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
Gordon Merklein
Will Raymond
Amy Witsil
Alan Rimer (*ex-officio*)

THROUGH: Ed Kerwin

FROM: Stephen Winters, CPA

DATE: February 22, 2013

SUBJECT: Finance Committee Meeting – February 26, 2013

The Finance Committee will meet on Thursday, February 26, 2013, at 5:00 p.m. in the OWASA Boardroom. The agenda will be:

- Discuss results of the water and sewer rate study for the purpose of making a recommendation to the Board of Directors. See Attachments 1 and 2 for background information.

  Committee Action Requested: Seek consensus and vote on proposed rate structure changes to formally recommend to the Board of Directors.

Stephen Winters, CPA
Director of Finance and Customer Service

cc: Board of Directors
Ed Kerwin
Bob Epting

Purpose

On January 24, 2013 the Board of Directors received a report on results of the water and sewer rate study. The report included an overview of four rate structure scenarios that the Finance Committee selected for consideration by the Board. The Committee considered several other scenarios but concluded the scenarios summarized in the chart below would be the most feasible:

		Scenarios		
Rate structure modification	**Current Rates**	**1**	**2**	**3**
Equalize revenue recovery from water and sewer monthly service charge at 20% for each	No changes to current rate structure	✓	✓	✓
Separately calculate customer service component of monthly service charge		✓	✓	✓
Adopt American Water Works Association (AWWA) standard for scaling monthly service charges for larger meters		✓	✓	✓
Decrease commodity charge for first rate-block by 3% each			✓	
Decrease commodity charge for first rate-block by 6%				✓

After discussion, the Board requested that the Finance Committee make a formal rate structure recommendation to the Board of Directors at its meeting on February 28, 2013.

At the suggestion of Terri Buckner, we developed a revised table summarizing rate impacts of the various scenarios (Attachment 2 of this packet). It reflects how the different scenarios would impact the sample sets of customers.

During the Board's discussion, Will Raymond referred to a scenario in which the number of gallons in Block 1 of the single-family residential block rates be expanded to include consumption of 3,500 gallons per month. Since we bill in 1,000 gallon increments, Block 1 would have to be expanded to include up to 4,000 gallons rather than 3,500.We have included an analysis of this scenario (Scenario 4 in the table in Attachment 2). As we have previously discussed, 78% of our single-family residential bills are for 5,000 gallons of water use or less. As a result, the reduction in revenue generated from Blocks 1 and 2 in this scenario is significant. In Scenario 4, as in the other scenarios, the reduction in revenue is being recovered from other customers within the residential customer class; you will notice that the bills for higher volume users increases substantially.

Scenarios 2, 3 and 4 include specific changes to the increasing block rates in order to address the affordability objective. For all three of these scenarios, the revenue reductions associated with lowering Block 1 or increasing the Block 1 usage level are offset solely through revenue increases applicable to Blocks 2, 3, 4, and 5.

Action Requested

Develop a consensus and vote on rate structure changes to formally recommend to the Board of Directors.

		Scenario 1		Scenario 2		Scenario 3		Scenario 4	
	Customer Group	**Impact**	**% Change**	**Impact**	**% Change**	**Impact**	**%Change**	**Impact**	**%Change**
Commercial	Public Housing Authority	Up	0.6%	Up	0.6%	Up	0.6%	Up	0.6%
Commercial	Chapel Hill Carrboro City Schools	Up	1.2%	Up	1.2%	Up	1.2%	Up	1.2%
Commercial	Master-Metered MDUs (Sample)	Down	-0.4%	Down	-0.4%	Down	-0.4%	Down	-0.4%
Commercial	Commercial Low Volume (Sample)	Up	4.5%	Up	4.5%	Up	4.5%	Up	4.5%
Commercial	Commercial Moderate Volume (Sample)	Up	0.6%	Up	0.6%	Up	0.6%	Up	0.6%
Commercial	Commercial High Volume (Sample)	Down	-0.6%	Down	-0.6%	Down	-0.6%	Down	-0.6%
Commercial	8-inch Meters	Up	1.6%	Up	1.6%	Up	1.6%	Up	1.6%
Commercial	Irrigation only (4 accounts w/ different meter sizes)	Up	0.6%	Up	0.6%	Up	0.6%	Up	0.6%
Residential	2,000 gallons/month	Down	-1.4%	Down	-2.2%	Down	-2.5%	Down	-1.8%
Residential	4,500 gallons/month	Down	-1.3%	Down	-2.3%	Down	-2.5%	Down	-9.7%
Residential	6,000 gallons/month	Down	-1.1%	Down	-1.6%	Down	-1.6%	Down	-4.5%
Residential	9,000 gallons/month	Down	-1.0%	Down	-0.2%	Up	0.1%	Up	4.9%
Residential	12,000 gallons/month	Down	-0.7%	Up	0.9%	Up	1.3%	Up	11.3%
Residential	15,000 gallons/month	Down	-0.6%	Up	1.6%	Up	2.2%	Up	15.6%
Residential	20,000 gallons/month	Up	0.5%	Up	4.0%	Up	4.9%	Up	26.2%

		Current Monthly Bill	**Monthly Bill**	**(Savings) additional cost**	**Monthly Bill**	**(Savings) additional cost**	**Monthly Bill**	**(Savings) additional cost**	**Monthly Bill**	**(Savings) additional cost**
Residential	2,000 gallons	$ 44.92	$ 44.30	$ (0.62)	$ 43.95	$ (0.97)	$ 43.79	$ (1.13)	$ 44.11	$ (0.81)
Residential	4,500 gallons (monthly average)	77.10	76.09	(1.00)	75.32	(1.77)	75.17	(1.93)	69.62	(7.48)
Residential	9,000 gallons	140.77	139.33	(1.44)	140.53	(0.24)	141.45	0.68	147.69	6.92
Residential	15,000 gallons	226.63	225.29	(1.34)	230.52	3.89	231.91	5.28	264.32	37.69
Residential	20,000 gallons	265.78	267.59	1.81	279.32	13.54	282.36	16.58	355.32	89.54

	Chapel Hill-Carrboro City Schools	35,227.50	35,650.23	422.73	35,650.23	422.73	35,650.23	422.73	35,650.23	422.73
	Public Housing Authority	10,573.25	10,636.69	63.44	10,636.69	63.44	10,636.69	63.44	10,636.69	63.44

Scenario Descriptions				
20% revenue recovery from monthly service charge for water and sewer				
AWWA meter equivalent ratios				
Separate customer service charge				
3% reduction to Block 1 rate				
6% reduction to Block 1 rate				
Block 1 changed to 0-4k gals, Block 2 changed to 4-6k gals. Rates for Blocks 1 unchanged from today. Revenue recovered from Blocks 2-5.				

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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

FROM: Stephen Winters, CPA

DATE: February 28, 2013

SUBJECT: Supplemental information for the Board's February 28, 2013 discussion of the Finance Committee's rate study recommendation and consideration of selecting the Board's preferred scenario.

The Finance Committee met on Tuesday, February 26, 2013, to discuss making a recommendation for water and sewer rate structure changes to the Board of Directors at its meeting on February 28. The committee considered several scenarios and wants the Board to have the benefit of reviewing the advantages of the three scenarios summarized below. (The numbers assigned to the scenarios match the numbers used during the committee meeting and have no other significant meaning.)

At its February 26th meeting, the Finance Committee reviewed information regarding Scenarios 3 and 0, and indicated a preference for Scenario 3. The Committee also requested that a new Scenario 6 be evaluated. Scenario 6 is summarized below; however, the Finance Committee has not had the benefit of reviewing and discussing this information in advance of the Board meeting.

Scenario 3

Brief Description

A. Changes the amount of the monthly fixed service charges so that the revenue recovered from water service charges and sewer service charges are both 20%.
B. Changes the amount of the differential in monthly fixed service charges between meter sizes to match the industry standards for meter demand ratios.
C. Separately calculates the customer service component of the fixed monthly service charge so that it does not vary by meter size.
D. Reduces the water commodity rate assigned to Block 1 of the individually-metered, single-family residential rates by 6%.

Advantages

- More closely aligns the fixed service charge rate structure with cost of service principles.
- Makes a slight improvement towards meeting our goal of achieving a 1.5% affordability ratio by shifting more of the peak capacity costs to individually-metered, single-family customers with higher than average and higher seasonal usage levels (median usage is approximately 3,200 gallons per month).
- Somewhat stronger conservation signal to individually-metered, single-family customers using more than 7,000 gallons per month.

Scenario 0 (Current Rate Structure)

Brief Description – Makes no changes to the current rate structure.

Advantages

- Avoids the increase in monthly bills for certain non-residential customers that occur if the changes described in A, B and C of Scenario 3 are made.
- Following financial modeling and rate deliberations, if the Board concludes that no overall increase in rates is required, leaving the rate structure unchanged allows us to unequivocally announce that we have not raised our monthly water and sewer rates for two consecutive years. (With the other scenarios, customers will see increases or decreases solely because of the rate structure changes even if monthly rates are not raised overall.)

Scenario 6

Brief Description

A. Makes the same changes described in A, B and C of Scenario 3 above.
B. Changes the number of gallons in Block 2 of the individually-metered, single-family residential block rates to include from 2,001 to 4,000 gallons (Block 2 is currently from 2,001 to 5,000 gallons).
C. Changes the number of gallons in Block 3 of the individually-metered, single-family residential block rates to include from 4,001 to 10,000 gallons (Block 3 is currently from 5,001 to 10,000 gallons).
D. Reduces the rates charged for Blocks 1 and 2 of the individually-metered, single-family residential rates by 6% each.

Advantages

- Same as those listed for Scenario 3.
- Provides a reasonably attainable target for individually-metered, single-family customers near the average usage level to reduce monthly consumption to 4,000 gallons or less (about 10% of residential customers use between 4,000 and 5,000 gallons per month).

The attached chart (Attachment A) reflects the impacts of Scenarios 3 and 6 on various customer types. As shown in the Attachment, when compared to Scenario 3, Scenario 6 results in a higher bill for customers billed for 5,000 gallons of service, but a lower bill for customers in the higher volume usage blocks. Attachment B shows the current rate structure for individually-metered, single-family customers.



Stephen Winters, CPA
Director of Finance and Customer Service

cc: Board of Directors, Ed Kerwin, Bob Epting

		Scenario 3		Scenario 6	
	Customer Group	**Impact**	**% Change**	**Impact**	**% Change**
Commercial	Public Housing Authority	Up	0.6%	Up	0.6%
Commercial	Chapel Hill Carrboro City Schools	Up	1.2%	Up	1.2%
Commercial	Master-Metered MDUs (Sample)	Down	-0.4%	Down	-0.4%
Commercial	Commercial Low Volume (Sample)	Up	4.5%	Up	4.5%
Commercial	Commercial Moderate Volume (Sample)	Up	0.6%	Up	0.6%
Commercial	Commercial High Volume (Sample)	Down	-0.6%	Down	-0.6%
Commercial	8-inch Meters	Up	1.6%	Up	1.6%
Commercial	Irrigation only (4 accounts w/ different meter sizes)	Up	0.6%	Up	0.6%
Residential	2,000 gallons/month	Down	-2.5%	Down	-2.5%
Residential	3,000 gallons	Down	-2.5%	Down	-3.2%
Residential	4,000 gallons	Down	-2.5%	Down	-3.6%
Residential	4,500 gallons/month	Down	-2.5%	Down	-2.2%
Residential	5,000 gallons/month	Down	-2.5%	Down	-0.9%
Residential	6,000 gallons/month	Down	-1.6%	Down	-0.4%
Residential	9,000 gallons/month	Up	0.1%	Up	0.4%
Residential	12,000 gallons/month	Up	1.3%	Up	1.1%
Residential	15,000 gallons/month	Up	2.2%	Up	1.6%
Residential	20,000 gallons/month	Up	4.9%	Up	3.6%

	Current Monthly Bill	**Monthly Bill**	**(Savings) additional cost**	**Monthly Bill**	**(Savings) additional cost**
2,000 gallons	$ 44.92	$ 43.79	$ (1.13)	$ 43.79	$ (1.13)
3,000 gallons	57.79	56.33	(1.46)	55.95	(1.84)
4,000 gallons	70.66	68.87	$ (1.79)	68.11	(2.55)
4,500 gallons (monthly average)	77.10	75.17	(1.93)	75.44	(1.66)
5,000 gallons/month	83.53	81.41	(2.12)	82.76	(0.77)
9,000 gallons	140.77	140.89	0.12	141.36	0.59
15,000 gallons	242.18	247.46	5.28	246.11	3.93
20,000 gallons	341.13	357.71	16.58	353.46	12.33

Chapel Hill-Carrboro City Schools	35,227.50	35,650.23	422.73	35,650.23	422.73
Public Housing Authority	10,573.25	10,636.69	63.44	10,636.69	63.44

Scenario Descriptions		
20% revenue recovery from monthly service charge for water		
AWWA meter equivalent ratios		
Separate customer service charge		
6% reduction to Block 1 rate		
6% reduction to Block 2 rate		
Change Block 2 to include from 3 to 4,000 gallons		
Change Block 3 to include from 5 to 10,000 gallons		

Monthly Water and Sewer Rates
for individually metered, single-family residential customers

	Current Rates		Scenario 3 Rates		Scenario 6 Rates	
Service charge						
Water		$14.70		$13.46		$13.46
Sewer		$12.00		$13.09		$13.09
Total service charge		$26.70		$26.55		$26.55
Water commodity charge	**Volume of use in gallons**	**Rate per 1,000 gallons**	**Volume of use in gallons**	**Rate per 1,000 gallons**	**Volume of use in gallons**	**Rate per 1,000 gallons**
Block 1	0 to 2,000	$2.63	0 to 2,000	$2.47	0 to 2,000	$2.47
Block 2	2,001 to 5,000	$6.39	2,001 to 5,000	$6.39	2,001 to 4,000	$6.01
Block 3	5,001 to 10,000	$7.83	5,001 to 10,000	$8.72	4,001 to 10,000	$8.50
Block 4	10,001 to 15,000	$10.94	10,001 to 15,000	$12.19	10,001 to 15,000	$11.87
Block 5	Over 15,000	$19.79	Over 15,000	$22.05	Over 15,000	$21.47
Sewer commodity charge	Per 1,000 gallons up to a maximum of 15,000 gallons	$6.48	Per 1,000 gallons up to a maximum of 15,000 gallons	$6.15	Per 1,000 gallons up to a maximum of 15,000 gallons	$6.15