

City of Columbia

701 East Broadway, Columbia, Missouri 65201



Agenda Item Number: B 235-14

Department Source: Public Works

To: City Council

From: City Manager & Staff

Council Meeting Date: August 4, 2014

Re: Sewer Utility Rate Structure Changes

Documents Included With This Agenda Item

Council memo, Resolution/Ordinance

Supporting documentation includes: None

Executive Summary

Staff is proposing to amend Chapter 13 and Chapter 22 of the City Code to implement a 6% revenue increase in connection with the November 2013 revenue bond package presented to the voters for sanitary sewer utility capital improvements. In addition, staff is recommending changes to the sewer connection fees, and the waste hauler disposal service fees.

Discussion

In order to provide adequate funding to meet current bond obligations, and to operate and maintain the sewer system and treatment works, staff is recommending that Chapters 13 and 22 of the City Code be amended to implement structural rate changes in connection with the November 2013 revenue bond package presented to the voters for sanitary sewer utility capital improvements.

The November 2013 ballot issue projected that revenue increases of 6% in FY2015, 5% in FY2017 and 1% in FY2019 were necessary to cover the cost of revenue bonds issued to construct \$32,340,000 of sanitary sewer improvements promised to the voters. This is the first of three anticipated rate changes as recommended by our consultant, Burton & Associates.

Rate structure modifications are recommended to:

- Recover debt service and administration costs in fixed monthly charges, consistent with industry trends.
- Increase cost recovery in base charges due to financial impacts of declining demands; typically more than 90%+ of a utility system's costs are fixed.
- Meet rating agency criteria to recover >30% of annual revenue in fixed fees. Results in monthly charges that are comparable to other local MO systems.
- Scale non-residential monthly charges by meter size using American Water Works Association (AWWA) maximum flow ratios. Current practice is based upon alternative schedule of flows by meter size. Majority of industry utilizes flow ratios as published by AWWA. Usage rate recovers remaining costs in proportion to use of system.



The user rate adjustment will increase the monthly residential bill by approximately \$2.99/month. Staff had previously calculated the average monthly water use for residential customers at 7 ccf (hundred cubic feet) per month. Burton & Associates has used the most recent billing data and determined the current average water use is 5 ccf per month. The average monthly residential customer bill for sewer service is estimated to be \$22.36 with the proposed 6% increase based on the 5ccf per month average use.

Staff has removed the section related to the phase-in of manufacturers, as it is no longer applicable.

Sewer Connection Fees:

- One-time charge assessed to new connections to recover unit cost of capacity used to serve growth.
- Used to pay for expansion-related capital costs and minimize the burden upon existing ratepayers for those facilities.
- Basis of Analysis: reconstruction cost new less depreciation of existing assets and expansion-related projects in five-year CIP.
- Discretionary fees that can be adopted at partial cost recovery, phased-in over time, or even waived/discounted. For 5/8 inch meters, staff is proposing to increase the cost from \$800 to \$1,200 in FY15; increase to \$1,600 in FY16; increase to \$2,000 in FY17, and a final increase to \$2,400 in FY18.

Fiscal Impact

Short-Term Impact: Anticipated revenue increases for FY15 include: \$1,103,366 for sanitary sewer utility rates and extra strength charge; \$387,500 for sewer connection fees; and \$2,040 for waste hauler fee.

Long-Term Impact: User rate increases: 5% increase is anticipated for FY17 and a 1% increase for FY19. Sewer Connection fees: for 5/8 inch meters, proposing to increase from \$800 to \$1,200 in FY15, increase to \$1,600 in FY16, increase to \$2,000 in FY17, and a final increase to \$2,400 in FY18.

Vision, Strategic & Comprehensive Plan Impact

Vision Impact: Environment, Health, Social Services and Affordable Housing

Strategic Plan Impact: Health, Safety and Wellbeing

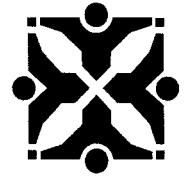
Comprehensive Plan Impact: Environmental Management, Infrastructure, Livable & Sustainable Communities

Suggested Council Action

Following public input and Council discussion at the public hearing, Council should pass the ordinance amending Chapters 13 and 22 relating to rate structure of sanitary sewer utility rates, sewer utility connection fees, and an increase to the waste hauler disposal service fees.

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Legislative History

8/5/13 - (Ord 21760) Calling a special election of whether to issue the Sewer System Revenue bonds
11/5/13 - Voters approved the issue of Sewer System Revenue bonds
1/21/14 - (Ord 21965) Declaring the results of the special election
3/04/14 - Agreement with Burton & Associates for Sanitary Sewer Utility Cost of Service and Rate Study
7/7/14 - Burton & Associates presented rate recommendations for the Sanitary Sewer Utility to the City Council during pre-council meeting.
7/21/14 - (R120-14) Setting a Public Hearing to consider changes to the sewer utility rate, connection fee, and hauled liquid waste rate


Department Approved


City Manager Approved

Introduced by _____

First Reading _____

Second Reading _____

Ordinance No. _____

Council Bill No. B 235-14

AN ORDINANCE

amending Chapter 13 of the City Code as it relates to hauled liquid waste rates; amending Chapter 22 of the City Code as it relates to sanitary sewer utility rates and sanitary sewer utility connection fees; and fixing the time when this ordinance shall become effective.

SECTION 1. Chapter 13 of the Code of Ordinances of the City of Columbia, Missouri, is hereby amended as follows:

Material to be deleted in ~~strikeout~~; material to be added underlined.

Sec. 13-192. Charges for disposal services.

...

(b) The following charges shall be imposed for acceptable liquid waste generated within the city limits of Columbia which is discharged into the designated disposal facility:

- (1) Waste activated sludge from package wastewater treatment plants and stabilization pond sludge..... ~~\$0.041~~ 0.043 per gallon
- (2) Portable/chemical toilet, domestic holding tank, septic tank, grease trap wastes and other wastewater not described above in (b)(1)
..... ~~\$0.077~~ 0.082 per gallon
- (3) Treatment service availability..... ~~\$9.26~~ 11.01 per load

...

SECTION 2. Chapter 22 of the Code of Ordinances of the City of Columbia, Missouri, is hereby amended as follows:

Material to be deleted in ~~strikeout~~; material to be added underlined.

Sec. 22-263. Charges for sewage service.

...

(b) The monthly volume charges for residential classification shall be based on the average monthly billing of water usage during the calendar months of November, December, January, February and March dropping out the highest and lowest usage months. If the calculated average usage results in an average of less than one (1) CCF, the average will be recalculated using the water usage for the previous twelve (12) month billing periods, April through March. If the residential user does not have the appropriate number of billing periods necessary for calculating a winter-quarter average, a minimum volume usage of two (2) CCF will be billed until a winter-quarter average can be established. Winter-quarter average shall transfer to any residential customer who moves to a new residential address. The monthly volume charges for all other customers shall be based on one hundred (100) percent of the monthly metered water used, except as otherwise provided in this Code.

- (1) *Sewage service charge rates.* Each user of the wastewater system of the city shall pay a base charge and a volume charge for the use of such system monthly. Sewage service charges shall be based on the following rates:

Residential base charge:\$ ~~7.30~~ 11.01

Non-residential Base Charge:			
Water Meter Size	Meter Capacity (gpm)	Capacity Difference	Base Charge by Meter Capacity
5/8-inch	15 <u>25</u>	<u>1</u>	\$7.30 <u>11.01</u>
3/4-inch	25 <u>30</u>	1.67 <u>1.5</u>	\$12.17 <u>16.52</u>
1-inch	50	3.33 <u>2.5</u>	\$24.33 <u>27.53</u>
1½-inch	100	6.67 <u>5</u>	\$48.67 <u>55.05</u>
2-inch	160	10.67 <u>8</u>	\$77.87 <u>88.08</u>
3-inch	320	21.33 <u>16</u>	\$155.73 <u>176.16</u>
4-inch	500	33.33 <u>25</u>	\$243.34 <u>275.25</u>
6-inch	3,000 <u>1,000</u>	200.00 <u>50</u>	\$1,460.04 <u>550.50</u>
8-inch	4,000 <u>1,600</u>	266.67 <u>80</u>	\$1,946.72 <u>880.80</u>
10-inch	5,500 <u>2,300</u>	366.67 <u>115</u>	\$2,676.74 <u>1,266.15</u>
12-inch	7,500 <u>4,300</u>	500.00 <u>215</u>	\$3,650.10 <u>2,367.15</u>

Volume Charge:

Volume charge, per Ccf:\$ ~~2.414~~ 2.27

Ccf = 100 cubic feet

~~Rate increases imposed by Ordinance No. 20922 may be phased-in for manufacturers. A “manufacturer” is defined for the purpose of this section as: a user that has facilities for the assembly, compounding, packaging, processing, treatment or manufacture of equipment, materials, merchandise or products, and that employs at least twenty five (25) employees. Manufacturers may request, in writing, that the director phase-in rate increases imposed by Ordinance No. 20922. Such requests must be received by the director before December 1, 2011. After the director receives the written request, the manufacturer’s rates shall revert, on the manufacturer’s next utility bill, to rates in effect before the passage of Ordinance No. 20922. The phased-in rate increases shall be made annually in three equal increments beginning on January 1, 2012. The director shall determine who meets the criteria of “manufacturer” consistent with this ordinance. All manufacturers shall pay the full rate increase beginning on January 1, 2015.~~

- (2) *Extra strength charge.* Wastewater discharged to the wastewater system from commercial or industrial users shall be subject to an extra strength charge when the BOD or total suspended solids concentration exceeds three hundred (300) milligrams per liter (mg/l) by weight. All analyses shall be performed on composite samples collected at no less than hourly intervals over a twenty-four-hour period.

Extra strength charges shall be calculated based on one hundred (100) percent of metered water use, except as otherwise provided in section 22-269 of this Code, in accordance with the following formula:

$$S = V_s \times 0.00624 \times [\$ \text{0.273} \text{ } \underline{\text{0.289}} (\text{BOD} - 300) + \$ \text{0.1866} \text{ } \underline{\text{0.198}} (\text{SS} - 300)]$$

Where:

S	=	Surcharge in dollars monthly.
Vs	=	Sewage volume in 100 cubic feet per month.
0.00624	=	Conversion factor for hundred cubic feet to million pounds.
\$0.273 <u>0.289</u>	=	Unit charge for BOD in dollars per pound; of which \$0.243 <u>0.194</u> represents the user charge portion and \$0.060 <u>0.095</u> represents capital charges.
BOD	=	BOD strength index in mg/l by weight.
300	=	Allowed BOD and suspended solids strengths in mg/l by weight.

\$0.1866 <u>0.198</u>	=	Unit charge for suspended solids in dollars per pound; of which \$0.14357 <u>0.13266</u> represents the user charge portion and \$0.0430 <u>0.06534</u> represents capital charges.
SS	=	Suspended solids strength index in mg/l by weight.

...

Sec. 22-264. Connection fees.

...

(b) Each new user of the wastewater system shall pay a wastewater system connection fee. The fee shall be ~~eight hundred dollars (\$800.00)~~ one thousand two hundred dollars (\$1,200.00) per dwelling unit. If there are uses on the property other than dwelling units, the new user of the wastewater system shall pay a wastewater system connection fee based on the size of the water meter that shall serve the property in accordance with the following table:

Size of Water Meter Inches	Connection Fee
5/8 and 3/4	\$800.00-1,200.00
<u>3/4</u>	<u>\$1,800.00</u>
1	1,422.00-3,000.00
1½	3,200.00-6,000.00
2	5,689.00-9,600.00
3	12,800.00-19,200.00
4	22,756.00-30,000.00
6	51,200.00-60,000.00
8	91,022.00-96,000.00
10	142,222.00-138,000.00
12	204,800.00-258,000.00

...

SECTION 3. The new rates established in this ordinance shall take effect on October 1, 2014; provided that rates for monthly charges shall be applied to utility bills beginning with the first cycle billed in October, 2014.

SECTION 4. This ordinance shall be in full force and effect from and after its passage.

PASSED this _____ day of _____, 2014.

ATTEST:

City Clerk

Mayor and Presiding Officer

APPROVED AS TO FORM:

City Counselor