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# Town of Banner Elk

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## MEMO

### Water and Sewer Rate Re-Structure

March 10, 2014

#### Why are we considering this?

The review of the Towns water and sewer rate structure is due to the need to meet current and future expenses for the operation of our utilities along with meeting State requirements in relation to the operation of the systems as an enterprise fund.

The first issue of meeting current and future expenses for the operation of our utilities is linked with meeting State requirements in relation to the operation of the systems as an enterprise fund. Our system not only needs to generate the needed revenue to cover budgeted operating expenses but also the cost of depreciation and capital reserve for the future.

The Local Government Commission reviews the yearly audits of cities and towns in North Carolina. One of the areas watched closely is the operation of enterprise funds such as utilities. They are tasked with determining if a fund is generating the revenue necessary to be sustainable.

Currently our utility is operating as inexpensively as possible and we do not have the revenue to increase the level of operation. We also are not covering our depreciation of assets. The Local Government Commission has notified us of this issue and requests that we provide a resolution to the problem.

#### What is the goal?

Our goal will be to set a rate structure that will insure the sustainability of the Towns water and sewer operations. We will look for a balanced structure for users. We will attempt not to over burden users with excessive rate increases. We will propose a structure that will allow for uncomplicated rate increases in the future.

#### Outcome

Through extensive review of our current utility customers the following is the proposed structure and supporting information.

## Customer Review

Our initial review was to determine if a basic rate increase could be applied to our current rates to generate needed revenue. It became apparent that this could generate revenue however during this review it also became evident that our current rate structure may benefit from restructure. At this point we determined since a rate increase would be proposed that a rate structure review should be a part of any increase recommendation.

We began by reviewing our current rate structure and the revenue generated by the given usage. Since a large number of our users experience a variety of usage, from low to high throughout a given year, simply comparing accounts and usage provides limited insight. Our accounts were expanded to number of bills per customer per year. The bills were categorized by 1,000 gallon usage break points. They were further defined by their given rate by meter size.

When the bills were reviewed by 1,000 gallon usage by rate charged we were able to determine more accurately our customer usage patterns. This further allowed us to find areas in our current structure that did not treat our users equally. The three major areas of inconsistency are: 1) the need for customers connected to the systems to share more in the cost of the systems, 2) large meter accounts do not accurately represent our large system users, and 3) we have a number of accounts that represent multiple users but are being considered single accounts.

These 3 issues were central to the recommended restructure.

## Base Rate and Rate Table

The proposal is for the new monthly base rate and rate table to be the same for water and sewer, along with the included usage of 2,000 gallons for both. Our current structure has different base rates and rate tables for water and sewer, and allows for 2,000 gallons of water and 1,000 gallons of sewer. This change will allow for simplified rate increases in the future that will be more equitable to our users. We would no longer have base charge changes by meter size. There would be 2 rate tables, in-town and out of town.

The proposed rate table was formulated with consideration to the current rates, needed revenue increase, removal of base charges by meter size, and low and high usage groups. The proposal creates a variety of increases and decreases throughout our customer base. Due to our current structure it is not possible to have all users see the same effect. However it will create a more equitable result.

## Large Meter Accounts

Currently we differentiate user rates by meter size. Users are billed a given base charge dependent on the size meter they receive water through; the larger the meter, the larger the base rate. The idea being customers who require larger meters also require a larger demand for water and sewer. The new rate structure proposes to remove this practice. In review of our current large meter accounts and our large system users we find that the basis for this type of distinction is not sound at our current use patterns.

A large meter is considered everything above  $\frac{3}{4}$ ". We have 28 accounts: 12 accounts with 1" meters, 12 accounts with 2" meters, and 1 each at 1", 1-1/2", 3", and 4".

Out of our 28 large metered accounts 15 of them are below a 15,000 gallon median usage in the 12

months reviewed. An additional 5 accounts do not exceed 35,000 gallons, 5 others fall below 100,000 and 3 over 100,000.

In contrast we have 11 ¾” meters with a median use of 15,000-35,000; 2 between 40,000-80,000; 1 over 100,000. In addition to these with high median usage there are an additional 8 accounts that have usages that range 10,000-60,000 throughout the year.

In the new structure large meter accounts that do not have high demand will see their bills go down. Large meter accounts with high demand will see increases similar to other users; however they will now pay more for usage as opposed to paying a high base charge.

The accounts that will see the highest increase will be those who have ¾” meters with high usage. They have been receiving the high usage without the large meter base charge. In creating a structure that allows for a level base charge we have raised the per gallon rate to make up for the loss of high base charges. In doing so the large meter accounts do not see as high an increase because they are no longer paying the high base charge. In contrast the ¾” high usage accounts have not been paying the high base charge so they do not see that saving in going to a flat base rate and see a higher percentage increase.

### Single Accounts with Multiple Users

We have 16 accounts that have single meters being used by multiple users. In this instance a user is defined as a condominium, apartment or location which operates independent of the other users connected to the same meter. There are 160 users on these 16 meters. Each of these 16 accounts should be charged based on the multiple of the number of users on the given meter.

This would more accurately represent the use of these meters and would then count as 160 user accounts as opposed to the current 16. These accounts are then paying a base charge for each user on their meter.

The accounts that are included in this list would see a varied change in their bill based on their current usage. The accounts would be given the minimum usage times the number of users; i.e. number of base charges they are paying. Some accounts would see a savings from the proposed rate structure and others would see an increase.

Overall the change would generate \$7,566.00 over the proposed rate change based on current usage. In the long term it allows for base charge increases to be applied to 160 users opposed to 16.

### Closing

This proposal will restructure the Towns rate structure and rate tables to be more equitable for our users and set the stage for future rate changes that affect all users in usages equally.

Addendum

Rate Structure information from other utilities across the State:

59% have a minimum usage built into the structure

*The proposed structure includes a minimum usage*

*Our current structure includes a minimum usage*

2,000 gallons is the median amount of usage included in the base rate

*The proposed structure includes a minimum usage: 2,000 gallons water and 2,000 gallons sewer*

*Our current structure includes: 2,000 gallons water and 1,000 gallons sewer*

Only 25% have separate structures for different uses (Residential, Commercial, Institutional, etc.)

*The proposal does not separate uses*

*Our current structure does not separate uses*

Most use a uniform rate (one rate per number of gallons for all usage). Increasing Block is the next most common

*The proposed structure is increasing block through 50,000 gallons*

*Our current structure is increasing block*

22% calculate their base rate by meter size

*The proposed structure does not calculate rate by meter size*

*Our current structure does calculate the rate by meter size*

Typically service provided outside of a city or towns limits is 200% of the in-town rate, but may be higher based on the cost to provide the service

*The proposed out-of-town structure is based on a rate 200% - 300% higher than the proposed in-town rate*

*Our current structure ranges from 200% - 323% of the in-town rate*

Our Utility Customer Base:

602 Water Users

7,203 Water Bills per year

645 Sewer Users

7,727 Sewer Bills per year

Total: 1,247

Total: 14,930

All Bills for All Users		Water		Sewer	
0	2,000	4,304	59.8%	4,561	59.0%
2,001	7,000	2,334	32.4%	2,450	31.7%
7,001	15,000	314	4.4%	385	5.0%
15,001	50,000	168	2.3%	235	3.0%
50,001	500,000	83	1.2%	96	1.2%
		<u>7,203</u>	100.0%	<u>7,727</u>	100.0%
<u>Users</u>		<u>602</u>		<u>645</u>	

New Proposed Rate Table

In - Town			
Water			
Usage Range		Gallons	
0	2,000	2,000	\$ 15.00
2,001	7,000	5,000	\$ 5.00
7,001	15,000	8,000	\$ 6.00
15,001	50,000	35,000	\$ 7.00
50,001	99,999,999		\$ 6.00

  

Sewer			
Usage Range		Gallons	
0	2,000	2,000	\$ 15.00
2,001	7,000	5,000	\$ 5.00
7,001	15,000	8,000	\$ 6.00
15,001	50,000	35,000	\$ 7.00
50,001	99,999,999		\$ 6.00

Out -of- Town			
Water			
Usage Range		Gallons	
0	2,000	2,000	\$ 30.00
2,001	7,000	5,000	\$ 10.00
7,001	15,000	8,000	\$ 12.00
15,001	50,000	35,000	\$ 14.00
50,001	99,999,999		\$ 12.00

  

Sewer			
Usage Range		Gallons	
0	2,000	2,000	\$ 35.00
2,001	7,000	5,000	\$ 15.00
7,001	15,000	8,000	\$ 18.00
15,001	50,000	35,000	\$ 21.00
50,001	99,999,999		\$ 18.00

Current Rate Table

101	INSIDE 3/4" METER	12.60
1	2000	0.00
2	4000	3.60
3	7000	4.10
4	20000	4.35
5	999999	4.70
102	WATER 1" METER	22.50
1	2000	0.00
2	4000	3.60
3	7000	4.10
4	20000	4.35
5	999999	4.70
105	WATER 2" METER	56.10
1	2000	0.00
2	4000	3.60
3	7000	4.10
4	20000	4.35
5	999999	4.70

111	OUTSIDE WATER 3/4" METER	25.20
1	2000	0.00
2	4000	7.20
3	7000	8.20
4	20000	7.20
5	999999	7.30

112	OUTSIDE WATER 1" METER	45.00
1	2000	0.00
2	4000	7.20
3	7000	8.20
4	20000	7.20
5	999999	7.30

115	OUTSIDE WATER 2" METER	112.20
1	2000	0.00
2	4000	7.20
3	7000	8.20
4	20000	7.20
5	999999	7.30

106	WATER 3" METER		65.60
1		2000	0.00
2		4000	3.60
3		7000	4.10
4		20000	4.35
5		999999	4.70

116	OUTSIDE WATER 3" METER		131.20
1		2000	0.00
2		4000	7.20
3		7000	8.20
4		20000	7.20
5		999999	7.30

107	WATER 4" METER		171.10
1		2000	0.00
2		4000	3.60
3		7000	4.10
4		20000	4.35
5		999999	4.70

117	OUTSIDE WATER 4" METER		342.20
1		2000	0.00
2		4000	7.20
3		7000	8.20
4		20000	7.20
5		999999	7.30

201	SEWER 3/4" METER		9.80
1		1000	0.00
2		3000	4.70
3		4000	5.35
4		7000	5.63
5		20000	5.63
6		999999	4.70

211	OUTSIDE SEWER 3/4" METER		21.00
1		1000	0.00
2		3000	12.60
3		4000	14.35
4		7000	14.75
5		20000	15.22
6		999999	10.85

202	SEWER WATER 1" METER		24.95
1		1000	0.00
2		3000	4.70
3		4000	5.35
4		7000	5.63
5		20000	5.63
6		999999	4.70

212	OUTSIDE SEWER 1" METER		78.25
1		1000	0.00
2		3000	12.60
3		4000	14.35
4		7000	14.75
5		20000	15.22
6		999999	10.85

204	SEWER WATER 1 1/2" METER		39.50
1		1000	0.00
2		3000	4.70
3		4000	5.35
4		7000	5.63
5		20000	5.63
6		999999	4.70

214	OUTSIDE SEWER 1 1/2" METER		127.75
1		1000	0.00
2		3000	12.60
3		4000	14.35
4		7000	14.75
5		20000	15.22
6		999999	10.85

205	SEWER WATER 2" METER		57.10
1		1000	0.00
2		3000	4.70
3		4000	5.35
4		7000	5.63
5		20000	5.63
6		999999	4.70

215	OUTSIDE SEWER 2" METER		176.75
1		1000	0.00
2		3000	12.60
3		4000	14.35
4		7000	14.75
5		20000	15.22
6		999999	10.85

206	SEWER WATER 3" METER	80.00
1	1000	0.00
2	3000	4.70
3	4000	5.35
4	7000	5.63
5	20000	5.63
6	999999	4.70

207	SEWER WATER 4" METER	220.00
1	1000	0.00
2	3000	4.70
3	4000	5.35
4	7000	5.63
5	20000	5.63
6	999999	4.70

216	OUTSIDE SEWER 3" METER	245.00
1	1000	0.00
2	3000	12.60
3	4000	14.35
4	7000	14.75
5	20000	15.22
6	999999	10.85

217	OUTSIDE SEWER 4" METER	732.50
1	1000	0.00
2	3000	12.60
3	4000	14.35
4	7000	14.75
5	20000	15.22
6	999999	10.85