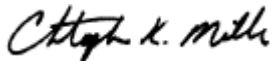


  
**REQUEST FOR COUNCIL ACTION**

Date: 03/09/09  
Item No.: 13.a

Department Approval

City Manager Approval



Item Description: Discussion on the 2009 Utility Rates

**BACKGROUND**

On November 17, 2008, the City Council adopted the 2009 Utility Rates. With this action, the Council adopted a new rate structure that was designed to achieve two newly-established outcomes. They included:

- ❖ Providing long-term financial sustainability for the City’s water, sewer, and stormwater operations
- ❖ Encouraging water conservation in conjunction with the goals and strategies outlined in the City’s Imagine Roseville 2025 initiative, as well as a new State Law.

Since adopting the new rates, the City has expectedly received a number of inquiries on the impact of the new rates, and whether the conservation measures will achieve the desired outcome. Copies of these inquiries are attached. The remainder of this report addresses these inquiries.

Desired Outcome #1 – Ensuring Financial Sustainability

The 2010-2019 Financial Plan identifies a funding gap of over \$18 million over the next 10 years for the planned replacement of City water and sewer infrastructure. Simply put, the ‘base fee’ portion of the City’s rate structure has proven to be inadequate in funding this need. It is an accepted practice to structure the base fee in such a manner that can account for fixed costs such as capital replacements. It is also widely accepted that similar customers, such as single-family households, be charged the same base fee because the cost of providing infrastructure to the home is relatively the same.

Historically however, and for reasons that aren’t entirely known, the City’s base fee was set at a level that was insufficient in generating enough revenue to maintain and replace the infrastructure. The difference had to be made up with the revenue derived from ‘usage fees’. However, this practice creates inequities in how the City’s infrastructure is funded. Because infrastructure funding is now tied to usage, those that consume a lot of water are paying a greater share for the infrastructure than those that consume relatively little.

In other words, an implicit (hidden) subsidy was in place. In effect, 4-person households were subsidizing the costs for 2-person households. Under this scenario, if higher volume households began reducing water consumption, funding for infrastructure replacement would be diminished and the financing gap noted above would increase.

33 To remedy this financial uncertainty and disparity, the City adjusted its base fee to ensure that it had the  
34 necessary funds to replace the infrastructure when needed. And because the cost of providing water and  
35 sewer service to each home is relatively the same, the base fee was applied equally to all homes - as it was  
36 done in the past. Having transparency and equity was considered an important factor in ensuring that  
37 households realized true savings as they adjusted their consumption behavior. With this action the City was  
38 able to reduce the usage rate which now reflects only the direct cost of actually pumping water to the home.  
39

40 Desired Outcome #2 – Encourage Water Conservation

41 As noted above, the 2009 Rate Structure was designed to encourage water conservation in such a way that  
42 would not only reflect the goals and strategies outlined in the Imagine Roseville 2025 initiative, but also to  
43 adhere to a new state law that required water service providers to encourage water conservation.  
44

45 It should be noted that the 2009 conservation-based rates are designed primarily to address *excessive* water  
46 usage. It is not unusual to see a 4 or 5 person household use 20-30,000 gallons per quarter for general use  
47 such as personal hygiene or cooking (as evidenced by the household's winter usage). In recognition of this,  
48 the 2009 rate structure was designed to encourage conservation without unduly penalizing households for  
49 basic water use.  
50

51 The new law did not mandate how each service provider should structure their rates, but it did offer  
52 examples that are commonly in use, such as using increasing block rates and seasonal rates. The new rate  
53 structure adopted by the Council employs both of those measures.  
54

55 In analyzing customer usage behaviors, it was evident that Roseville residents were already consuming less  
56 water than residents in many other communities. This was presumably due to the fact that relatively few  
57 residential properties in Roseville have irrigation systems, which is in contrast to some 2<sup>nd</sup> and 3<sup>rd</sup> ring  
58 suburbs. It could also stem from having a relatively smaller population per household.  
59

60 Because many Roseville residents have already implemented water conservation measures, it is conceivable  
61 that the new conservation-based rate structure may produce a relatively small amount of water reduction in  
62 Roseville. At this time, we cannot determine the effectiveness of the changes. We would need to observe  
63 consumption behavior over a longer period of time, perhaps 2 years or longer. Even then, it will be  
64 problematic in pinpointing the effectiveness of the change. For example, it will be difficult to ascertain  
65 whether a particular household curbed its summer usage because it was making a conscious effort to  
66 conserve water used for irrigation purposes, or because we simply had more rain.  
67

68 2009 Rate Structure

69 The 2009 rate structure for households with comparisons to 2008 is as follows:  
70

71 **Water Base Rate – per quarter**

72

<b>Category</b>	<b>2008 Base Rate</b>	<b>2009 Base Rate</b>
Residential	\$ 13.00	\$ 27.75
Residential – Sr. Rate	7.90	18.00

73

74 **Water Usage Rate**

75

Category	2008 Usage Rate	2009 Usage Rate
Residential; Up to 30,000 gals./qtr	\$ 2.35	\$ 1.85
Residential; Over 30,000 gals./qtr – winter rate	2.35	2.00
Residential; Over 30,000 gals./qtr – summer rate	2.35	2.10

76 **Sanitary Sewer Base Rate**

77

78

Category	2008 Base Rate	2009 Base Rate
Residential	\$ 13.35	\$ 23.35
Residential – Sr. Rate	8.30	14.55

79 **Sanitary Sewer Usage Rate**

80

81

Category	2008 Usage Rate	2009 Usage Rate
Residential	\$ 1.55	\$ 1.20

82

83

84 The 2009 rate structure employs two significant changes; a tiered or increasing block, water rate, and a

85 summer usage rate. The tiered water rate is designed to encourage households to take year-round measures

86 such as; installing water-saving devices, and taking shorter showers. Having a higher summer usage rate

87 should encourage households to reduce the water used for irrigation purposes.

88 **POLICY OBJECTIVE**

89 An annual review of the City’s utility rate structure is consistent with governmental best practices to ensure

90 that each utility operation is financially sound. In addition, moving to a conservation-based rate structure is

91 consistent with the goals and strategies identified in the Imagine Roseville 2025 initiative, and complies

92 with new state laws.

93 **FINANCIAL IMPACTS**

94 The impacts from the 2009 rate structure will vary significantly depending on each households water usage.

95 *Attachment B* presents 4 different scenarios based on varying usage. For lower-volume users, the

96 percentage increase is higher than for moderate or high volume users. The reason for this is because of the

97 elimination of the implicit subsidy that was in place under the old rate structure. Eliminating this subsidy

98 (inequity) was mentioned above and is explained in greater detail in *Attachment A*, which is an article that

99 was recently posted on the City’s website and was delivered to individual homes via their utility bill.

100 **STAFF RECOMMENDATION**

101 Not applicable.

102 **REQUESTED COUNCIL ACTION**  
103 Not applicable. For information purposes only

104  
Prepared by: Chris Miller, Finance Director  
Attachments: A: Supplemental Explanation of Rate Changes  
B: 2009 Rate Structure Financial Impact Scenarios  
C: Minnesota DNR Pamphlet on Conservation Rates (by request of Councilmember Ihlan)  
D: Correspondence from Senator Marty's Office  
E: Correspondence from Councilmember Roe

105  
106 **Council Member Roe:**  
107 Attachment A: Roe 2/25/09 email "More on Conservation Rate Proposal" with two charts

108  
109 **Council Member Ihlan:**  
110 Attachment A: Ihlan 3/04/09 memo "Water Billing Structure and How to Achieve Conservation Rates"  
111 B: 11/17/08 RCA "Adopting the 2009 Utility Rate Adjustment"

## 2009 Utility Rate Changes

In the January/February 2009 issue of the Roseville City News, an article was published regarding the City's change to a conservation-based rate structure. This article has generated some questions from residents who wanted to learn more about the impacts on homeowners. The information presented below addresses those questions and provides additional information on how the new rate structure works.

The change to a conservation-based rate structure was in response to requirements set forth under a new State Law, but also reflects the societal belief that water is a limited resource and as such, the City ought to encourage conservation measures. The concept of encouraging water conservation was also emphasized by citizens and stakeholders during the Imagine Roseville 2025 process.

Under the new rate structure, a typical home would see an increase of 5% from 2008; as measured over an entire calendar year. This is comparable to increases in prior years. However, those households that typically have less-than-average water usage, say 10-15,000 gallons per quarter, will see a higher percentage increase. This paradox did not go unnoticed by City Officials. The reason is due to an implicit subsidy that was present under the old rate structure. In short, higher-volume users subsidized lower-volume users – and had been for decades. For some homeowners, the subsidy amounted to \$10 per quarter or more. Under a conservation-based rate structure, this subsidy must be eliminated. To explain further, we must look at how the City accounts for its water and sewer operations.

Like most municipalities, the City incurs both fixed and variable costs in providing water and sewer services to homeowners. The City's rate structure was designed to recoup these costs using both a fixed or 'base' fee that is charged equally to all homeowners, as well as a variable or 'usage' fee that fluctuates depending on how much water each household uses.

Conceptually, the base fee should be set at an amount that is commensurate with the cost of simply ensuring that water and sewer services is available; i.e., to maintain existing water and sewer mains. Historically however, and for reasons that aren't entirely known, the City's base fee was set at a level that was insufficient in generating enough revenue to maintain these mains including those that lead up to individual homes. The difference had to be made up with the usage fee.

This rate-setting practice doesn't necessarily present a problem as long as households continue to use the same amount of water they always have. However, under a conservation-based rate structure households are encouraged to use less water, which in turn means that they will pay less in usage fees. But because the usage fees helped defray the costs to maintain and replace water and sewer infrastructure, a decline in water consumption would result in fewer monies available to replace that infrastructure. To avoid this, the City needed to increase the base fee to an amount that was sufficient to meet the City's infrastructure needs. At the same time, this enabled the City to lower the usage fee because it no longer had to help fund infrastructure and could now be used exclusively to pay for the variable costs.

With the 2009 Utility Rate Structure, the City's base fee now reflects the true cost of making water and sewer service available, and the usage fee reflects the sole cost of actually purchasing the water and treating the wastewater. With these changes, the savings realized from homeowners' water conservation efforts will now be transparent.

For most homeowners the 2009 Rate structure will amount to an increase of approximately \$5-15 on your quarterly bill, assuming your household consumption is unchanged. Homeowners can minimize this increase by employing water conservation measures such as; fixing any water leaks, reducing the water used for lawn and garden irrigation, taking shorter showers, and installing newer household appliances that are designed to minimize water use.

If you have any further questions on the impact of these rate changes, please contact Chris Miller, Finance Director by email at: [chris.miller@ci.roseville.mn.us](mailto:chris.miller@ci.roseville.mn.us), or by phone at: 651-792-7031.

City of Roseville  
Impact of New Rate Structure

Scenario #1

<u>Service</u>	<u>Rate</u>	<b>2008</b>			
		<u>Qtr 1</u> <u>Charge</u>	<u>Qtr 2</u> <u>Charge</u>	<u>Qtr 3</u> <u>Charge</u>	<u>Qtr 4</u> <u>Charge</u>
Water - base fee	\$ 13.00	\$ 13.00	\$ 13.00	\$ 13.00	\$ 13.00
Water - usage fee - under 30K gals.	2.35	28.20	28.20	70.50	70.50
Water - usage fee - over 30K gals.	2.35	-	-	11.75	11.75
Sanitary Sewer - base fee	13.35	13.35	13.35	13.35	13.35
Sanitary Sewer - usage fee	1.55	18.60	18.60	52.70	52.70
<b>Total Charges</b>		<b>\$ 73.15</b>	<b>\$ 73.15</b>	<b>\$ 161.30</b>	<b>\$ 161.30</b>

Cumulative Charges \$ 468.90

<u>Rate</u>	<b>2009 Old Rate Structure</b>			
	<u>Qtr 1</u> <u>Charge</u>	<u>Qtr 2</u> <u>Charge</u>	<u>Qtr 3</u> <u>Charge</u>	<u>Qtr 4</u> <u>Charge</u>
\$ 13.65	\$ 13.65	\$ 13.65	\$ 13.65	\$ 13.65
2.47	29.61	29.61	74.03	74.03
2.47	-	-	12.34	12.34
14.02	14.02	14.02	14.02	14.02
1.63	19.53	19.53	55.34	55.34
	<b>\$ 76.81</b>	<b>\$ 76.81</b>	<b>\$ 169.37</b>	<b>\$ 169.37</b>

Cumulative Charges \$ 492.35  
\$ Difference 23.45  
% Difference 5.0%

	<u>Usage</u>
Usage - 1st Quarter (1,000's)	12
Usage - 2nd Quarter	12
Usage - 3rd Quarter	34
Usage - 4th Quarter	34
<b>Average</b>	<b>23</b>

<u>Service</u>	<u>Rate</u>	<u>Qtr 1</u> <u>Charge</u>	<u>Qtr 2</u> <u>Charge</u>	<u>Qtr 3</u> <u>Charge</u>	<u>Qtr 4</u> <u>Charge</u>
Water - base fee	\$ 27.75	\$ 27.75	\$ 27.75	\$ 27.75	\$ 27.75
Water - usage fee - under 30K gals.	1.85	22.20	22.20	55.50	55.50
Water - usage fee - over 30K gals.	2.10	-	-	10.50	10.50
Sanitary Sewer - base fee	23.35	23.35	23.35	23.35	23.35
Sanitary Sewer - usage fee	1.20	14.40	14.40	40.80	40.80
<b>Total Charges</b>		<b>\$ 87.70</b>	<b>\$ 87.70</b>	<b>\$ 157.90</b>	<b>\$ 157.90</b>

Cumulative Charges \$ 491.20  
\$ Difference 22.30  
% Difference 4.8%

City of Roseville  
Impact of New Rate Structure

Scenario #2

Service	Rate	2008			
		Qtr 1 Charge	Qtr 2 Charge	Qtr 3 Charge	Qtr 4 Charge
Water - base fee	\$ 13.00	\$ 13.00	\$ 13.00	\$ 13.00	\$ 13.00
Water - usage fee - under 30K gals.	2.35	21.15	21.15	61.10	61.10
Water - usage fee - over 30K gals.	2.35	-	-	-	-
Sanitary Sewer - base fee	13.35	13.35	13.35	13.35	13.35
Sanitary Sewer - usage fee	1.55	13.95	13.95	40.30	40.30
<b>Total Charges</b>		<b>\$ 61.45</b>	<b>\$ 61.45</b>	<b>\$ 127.75</b>	<b>\$ 127.75</b>

Cumulative Charges \$ 378.40

Rate	2009 Old Rate Structure			
	Qtr 1 Charge	Qtr 2 Charge	Qtr 3 Charge	Qtr 4 Charge
\$ 13.65	\$ 13.65	\$ 13.65	\$ 13.65	\$ 13.65
2.47	22.21	22.21	64.16	64.16
2.47	-	-	-	-
14.02	14.02	14.02	14.02	14.02
1.63	14.65	14.65	42.32	42.32
	<b>\$ 64.52</b>	<b>\$ 64.52</b>	<b>\$ 134.14</b>	<b>\$ 134.14</b>

Cumulative Charges \$ 397.32  
\$ Difference 18.92  
% Difference 5.0%

	Usage
Usage - 1st Quarter (1,000's)	9
Usage - 2nd Quarter	9
Usage - 3rd Quarter	26
Usage - 4th Quarter	26
<b>Average</b>	<b>18</b>

Service	Rate	Qtr 1 Charge	Qtr 2 Charge	Qtr 3 Charge	Qtr 4 Charge
Water - base fee	\$ 27.75	\$ 27.75	\$ 27.75	\$ 27.75	\$ 27.75
Water - usage fee - under 30K gals.	1.85	16.65	16.65	48.10	48.10
Water - usage fee - over 30K gals.	2.10	-	-	-	-
Sanitary Sewer - base fee	23.35	23.35	23.35	23.35	23.35
Sanitary Sewer - usage fee	1.20	10.80	10.80	31.20	31.20
<b>Total Charges</b>		<b>\$ 78.55</b>	<b>\$ 78.55</b>	<b>\$ 130.40</b>	<b>\$ 130.40</b>

Cumulative Charges \$ 417.90  
\$ Difference 39.50  
% Difference 10.4%



City of Roseville  
Impact of New Rate Structure

Scenario #3

<u>Service</u>	<u>Rate</u>	<b>2008</b>			
		<u>Qtr 1 Charge</u>	<u>Qtr 2 Charge</u>	<u>Qtr 3 Charge</u>	<u>Qtr 4 Charge</u>
Water - base fee	\$ 13.00	\$ 13.00	\$ 13.00	\$ 13.00	\$ 13.00
Water - usage fee - under 30K gals.	2.35	14.10	14.10	39.95	39.95
Water - usage fee - over 30K gals.	2.35	-	-	-	-
Sanitary Sewer - base fee	13.35	13.35	13.35	13.35	13.35
Sanitary Sewer - usage fee	1.55	9.30	9.30	26.35	26.35
<b>Total Charges</b>		<b>\$ 49.75</b>	<b>\$ 49.75</b>	<b>\$ 92.65</b>	<b>\$ 92.65</b>

Cumulative Charges \$ 284.80

<u>Rate</u>	<b>2009 Old Rate Structure</b>			
	<u>Qtr 1 Charge</u>	<u>Qtr 2 Charge</u>	<u>Qtr 3 Charge</u>	<u>Qtr 4 Charge</u>
\$ 13.65	\$ 13.65	\$ 13.65	\$ 13.65	\$ 13.65
2.47	14.81	14.81	41.95	41.95
2.47	-	-	-	-
14.02	14.02	14.02	14.02	14.02
1.63	9.77	9.77	27.67	27.67
	<b>\$ 52.24</b>	<b>\$ 52.24</b>	<b>\$ 97.28</b>	<b>\$ 97.28</b>

Cumulative Charges \$ 299.04  
\$ Difference 14.24  
% Difference 5.0%

<u>Usage</u>	
Usage - 1st Quarter (1,000's)	6
Usage - 2nd Quarter	6
Usage - 3rd Quarter	17
Usage - 4th Quarter	17
<b>Average</b>	<b>12</b>

<u>Service</u>	<u>Rate</u>	<u>Qtr 1 Charge</u>	<u>Qtr 2 Charge</u>	<u>Qtr 3 Charge</u>	<u>Qtr 4 Charge</u>
Water - base fee	\$ 27.75	\$ 27.75	\$ 27.75	\$ 27.75	\$ 27.75
Water - usage fee - under 30K gals.	1.85	11.10	11.10	31.45	31.45
Water - usage fee - over 30K gals.	2.10	-	-	-	-
Sanitary Sewer - base fee	23.35	23.35	23.35	23.35	23.35
Sanitary Sewer - usage fee	1.20	7.20	7.20	20.40	20.40
<b>Total Charges</b>		<b>\$ 69.40</b>	<b>\$ 69.40</b>	<b>\$ 102.95</b>	<b>\$ 102.95</b>

Cumulative Charges \$ 344.70  
\$ Difference 59.90  
% Difference 21.0%

City of Roseville  
Impact of New Rate Structure

Scenario #4

<u>Service</u>	<u>Rate</u>	<b>2008</b>			
		<u>Qtr 1 Charge</u>	<u>Qtr 2 Charge</u>	<u>Qtr 3 Charge</u>	<u>Qtr 4 Charge</u>
Water - base fee	\$ 13.00	\$ 13.00	\$ 13.00	\$ 13.00	\$ 13.00
Water - usage fee - under 30K gals.	2.35	35.25	35.25	70.50	70.50
Water - usage fee - over 30K gals.	2.35	-	-	28.20	28.20
Sanitary Sewer - base fee	13.35	13.35	13.35	13.35	13.35
Sanitary Sewer - usage fee	1.55	23.25	23.25	65.10	65.10
<b>Total Charges</b>		<b>\$ 84.85</b>	<b>\$ 84.85</b>	<b>\$ 190.15</b>	<b>\$ 190.15</b>

Cumulative Charges \$ 550.00

<u>Rate</u>	<b>2009 Old Rate Structure</b>			
	<u>Qtr 1 Charge</u>	<u>Qtr 2 Charge</u>	<u>Qtr 3 Charge</u>	<u>Qtr 4 Charge</u>
\$ 13.65	\$ 13.65	\$ 13.65	\$ 13.65	\$ 13.65
2.47	37.01	37.01	74.03	74.03
2.47	-	-	29.61	29.61
14.02	14.02	14.02	14.02	14.02
1.63	24.41	24.41	68.36	68.36
<b>Total Charges</b>	<b>\$ 89.09</b>	<b>\$ 89.09</b>	<b>\$ 199.66</b>	<b>\$ 199.66</b>

Cumulative Charges \$ 577.50

\$ Difference 27.50

% Difference 5.0%

	<u>Usage</u>
Usage - 1st Quarter (1,000's)	15
Usage - 2nd Quarter	15
Usage - 3rd Quarter	42
Usage - 4th Quarter	42
<b>Average</b>	<b>29</b>

<u>Service</u>	<b>2009 New Rate Structure</b>			
	<u>Qtr 1 Charge</u>	<u>Qtr 2 Charge</u>	<u>Qtr 3 Charge</u>	<u>Qtr 4 Charge</u>
Water - base fee	\$ 27.75	\$ 27.75	\$ 27.75	\$ 27.75
Water - usage fee - under 30K gals.	1.85	27.75	27.75	55.50
Water - usage fee - over 30K gals.	2.10	-	-	25.20
Sanitary Sewer - base fee	23.35	23.35	23.35	23.35
Sanitary Sewer - usage fee	1.20	18.00	18.00	50.40
<b>Total Charges</b>	<b>\$ 96.85</b>	<b>\$ 96.85</b>	<b>\$ 182.20</b>	<b>\$ 182.20</b>

Cumulative Charges \$ 558.10

\$ Difference 8.10

% Difference 1.5%

## Conservation Rates

*Minnesota Statutes*, section 103G.291, was amended in 2008 to include a requirement for public water suppliers serving more than 1,000 people to adopt a water rate structure that encourages conservation:

*Minnesota Statutes*, section 103G.291, subd. 4. **Conservation rate structure required.** (a) For the purposes of this section, "conservation rate structure" means a rate structure that encourages conservation and may include increasing block rates, seasonal rates, time of use rates, individualized goal rates, or excess use rates. The rate structure must consider each residential unit as an individual user in multiple-family dwellings.

(b) To encourage conservation, a public water supplier serving more than 1,000 people in the metropolitan area, as defined in section 473.121, subdivision 2, shall use a conservation rate structure by January 1, 2010. All remaining public water suppliers serving more than 1,000 people shall use a conservation rate structure by January 1, 2013.

(c) A public water supplier without the proper measuring equipment to track the amount of water used by its users, as of the effective date of this act, is exempt from this subdivision and the conservation rate structure requirement under subdivision 3, paragraph (c).

In addition, *Minnesota Statutes*, section 103G.291, was further amended to read:

Subd. 3. **Water supply plans; demand reduction.** (c) Public water suppliers serving more than 1,000 people must employ water use demand reduction measures, including a conservation rate structure, as defined in subdivision 4, paragraph (a), unless exempted under subdivision 4, paragraph (c), before requesting approval from the commissioner of health under section 144.383, paragraph (a), to construct a public water supply well or requesting an increase in the authorized volume of appropriation. Demand reduction measures must include evaluation of conservation rate structures and a public education program that may include a toilet and showerhead retrofit program.

Public water suppliers serving more than 1,000 residents will need to adopt a conservation rate structure before requesting well construction approval for a public water supply well or before requesting an increase in permitted volume for their water appropriation permit.

### Examples of Conservation Rates:

Below are examples of rate structures that encourage conservation. Many variations and combinations of these examples are possible.

**NOTE:** Rate structures often include a service charge (base rate) and a volume based charge. Service charges may cover fixed costs (capital improvements) and the volume charge is often for operation and maintenance costs. Volume charges usually use units of 1,000 gallons or 100 cubic feet (748 gallons).

Increasing Block Rates: Cost per unit increases as water use increases within specified "blocks" or volumes. The increase in cost between each block should be significant enough (25% or more and 50% between the last two steps) to encourage conservation.

Example:

- 0-6,000 gallons = \$2.50/1000 gallons.
- 6,000-12,000 gallons = \$3.15/1000 gallons.
- 12,000-24,000 gallons = \$4.00/1000 gallons.
- Above 24,000 gallons = \$6.00/1000 gallons.

Seasonal Rates: The rate per unit increases in the summer to encourage the efficient use of water during peak demand periods caused by outdoor water uses. Seasonal rates can take the form of a surcharge added to the normal rate or a separate fee schedule for winter and summer periods.

Example:

- Surcharge method - \$1.00/1000 gallons is added on top of the regular fee schedule for all water use between May 1 and October 1.

**Time of Use Rates:** Water rates are higher at times of the day when water use demands are high. This rate requires specialized meters that can monitor water use during specified segments of time, for instance, every 15 minutes.

Example: Water rates are reduced by \$0.75 for customers that agree not to use water for certain purposes or over a set volume of water during certain times of the day or periods of high water demands.

**Individualized Goal Rate (Water Budget Rate):** A rate with tailored allocations developed for each customer. The rates increase as the allocation is used or exceeded by the customer. The allocation is generally based upon winter or January use.

Example: A family of four used 6,200 gallons in January. Summer use is higher than January use so a factor is applied to determine a summer allocation (1.5 x 6,200 gallons = 9,300 gallons).  
 0-6,000 gallons = \$2.50/1000 gallons.  
 6,000-9,300 gallons = \$2.75/1000 gallons.  
 9,300-18,600 gallons = \$4.00/1000 gallons. (Allocation is exceeded.)  
 Above 18,600 gallons = \$6.00/1000 gallons.

**Excess Use Rates:** Cost per unit increases greatly above an established level in order to trigger a strong price signal that discourages excessive use. This rate is similar to an increasing block rate but with much higher charges for the larger volume blocks.

Example: 0-6,000 gallons = \$2.50/1000 gallons  
 6,000-12,000 gallons = \$3.15/1000 gallons  
 12,000-24,000 gallons = \$5.00/1000 gallons (Excessive Use Rate)  
 Above 24,000 gallons = \$7.50/1000 gallons (Excessive Use Rate)

**Multiple-Family Dwellings:** Total water use in a multiple-family dwelling, which has only one water meter for the entire dwelling, may exceed that of a single-family dwelling. The statute does not require individual water meters for each residential unit within a multiple-family dwelling; however, the required conservation rate at which the multiple-family dwelling's water use is billed must consider the number of residential units within that multiple-family dwelling.

Example: A four-plex uses a total of 18,000 gallons per month or approximately 4,500 gallons per residential unit. Water use for each residential unit falls within the first block (0-6,000 gallons) of the above Excess Use Rate example. A rate of \$2.50/1000 gallons would apply up to a total use of 24,000 gallons for the multiple-family dwelling. Thereafter, the rate increases according to the rate schedule, always considering each residential unit as an individual user.

#### **Non-conservation rate examples:**

**Declining (Decreasing) Block Rates:** The cost per unit of water (cubic foot or gallon) decreases as the water use increases beyond the basic block. This rate structure provides no incentive to conserve because the cost of water per unit decreases with increased use.

**Flat Rates:** A set fee allows the use of an indefinite amount of water. This rate structure is used where water is unmetered and provides no incentive to conserve water because cost is unrelated to volume used.

**Uniform Rates:** The cost per unit is the same regardless of the volume used. This rate structure is considered conservation neutral.

**Service Charge (Base Rate) that includes a Minimum Water Volume:** The inclusion of a minimum volume of water in the service charge (base rate) discourages conservation especially if the minimum volume exceeds average customer usage.

Senator  
John Marty

**Senate**  
State of Minnesota

February 23, 2009

Mayor Klausung and Roseville City Council  
2660 Civic Center Drive  
Roseville, MN 55113

RE: New Utility Billing Formula

Dear Mayor Klausung and City Council Members:

A recent letter to Roseville residents included with water bills mentions a state environmental law requiring municipalities across Minnesota to promote water conservation through rate structure and uses this law as justification for the new rate structure chosen by the city. However, the change in rates move the city further away from a conservation-based system than the old rates, in **direct violation** of the law's intent. In effect, the cost increases fall disproportionately on the shoulders of residential customers who conserve while wasteful consumers and larger commercial customers may actually see their bills decrease.

The intent of Minnesota's new water conservation law is to protect our one of our most precious natural resources by increasing costs as usage goes up. The Department of Natural Resources says that is achieved by creating a billing system with multi-tiered rates with a 25% to 50% rate difference between **each** tier. In this area, Roseville's new structure fails on all accounts: 1. there are only two billing levels, 2. commercial customers are excluded from usage-based rates, and 3. the difference between the two tiers is nominal.

Furthermore, small-volume consumers see only a nominal savings if they are in the lowest category because a disproportional amount of their bill is a flat fee, subverting the financial incentive to save water. In this case, the large fixed-rate makes small-users pay far more per 1000 gallons used than larger customers (please see attached chart). Under the new rate structure a residential customer in Roseville using 5000 gallons pays \$7.40 per 1000 gallons of water. In contrast, a customer using 50,000 gallons pays only \$2.55 per gallon. This directly violates the intent of the state law.

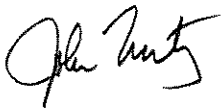
As you can see in the attached chart, customers that use more than 50,000 gallons or more per billing period will actually see their bills decrease under the new system. This is because the majority of the increases were applied to the flat rate instead of the usage-based rate.

I strongly urge the City of Roseville to remedy these issues so that the rate system encourages conservation of resources instead of encouraging wasteful use. Among the city's options would be to

1. create more usage-tiers,
2. increase the difference between each tier to at least 25% to 50%, and/or
3. reduce the revenue collected from the base-rate while increasing the revenue collected from tiered-consumption rates.

Again, I hope the city will revise the new rate structure to protect our environment and water resources.

Sincerely,

A handwritten signature in black ink, appearing to read "John Marty". The signature is stylized and cursive.

John Marty

2009

5,000				10,000				20,000				30000 Winter				50000 Winter				100000 Winter			
Flat Fee	Usage Fee	Total Cost	Per Gallon Cost	Flat Fee	Usage Fee	Total Cost	Per Gallon Cost	Flat Fee	Usage Fee	Total Cost	Per Gallon Cost	Flat Fee	Usage Fee	Total Cost	Per Gallon Cost	Flat Fee	Usage Fee	Total Cost	Per Gallon Cost	Flat Fee	Usage Fee	Total Cost	Per Gallon Cost
\$ 27.75	\$ 9.25	\$ 37.00	\$ 7.40	\$ 27.75	\$ 18.50	\$ 46.25	\$ 4.63	\$ 27.75	\$ 37.00	\$ 64.75	\$ 3.24	\$ 27.75	\$ 60.00	\$ 87.75	\$ 2.93	\$ 27.75	\$ 100.00	\$ 127.75	\$ 2.55	\$ 27.75	\$ 200.00	\$ 227.75	\$ 2.28
\$ 18.00	\$ 9.25	\$ 27.25	\$ 5.45	\$ 18.00	\$ 18.50	\$ 36.50	\$ 3.65	\$ 18.00	\$ 37.00	\$ 55.00	\$ 2.75	\$ 18.00	\$ 60.00	\$ 78.00	\$ 2.60	\$ 18.00	\$ 100.00	\$ 118.00	\$ 2.36	\$ 18.00	\$ 200.00	\$ 218.00	\$ 2.18

Non-Residential

\$ 27.75	\$ 12.00	\$ 39.75	\$ 7.95	\$ 27.75	\$ 24.00	\$ 51.75	\$ 5.18	\$ 27.75	\$ 48.00	\$ 75.75	\$ 3.78	\$ 27.75	\$ 72.00	\$ 99.75	\$ 3.33	\$ 27.75	\$ 132.50	\$ 160.25	\$ 3.21	\$ 27.75	\$ 265.00	\$ 292.75	\$ 2.93
\$ 35.00	\$ 12.00	\$ 47.00	\$ 9.40	\$ 35.00	\$ 24.00	\$ 59.00	\$ 5.90	\$ 35.00	\$ 48.00	\$ 83.00	\$ 4.15	\$ 35.00	\$ 72.00	\$ 107.00	\$ 3.57	\$ 35.00	\$ 132.50	\$ 167.50	\$ 3.35	\$ 35.00	\$ 265.00	\$ 300.00	\$ 3.00
\$ 55.00	\$ 12.00	\$ 67.00	\$ 13.40	\$ 55.00	\$ 24.00	\$ 79.00	\$ 7.90	\$ 55.00	\$ 48.00	\$ 103.00	\$ 5.15	\$ 55.00	\$ 72.00	\$ 127.00	\$ 4.23	\$ 55.00	\$ 132.50	\$ 187.50	\$ 3.75	\$ 55.00	\$ 265.00	\$ 320.00	\$ 3.20
\$ 105.00	\$ 12.00	\$ 117.00	\$ 23.40	\$ 105.00	\$ 24.00	\$ 129.00	\$ 12.90	\$ 105.00	\$ 48.00	\$ 153.00	\$ 7.65	\$ 105.00	\$ 72.00	\$ 177.00	\$ 5.90	\$ 105.00	\$ 132.50	\$ 237.50	\$ 4.75	\$ 105.00	\$ 265.00	\$ 370.00	\$ 3.70
\$ 210.00	\$ 12.00	\$ 222.00	\$ 44.40	\$ 210.00	\$ 24.00	\$ 234.00	\$ 23.40	\$ 210.00	\$ 48.00	\$ 258.00	\$ 12.90	\$ 210.00	\$ 72.00	\$ 282.00	\$ 9.40	\$ 210.00	\$ 132.50	\$ 342.50	\$ 6.85	\$ 210.00	\$ 265.00	\$ 475.00	\$ 4.75
\$ 420.00	\$ 12.00	\$ 432.00	\$ 86.40	\$ 420.00	\$ 24.00	\$ 444.00	\$ 44.40	\$ 420.00	\$ 48.00	\$ 468.00	\$ 23.40	\$ 420.00	\$ 72.00	\$ 492.00	\$ 16.40	\$ 420.00	\$ 132.50	\$ 552.50	\$ 11.05	\$ 420.00	\$ 265.00	\$ 685.00	\$ 6.85

2008

Residential

5,000				10,000				20,000				30,000				50,000				100,000			
Flat Fee	Usage Fee	Total Cost	Per 1000 Gallon Cost	Flat Fee	Usage Fee	Total Cost	Per 1000 Gallon Cost	Flat Fee	Usage Fee	Total Cost	Per 1000 Gallon Cost	Flat Fee	Usage Fee	Total Cost	Per 1000 Gallon Cost	Flat Fee	Usage Fee	Total Cost	Per 1000 Gallon Cost	Flat Fee	Usage Fee	Total Cost	Per 1000 Gallon Cost
\$13.00	\$ 11.75	\$ 24.75	\$ 4.95	\$13.00	\$ 23.50	\$ 36.50	\$ 3.65	\$ 13.00	\$ 47.00	\$ 60.00	\$ 3.00	\$ 13.00	\$ 70.50	\$ 83.50	\$ 2.78	\$ 13.00	\$ 117.50	\$ 130.50	\$ 2.61	\$ 13.00	\$ 235.00	\$ 248.00	\$ 2.48
\$7.90	\$ 11.75	\$ 19.65	\$ 3.93	\$7.90	\$ 23.50	\$ 31.40	\$ 3.14	\$ 7.90	\$ 47.00	\$ 54.90	\$ 2.75	\$ 7.90	\$ 70.50	\$ 78.40	\$ 2.61	\$ 7.90	\$ 117.50	\$ 125.40	\$ 2.50	\$ 7.90	\$ 235.00	\$ 242.90	\$ 2.42

Non-Residential

\$17.05	\$ 11.75	\$ 28.80	\$ 5.76	\$17.05	\$ 23.50	\$ 40.55	\$ 4.05	\$ 17.05	\$ 47.00	\$ 64.05	\$ 3.20	\$ 17.05	\$ 70.50	\$ 87.55	\$ 2.91	\$ 17.05	\$ 117.00	\$ 134.05	\$ 2.68	\$ 17.05	\$ 235.00	\$ 252.05	\$ 2.52
\$25.50	\$ 11.75	\$ 37.25	\$ 7.45	\$25.50	\$ 23.50	\$ 49.00	\$ 4.90	\$ 25.50	\$ 47.00	\$ 72.50	\$ 3.62	\$ 25.50	\$ 70.50	\$ 98.00	\$ 3.20	\$ 25.50	\$ 117.00	\$ 142.50	\$ 2.85	\$ 25.50	\$ 235.00	\$ 260.50	\$ 2.61
\$50.95	\$ 11.75	\$ 62.70	\$ 12.54	\$50.95	\$ 23.50	\$ 74.45	\$ 7.44	\$ 50.95	\$ 47.00	\$ 97.95	\$ 4.90	\$ 50.95	\$ 70.50	\$ 121.45	\$ 4.04	\$ 50.95	\$ 117.00	\$ 167.95	\$ 3.36	\$ 50.95	\$ 235.00	\$ 285.95	\$ 2.86
\$102.10	\$ 11.75	\$ 113.85	\$ 22.77	\$102.10	\$ 23.50	\$ 125.60	\$ 12.56	\$ 102.10	\$ 47.00	\$ 149.10	\$ 7.46	\$ 102.10	\$ 70.50	\$ 172.60	\$ 5.75	\$ 102.10	\$ 117.00	\$ 219.10	\$ 4.38	\$ 102.10	\$ 235.00	\$ 337.10	\$ 3.37
\$204.10	\$ 11.75	\$ 215.85	\$ 43.17	\$204.10	\$ 23.50	\$ 227.60	\$ 22.76	\$ 204.10	\$ 47.00	\$ 251.10	\$ 12.56	\$ 204.10	\$ 70.50	\$ 274.60	\$ 9.15	\$ 204.10	\$ 117.00	\$ 321.10	\$ 6.42	\$ 204.10	\$ 235.00	\$ 439.10	\$ 4.39
\$408.15	\$ 11.75	\$ 419.90	\$ 83.98	\$408.15	\$ 23.50	\$ 431.65	\$ 43.17	\$ 408.15	\$ 47.00	\$ 455.15	\$ 22.76	\$ 408.15	\$ 70.50	\$ 478.65	\$ 15.96	\$ 408.15	\$ 117.00	\$ 528.15	\$ 10.50	\$ 408.15	\$ 235.00	\$ 643.15	\$ 6.43

----- Forwarded Message -----

From: "dan roe" <dan.roe@comcast.net>  
 To: "bill malinen" <bill.malinen@ci.roseville.mn.us>  
 Sent: Tuesday, February 24, 2009 5:49:32 PM GMT -06:00 US/Canada  
 Central  
 Subject: Water rate structure

Bill,

As I reflected on Senator Marty's letter and attachment, as well as my thoughts on the issue, a couple of conclusions came to mind:

First, I think we should, as a policy matter, target more than only 10-15% of residential water users for higher rates under our rate structure. We should target all of the above-average users with the increased rates. Then, over time we should, as the average continues to (hopefully) decrease with usage, look at decreasing the break point in our rate structure.

Second, I think it IS unfair that a small number of high users actually pay less in total in 2009 under the new rate structure than in 2008 (for the same usage). That is because we are trying to collect more \$\$ overall to cover predicted infrastructure costs, and all should participate in that.

Finally, in order to achieve the 2 objectives above, the math tells me that we should look at a break-point of 20,000 gallons/quarter rather than 30,000. (Closer to the average of 22,000.) We should also, on the basis of having all users pay at least about 5% more in order to be fair, change the upper tier winter rate from \$2.00/1000 gallons to \$2.40. The summer rate can still be a 10% premium on that rate, or \$2.65/1000 gallons.

As I run a couple of examples on this basis, the total amount paid by users in 2009 versus 2008 goes up for all users. The 2008-2009 change is the same for below-average users as it is under our adopted rates, but for those users over average they will still see an increase over 2008, rather than the current situation where their cost per quarter actually goes down. The table below is strictly winter rates.

Usage/qtr: Total Cost	2009 Current Total Cost 2008 Total Cost	My 2009 Proposed
5000gal 50% incr)	\$37 (\$12.25 or 50% incr) \$24.75	\$37 (\$12.25 or
10000gal incr)	\$46.25 (\$9.75 or 27% incr) \$36.50	\$46.25 (\$9.75 or 27%
15000gal incr)	\$55.50 (\$7.25 or 15% incr) \$48.25	\$55.50 (\$7.25 or 15%
20000gal 8% incr)	\$64.75 (\$4.75 or 8% incr) \$60.00	\$64.75 (\$4.75 or
25000gal 7% incr)	\$74.00 (\$2.25 or 3% incr) \$71.75	\$76.75 (\$5.00 or
30000gal 6% incr)	\$83.25 (\$0.50 or 0% incr) \$83.50	\$88.75 (\$5.25 or



35000gal incr)	\$93.25 (\$2.00 or 2% DEC) \$95.25	\$100.75 (\$5.50 or 6%
40000gal incr)	\$103.25 (\$3.75 or 4% DEC) \$107.00	\$112.75 (\$5.75 or 5%
45000gal incr)	\$113.25 (\$5.50 or 5% DEC) \$118.75	\$124.75 (\$6.00 or 5%
50000gal incr)	\$123.25 (\$7.25 or 6% DEC) \$130.50	\$136.75 (\$6.25 or 5%
55000gal incr)	\$133.25 (\$9.00 or 6% DEC) \$142.25	\$148.75 (\$6.50 or 5%

Granted, if only 10%-15% of users use more than 30,000 gallons per quarter, only a relative few would be impacted by my suggested change. However, out of fairness, they SHOULD have an increase, rather than a decrease, between 2009 and 2008.

Also, as we move into future years, I would like to have more analysis of applying a conservation rate structure to non-residential users, since they should have incentives to conserve water as well. (Besides the summer premium.)

Lastly, I would appreciate a staff analysis of how the language in the statute dealing with multi-family housing rates is met by our structure, or might have to be adjusted. I don't know whether our multi-family buildings use single large meters that fall under non-residential rates, or if there are small meters for each unit, based on our terminology in the rate structure of "residential" versus "non-residential." If they have large meters, do the equivalent block rates work out in conformance with statute?

Please include this suggestion with the information that we consider at our March 9th discussion of the conservation water rates. (Including any staff analysis.) If the table in this email comes out garbled, let me know and I can send a PDF or something.

Thanks,

Dan Roe  
Roseville City Councilmember  
Phone 651-487-9654  
Email dan.roe@comcast.net

**Chris Miller**

---

**From:** Bill Malinen  
**Sent:** Wednesday, February 25, 2009 11:21 AM  
**To:** Chris Miller  
**Subject:** FW: more on conservation rate proposal

**Attachments:** rate comparison chart.pdf



rate comparison  
chart.pdf (13 ...

Please review and comment.

-----Original Message-----

**From:** dan.roe@comcast.net [mailto:dan.roe@comcast.net]  
**Sent:** Wednesday, February 25, 2009 9:32 AM  
**To:** Bill Malinen  
**Subject:** more on conservation rate proposal

Bill,

Per the attached charts, I have slightly revised my proposal to shift the break point between tiers from 20,000 gallons/qtr to 25,000 gallons/qtr.

That is because, at 20,000 gal/qtr, the summer rate differential from 2008 gets to be 8% to 11% for average to high users, which is, I think, too great of a differential.

By changing the break point to 25,000 gal/qtr, the winter differential for those users goes down to 3% to 5%, but with the summer differential of up to 7% this should average to something more around 5% for those users over the course of a year.

As always, feel free to let me know if either you or the staff have any questions or comments on my proposal.

I look forward to the discussion on the 9th.

Regards,

Dan Roe  
Roseville City Councilmember  
Phone 651-487-9654  
Email dan.roe@comcast.net

WATER RATES  
Conservation Rate Structure Analysis

**Residential Rates**

	<u>2008</u>	<u>2009</u>	<u>% diff</u>	<u>2009 Roe1</u>	<u>% diff</u>	<u>2009 Roe2</u>	<u>% diff</u>
Base Rate	\$13.00	\$27.75		\$27.75		\$27.75	
Per 1000 gal - Tier I	\$2.35	\$1.85		\$1.85		\$1.85	
Per 1000 gal - Tier II (winter)	\$2.35	\$2.00	8%	\$2.40	30%	\$2.40	30%
Per 1000 gal - Tier II (summer)	\$2.35	\$2.10	5%	\$2.65	10%	\$2.65	10%
Tier I / Tier II Break Point (gal)	0	30,000		20,000		25,000	

**Winter Comparison**

<u>Quarterly Usage (gallons)</u>	<u>2008 Total</u>	<u>2009 Total</u>	<u>(\$ diff)</u>	<u>(% diff)</u>	<u>2009 Roe1</u>	<u>(\$ diff)</u>	<u>(% diff)</u>	<u>2009 Roe2</u>	<u>(\$ diff)</u>	<u>(% diff)</u>
0	\$13.00	\$27.75	\$14.75	113%	\$27.75	\$14.75	113%	\$27.75	\$14.75	113%
2500	\$18.88	\$32.38	\$13.50	72%	\$32.38	\$13.50	72%	\$32.38	\$13.50	72%
5000	\$24.75	\$37.00	\$12.25	49%	\$37.00	\$12.25	49%	\$37.00	\$12.25	49%
7500	\$30.63	\$41.63	\$11.00	36%	\$41.63	\$11.00	36%	\$41.63	\$11.00	36%
10000	\$36.50	\$46.25	\$9.75	27%	\$46.25	\$9.75	27%	\$46.25	\$9.75	27%
12500	\$42.38	\$50.88	\$8.50	20%	\$50.88	\$8.50	20%	\$50.88	\$8.50	20%
15000	\$48.25	\$55.50	\$7.25	15%	\$55.50	\$7.25	15%	\$55.50	\$7.25	15%
17500	\$54.13	\$60.13	\$6.00	11%	\$60.13	\$6.00	11%	\$60.13	\$6.00	11%
20000	\$60.00	\$64.75	\$4.75	8%	\$64.75	\$4.75	8%	\$64.75	\$4.75	8%
22500	\$65.88	\$69.38	\$3.50	5%	\$70.75	\$4.88	7%	\$69.38	\$3.50	5%
25000	\$71.75	\$74.00	\$2.25	3%	\$76.75	\$5.00	7%	\$74.00	\$2.25	3%
27500	\$77.63	\$78.63	\$1.00	1%	\$82.75	\$5.13	7%	\$80.00	\$2.38	3%
30000	\$83.50	\$83.25	(\$0.25)	0%	\$88.75	\$5.25	6%	\$86.00	\$2.50	3%
32500	\$89.38	\$88.25	(\$1.13)	-1%	\$94.75	\$5.38	6%	\$92.00	\$2.63	3%
35000	\$95.25	\$93.25	(\$2.00)	-2%	\$100.75	\$5.50	6%	\$98.00	\$2.75	3%
37500	\$101.13	\$98.25	(\$2.88)	-3%	\$106.75	\$5.63	6%	\$104.00	\$2.88	3%
40000	\$107.00	\$103.25	(\$3.75)	-4%	\$112.75	\$5.75	5%	\$110.00	\$3.00	3%
42500	\$112.88	\$108.25	(\$4.63)	-4%	\$118.75	\$5.88	5%	\$116.00	\$3.13	3%
45000	\$118.75	\$113.25	(\$5.50)	-5%	\$124.75	\$6.00	5%	\$122.00	\$3.25	3%
47500	\$124.63	\$118.25	(\$6.38)	-5%	\$130.75	\$6.13	5%	\$128.00	\$3.38	3%
50000	\$130.50	\$123.25	(\$7.25)	-6%	\$136.75	\$6.25	5%	\$134.00	\$3.50	3%

WATER RATES  
Conservation Rate Structure Analysis

Residential Rates

	<u>2008</u>	<u>2009</u>	<u>% diff</u>	<u>2009 Roe1</u>	<u>% diff</u>	<u>2009 Roe2</u>	<u>% diff</u>
Base Rate	\$13.00	\$27.75		\$27.75		\$27.75	
Per 1000 gal - Tier I	\$2.35	\$1.85		\$1.85		\$1.85	
Per 1000 gal - Tier II (winter)	\$2.35	\$2.00	8%	\$2.40	30%	\$2.40	30%
Per 1000 gal - Tier II (summer)	\$2.35	\$2.10	5%	\$2.65	10%	\$2.65	10%
Tier I / Tier II Break Point (gal)	0	30,000		20,000		25,000	

Summer Comparison

<u>Quarterly Usage (gallons)</u>	<u>2008 Total</u>	<u>2009 Total</u>	<u>(\$ diff)</u>	<u>(% diff)</u>	<u>2009 Roe1</u>	<u>(\$ diff)</u>	<u>(% diff)</u>	<u>2009 Roe2</u>	<u>(\$ diff)</u>	<u>(% diff)</u>
0	\$13.00	\$27.75	\$14.75	113%	\$27.75	\$14.75	113%	\$27.75	\$14.75	113%
2500	\$18.88	\$32.38	\$13.50	72%	\$32.38	\$13.50	72%	\$32.38	\$13.50	72%
5000	\$24.75	\$37.00	\$12.25	49%	\$37.00	\$12.25	49%	\$37.00	\$12.25	49%
7500	\$30.63	\$41.63	\$11.00	36%	\$41.63	\$11.00	36%	\$41.63	\$11.00	36%
10000	\$36.50	\$46.25	\$9.75	27%	\$46.25	\$9.75	27%	\$46.25	\$9.75	27%
12500	\$42.38	\$50.88	\$8.50	20%	\$50.88	\$8.50	20%	\$50.88	\$8.50	20%
15000	\$48.25	\$55.50	\$7.25	15%	\$55.50	\$7.25	15%	\$55.50	\$7.25	15%
17500	\$54.13	\$60.13	\$6.00	11%	\$60.13	\$6.00	11%	\$60.13	\$6.00	11%
20000	\$60.00	\$64.75	\$4.75	8%	\$64.75	\$4.75	8%	\$64.75	\$4.75	8%
22500	\$65.88	\$69.38	\$3.50	5%	\$71.38	\$5.50	8%	\$69.38	\$3.50	5%
25000	\$71.75	\$74.00	\$2.25	3%	\$78.00	\$6.25	9%	\$74.00	\$2.25	3%
27500	\$77.63	\$78.63	\$1.00	1%	\$84.63	\$7.00	9%	\$80.63	\$3.00	4%
30000	\$83.50	\$83.25	(\$0.25)	0%	\$91.25	\$7.75	9%	\$87.25	\$3.75	4%
32500	\$89.38	\$88.50	(\$0.88)	-1%	\$97.88	\$8.50	10%	\$93.88	\$4.50	5%
35000	\$95.25	\$93.75	(\$1.50)	-2%	\$104.50	\$9.25	10%	\$100.50	\$5.25	6%
37500	\$101.13	\$99.00	(\$2.13)	-2%	\$111.13	\$10.00	10%	\$107.13	\$6.00	6%
40000	\$107.00	\$104.25	(\$2.75)	-3%	\$117.75	\$10.75	10%	\$113.75	\$6.75	6%
42500	\$112.88	\$109.50	(\$3.38)	-3%	\$124.38	\$11.50	10%	\$120.38	\$7.50	7%
45000	\$118.75	\$114.75	(\$4.00)	-3%	\$131.00	\$12.25	10%	\$127.00	\$8.25	7%
47500	\$124.63	\$120.00	(\$4.63)	-4%	\$137.63	\$13.00	10%	\$133.63	\$9.00	7%
50000	\$130.50	\$125.25	(\$5.25)	-4%	\$144.25	\$13.75	11%	\$140.25	\$9.75	7%

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**MEMORANDUM**

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**TO:** MEMBERS OF THE ROSEVILLE CITY COUNCIL  
**FROM:** AMY IHLAN  
**SUBJECT:** WATER BILLING STRUCTURE AND HOW TO ACHIEVE  
CONSERVATION RATES  
**DATE:** MARCH 4, 2009

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Based on the DNR's guidelines and the suggestions from Senator John Marty, I would like to have council discussion and direct staff to formulate amendments to the city's water billing structure to comply with state law requiring a billing structure "that encourages conservation." To create a conservation rate structure that meets state law requirements, we need to consider the following amendments to our new utility billing rates:

1. Create additional usage tiers or "blocks" with greater cost increases between blocks. The DNR Conservation Rate guidelines state that:

The increase in cost between each block should be significant enough (25% or more and 50% between the last two steps) to encourage conservation.

Roseville's residential billing rates include only two usage "blocks", and the increase in cost between them is less than 10%, not significant enough to encourage conservation by the DNR's standards. We should consider creating more usage blocks with significant cost increases between them, so that residents who conserve water and stay within the lower usage tiers will be rewarded by paying significantly less than residents who don't. For example, we could look at rate structures that create additional usage blocks under 30,000 gallons, with the highest rate for usage of more than 30,000 gallons (and increasing by at least 50% over the next highest rate).

2. There are no usage blocks for commercial properties. We should also create a tiered usage block rate structure for commercial properties that meets DNR guidelines. If there is a large disparity in water use among business, the tiers should reflect the range of usage so that small users pay significantly less than large users do.

It's questionable whether a higher summer rate will be any kind of meaningful incentive to conserve for commercial property owners. Is there any evidence that commercial water usage tends to increase in the summer by the same percentage that residential use increases?

3. We might also want to review the base rates in light of the DNR's statement that:

Rate structures often include a service charge (base rate) and a volume based charge. Service charges may cover fixed costs (capital improvements) and the volume charge is often for operation and maintenance costs.

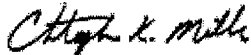
Given that we are more than doubling base rates, we should make sure that we are raising them no more than necessary to cover capital costs. Maintenance and operating costs can properly be funded by the volume/usage rates.

**ROSEVILLE**  
**REQUEST FOR COUNCIL ACTION**

Date: 11/17/08  
Item No.: 12.a

Department Approval

City Manager Approval



Item Description: Adopting the 2009 Utility Rate Adjustments

**BACKGROUND**

Over the past several months, City Staff has been reviewing the City's utility operations to determine whether rate adjustments are necessary for 2009. In addition, Staff has also assessed the changes necessary to implement a conservation-based rate structure. The analysis included the City's water, sanitary sewer, storm water drainage, and solid waste recycling operations.

The analysis entailed a review of:

- Fixed costs including personnel, supplies and maintenance, and depreciation
- Variable costs including the purchase of water from the City of St. Paul, water treatment costs paid to the Metropolitan Council, and recycling contractor costs.
- Capital replacement costs
- Current customer base, rates, and rate structure

On September 15, 2008, the City Council adopted the 2009 Preliminary Budget for each of the operations noted above. The remainder of this report summarizes the rate adjustment necessary to accommodate the budget, and scheduled capital replacements over the next 10 years.

Water Operations: The City's water operation provides City customers with safe potable water, as well as on-demand water pressure sufficient to meet the City's fire protection needs. The City purchases its water supply from the City of St. Paul, which remains the single largest operating cost to the water operation. It is estimated that our wholesale water purchase costs will increase approximately 3-4%. In addition, the City's internal operating costs are expected to increase by approximately 5% due to higher motor fuel, insurance, and other operating costs.

To facilitate a change to a conservation-based rate structure, significant changes in the water rates need to occur. In essence, the portion of the rates designed to offset the City's fixed water costs need to increase substantially. However, the variable rate portion can be lowered. Greater detail is provided below.

The Water Fund is in a relatively weak financial position compared to other utility funds and even the City's General Fund. Sustained increases in water rates will be needed for the foreseeable future to improve this condition.

33 Sanitary Sewer Operations: The City maintains a sanitary sewer collection system to ensure the general  
34 public's health and general welfare. The single largest operating cost to the sanitary sewer operation is the  
35 treatment costs paid to the Metropolitan Council Environmental Services Division (MCES). The MCES  
36 has notified us that our treatment costs are expected to increase by approximately 4% in 2009. In addition,  
37 the City's internal operating costs are expected to increase by approximately 5% reflecting higher motor  
38 fuel, insurance, and other operating costs.

39  
40 Like the water operation; to facilitate a change to a conservation-based rate structure, significant changes in  
41 the sanitary sewer rates need to occur. The portion of the rates designed to offset the City's fixed sanitary  
42 sewer costs need to increase substantially, whereas the variable rate portion can be lowered.

43  
44 The Sanitary Sewer Fund is in good financial condition which has allowed for lower-than-inflation rate  
45 increases over the last 5 years. However, planned capital replacements over the next 10 years will  
46 necessitate a rate increase in 2009.

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48 Storm Water Drainage Operations: The City provides for the management of storm water drainage to  
49 prevent flooding and pollution control, as well as street sweeping and the leaf pickup program. The storm  
50 sewer costs are expected to be higher than in previous years, due to an increase in the planned capital  
51 replacement of stormwater systems, as well as higher costs for motor fuel, depreciation, and other operating  
52 costs.

53  
54 Like the Sanitary Sewer Fund, the Storm Water Drainage Fund is in good financial condition which has  
55 allowed for lower-than-inflation rate increases over the last 5 years. However, planned capital  
56 replacements over the next 10 years will necessitate rate increases in 2009.

57  
58 Recycling Operations: The recycling operation provides for the contracted curbside recycling pickup  
59 throughout the City. The primary operating cost is the amounts paid to a contractor to pickup recycling  
60 materials. Thanks to strong revenue sharing dollars being recouped, no rate increase will be needed for  
61 2009 for single family homeowners. However, based on current amounts charged by Eureka for multi-  
62 family homes, a rate increase will be needed.

#### 63 64 Water Conservation Measures

65 Based on an analysis of the City's water customers, it appears that the Roseville residents are already  
66 consuming less water than residents in many other communities. This is likely due to the fact that  
67 relatively few residential properties in Roseville have irrigation systems, which is in contrast to some 2<sup>nd</sup>  
68 and 3<sup>rd</sup> ring suburbs. It may also be the result of having a relatively lower population per household.  
69 However, there are additional measures that can be taken to encourage water conservation even further.

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71 To provide an even greater incentive to conserve water, Staff is recommending two changes to the City's  
72 water rate structure; a tiered water rate structure, and a summer usage rate

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74 Currently, all water users pay the same rate regardless of the amount they use. It is recommended that a  
75 tiered rate be implemented that would charge residential users that consume in excess of 30,000 gallons per  
76 quarter, a 10% rate premium. Based on current customer behavior, this would impact 10-15% of the City's  
77 residential customers. A tiered rate for commercial customers is not recommended given the large disparity  
78 in usage among those customers. A tiered water rate would encourage households to take year-round  
79 measures such as; installing water-saving devices, and taking shorter showers.



81 It is also recommended that the City implement a summer usage rate that would also carry a 10% premium.  
 82 For residential properties, this would apply for all usage in excess of 30,000 gallons per quarter during the  
 83 summer months. By applying it only to usage in excess of 30,000 gallons, we ensure that those households  
 84 that do not water their lawn aren't penalized by paying more for general household use. For commercial  
 85 properties, it would apply to all usage during the summer months. A summer usage rate would encourage  
 86 both residential and commercial properties to reduce the water used for irrigation purposes.

87 **POLICY OBJECTIVE**

88 An annual review of the City's utility rate structure is consistent with governmental best practices to ensure  
 89 that each utility operation is financially sound. In addition, moving to a conservation-based rate structure is  
 90 consistent with the goals and strategies identified in the Imagine Roseville 2025 initiative.

91 **FINANCIAL IMPACTS**

92 Based on the 2009 Preliminary Budget and the Staff-recommended rate increases, a typical homeowner will  
 93 pay approximately \$130 per quarter, an increase of \$6.35 or 5%. Additional detail is shown in the tables  
 94 below.

95  
 96 Based on the 2009 recommended rates, the following impact will be realized on an average users' quarterly  
 97 utility bill.

98 **Single Family Homes**

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Service	2008	2009	\$ Change	% Change
Water – base fee	\$ 13.00	\$ 27.75	\$ 14.75	
Water – usage fee	51.70	40.70	(11.00)	
Sanitary Sewer – base fee	13.35	23.35	10.00	
Sanitary Sewer – usage fee	34.10	26.40	(7.70)	
Storm Sewer	5.45	5.75	0.30	
Recycling	5.90	5.90	-	
<b>Total</b>	<b>\$ 123.50</b>	<b>\$ 129.85</b>	<b>\$ 6.35</b>	<b>5.1 %</b>

101 **\*\*** Based on an average consumption of 22,000 gallons per quarter.

102  
 103 **Single Family Homes – with Utility Discount**

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Service	2008	2009	\$ Change	% Change
Water – base fee	\$ 7.90	\$ 18.00	\$ 10.10	
Water – usage fee	35.25	27.75	(7.50)	
Sanitary Sewer – base fee	8.30	14.55	6.25	
Sanitary Sewer – usage fee	23.25	18.00	(5.25)	
Storm Sewer	5.45	5.75	0.30	
Recycling	5.90	5.90	-	
<b>Total</b>	<b>\$ 86.05</b>	<b>\$ 89.95</b>	<b>\$ 3.90</b>	<b>4.5 %</b>

106 **\*\*** Based on an average consumption of 15,000 gallons per quarter.  
 107 Discount is approximately 38% less than the standard rate.

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### Commercial Property

Service	2008	2009	\$ Change	% Change
Water – base fee	\$ 25.50	\$ 55.00	\$ 29.50	
Water – usage fee	470.00	480.00	10.00	
Sanitary Sewer – base fee	29.15	51.00	21.85	
Sanitary Sewer – usage fee	550.00	550.00	-	
Storm Sewer	252.45	266.40	13.95	
Recycling	-	-		
Total	\$ 1,327.10	\$1,402.40	\$ 75.30	5.7 %

110 \*\* Based on an average consumption of 200,000 gallons per quarter, with a 1 ½" meter, and occupying 3 acres.  
111

112 **STAFF RECOMMENDATION**

113 Based on the increasing costs noted above, and in an effort to implement a conservation-based rate  
114 structure, Staff is recommending rate adjustments as shown in the attached resolution.

115 **REQUESTED COUNCIL ACTION**

116 Adopt the attached resolution establishing the 2009 Utility Rates.  
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Prepared by: Chris Miller, Finance Director  
Attachments: A: Resolution establishing the 2009 Utility Rates

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EXTRACT OF MINUTES OF MEETING OF THE  
CITY COUNCIL OF THE CITY OF ROSEVILLE

\* \* \* \* \*

Pursuant to due call and notice thereof, a regular meeting of the City Council of the City of Roseville, County of Ramsey, Minnesota was duly held on the 17th day of November, 2008 at 6:00 p.m.

The following members were present:  
and the following were absent:

Member introduced the following resolution and moved its adoption:

RESOLUTION \_\_\_\_\_

**RESOLUTION ESTABLISHING THE 2009 UTILITY RATES**

NOW, THEREFORE, BE IT RESOLVED, by the City Council of the City of Roseville, Minnesota, the water, sanitary sewer, storm drainage, and recycling rates be established for 2009 in accordance with Schedule A attached to this Resolution.

The motion for the adoption of the foregoing resolution was duly seconded by member  
and upon a vote being taken thereon, the following voted in favor thereof:

and the following voted against the same:

WHEREUPON, said resolution was declared duly passed and adopted.

148 State of Minnesota )  
149 ) SS  
150 County of Ramsey )

151  
152 I, undersigned, being the duly qualified City Manager of the City of Roseville, County of Ramsey, State of  
153 Minnesota, do hereby certify that I have carefully compared the attached and foregoing extract of minutes  
154 of a regular meeting of said City Council held on the 17th day of November, 2008 with the original thereof  
155 on file in my office.

156  
157 WITNESS MY HAND officially as such Manager this 17th day of November, 2008.

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City Manager

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William J. Malinen

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## Schedule A

### Water Base Rate

Category	2008 Base Rate	2009 Base Rate
Residential	\$ 13.00	\$ 27.75
Residential – Sr. Rate	7.90	18.00
Non-residential		
1.0" Meter	17.05	27.75
1.5" Meter	25.50	35.00
2.0" Meter	50.95	55.00
3.0" Meter	102.10	105.00
4.0" Meter	204.10	210.00
6.0" Meter	\$ 408.15	\$ 420.00

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### Water Usage Rate

Category	2008 Usage Rate	2009 Usage Rate
Residential; Up to 30,000 gals./qtr	\$ 2.35	\$ 1.85
Residential; Over 30,000 gals./qtr – winter rate *	2.35	2.00
Residential; Over 30,000 gals./qtr – summer rate **	2.35	2.10
Non-Residential – winter rate	2.35	2.40
Non-Residential – summer rate **	\$ 2.35	\$ 2.65

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\* Residential high water usage rate is 10% higher than basic rate

\*\* Summer rate is 10% higher than highest winter rate for each property category

### Sanitary Sewer Base Rate

Category	2008 Base Rate	2009 Base Rate
Residential	\$ 13.35	\$ 23.35
Residential – Sr. Rate	8.30	14.55
Residential – Multi family	9.20	16.10
Non-residential		
5/8" Meter	9.75	17.05
1.0" Meter	19.50	34.15
1.5" Meter	29.15	51.00
2.0" Meter	48.60	85.05
3.0" Meter	97.30	170.30
4.0" Meter	194.70	340.75
6.0" Meter	\$ 389.40	\$ 681.45

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**Sanitary Sewer Usage Rate**

<b>Category</b>	<b>2008 Usage Rate</b>	<b>2009 Usage Rate</b>
Residential	\$ 1.55	\$ 1.20
Non-residential	\$ 2.75	\$ 2.75

**Stormwater Rates**

<b>Category</b>	<b>2008 Flat Rate</b>	<b>2009 Flat Rate</b>
Single Family & Duplex	\$ 5.45	\$ 5.75
Multi-family & Churches	42.05	44.40
Cemeteries & Golf Courses	4.20	4.45
Parks	12.65	13.35
Schools & Comm. Centers	21.05	22.20
Commercial & Industrial	\$ 84.15	\$ 88.80

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Note: Stormwater rates are based on a per lot basis for single-family and duplex properties, and on a per acre basis for all other properties.

**Recycling Rates**

<b>Category</b>	<b>2008 Flat Rate</b>	<b>2009 Flat Rate</b>
Single Family	\$ 5.90	\$ 5.90
Multi Family (per unit)	\$ 3.25	\$ 4.00

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**Meter Security Deposit**

<b>Category</b>	<b>2008 Flat Rate</b>	<b>2009 Flat Rate</b>
5/8" Meter	\$ 75.00	\$ 75.00
1.0" Meter	120.00	120.00
1.5" Meter	300.00	300.00
2" Meter	\$ 400.00	\$ 400.00

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Larger meters and hydrant meters are evaluated on the basis of meter cost and consumption. A deposit is computed accordingly.