

**PROJECT MEMORANDUM**

City of St. Joseph, Missouri  
Department of Water Protection  
**Fiscal Year 2014 Sewer Rates**

B&V Project 179174  
12 April 2013

To: Jody Carlson, Director of Public Works  
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This project memorandum presents the proposed fiscal year (FY) 2014 Sewer Rates, which are based on FY 2014 projections from the FY 2013 Sewer Rate Study (Rate Study). The Rate Study provides a projection of revenue adjustments for five years and indicated a 12% overall system increase for FY 2014 in order to meet the Water Protection Utility's revenue requirements.

**Target Rate Adjustment**

The Water Protection Department serves two different classes of customers: Retail customers that use the full collection system and receive both primary and secondary treatment of their wastewater and Wholesale customers that are not on the collection system and only receive secondary treatment. Because of the different service characteristics of these two customer classes, it was determined that it would not be appropriate to apply the 12% rate increase "across the board", or to increase all rate components by the same percentage.

As a proxy to determine an appropriate allocation of the 12% increase to the customer classes, the cost of service results from the FY2013 Rate Study are used. The allocated cost of service by rate class was shown in Table 17 of the Rate Study. The summarized results of the allocations are shown in Table 1, Columns 1 and 2. Based on the 11% total system increase for FY 2013, the indicated increase for Retail customers was 11.6% and 5.0% for Wholesale customers. The same ratios for FY 2013 are used to calculate the 12% increase for FY 2014. This was done by taking the FY 2013 indicated increase for each class and multiplying it by the FY 2014 system increase over the FY 2013 increase in Table 1 Column 3. This results in a 12.6% increase for Retail and a 5.5% increase for Wholesale.

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**Table 1**  
**Target Rate Adjustment for FY14 Rates**

Rate Class	[1] Adjusted Allocated FY13 Cost of Service	[2] Indicated FY 13 Percent Change	[3] Ratio Up for FY14 Increase	[4] Target Rate Adjustment for FY 14
Retail	\$17,806,649	11.6%	x 12 / 11	12.6%
Wholesale	<u>\$1,644,350</u>	5.0%	x 12 / 11	5.5%
Total	\$19,450,999	11.0%		12.0%

Source: FY13 Rate Study, Table 17

### Revenue Adjustments by Class

To determine how to apply the target rate increases shown in Table 1, the revenue under existing rates must be calculated. The revenue under existing rates is shown in Table 2 and is based on the projected FY 2014 billing units from the Rate Study. The numbers of outside city customers and the associated volumes shown in Table 2 have been reduced from the FY 2013 Rate Study to account for the loss of Country Club Village (CCV) as a customer of the Water Protection utility. The timing of CCV leaving the system was not known at the time of the FY 2013 Rate study. The projected FY 2014 billing units have been reduced by 536 residential and 8 commercial customers, with a combined 34,200 Ccf of contributed volume. This reduces the projection of FY 2014 revenue under existing rates by \$545,000.

Using this information, the target revenue under proposed rates for each class is determined by taking the revenue under existing rates and increasing it by the target rate adjustment for FY 2014 found in Table 1, Column 4. The calculated target revenue for Retail is \$19.3 million and for Wholesale is \$1.9 million, as shown in Table 3.

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**Table 2**  
**FY14 Revenue Under Existing Rates**

Description	[1] Customers	[2] Volume Ccf	[3] BOD lbs.	[4] SS lbs.	[5] FOG lbs.	[6] Revenue
<b>Retail</b>						
Residential (97% Inside City less CCV)						
Inside	23,665	1,578,287				\$ 10,559,898
Outside	196	15,913				\$ 224,998
Commerical (99% Inside City less CCV)						
Inside	2,494	1,487,475				\$ 5,697,249
Outside	17	13,725				\$ 117,409
Surcharges			1,591,000	147,800	89,000	\$ 555,647
Total Retail						\$ 17,155,201
<b>Wholesale</b>						
SSJISD	1	860,900	1,995,600	803,300		\$ 1,129,299
National Beef Leathers	1	450,000	109,800	159,900		\$ 119,967
Triumph Foods	1	1,131,000	734,700	852,500	-	\$ 510,574
Total Wholesale						\$ 1,759,840
	26,375	5,537,300	4,431,100	1,963,500	89,000	
<b>Total Revenue</b>						\$ 18,915,041

Source: FY13 Rate Study, Tables 2, 3, and 15

**Table 3**  
**Target Revenue Under Proposed Rates**

Rate Class	[1] Revenue Under Existing Rates	[2] Target Rate Adjustment	[3] Target Class Revenue
	\$	%	\$
Retail	\$17,155,201	12.6%	\$19,323,338
Wholesale	\$1,759,840	5.5%	\$1,856,536
<b>Total</b>	<b>\$18,915,041</b>	<b>12.0%</b>	<b>\$21,179,874</b>

## Proposed Rates for FY 2014

The proposed rates presented on Table 4 are designed to recover the target revenue in Table 3, Column 3. When designing the proposed rates for FY 2014, the cost of service and rate design for FY 2013 was reviewed for each customer class and rates were adjusted to remain consistent with FY 2013 cost distributions results. Based on this, the retail extra strength surcharges and the South St. Joseph Industrial Sewer District (SSJISD) pump station rates were held constant for FY 2014. This is because these rates were held constant in the FY 2013 Rate Study and there is no indication the cost of service related to these rates have changed.

The remaining rates were uniformly increased to recover 100% of the Retail and Wholesale target revenues, as shown in Table 5, Column 6. Since the Retail Surcharges remained unchanged in FY 2014, the Service Charge and Volume Charge for residential and commercial customers increased by 13% to fully recover the Retail indicated 12.6% revenue adjustment (Table 5, Column 7). The same is true for the other Wholesale customers since the Pump Station charge for SSJISD remained unchanged in FY 2014. The average rate increase for the Wholesale class is 5.5% (Table 5, Column 7).

**Table 4**  
**Proposed Rates for Fiscal Year Ending June 30, 2014**

	<u>Inside City</u>	<u>Outside City</u>
Retail		
Service Charge (\$/Month)	\$20.27	\$47.57
Volume Charge (\$/Ccf)	\$3.92	\$8.96
Surcharges (\$/lb.)		
BOD	\$0.321	\$0.477
Suspended Solids	\$0.239	\$0.567
Fats, Oils, & Grease	\$0.108	\$0.248
Wholesale		
Flow charge (\$/Ccf)	\$0.144	
Pump Station (\$/Ccf)	\$0.370	
BOD (\$/lb.)	\$0.292	
Suspended Solids (\$/lb.)	\$0.197	
FOG (\$/lb.)	\$0.108	

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**Table 5**  
**Revenue Under Proposed Rates (FY14 Billing Units)**

Description	[1] Customers	[2] Volume Ccf	[3] BOD lbs.	[4] SS lbs.	[5] FOG lbs.	[6] Revenue	[7] Percent Change From FY13 Rates
<b>Retail</b>							
Residential							
Inside	23,665	1,578,287				\$ 11,943,160	13.1%
Outside	196	15,913				\$ 254,465	13.1%
Commerical							
Inside	2,494	1,487,475				\$ 6,437,543	13.0%
Outside	17	13,725				\$ 132,680	13.0%
Surcharges			1,591,000	147,800	89,000	\$ 555,647	0.0%
Total Retail						\$ 19,323,495	12.6%
<b>Wholesale</b>							
SSJISD	1	860,900	1,995,600	803,300		\$ 1,183,468	4.8%
National Beef Leathers	1	450,000	109,800	159,900		\$ 128,362	7.0%
Triumph Foods	1	1,131,000	734,700	852,500		\$ 545,339	6.8%
Total Wholesale						\$ 1,857,169	5.5%
Total Revenue						\$ 21,180,664	12.0%