about the budget process and timeline.

Committee Action Requested: Review the budget process as proposed by staff and provide feedback and guidance.

- Discuss plan for reengaging in discussions about rate structure modifications

Background: The rate study completed last year recommended that we make several relatively minor adjustments to our rate structure in order to improve its conservation pricing signal and enhance affordability for low-volume and average-user customers. Additionally, the Finance Committee also considered several other rate structure change scenarios. When the Board decided it did not need to approve a rate increase for FY 2014, it also decided to defer any further discussion on rate structure changes until sometime in FY 2014.

Committee Action Requested: Discuss and provide guidance regarding when the Committee wishes to begin considering rate structure changes.

Stephen Winters, CPA
Director of Finance and Customer Service

cc: Board of Directors
Ed Kerwin
Bob Epting

Attachments
Attachment 1 – OWASA's Finance Management Policy
Attachment 2 – Information for discussion of Finance Management Policy
Attachment 3 – Information for discussion of FY 2015 budget process and calendar

ORANGE WATER AND SEWER AUTHORITY
FINANCIAL MANAGEMENT POLICY
JANUARY 26, 2012

SUMMARY

The purpose of this document is to describe a comprehensive and systematic approach to strategic financial planning, related policy decisions, and measurements of financial performance that collectively guide Orange Water and Sewer Authority (OWASA) in its ongoing efforts to provide its customers with high quality water, wastewater and reclaimed water services through responsible, sustainable and creative stewardship of the resources and assets it manages.

The following excerpt from OWASA's *Mission Statement* provides the framework for development of this approach and related policies.

- *Efficiency and Value - we will perform all services in a financially sound and responsible manner with sufficient revenues to properly operate and fully maintain the water and wastewater system. As OWASA relies solely on user fees, we will continue to be guided by cost-of-service principles with regards to our rates, fees, and charges, and operate the water and sewer system at the lowest rates consistent with our obligation to provide proper and efficient services, now and in the future. We remain committed to continuous improvement in all of our services and will provide high value to our customers.*

- *Sustainability - we will proactively plan, construct, operate, maintain, and finance the water and wastewater system in a manner consistent with the principles of environmental, social and economic sustainability.*

FINANCIAL PERFORMANCE OBJECTIVES

Measurement	Objective	Section
Working Capital Reserves	The greater of 4 months of O&M budget or 20% of the succeeding 3 years of CIP budget	A.1
Capital Improvements Reserve Fund	Minimum fund balance target of 2% of annual depreciated capital costs	B.1
Debt Service Coverage Ratio	≥ 2.0	D.1
Debt Burden to Asset Value	$\leq 50\%$	D.2
Sufficiency of Revenues Above Debt Requirements	Annual Debt service shall not exceed 35% of annual gross revenues	D.3
Credit Ratings	Aa2 – Moody's; AA+ – Standard & Poor's; AA+ – Fitch	D.4
Cash Financing of Capital	Annual revenues and cash reserves shall provide not less than 30% of CIP funding	E.1
Rate/Revenue Stabilization Fund	Minimum fund balance target of 5% of projected water and sewer revenue	E.2
Service Affordability	Average annual residential bill divided by real median household income shall be $\leq 1.5\%$.	F.2

In recognition of the dynamic environment in which OWASA operates, the desired results of policy decisions identified in the Financial Management Policy may not always be achievable within short-term operating cycles. These policy decisions should be viewed as guidance for long-term sustainable fiscal performance, with success measured against the entire planning horizon rather than to individual reporting periods.

Although not necessarily explicitly expressed in this document, the Financial Management Policy recognizes OWASA's major legal requirements and obligations arising from State laws and regulations, contractual agreements with bondholders and other stakeholders and OWASA's Sale and Purchase Agreements under which the organization was formed. If not specifically addressed herein, adherence to such requirements is mandated elsewhere.

This document categorizes policy considerations for sound, sustainable financial policies into the categories of general financial; asset management; investment management; debt management; rates, fees and charges; customer care; and annual budgeting process.

SECTION A. GENERAL FINANCIAL POLICIES

A.1. ***Working Capital Reserves***: OWASA shall maintain a fund balance at a level to sufficiently provide cash flow for daily financial needs in addition to adequate reserves to counter revenue instability and unanticipated expenses. The budgeted minimum reserve balance shall be equal to the larger of the following: a) 33% (four months) of the Operations & Maintenance (O&M) Budget, or b) 20% of the total estimated cost of the Capital Improvements Program (CIP) identified for the succeeding three years.

A.2. OWASA shall make conservative, but reasonable estimates of revenues and costs.

A.3. To the extent practical, the cost of system expansion shall be recovered from parties responsible for the expansion ("growth should pay for growth").

A.4. If the Executive Director deems it necessary at any time to submit any Budget or other proposal to the Board that does not comply with the parameters set forth in this document, he/she shall seek specific approval from the Board for such a proposal.

SECTION B. ASSET MANAGEMENT POLICIES

B.1. ***Capital Improvements Reserve Fund***: OWASA shall maintain a Capital Improvements Reserve Fund with a minimum fund balance target of 2% of the annual depreciated capital costs. The Capital Improvements Reserve Fund shall be an unrestricted reserve that is a component of the General Fund balance. The purpose of this reserve fund is to: ensure more sustainable funding for rehabilitation and replacement of the water and sewer systems and capital equipment; cover major unplanned increases in capital project costs; pay for previously unplanned capital needs; and provide funding flexibility needed in the Annual Budget to adjust for CIP costs carry-over adjustments.

B.2. The annual budget shall provide 100% funding for maintenance activities required to ensure the operational integrity and safety of facilities and facility components.

B.3. OWASA shall use a comprehensive approach to properly maintain all capital facilities, equipment, vehicles, etc.

B.4. An amortization schedule shall be established for each physical asset to reflect the reasonable useful life of the asset.

B.5. The costs of this comprehensive maintenance and rehabilitation program shall be reflected in OWASA's annual budget and five-year CIP budget.

SECTION C. INVESTMENT MANAGEMENT POLICIES

C.1. Cash management and treasury activities shall be managed in a manner that reflects efficient use of interest rates and maximizes fund performance balanced against investment risk and cash flow needs.

C.2. OWASA shall attempt to reduce investment risk and maximize return on investments by participating in a variety of authorized investment instruments and financial institutions.

C.3. Investment of OWASA funds shall not expose the assets to undue or unreasonable risk.

SECTION D. DEBT MANAGEMENT POLICIES

D.1. ***Debt Service Coverage Ratio***: OWASA's Bond Order requires a minimum annual required Debt Service Coverage Ratio of 1.2. The minimum annual debt service coverage ratio shall be 2.0; provided, however, that the minimum coverage ratio for any single year when severe weather anomalies or other unforeseen circumstances occur which negatively impact revenues and/or expenses shall not be less than 1.5 during the Fiscal Year.

D.2. ***Debt Burden to Asset Value***: The comparison of outstanding debt to infrastructure value is a reasonable indicator of debt capacity. OWASA's debt to plant ratio (outstanding debt divided by the book value of fixed assets) shall not exceed 0.5 (50%).

D.3. ***Sufficiency of Revenues above Debt Requirements***: OWASA shall maintain debt service as a percent of revenue at or below 35% of revenues.

D.4. ***Credit Ratings***: OWASA shall maintain Credit Ratings of at least Aa2, AA+ and AA+ from Moody's, Standard & Poor's and Fitch, respectively.

D.5. Debt issuance shall be limited to financing the costs of capital asset project planning and design, land acquisition, buildings, permanent structures, attached fixtures and

equipment, and the cost of debt issuance and capital reserves as may be required by creditors.

D.6. The repayment of debt shall be structured in such a manner that the repayment period does not exceed the expected useful life of the assets acquired with the debt proceeds.

SECTION E. RATES, FEES AND CHARGES POLICIES

E.1. ***Cash Financing of Capital***: Annual revenues and cash reserves shall provide not less than 30% of the funds required for OWASA's CIP.

E.2. ***Rate/Revenue Stabilization Fund***: OWASA shall maintain a Rate/Revenue Stabilization Fund with a minimum fund balance target of 5% of the projected water and sewer revenue for the applicable year. The Rate/Revenue Stabilization Fund shall be an unrestricted reserve that is a component of the General Fund balance. The purpose of this reserve fund is to provide sufficient funding for the cost of maintaining, repairing and operating the water, wastewater and reclaimed water systems during extended periods when expenditures are higher and/or revenues are lower than budgeted while offsetting the need for rate increases and spending changes during the fiscal year.

E.3. OWASA shall maintain a system of rates, fees and charges that effectively recovers allocated costs to customers and customer classes in reasonable proportion to their differing service requirements and their responsibility for the costs incurred by the utility. Adherence to the cost-of-service principle (benefiting party pays) as mandated by the Sale and Purchase Agreements and Bond Order shall be a primary guiding philosophy.

E.4. OWASA's rates, fees, and charges shall be reviewed on an annual basis, and adjusted as necessary, to ensure that rate and revenue levels are adequately funding OWASA's financial, capital and operational goals, objectives and requirements.

E.5. Rates shall be sufficient to generate income necessary to meet OWASA's revenue requirements. Revenue recovery from rates shall ensure financial stability as measured by adequate fund balance, operating reserves, debt service ratio, specified reserves and other measures established by OWASA.

E.6. Rates should provide incentives for cost-effective use of facilities, conservation of water and efficient use and reuse of water resources, including rate surcharges during periods of water shortage.

E.7. When OWASA determines that a rate increase is required, OWASA will strive to have such an increase be no higher than the general rate of inflation. However, OWASA shall set rates so that revenues will be sufficient at all times to provide for the cost of maintaining, repairing and operating the water, wastewater and reclaimed water systems, to pay the principal and interest on all issued or assumed debt, and to ensure the organization remains fiscally sound and financially sustainable.

E.8. Although at times, operational or fiscal constraints may necessitate more aggressive or accelerated rate adjustments, rate levels and structures should be implemented through gradual programmed implementation of rate adjustments if possible.

E.9. OWASA shall consider using the services of a qualified independent consultant to conduct a comprehensive rate study at approximately five year intervals.

SECTION F. CUSTOMER CARE

F.1. OWASA shall operate the water and sewer system at the lowest rates consistent with its obligation to provide proper and efficient services, now and in the future.

F.2. ***Service Affordability*** is an important consideration for OWASA. The target for average annual residential water and sewer bill divided by real median household income is ≤1.5%.

F.3. When setting rates and evaluating rate structures, OWASA will carefully consider the impact such rates and rate structures will have on low income customers, while ensuring that cost-of-service principles are met.

F.4. OWASA endorses and will promote the Taste of Hope customer assistance program. Donations made to the program by OWASA customers shall be provided to the Inter-Faith Council to help customers in need to pay their OWASA bill.

F.5. Customers, citizens, and elected officials shall be provided timely, clear and understandable information and opportunities for constructive citizen participation in OWASA's rate decisions.

SECTION G. ANNUAL BUDGETING PROCESS

The preparation of the following documents on an annual basis is a key component of OWASA's annual budgeting and rate setting process. Those documents followed by an asterisk (*) shall be presented for Board of Directors adoption.

Budget Calendar: The budget calendar shall include the proposed dates of all Board meetings and work sessions at which budget matters are to be discussed, and shall list the dates by which major budget tasks have been or are to be completed by staff.

Statement of Strategic Issues and Policies (SIP): The SIP shall identify the major issues, policies, and concerns that should be addressed in the upcoming annual budget and capital improvements deliberations.

Financial Planning Assumptions and Background Information Document: This document lists the major assumptions upon which the financial plans and budgets are to be based.

5-Year CIP Budget*: The CIP provides for the orderly repair and replacement of existing facilities, helps identify lead time for project planning, regulatory approvals, land acquisition, design, and construction, and provides a framework for strategically analyzing a wider range of acceptable alternatives, and for identifying, ranking, and executing projects.

15-Year Financial Planning Model Report: The planning model report provides a long-term perspective for assessing the adequacy of rates and fees and the timing and amount of anticipated debt financing. It also provides a means of evaluating the economic feasibility of implementing the long range CIP.

Annual Budget*: The annual budget provides the appropriation necessary to operate during the ensuing fiscal year.

The specific process and timeline for completing key components of OWASA's annual budgeting and rate setting process will vary from year-to-year; however, the following table sets forth guidelines to which OWASA should generally adhere.

Task	Time Frame	Rationale
Review strategic issues, policies and economic assumptions	November/December	Staff, the Finance Committee and Board shall review strategic issues, policies, and economic assumptions that are expected to impact and the preparation of budgets (O&M and CIP) and rates. The identification of these key issues will help shape the annual budgeting process.
Capital Improvements Plan Review	February/March	The CIP provides for the orderly repair and replacement of existing facilities, lead time for project planning, regulatory approvals, land acquisition, design and construction, a framework for strategically analyzing a wider range of acceptable alternatives, and a framework for identifying, ranking, and executing projects. The Finance Committee and Board will review and comment on the draft CIP.
Operations and Maintenance Budget Review	March/April	The O&M budget provides funding for properly operating and maintaining OWASA's services and programs. The Finance Committee and Board will review the draft O&M budget to

Task	Time Frame	Rationale
		include cost containment and/or efficiency opportunities that may impact the O&M or CIP budgets.
Financial Planning and Rate Review	April	Upon completion of CIP and O&M budgets, this information and other planning assumptions shall inform OWASA's 15-year financial plan. Staff will review the financial plan with the Board and recommend increases or decreases in rates.
Conduct Public Hearings	May	The OWASA Board shall hold public hearings on the draft O&M budget; CIP budget; and proposed rates, fees and charges for the coming year.
Adopt Budgets and Rates	June	The OWASA Board shall adopt the O&M budget, CIP budget and rate schedule for the coming year.

OWASA's Financial Management Policy

As part of our continuous improvement culture, we are always interested in, and looking for ways to improve the way we manage and operate the organization: including changing our policies. In March 2009, OWASA made substantive changes to its Financial Management Policy (the Policy) and made a few minor adjustments in January 2012. The Finance Committee is considering recommending Policy changes to the Board of Directors and the following information is provided to enhance the Committee's discussion.

The following UNC Environmental Center blog post and You Tube video offer a perspective of the current version of our Policy.

- *Don't Chicken Out on Financial Policies*, by Stacey Berahzer (published November 20, 2012)
- You Tube interview of Stephen Winters that is referenced in Ms. Berahzer's article.

Reserves policies

The Policy identifies the three reserve funds described below. These financial reserves are a significant factor in OWASA's "double-A" bond ratings.

Working Capital - OWASA shall maintain a fund balance at a level to sufficiently provide cash flow for daily financial needs in addition to adequate reserves to counter revenue instability and unanticipated expenses. The budgeted minimum reserve balance shall be equal to the larger of the following: a) 33% (four months) of the Operating Budget, or b) 20% of the total estimated cost of the Capital Improvements Program (CIP) identified for the succeeding three years.

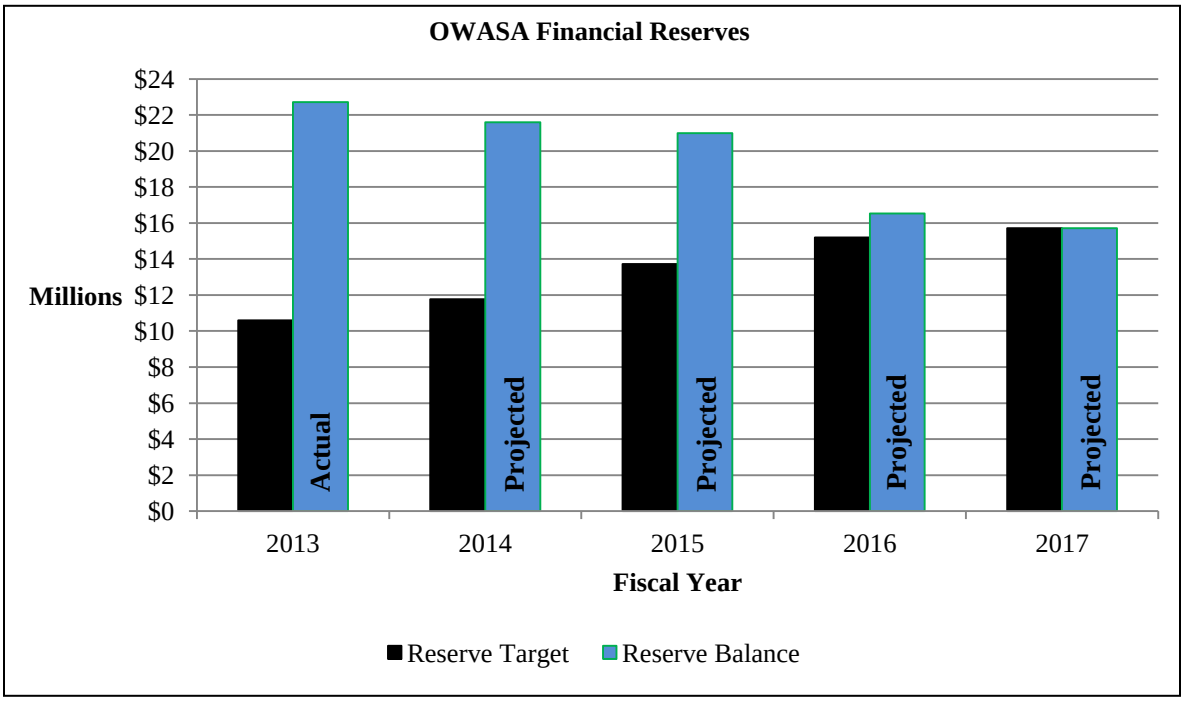
Capital Improvements - OWASA shall maintain a Capital Improvements Reserve Fund with a minimum fund balance target of 2% of the annual depreciated capital costs. The purpose of this reserve fund is to: ensure more sustainable funding for rehabilitation and replacement of the water and sewer systems and capital equipment; cover major unplanned increases in capital project costs; pay for previously unplanned capital needs; and provide funding flexibility needed in the Annual Budget to adjust for CIP costs carry-over adjustments.

Rate/Revenue Stabilization - OWASA shall maintain a Rate/Revenue Stabilization Reserve Fund with a minimum fund balance target of 5% of the projected water and sewer revenue for the applicable year. The purpose of this reserve fund is to provide sufficient funding for the cost of maintaining, repairing and operating the water, wastewater and reclaimed water systems during extended periods when expenditures are higher and/or revenues are lower than budgeted while offsetting the need for rate increases and spending changes during the fiscal year.

The status of funding as of August 31, 2013 for each reserve fund is presented in the following table.

Reserve Fund	Minimum Target Balance	Current Balance	Amount Current Balance is Over (Under) the Minimum Target Balance
Working Capital	$8,500,000	$20,216,000	$11,716,000
Capital Improvements[1]	5,800,000	2,000,000	(3,800,000)
Rate/Revenue Stabilization[1]	1,750,000	1,250,000	(500,000)

According to projections of cash inflows and outflows in our 15-year financial plan, the balance in the reserve funds will equal the minimum target by the end of FY 2017.



Many estimates and assumptions factor into our projections of cash inflows and outflows. For example, the above projections include assumptions such as:

- Rate increases of 3% per year
- A bond issuance of $8 million in FY 2016
- An average operating cost escalation of approximately 3.5% per year
- Specific operating cost increases or decreases in years for which we anticipate identified cost changes going into effect
- A 15-year Capital Improvements Program with average annual expenditures of $21 million and ranging from as low as $10 million and as high as $32 million

Significant changes in any of the assumptions used in developing our financial plan could change the projection of when our current reserve balances will be expended to the point of equaling our minimum targets.

Changing OWASA's policies on reserves could have advantages and disadvantages; staff has the ability to assist the Board in evaluating the impact of potential different policy scenarios.

Financial Performance Objectives

In addition to reserve levels, the Policy also contains six additional performance objectives by which we measure and monitor our financial status. Below is an explanation of these objectives and their purpose.

Debt Service Coverage – The Debt Service Coverage ratio (DSC) measures the amount of annual net income we have available to make principle and interest payments (debt service) on our outstanding bonds. It is a measure of liquidity and is, along with our reserve balances, one of the two financial attributes weighed most heavily by the ratings agencies. The Policy specifies that our DSC be at least 2.0. This means that each year, our net income should be twice as much as our annual debt service payments. Currently, our annual debt service payments

amount to about $8 million per year; obviously, this means we need to bring in roughly $16 million in net income to achieve a 2.0 DSC. For FY 2013, we finished the year with a DSC of 2.2.

Debt Burden to Asset Value – The Debt Burden to Asset Value ratio measures OWASA's net worth and debt capacity. The Policy specifies that this ratio be no more than 50%: meaning that the amount of outstanding debt should not be more than 50% of the amount of our assets. At the end of FY 2013, our Debt Burden to Asset Value ratio was 29%.

Sufficiency of Revenues Above Debt Requirements – this ratio measures the sufficiency of annual revenues to pay for operating expenses and debt service. The Policy specifies that our Sufficiency of Revenues Above Debt Requirements ratio be no more than 35%: meaning that our debt service should be no more than 35% of annual revenues. For FY 2013, our debt service was 22% of gross revenue.

Credit Ratings – The Policy states that our credit ratings should be at least Aa2, AA+ and AA+ from Moody's, Standard and Poors and Fitch, respectively. Our current credit ratings are Aa1, AA+ and AA+.

Bond or credit ratings are indicators of the financial condition of the entity that issues bond debt and the relative quality of the bonds issued. A better bond rating indicates lower risk to an investor and translates into lower borrowing costs for the issuer. OWASA's current bond ratings are very good. A number of factors influence bond ratings but in discussions we have had with the ratings agencies, two of the most important factors for OWASA's high ratings are the level of our financial reserves and our debt service coverage ratio. From FY 2003 through 2009, our debt service coverage ratio and reserve balances were low. Rate increases from FY 2007 to FY 2010 helped to restore these two critical financial indicators.

The table below shows an estimate of the effect lower bond ratings could have on OWASA's borrowing costs. The costs shown in the table are based on a $10 million bond issue; therefore, the costs on a $20 million bond issue would be twice the amounts shown.

	Current Rating	**Hypothetical Rating**	**Hypothetical Rating**	**Hypothetical Rating**
Rating Agency:				
Moody's	Aa1	Aa2	Aa3	A1
Fitch	AA+	AA	AA-	A+
Standard & Poor's	AA+	AA	AA-	A+
Impact of lower rating	x%	x.1%	x.2%	x.45%
Estimated additional average annual cost on a $10 million bond issue	N/A	$6,500	$13,000	$29,250
Estimated additional cost over the life of a 25-year, $10 million bond issue	N/A	$162,500	$325,000	$731,250

Cash Financing of Capital – The Policy states that we pay at least 30% of annual CIP expenditures out of annual revenues and cash reserves. We have not incurred any new debt in the last several years; we have paid 100% of CIP expenditures with annual revenues and cash reserves.

Service Affordability – The Policy specifies that our average annual residential bill shall be no more than 1.5% of the area's median household income. Based on our average bill and the most recent census information, our current Service Affordability ratio is 1.68%. As we have discussed, this is an imprecise measurement as it is based

on a level of income that is not representative of our lower-income customers. Additionally, lower-income customers may use more water than the average user.

For additional analysis of the affordability ratio and its use of median household income, please see the UNC Environmental Center's blog post, *"Percent MHI" Indicator of Affordability of Residential Rates: Using the U.S. Census Bureau's Median Household Income Data* by Shadi Eskaf.

During the development of the FY 2014 budget, the Finance Committee and Board of Directors expressed interest in being involved earlier in the budget process. It is staff's understanding that the Committee and Board want to have sufficient time to be able to make policy-level decisions that may impact development of the budget. The following is a draft we can use to discuss a process that will meet the needs of the Committee and Board.

Date	Activity
November 2013	Finance Committee and Board of Directors meetings to discuss policy-level issues that need to be factored into the FY 2015 budget development process (e.g. overall level of CIP investment, guidelines for operating expenses, etc.). Staff to provide information regarding important strategic issues or assumptions that should be considered in the Committee's and Board's discussions.
December 2013	Finance staff to begin working with department managers to develop departmental budget requests
January 2014	Department managers to submit budget requests to Finance staff
February and March 2014	Staff to prepare draft of budget, update 15-year financial plan, and develop initial rate adjustment recommendation
February and March 2014	Finance Committee and Board of Directors meetings, as necessary, to discuss budget and rate adjustment
April 2014	Deliver draft of FY 2015 budget to the Finance Committee and Board of Directors and hold Committee and Board meetings as necessary to discuss and refine budget
May 2014	Hold public hearings on the proposed budget and rate adjustment [1]
June 2014	Board approval of FY 2015 budget

[1] If the Board decides to make rate structure changes, we may want to provide additional opportunities for the public to react and provide input.