

City of Versailles Wastewater Impact Fee Program Manual

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The City of Versailles owns and operates a municipal utility that provides wastewater collection and treatment for approximately 6000 customers. About 87 percent of Versailles' wastewater customers are residential; the remaining 13 percent are commercial and light industrial accounts. The wastewater utility operates a 3.0 million gallon per day (MGD) treatment plant and maintains over 100 miles of collection and interceptor lines. The city is currently in the midst of a \$20 million project to increase the treatment plant capacity to 4.5 MGD.

According to the US Census, Versailles' population in 2000 was 7,511, increasing to 9,164 in 2010. The increase in population represented a 22 percent growth rate. Estimates for 2017 indicate a population of 9,437, a 3 percent growth from 2010. Versailles is the 8th fastest growing city in Bluegrass Area Development District and, according to HomeSnacks, is the 29th fastest growing of Kentucky's 85 cities.

The availability of affordable, dependable and regulatory compliant water and wastewater service cannot be overstated when families and businesses look for a place to locate. The existing customers of the Versailles wastewater utility have built a vibrant and compliant wastewater utility through the revenue generated by their utility bills. Seeing that, in many cases, the contribution to capital has been a life-long investment, city leaders wanted to recognize the equity existing customers have in the utility. Additionally, while responsible growth is certainly welcome in Versailles, the burden of funding the capital construction required for growth should be predominately carried by those requesting new wastewater service.

Impact fees (also called system development charges and development fees) are one-time fees paid by those customers presenting a new demand on the utility (new or additional wastewater flow, in this case). The fee is designed and assessed to minimize the impact of growth-related costs on existing customers and, instead, assign much of the financial burden to those responsible for the growth-related costs. Impact fees have come to prominence on a path inversely related to the tolerance of higher taxes. As the public resists higher taxes, the municipalities have had to consider additional ways to generate revenue, presumably in an equitable manner. Additionally, grant funds have become a thing of the past and the debt service component of utility rates now dwarfs the operation and maintenance portion.

Salt River Engineering was contracted by the City of Versailles to develop an impact fee program for the municipal wastewater utility. SRE used American Waterworks



Association (AWWA) Manual M-1, Water Environment Federation (WEF) Manual of Practice #27 and Nelson’s “System Development Charges for Water, Wastewater and Stormwater Facilities” for guidance in developing the program.

While Kentucky municipal utilities are not subject to Public Service Commission regulation, the development and administration of the impact fee program is subject to certain rational nexus tests, best summarized by the *Banberry*¹ factors:

- the cost of existing facilities;
- how existing facilities were financed;
- how much new development has already paid;
- how much new development will pay in the future;
- credit for facilities installed by developer;
- extraordinary costs and time-price differentials;
- new development benefits from fee it pays.

Other key requirements involve the capital improvements plan (CIP) upon which the fee is based and the revenues collected. The CIP must be a dynamic file of planned infrastructure projects and the impact fee program revenues must be “fenced” for eligible infrastructure projects.

The “Total Cost Attribution Method” is described in the Nelson book. It is well suited for Versailles’ wastewater utility because it addresses the equity the existing customers have in the system as well as the costs associated with new demands and growth. It combines the elements of the rational nexus criteria, including such *Banberry* factors as how existing facilities were financed, the costs of accommodating new development, and the time-value of money.² The total cost attribution method considers the existing system, realizing existing customers financed the capital through rates, and attempts to provide a way for new customers to “buy-in” to the equity. The rate base, as reported by the city auditor, is reviewed and each piece of capital assessed for its intended benefit—the existing system (systemwide improvements) and/or new demands (growth-related expansion). Additionally, the CIP adopted by the city provides the estimated cost from future projects, whether they are designed to replace and upgrade the existing system (systemwide improvements) or provide new capacity for new or increased demands (growth-related expansion). The rate base (inventory) includes the

¹ *Banberry Development Company v. South Jordan City* (631 P.2d 899, Utah 1981).

² Nelson A., “System Development Charges for Water, Wastewater, and Stormwater

² Nelson A., “System Development Charges for Water, Wastewater, and Stormwater Facilities,” 1995 CRC Press, Inc., page 81.



existing principal (capital). The CIP includes future principal (capital) and future interest estimates. Additionally, the CIP identifies and includes the remaining interest to be paid on existing principal (capital).

To identify the value of the existing capital, the depreciation schedule was amended to bring the value of existing capital to the base year 2016. The existing capital is annotated in the amended depreciation schedule, now referred to as the inventory. The inventory includes capital projects built for the existing customers and replacements and upgrades to that systemwide capital. Additionally, some capital facilities are included in the inventory that were constructed, in part, for growth.

The capital improvements plan is a critical component of the impact fee program. The CIP lists the capital projects that Versailles plans to construct within the planning period, usually 20 years. The CIP was amended to identify those projects, or the percentage of projects, to be constructed to repair or replace existing systemwide facilities and those projects to be constructed in whole or in part for growth. The Capital Improvements Element (CIE) of the CIP lists the proposed capital projects and the estimated future interest cost associated with those projects. Additionally, the CIE includes the remaining interest cost from existing capital debt. Adherence to the CIP, or at least an honest effort to construct the projects on the CIP in accordance with the time schedule, is crucial to the legal defense of the impact fee program.

The capacity of the wastewater utility plays a significant role in the calculation of the impact fee. Both the available capacity in the base year and the planned capacity are used in the calculation. SRE worked closely with Versailles' consultant, GRW Engineers, in identifying the growth-related percentage of the CIP and the wastewater system's limiting capacity, in this case the WWTP capacity.

The inventory, the CIE, and the limiting capacity were used to arrive at the systemwide improvements cost and the growth-related improvements cost. The sum of the two is the gross impact fee. In keeping with the rational nexus principals, new customers subject to the impact fee charge should not pay twice for the capital (principal) and interest associated with the wastewater utility. To prevent double-charging for the principal and interest, the net present value (NPV) of the remaining existing principal and interest and the estimated future debt service is calculated. Then, the NPV for each outstanding bond issue and the estimated future bond issue is subtracted from the gross impact fee. The NPV of the administrative cost is added to arrive at the final impact fee on a cost (\$) per gallon basis.



Once the impact fee is known, the charge is calculated by estimating the wastewater flow introduced by the new customer and multiplying the fee (\$/gallon) by the volume (gallons). The wastewater flow of the average single-family residence is estimated by dividing the average daily residential flow through the WWTP by the number of residential customers. The result, called the equivalent residential unit (ERU), is the basis for the impact fee charge schedule. The impact fee charge for a new single-family residential customer is simply the impact fee multiplied by the ERU.

Rather than estimating the wastewater flow for every new multi-family residential, commercial and industrial customer, the ERU is multiplied by a factor that represents typical flows from customers other than single-family residences. There are several methods to arrive at the factors; Versailles opted to use the “meter equivalency” method. The meter equivalencies used in the impact fee calculation are taken directly from Table VI.2-5 in American Water Works Association's Manual M-1, "Principals of Water Rates, Fees and Charges," 6th Edition, 2012.

The “Impact Fee Charge Schedule” included at the end of this section lists the ERU factor (meter equivalencies) associated with various meter types and sizes. For example, if a customer subject to the impact fee installs a 3-inch compound meter to supply water to their business, the impact fee charge would be the impact fee multiplied by the ERU, then multiplied by 16.

The spreadsheets that follow show the calculations involved in developing the initial impact fee. The same spreadsheets appear in Appendix A, but with alphanumeric references to illustrate the source of the factors that make up the fee calculations. The city should endeavor to recalculate the impact fees every five years including, but not limited to, reassessing the ERU and updating the CIP. It is imperative that the city adheres, as closely as possible, to the approved CIP.

Appendix B includes the handouts provided to the work committee and the council throughout the course of the program development. Appendix C contains the draft ordinance developed as the authorization for the impact fee program.



City of Versailles
Impact Fee Charge Schedule
2017 - 2022

calculated ERU	185 gallons per day
calculated impact fee	\$7.41 per gallon

Meter equivalencies, which are based on meter capacity, are taken directly from Table VI.2-5 in American Water Works Association's Manual M-1, "Principals of Water Rates, Fees and Charges," 6th Edition, 2012.

If, in the opinion of the impact fee administrator, the determination of the sewer impact fee on the basis of meter size is not representative of the nature of the installation's flow volume, the installation's equivalent residential unit (ERU) factor may be custom-calculated by using a ratio of the installation's gpd usage and the average single-family residence gpd usage (the ERU) for the utility.

$$\text{sewer impact fee charge} = (\text{ERU}) \times (\text{ERU factor}) \times (\text{impact fee})$$

water meter size	ERU factor	sewer impact fee
5/8 inch displacement	1.0	\$1,370.85
3/4 inch displacement	1.5	\$2,056.28
1 inch displacement	2.5	\$3,427.13
1 1/2 inch displacement	5.0	\$6,854.25
2 inch displacement	8.0	\$10,966.80
3 inch singlejet	16.0	\$21,933.60
3 inch compound	16.0	\$21,933.60
3 inch turbine	17.5	\$23,989.88
4 inch singlejet	25.0	\$34,271.25
4 inch compound	25.0	\$34,271.25
4 inch turbine	31.5	\$43,181.78
6 inch singlejet	50.0	\$68,542.50
6 inch compound	50.0	\$68,542.50
6 inch turbine	65.0	\$89,105.25
8 inch compound	80.0	\$109,668.00
8 inch turbine	140.0	\$191,919.00
10 inch turbine	210.0	\$287,878.50
12 inch turbine	265.0	\$363,275.25

A "Buy-In" credit may be granted by the program manager in accordance with the Impact Fee ordinance. The Buy-In credit associated with the average single-family residence has been calculated to be \$97.85. Buy-In credits for facilities other than single-family residences shall be calculated, on a case-by-case basis, by the program manager.

City of Versailles
Impact Fee Calculation
for years 2018 through 2022

Gross Wastewater Impact Fee	
system capacity, 2016 gallons	3,000,000
planned system capacity, gallons	4,500,000
current local asset value, systemwide improvements	\$21,046,519
local CIP systemwide improvements	\$24,733,053
existing & planned systemwide improvements	\$45,779,572
existing & planned systemwide improvements per gallon (planned capacity)	\$10.17
planned growth-related expansion (gallons)	1,500,000
excess capacity, 2016 gallons	232,000
total excess and planned growth-related capacity, 2016 gallons	1,732,000
current asset value, local growth-related improvements	\$6,171,459
CIP growth-related costs	\$12,510,600
total growth-related costs	\$18,682,059
balance in impact fee account	\$0
growth-related expansion cost/gallon (excess & planned capacity)	\$10.79
gross wastewater impact fee charge per gallon	\$20.96

Adjustments	
less credit for outstanding debt service, 2011 Bond Issue	\$0.08
less credit for outstanding debt service, 2012 Bond Issue	\$1.11
less credit for outstanding debt service, 2013 Bond Issue	\$1.24
less credit for outstanding debt service, 2014 Bond Issue	\$1.52
less credit for outstanding debt service, 2016 Bond Issue	\$2.31
less credit for future debt service	\$7.32
plus administrative costs ¹	\$0.03

¹NPV of \$6,000 initial set up; \$4,000 every 5 years thereafter plus \$6,000 admin per year for 20 year planning period

Net Wastewater Impact Fee Charge Per Gallon	\$7.41
Net Wastewater Impact Fee Charge Per ERU	\$1,370.85

City of Versailles
Inventory and Current Value of Sewer Facilities

item #	description	year in service	useful life (yrs)	original cost (\$)	amount locally paid (\$)	ENR factor	local replacement value (\$)	deprec %	current local asset value (\$)	% system imprv	% growth related	current value local systemwide imprv (\$)	current value local growth related imprv (\$)
1	original treatment 334-336 Kentucky Ave	1937	50	83,000	83,000	44.8085	3,719,106	100%	-	100%	0%	-	-
6	sewer extensions	1963	50	179,400	179,400	11.6870	2,096,650	100%	-	100%	0%	-	-
7	sewer main extension	1964	50	24,055	24,055	11.2500	270,619	100%	-	100%	0%	-	-
9	truck sanitary sewer	1968	50	248,565	248,565	8.76769	2,179,342	96%	87,174	100%	0%	87,174	-
16	extension to Kuhlman	1969	50	24,805	24,805	8.0690	200,151	94%	12,009	100%	0%	12,009	-
17	construction project	1972	50	274,892	274,892	5.7985	1,593,950	88%	191,274	100%	0%	191,274	-
18	contract XVIII	1974	25	6,536	6,536	5.0119	32,758	100%	-	100%	0%	-	-
19	project XX	1977	50	622,731	622,731	3.9586	2,465,172	78%	542,338	100%	0%	542,338	-
20	project XX	1977	50	600,000	600,000	3.9586	2,375,188	78%	522,541	100%	0%	522,541	-
21	contract 20 interest	1979	40	2,053	2,053	3.3535	6,885	93%	516	100%	0%	516	-
22	contract 26	1980	25	146,182	146,182	3.1191	455,953	100%	-	100%	0%	-	-
23	sewer line at Kain	1983	15	8,700	8,700	2.5620	22,290	100%	-	100%	0%	-	-
26	wastewater treatment	1986	50	51,731	51,731	2.4201	125,196	60%	50,078	100%	0%	50,078	-
28	construction waste	1986	50	782,014	782,014	2.4201	1,892,578	60%	757,031	100%	0%	757,031	-
29	construction Big Sin	1986	50	100,491	100,491	2.4201	243,202	60%	97,281	100%	0%	97,281	-
27	Burckly property (land)	1986	-	13,128	13,128	2.4201	31,772	0%	14,000	100%	0%	14,000	-
30	land on Beech Street (land)	1986	-	25,000	25,000	2.4201	60,503	0%	25,000	100%	0%	25,000	-
33	wastewater treatment	1988	50	135,807	135,807	2.3052	313,058	56%	137,745	100%	0%	137,745	-
34	construction Big Sin	1988	50	42,377	42,377	2.3052	97,686	56%	42,982	100%	0%	42,982	-
35	wastewater plant co	1988	50	3,107	3,107	2.3052	7,162	56%	3,151	100%	0%	3,151	-
50	sewer LJE-Merewo	1989	50	2,250	2,250	2.2476	5,057	54%	2,326	100%	0%	2,326	-
53	Golimley Drive sewer	1989	50	9,998	9,998	2.2476	22,471	54%	10,337	100%	0%	10,337	-
55	South Main Street	1989	50	8,550	8,550	2.2476	19,217	54%	8,840	100%	0%	8,840	-
60	sewer line Mere	1989	10	6,240	6,240	2.2476	14,025	100%	-	100%	0%	-	-
61	line South Main	1989	10	9,360	9,360	2.2476	21,038	100%	-	100%	0%	-	-
62	sewer line Gormley	1990	50	6,745	6,745	2.2043	14,868	52%	7,137	100%	0%	7,137	-

City of Versailles
Inventory and Current Value of Sewer Facilities

item #	description	year in service	useful life (yrs)	original cost (\$)	amount locally paid (\$)	ENR factor	local replacement value (\$)	deprec %	current local asset value (\$)	% system imprv	% growth related	current value local systemwide imprv (\$)	current value local growth related imprv (\$)
68	contract 39 Paddock	1991	50	54,492	54,492	2.1538	117,366	50%	58,683	100%	0%	58,683	-
69	sanitary sewer improvements	1991	50	116,088	116,088	2.1538	250,032	50%	125,016	100%	0%	125,016	-
70	sewer trunk line	1991	50	108,015	108,015	2.1538	232,644	50%	116,322	100%	0%	116,322	-
71	WWTP 1990 PDR contract	1991	50	644,086	644,086	2.1538	1,387,242	50%	693,621	100%	0%	693,621	-
73	sewer line South Main	1991	50	160,704	160,704	2.1538	346,127	50%	173,063	100%	0%	173,063	-
75	sewer line improvements	1991	50	13,110	13,110	2.1538	28,237	50%	14,118	100%	0%	14,118	-
77	contract 92-1	1991	50	23,238	23,238	2.1538	50,050	50%	25,025	100%	0%	25,025	-
74	WWTP - PDR contract	1992	50	3,085,781	3,085,781	2.0814	6,422,865	48%	3,339,890	100%	0%	3,339,890	-
78	wastewater treatment plant	1993	50	10,987	10,987	1.9831	21,788	46%	11,765	100%	0%	11,765	-
79	sewer line Frankfort Street	1993	50	134,210	134,210	1.9831	266,145	46%	143,718	100%	0%	143,718	-
85	concrete slab - dumpster 336 Kentucky Av	1994	40	1,800	1,800	1.9360	3,485	55%	1,568	100%	0%	1,568	-
81	sewer rodder	1994	10	16,500	16,500	1.9360	31,944	100%	-	100%	0%	-	-
83	1994 Ford F-800 tank truck	1994	10	31,490	31,490	1.9360	60,965	100%	-	100%	0%	-	-
231	94 Ford F-800 VIN#5269	1994	5	-	-	1.9360	-	100%	-	100%	0%	-	-
87	Baker property - 20 acres (land)	1995	-	100,014	100,014	1.9062	190,649	0%	190,649	100%	0%	190,649	-
94	sewer line repairs	1996	50	244,570	244,570	1.8332	448,350	40%	269,010	100%	0%	269,010	-
91	1/4 1995 Chevrolet 4X4 blue	1996	5	4,428	4,428	1.8332	8,117	100%	-	100%	0%	-	-
96	sewer line repair - Charmill area	1997	40	54,230	54,230	1.7975	97,481	48%	51,177	100%	0%	51,177	-
97	lift station improvements	1997	40	18,716	18,716	1.7975	33,643	48%	17,662	100%	0%	17,662	-
103	lift station improvements	1998	40	31,265	31,265	1.7576	54,953	45%	30,224	100%	0%	30,224	-
108	1/2 New Holland 3415 tractor VIN#	1998	10	6,455	6,455	1.7576	11,346	100%	-	100%	0%	-	-
102	lift station improvements	1999	40	127,495	127,495	1.7186	219,116	43%	125,992	100%	0%	125,992	-
101	1999 Ford F-800 truck	1999	5	34,950	34,950	1.7186	60,066	100%	-	100%	0%	-	-
232	1999 Ford F-800 VIN#9386	1999	5	-	-	1.7186	-	100%	-	100%	0%	-	-
98	lift station - repairs	2000	50	13,155	13,155	1.6760	22,047	32%	14,992	100%	0%	14,992	-
99	sewer line repairs	2000	40	58,934	58,934	1.6760	98,770	40%	59,262	100%	0%	59,262	-

City of Versailles
Inventory and Current Value of Sewer Facilities

item #	description	year in service	useful life (yrs)	original cost (\$)	amount locally paid (\$)	ENR factor	local replacement value (\$)	deprec %	current local asset value (\$)	% system imprv	% growth related	current value local systemwide imprv (\$)	current value local growth related imprv (\$)
100	road repair at plant	2000	15	13,371	13,371	1.6760	22,409	100%	-	100%	0%	-	-
109	lift station improvements	2001	40	98,691	98,691	1.6479	162,632	38%	101,645	100%	0%	101,645	-
110	sludge holding tank	2001	40	11,416	11,416	1.6479	18,812	38%	11,758	100%	0%	11,758	-
111	sewer line rehab	2001	40	347,535	347,535	1.6479	572,699	38%	357,937	100%	0%	357,937	-
112	Osram expansion project	2001	40	165,000	165,000	1.6479	271,901	38%	169,938	100%	0%	169,938	-
234	2001 Dodge truck VIN#1389	2001	5	-	-	1.6479	-	100%	-	100%	0%	-	-
113	wastewater facility project	2002	40	18,000	18,000	1.6044	28,880	35%	18,772	100%	0%	18,772	-
123	High Street pipe line	2002	40	36,530	36,530	1.6044	58,611	35%	38,097	100%	0%	38,097	-
124	Bell Avenue pipe line	2002	40	6,039	6,039	1.6044	9,689	35%	6,298	100%	0%	6,298	-
130	Osram-Sylvania sewer project	2003	50	85,435	85,435	1.5526	132,650	26%	98,161	100%	0%	98,161	-
127	concrete steps - 336 Kentucky Ave	2003	40	2,675	2,675	1.5526	4,153	33%	2,803	100%	0%	2,803	-
125	manhole risers/lids	2003	10	8,890	8,890	1.5526	13,803	100%	-	100%	0%	-	-
129	backhoe	2003	10	29,900	29,900	1.5526	46,424	100%	-	100%	0%	-	-
233	2003 Chevy truck VIN#0804	2004	5	-	-	1.4409	-	100%	-	100%	0%	-	-
133	sewer line project	2005	30	7,141	7,141	1.3770	9,833	37%	6,228	100%	0%	6,228	-
134	sewer line replacement - Bryanwood	2005	30	18,244	18,244	1.3770	25,122	37%	15,911	100%	0%	15,911	-
135	sewer line - Cedar Ridge	2006	30	100,800	-	1.3349	-	33%	-	0%	0%	-	-
136	manholes - Cedar Ridge	2006	30	77,400	-	1.3349	-	33%	-	0%	0%	-	-
137	sewer line - Rose Ridge	2006	30	48,600	-	1.3349	-	33%	-	0%	0%	-	-
138	manholes - Rose Ridge	2006	30	39,600	-	1.3349	-	33%	-	0%	0%	-	-
139	sewer line - Adena Trace	2006	30	95,940	-	1.3349	-	33%	-	0%	0%	-	-
140	manholes - Adena Trace	2006	30	45,000	-	1.3349	-	33%	-	0%	0%	-	-
145	sewer lines - Huntertown Glenn	2006	30	45,000	-	1.3349	-	33%	-	0%	0%	-	-
146	manholes - Huntertown Glenn	2006	30	28,500	-	1.3349	-	33%	-	0%	0%	-	-
132	pumps	2006	10	12,850	12,850	1.3349	17,154	100%	-	100%	0%	-	-
143	Chevy Silverado VIN#9675	2006	5	12,000	12,000	1.3349	16,019	100%	-	100%	0%	-	-

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Inventory and Current Value of Sewer Facilities

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144	2006 dump truck	2006	5	12,746	12,746	1.3349	17,015	100%	-	100%	0%	-	-
148	sewer line - Glenn Eagles	2007	30	39,600	-	1.3018	-	30%	-	0%	0%	-	-
147	manholes - Glenn Eagles	2007	30	28,600	-	1.3018	-	30%	-	0%	0%	-	-
149	sewer lines - Adena Woods	2007	30	55,000	-	1.3018	-	30%	-	0%	0%	-	-
150	manholes - Adena Woods	2007	30	31,500	-	1.3018	-	30%	-	0%	0%	-	-
142	sewer line replacement	2007	30	53,592	53,592	1.3018	69,764	30%	48,835	100%	0%	48,835	-
153	2 pumps w/concrete pad and installation	2007	10	60,622	60,622	1.3018	78,916	90%	7,892	100%	0%	7,892	-
151	1/2 dump truck (split w/water)	2007	10	22,384	22,384	1.3018	29,139	90%	2,914	100%	0%	2,914	-
152	1/2 utility truck (split w/water)	2007	10	9,230	9,230	1.3018	12,015	90%	1,202	100%	0%	1,202	-
158	1992 F-450 bucket truck VIN#4064	2007	5	6,500	6,500	1.3018	8,461	100%	-	100%	0%	-	-
191	pump station	2008	50	60,000	60,000	1.2314	73,886	16%	62,064	100%	0%	62,064	-
154	storage building 336 Kentucky Ave	2008	20	39,491	39,491	1.2314	48,631	40%	29,178	100%	0%	29,178	-
155	Case backhoe (1/4) VIN#7540	2008	10	14,129	14,129	1.2314	17,399	80%	3,480	100%	0%	3,480	-
156	flush truck	2008	10	225,000	225,000	1.2314	277,073	80%	55,415	100%	0%	55,415	-
159	portable respirator	2008	7	9,034	9,034	1.2314	11,125	100%	-	100%	0%	-	-
163	HVAC unit	2008	7	6,870	6,870	1.2314	8,460	100%	-	100%	0%	-	-
193	Ford F-150 truck (1/2) VIN#5559	2008	5	8,842	8,842	1.2314	10,888	100%	-	100%	0%	-	-
157	sewer line replacement	2009	30	12,800	12,800	1.2186	15,598	23%	11,959	100%	0%	11,959	-
160	handrail around tanks	2009	20	6,939	6,939	1.2186	8,456	35%	5,496	100%	0%	5,496	-
161	elliptical receptacle boxes	2009	10	6,500	6,500	1.2186	7,921	70%	2,376	100%	0%	2,376	-
162	pumps	2009	10	15,954	15,954	1.2186	19,442	70%	5,833	100%	0%	5,833	-
165	pumps	2009	10	5,211	5,211	1.2186	6,350	70%	1,905	100%	0%	1,905	-
192	basis adj - 2008 flush truck trade	2009	10	33,592	33,592	1.2186	40,936	70%	12,281	100%	0%	12,281	-
164	clarifier repairs	2009	5	24,142	24,142	1.2186	29,420	100%	-	100%	0%	-	-
199	2012 Ford E350 van - camera truck	2009	5	12,301	12,301	1.2186	14,990	100%	-	100%	0%	-	-
197	sewer line replacement - Cleveland	2010	30	65,916	65,916	1.1763	77,535	20%	62,028	100%	0%	62,028	-

City of Versailles
Inventory and Current Value of Sewer Facilities

item #	description	year in service	useful life (yrs)	original cost (\$)	amount locally paid (\$)	ENR factor	local replacement value (\$)	deprec %	current local asset value (\$)	% system imprv	% growth related	current value local systemwide imprv (\$)	current value local growth related imprv (\$)
194	Ball Park pump station	2010	5	75,745	75,745	1.1763	89,097	100%	-	100%	0%	-	-
195	pump blower repair	2010	5	9,802	9,802	1.1763	11,530	100%	-	100%	0%	-	-
213	wastewater treatment plant	2012	40	4,960,373	4,660,793	1.1188	5,214,423	10%	4,692,981	100%	0%	4,692,981	-
200	KIA interceptor	2012	30	286,855	286,855	1.1188	320,929	13%	278,138	100%	0%	278,138	-
212	wastewater collection plant update	2012	30	10,250,176	9,651,048	1.1188	10,797,443	13%	9,357,784	100%	66%	3,186,325	6,171,459
204	pump control panel	2012	10	5,760	5,760	1.1188	6,444	40%	3,867	100%	0%	3,867	-
205	waste water pump	2012	10	11,236	11,236	1.1188	12,571	40%	7,542	100%	0%	7,542	-
209	Aries camera equipment for truck	2012	10	110,076	110,076	1.1188	123,151	40%	73,891	100%	0%	73,891	-
214	7 radios	2012	5	7,620	7,620	1.1188	8,525	80%	1,705	100%	0%	1,705	-
201	1/2 of 2012 Escape VIN#5549	2012	5	11,700	11,700	1.1188	13,090	80%	2,618	100%	0%	2,618	-
202	1/2 of Ford truck VIN#3398	2012	5	18,947	18,947	1.1188	21,198	80%	4,240	100%	0%	4,240	-
203	1/3 of Chevy truck VIN#0729	2012	5	10,797	10,797	1.1188	12,080	80%	2,416	100%	0%	2,416	-
206	Gooch Const Crossfield pump station	2013	15	25,377	25,377	1.0892	27,640	20%	22,112	100%	0%	22,112	-
208	Woodlands pump station upgrade	2013	15	8,156	8,156	1.0892	8,883	20%	7,107	100%	0%	7,107	-
215	dump truck	2013	10	23,767	23,767	1.0892	25,886	30%	18,120	100%	0%	18,120	-
216	2013 Ford F-150 VIN#4436	2013	5	22,803	22,803	1.0892	24,836	60%	9,934	100%	0%	9,934	-
217	sewer line replacement	2014	30	127,229	127,229	1.0598	134,835	7%	125,846	100%	0%	125,846	-
220	hydraulic hammer for backhoe	2014	10	9,125	9,125	1.0598	9,671	20%	7,736	100%	0%	7,736	-
221	diffuser for digester at WWTP	2014	10	5,336	5,336	1.0598	5,655	20%	4,524	100%	0%	4,524	-
222	2014 Ford F-150 (1/2) VIN#8515	2014	5	11,862	11,862	1.0598	12,571	40%	7,543	100%	0%	7,543	-
224	SSES Phase I rehab	2015	30	1,613,020	1,613,020	1.0372	1,673,079	3%	1,617,310	100%	0%	1,617,310	-
226	City Hall repairs	2015	15	8,000	8,000	1.0372	8,298	7%	7,745	100%	0%	7,745	-
230	Case backhoe	2015	10	26,450	26,450	1.0372	27,435	10%	24,691	100%	0%	24,691	-
223	software upgrade/printers	2015	5	11,831	11,831	1.0372	12,272	20%	9,817	100%	0%	9,817	-
225	land Rose Hill Ave (land)	2015	-	94,372	94,372	1.0372	97,886	0%	95,000	100%	0%	95,000	-
229	software upgrade (Springbrook)	2016	5	8,473	8,473	1.0000	8,473	0%	8,473	100%	0%	8,473	-

City of Versailles
Inventory and Current Value of Sewer Facilities

item #	description	year in service	useful life (yrs)	original cost (\$)	amount locally paid (\$)	ENR factor	local replacement value (\$)	deprec %	current local asset value (\$)	% system imprv	% growth related	current value local systemwide imprv (\$)	current value local growth related imprv (\$)
227	SSES Phase I and II	2016	30	1,275,843	1,275,843	1.0000	1,275,843	0%	1,275,843	100%	0%	1,275,843	-
228	lift stations - Stonegate, Charmil &	2016	40	437,071	437,071	1.0000	437,071	0%	437,071	100%	0%	437,071	-
	totals						\$51,464,347		\$27,217,978			\$21,046,519	\$6,171,459

City of Versailles
ENR Factor Calculation 2016

year	4th Q ENR index	annual avg ENR index	ENR factor 2016
1969	1305		8.0690
1970	1445		7.2872
1971	1672		6.2978
1972	1816		5.7985
1973	1939		5.4306
1974	2101		5.0119
1975	2297		4.5842
1976	2490		4.2289
1977	2660		3.9586
1978	2869		3.6703
1979	3140		3.3535
1980	3376		3.1191
1981	3695		2.8498
1982	3950		2.6658
1983	4110		2.5620
1984	4144		2.5410
1985	4228		2.4905
1986	4351		2.4201
1987	4478		2.3515
1988	4568		2.3052
1989	4685		2.2476
1990	4777		2.2043
1991	4889		2.1538
1992	5059		2.0814
1993		5310	1.9831
1994		5439	1.9360
1995		5524	1.9062
1996		5744	1.8332
1997		5858	1.7975
1998		5991	1.7576
1999		6127	1.7186
2000		6283	1.6760
2001		6390	1.6479
2002		6563	1.6044
2003		6782	1.5526
2004		7308	1.4409
2005		7647	1.3770
2006		7888	1.3349
2007		8089	1.3018
2008		8551	1.2314
2009		8641	1.2186
2010		8952	1.1763
2011		9172	1.1481
2012		9412	1.1188
2013		9668	1.0892
2014		9936	1.0598
2015		10152	1.0372
2016		10530	1.0000

City of Versailles
Sewer System Demand and Treatment Capacity

year	avg demand (MGD)	peak demand (MGD)	avg capacity (MGD)	peak capacity (MGD)	notes
1990			3.000	9.000	original (of current) WWTP
1995			3.000	9.000	
2000			3.000	9.000	
2001			3.000	9.000	
2002			3.000	9.000	
2003			3.000	9.000	
2004			3.000	9.000	
2005			3.000	9.000	sludge mgmt, clarifier upgrd only
2006			3.000	9.000	
2007			3.000	9.000	
2008			3.000	9.000	
2009			3.000	9.000	
2010	1.950	3.500	3.000	9.000	RFP by GRW approved 2015 pg 71
2011	2.810	11.000	3.000	9.000	RFP by GRW approved 2015 pg 71
2012	2.280	9.000	3.000	9.000	RFP by GRW approved 2015 pg 71
2013	2.440	7.248	3.000	9.000	RFP by GRW Exhibit 7-1
2014	2.564	7.616	3.000	9.000	RFP by GRW Exhibit 7-1
2015	2.688	7.983	3.000	9.000	RFP by GRW Exhibit 7-1
2016	2.768	8.223	3.000	9.000	RFP by GRW Exhibit 7-1
2017	2.849	8.462	3.000	9.000	RFP by GRW Exhibit 7-1
2018	2.930	8.702	3.000	9.000	SIS CE report (GRW) pg 11
2019	3.010	8.942	4.500	12.500	RFP by GRW Exhibit 7-1
2020	3.091	9.181	4.500	12.500	RFP by GRW Exhibit 7-1
2021	3.169	9.413	4.500	12.500	RFP by GRW Exhibit 7-1
2022	3.247	9.646	4.500	12.500	RFP by GRW Exhibit 7-1
2023	3.326	9.878	4.500	12.500	RFP by GRW Exhibit 7-1
2024	3.402	10.104	4.500	12.500	RFP by GRW Exhibit 7-1
2025	3.478	10.329	4.500	12.500	RFP by GRW Exhibit 7-1
2026	3.554	10.555	4.500	12.500	RFP by GRW Exhibit 7-1
2027	3.630	10.781	4.500	12.500	RFP by GRW Exhibit 7-1
2028	3.706	11.007	4.500	12.500	RFP by GRW Exhibit 7-1
2029	3.782	11.232	4.500	12.500	RFP by GRW Exhibit 7-1
2030	3.858	11.458	4.500	12.500	RFP by GRW Exhibit 7-1
2031	3.925	11.658	4.500	12.500	RFP by GRW Exhibit 7-1
2032	3.992	11.858	4.500	12.500	RFP by GRW Exhibit 7-1
2033	4.060	12.058	4.500	12.500	RFP by GRW approved 2015 pg 74

City of Versailles
Capital Improvements Plan (2017 - 2037)

GRW SIS CE Section #	Project Title	Requirement	Cost Estimate	GRW CCE	Notes
7.2.1	Gravity Sewer Upgrades d/s Methodist Home PS	regulatory	incl below	Exhibit 7-2	construction of a parallel gravity line to accommodate wet weather flows from Charmil, Bryanwood and Methodist Home when PSs are operating simultaneously;
7.2.2	Methodist Home PS Upgrade to 500 GPM	upgrade	incl below	Exhibit 7-4	after the downstream parallel gravity sewer is constructed
7.2.3	Methodist Home Equalization/Storage	upgrade	incl below	Exhibit 7-5	to handle additional volume during wet weather peak flows
7.3.1.2.A	Methodist Home Future Capacity Improvements	growth	incl below	Exhibit 7-9	as properties develop in the Methodist Home PS service area
7.3.2.1	Gravity Sewer b/t Preston Ct & Douglas Ave	growth	\$ 481,000	Exhibit 7-15	future development will lead to high water levels in MH 2-01-536; need 1 of 3 alternatives
7.3.3	Kentucky Avenue Collection Area Sewer Rpl	replace	\$ 170,000	Exhibit 7-27	eliminate existing MH surcharge
7.3.4.1	New Parallel Interceptor in Big Springs Park	regulatory	\$ 503,000	Exhibit 7-31	cannot currently handle wet weather flows
WIP	Phase III (shown here b/c not in inventory)	regulatory	\$ 1,818,000	Table 8.6	0% growth; not included in future debt
GRW RFP Section #	Project Title	Requirement	Cost Estimate	GRW CCE	Notes
8.8	Treatment Process (Sequencing Batch)	growth;	\$ 20,442,000	Table 8.4	didn't ask GRW but assume 33% (1.5/4.5) is growth; includes disinfection and sludge upgrades
8.21	Collection System Upgrades	regulatory;	\$ 2,864,000	Table 8.6	this is Phases IV and V and they are combined at 48% growth; a piece (approx half of 7.3.1.2.A is 100% growth); shows as WIP
8.25	Sycamore Estates Subdivision Expansion	growth	\$ 6,440,000	Table 8.7	90% would have to be county contribution

High School is replacing old building no additional demand

Elm Street will be 40 or 50 houses, but developer will build infrastructure and donate; no upgrade to existing needed

City of Versailles
Capital Improvements Element (2017 - 2037)

item #	description	est year in service	useful life (yrs)	total cost (\$)	local cost (\$)	% system imprv	% growth related	local costs systemwide imprv (\$)	local costs growth related imprv (\$)
WIP	Phase III SSES (done; not refl in inventory)	2016		1,818,000	1,818,000	100%	0%	1,818,000	-
WIP	Phase IV&V Sanitary Sewer Improvements	2018		2,864,000	2,864,000	100%	48%	1,489,280	1,374,720
	1. Methodist Home Future Capacity			-	-	100%	100%	-	-
	2. Gravity Sewer b/t Preston Ct & Douglas Av			481,000	481,000	100%	100%	-	481,000
	3. Kentucky Av Collection Area Replacement			170,000	170,000	100%	0%	170,000	-
	4. Big Springs Park Parallel Interceptor			503,000	503,000	100%	0%	503,000	-
	5. WWTP Process Upgrade/Replacement			20,442,000	20,442,000	100%	33%	13,696,140	6,745,860
	6. Sycamore Estates Subdivision Expansion			6,440,000	644,000	100%	100%	-	644,000
	7. 2011 Bond Remaining Interest, PV 2016				9,365	100%	0%	9,365	-
	8. 2012 Bond Remaining Interest, PV 2016				175,381	100%	60%	70,152	105,229
	9. 2013 Bond Remaining Interest, PV 2016				234,786	100%	0%	234,786	-
	10. 2014 Bond Remaining Interest, PV 2016				995,573	100%	0%	995,573	-
	11. 2016 Bond Remaining Interest, PV 2016				1,552,183	100%	33%	1,039,963	512,220
	12. Future Bond Issue Interest, PV 2016				7,354,365	100%	36%	4,706,794	2,647,571
	Total Wastewater Facilities				37,243,653			24,733,053	12,510,600

APPENDIX A

Guides to Calculations



The following pages depict spreadsheets used in the calculation of Versailles' wastewater Impact fee. The versions of the pages included in this addendum include numbers to illustrate the origin of the factors used in the calculations. Key factors are shown as letters "A" through "E" and are used in the equation at the bottom of the "Impact Fee Calculation" page.

A description of each number/step in the calculation shown on the "Impact Fee Calculation" and the name of the source spreadsheet are provided below:

1	the system capacity is simply the design capacity of the WWTP as it existed in the base year (2016, in this case)—from engineering design	"Sewer System Demand and Treatment Capacity" spreadsheet
2	the planned system capacity is the capacity that results from the existing WWTP upgrade project—from engineering design	"Sewer System Demand and Treatment Capacity" spreadsheet
3	the current local asset value, systemwide improvements is the value of the rate base, in 2016 dollars, for capital in use by all customers—from auditor's depreciation schedule	"Inventory and Current Value of Sewer Facilities"
4	the local CIP systemwide improvements is the value of the planned capital projects to upgrade and replace existing facilities or capacity—from Versailles' capital improvements plan	"Capital Improvements Element (2017-2037)"
5	the existing and planned systemwide improvements is simply the sum #3 and #4	operation within table
A	1 of 2 components of the gross wastewater impact fee, the existing & planned systemwide improvements per gallon is #5 divided by #2	operation within table
6	the planned growth-related expansion is simply #2 minus #1	operation within table
7	the excess capacity, 2016 gallons is the unused capacity in the existing WWTP in the base year—from Regional Facilities Plan by GRW	"Sewer System Demand and Treatment Capacity" spreadsheet
8	the total excess and planned growth-related capacity is the sum of #6 and #7	operation within table
9	the current asset value, local growth-related improvements is the value of the rate base, in 2016 dollars, of the portion of capital that has been provided	"Inventory and Current Value of Sewer Facilities"



	for growth—from auditor’s depreciation schedule	
10	the CIP growth-related costs is the value of the planned capital projects to increase capacity to accommodate growth—from Versailles’ capital improvements plan	“Capital Improvements Element (2017-2037)”
11	the total growth-related costs is simply the sum of #9 and #10	operation within table
12	the balance in impact fee account is the total funds in the fenced impact fee account at the beginning of the base year, since this was the initial calculation, the balance was \$0	in the future, this number will come from the base year audit
B	the growth-related expansion cost per gallon is the second of 2 components in the gross wastewater impact fee and is #11 minus #12, then divided by #8	operation within table
13	the gross wastewater impact fee charge per gallon is the sum of A and B	operation within table
14	shown as a negative number, the credit for outstanding debt service, 2011 Bond Issue is the credit given to new customers for the NPV of the debt service included in their monthly wastewater service rates/fees	“2011 Issue Wastewater Revenue Bonds”
15	shown as a negative number, the credit for outstanding debt service, 2012 Bond Issue is the credit given to new customers for the NPV of the debt service included in their monthly wastewater service rates/fees (NPV = net present value)	“2012 Issue Wastewater Revenue Bonds”
16	shown as a negative number, the credit for outstanding debt service, 2013 Bond Issue is the credit given to new customers for the NPV of the debt service included in their monthly wastewater service rates/fees	“2013 Issue Wastewater Revenue Bonds”
17	shown as a negative number, the credit for outstanding debt service, 2014 Bond Issue is the credit given to new customers for the NPV of the debt service included in their monthly wastewater service rates/fees	“2014 Issue Wastewater Revenue Bonds”
18	shown as a negative number, the credit for outstanding debt service, 2016 Bond Issue is the credit given to new customers for the NPV of the debt service included in their monthly wastewater service rates/fees	“2016 Issue Wastewater Revenue Bonds”
19	shown as a negative number, the credit for future debt service is a credit for the NPV of the estimated debt service that will be included in monthly service rates/fees for servicing the debt associated with the CIP projects—from Versailles’ capital improvements plan	“Estimated Future Wastewater Revenue Bonds (20 Year Term)”
20	the administrative costs is an estimate, the NPV stated in \$ per gallon, of the costs associated with administering	“Estimated Administrative Costs



	the impact fee program	for Impact Fee Program”
C	the total adjustments is the sum of all the adjustments to be made to the gross wastewater impact fee charge	operation within table
D	the Net Wastewater Impact Fee Charge Per Gallon is $(A + B) + C$ (in \$/gallon)	operation within table
E	the Net Wastewater Impact Fee Charge Per ERU is $D \times ERU$ (in dollars)	operation within table

City of Versailles
Impact Fee Calculation
for years 2018 through 2022

Gross Wastewater Impact Fee		
1	system capacity, 2016 gallons	3,000,000
2	planned system capacity, gallons	4,500,000
3	current local asset value, systemwide improvements	\$21,046,519
4	local CIP systemwide improvements	\$24,733,053
5	existing & planned systemwide improvements	\$45,779,572
A	existing & planned systemwide improvements per gallon (planned capacity)	\$10.17
6	planned growth-related expansion (gallons)	1,500,000
7	excess capacity, 2016 gallons	232,000
8	total excess and planned growth-related capacity, 2016 gallons	1,732,000
9	current asset value, local growth-related improvements	\$6,171,459
10	CIP growth-related costs	\$12,510,600
11	total growth-related costs	\$18,682,059
12	balance in impact fee account	\$0
B	growth-related expansion cost/gallon (excess & planned capacity)	\$10.79
13	gross wastewater impact fee charge per gallon	\$20.96

Adjustments		
14	less credit for outstanding debt service, 2011 Bond Issue	\$0.08
15	less credit for outstanding debt service, 2012 Bond Issue	\$1.11
16	less credit for outstanding debt service, 2013 Bond Issue	\$1.24
17	less credit for outstanding debt service, 2014 Bond Issue	\$1.52
18	less credit for outstanding debt service, 2016 Bond Issue	\$2.31
19	less credit for future debt service	\$7.32
20	plus administrative costs ¹	\$0.03
C	total adjustments	\$13.55

¹NPV of \$6,000 initial set up; \$4,000 every 5 years thereafter plus \$6,000 admin per year for 20 year planning period

D	Net Wastewater Impact Fee Charge Per Gallon	\$7.41
E	Net Wastewater Impact Fee Charge Per ERU	\$1,370.85

$$(A + B) + C = D$$

$$D (\$/gallon) \times ERU (gallons) = E (\$)$$

where ERU is the Equivalent Residential Unit, or the estimated flow (use) per single-family residence

City of Versailles
Sewer System Demand and Treatment Capacity

year	avg demand (MGD)	peak demand (MGD)	avg capacity (MGD)	peak capacity (MGD)	notes
1990			3.000	9.000	original (of current) WWTP
1995			3.000	9.000	
2000			3.000	9.000	
2001			3.000	9.000	
2002			3.000	9.000	
2003			3.000	9.000	
2004			3.000	9.000	
2005			3.000	9.000	sludge mgmt, clarifier upgrd only
2006			3.000	9.000	
2007			3.000	9.000	
2008			3.000	9.000	
2009			3.000	9.000	
2010	1.950	3.500	3.000	9.000	RFP by GRW approved 2015 pg 71
2011	2.810	11.000	3.000	9.000	RFP by GRW approved 2015 pg 71
2012	2.280	9.000	3.000	9.000	RFP by GRW approved 2015 pg 71
2013	2.440	7.248	3.000	9.000	RFP by GRW Exhibit 7-1
2014	2.564	7.616	3.000	9.000	RFP by GRW Exhibit 7-1
2015	2.688	7.983	3.000	9.000	RFP by GRW Exhibit 7-1
2016	7 2.768	8.223	1 3.000	9.000	RFP by GRW Exhibit 7-1
2017	2.849	8.462	3.000	9.000	RFP by GRW Exhibit 7-1
2018	2.930	8.702	3.000	9.000	SIS CE report (GRW) pg 11
2019	3.010	8.942	2 4.500	12.500	RFP by GRW Exhibit 7-1
2020	3.091	9.181	4.500	12.500	RFP by GRW Exhibit 7-1
2021	3.169	9.413	4.500	12.500	RFP by GRW Exhibit 7-1
2022	3.247	9.646	4.500	12.500	RFP by GRW Exhibit 7-1
2023	3.326	9.878	4.500	12.500	RFP by GRW Exhibit 7-1
2024	3.402	10.104	4.500	12.500	RFP by GRW Exhibit 7-1
2025	3.478	10.329	4.500	12.500	RFP by GRW Exhibit 7-1
2026	3.554	10.555	4.500	12.500	RFP by GRW Exhibit 7-1
2027	3.630	10.781	4.500	12.500	RFP by GRW Exhibit 7-1
2028	3.706	11.007	4.500	12.500	RFP by GRW Exhibit 7-1
2029	3.782	11.232	4.500	12.500	RFP by GRW Exhibit 7-1
2030	3.858	11.458	4.500	12.500	RFP by GRW Exhibit 7-1
2031	3.925	11.658	4.500	12.500	RFP by GRW Exhibit 7-1
2032	3.992	11.858	4.500	12.500	RFP by GRW Exhibit 7-1
2033	4.060	12.058	4.500	12.500	RFP by GRW approved 2015 pg 74

City of Versailles
Inventory and Current Value of Sewer Facilities

item #	description	year in service	useful life (yrs)	original cost (\$)	amount locally paid (\$)	ENR factor	local replacement value (\$)	deprec %	current local asset value (\$)	% system imprv	% growth related	current value local systemwide imprv (\$)	current value local growth related imprv (\$)
1	original treatment 334-336 Kentucky Ave	1937	50	83,000	83,000	44.8085	3,719,106	100%	-	100%	0%	-	-
6	sewer extensions	1963	50	179,400	179,400	11.6870	2,096,650	100%	-	100%	0%	-	-
7	sewer main extension	1964	50	24,055	24,055	11.2500	270,619	100%	-	100%	0%	-	-
9	truck sanitary sewer	1968	50	248,565	248,565	8.76769	2,179,342	96%	87,174	100%	0%	87,174	-
16	extension to Kuhlman	1969	50	24,805	24,805	8.0690	200,151	94%	12,009	100%	0%	12,009	-
17	construction project	1972	50	274,892	274,892	5.7985	1,593,950	88%	191,274	100%	0%	191,274	-
18	contract XVIII	1974	25	6,536	6,536	5.0119	32,758	100%	-	100%	0%	-	-
19	project XX	1977	50	622,731	622,731	3.9586	2,465,172	78%	542,338	100%	0%	542,338	-
20	project XX	1977	50	600,000	600,000	3.9586	2,375,188	78%	522,541	100%	0%	522,541	-
21	contract 20 interest	1979	40	2,053	2,053	3.3535	6,885	93%	516	100%	0%	516	-
22	contract 26	1980	25	146,182	146,182	3.1191	455,953	100%	-	100%	0%	-	-
23	sewer line at Kain	1983	15	8,700	8,700	2.5620	22,290	100%	-	100%	0%	-	-
26	wastewater treatment	1986	50	51,731	51,731	2.4201	125,196	60%	50,078	100%	0%	50,078	-
28	construction waste	1986	50	782,014	782,014	2.4201	1,892,578	60%	757,031	100%	0%	757,031	-
29	construction Big Sin	1986	50	100,491	100,491	2.4201	243,202	60%	97,281	100%	0%	97,281	-
27	Burcky property (land)	1986	-	13,128	13,128	2.4201	31,772	0%	14,000	100%	0%	14,000	-
30	land on Beech Street (land)	1986	-	25,000	25,000	2.4201	60,503	0%	25,000	100%	0%	25,000	-
33	wastewater treatment	1988	50	135,807	135,807	2.3052	313,058	56%	137,745	100%	0%	137,745	-
34	construction Big Sin	1988	50	42,377	42,377	2.3052	97,686	56%	42,982	100%	0%	42,982	-
35	wastewater plant co	1988	50	3,107	3,107	2.3052	7,162	56%	3,151	100%	0%	3,151	-
50	sewer LJE-Merewo	1989	50	2,250	2,250	2.2476	5,057	54%	2,326	100%	0%	2,326	-
53	Golmley Drive sewer	1989	50	9,998	9,998	2.2476	22,471	54%	10,337	100%	0%	10,337	-
55	South Main Street	1989	50	8,550	8,550	2.2476	19,217	54%	8,840	100%	0%	8,840	-
60	sewer line Mere	1989	10	6,240	6,240	2.2476	14,025	100%	-	100%	0%	-	-
61	line South Main	1989	10	9,360	9,360	2.2476	21,038	100%	-	100%	0%	-	-
62	sewer line Gormley	1990	50	6,745	6,745	2.2043	14,868	52%	7,137	100%	0%	7,137	-

City of Versailles
Inventory and Current Value of Sewer Facilities

item #	description	year in service	useful life (yrs)	original cost (\$)	amount locally paid (\$)	ENR factor	local replacement value (\$)	deprec %	current local asset value (\$)	% system imprv	% growth related	current value local systemwide imprv (\$)	current value local growth related imprv (\$)
68	contract 39 Paddock	1991	50	54,492	54,492	2.1538	117,366	50%	58,683	100%	0%	58,683	-
69	sanitary sewer improvements	1991	50	116,088	116,088	2.1538	250,032	50%	125,016	100%	0%	125,016	-
70	sewer trunk line	1991	50	108,015	108,015	2.1538	232,644	50%	116,322	100%	0%	116,322	-
71	WWTP 1990 PDR contract	1991	50	644,086	644,086	2.1538	1,387,242	50%	693,621	100%	0%	693,621	-
73	sewer line South Main	1991	50	160,704	160,704	2.1538	346,127	50%	173,063	100%	0%	173,063	-
75	sewer line improvements	1991	50	13,110	13,110	2.1538	28,237	50%	14,118	100%	0%	14,118	-
77	contract 92-1	1991	50	23,238	23,238	2.1538	50,050	50%	25,025	100%	0%	25,025	-
74	WWTP - PDR contract	1992	50	3,085,781	3,085,781	2.0814	6,422,865	48%	3,339,890	100%	0%	3,339,890	-
78	wastewater treatment plant	1993	50	10,987	10,987	1.9831	21,788	46%	11,765	100%	0%	11,765	-
79	sewer line Frankfort Street	1993	50	134,210	134,210	1.9831	266,145	46%	143,718	100%	0%	143,718	-
85	concrete slab - dumpster 336 Kentucky Av	1994	40	1,800	1,800	1.9360	3,485	55%	1,568	100%	0%	1,568	-
81	sewer rodder	1994	10	16,500	16,500	1.9360	31,944	100%	-	100%	0%	-	-
83	1994 Ford F-800 tank truck	1994	10	31,490	31,490	1.9360	60,965	100%	-	100%	0%	-	-
231	94 Ford F-800 VIN#5269	1994	5	-	-	1.9360	-	100%	-	100%	0%	-	-
87	Baker property - 20 acres (land)	1995	-	100,014	100,014	1.9062	190,649	0%	190,649	100%	0%	190,649	-
94	sewer line repairs	1996	50	244,570	244,570	1.8332	448,350	40%	269,010	100%	0%	269,010	-
91	1/4 1995 Chevrolet 4X4 blue	1996	5	4,428	4,428	1.8332	8,117	100%	-	100%	0%	-	-
96	sewer line repair - Charmill area	1997	40	54,230	54,230	1.7975	97,481	48%	51,177	100%	0%	51,177	-
97	lift station improvements	1997	40	18,716	18,716	1.7975	33,643	48%	17,662	100%	0%	17,662	-
103	lift station improvements	1998	40	31,265	31,265	1.7576	54,953	45%	30,224	100%	0%	30,224	-
108	1/2 New Holland 3415 tractor VIN#	1998	10	6,455	6,455	1.7576	11,346	100%	-	100%	0%	-	-
102	lift station improvements	1999	40	127,495	127,495	1.7186	219,116	43%	125,992	100%	0%	125,992	-
101	1999 Ford F-800 truck	1999	5	34,950	34,950	1.7186	60,066	100%	-	100%	0%	-	-
232	1999 Ford F-800 VIN#9386	1999	5	-	-	1.7186	-	100%	-	100%	0%	-	-
98	lift station - repairs	2000	50	13,155	13,155	1.6760	22,047	32%	14,992	100%	0%	14,992	-
99	sewer line repairs	2000	40	58,934	58,934	1.6760	98,770	40%	59,262	100%	0%	59,262	-

City of Versailles
Inventory and Current Value of Sewer Facilities

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100	road repair at plant	2000	15	13,371	13,371	1.6760	22,409	100%	-	100%	0%	-	-
109	lift station improvements	2001	40	98,691	98,691	1.6479	162,632	38%	101,645	100%	0%	101,645	-
110	sludge holding tank	2001	40	11,416	11,416	1.6479	18,812	38%	11,758	100%	0%	11,758	-
111	sewer line rehab	2001	40	347,535	347,535	1.6479	572,699	38%	357,937	100%	0%	357,937	-
112	Osram expansion project	2001	40	165,000	165,000	1.6479	271,901	38%	169,938	100%	0%	169,938	-
234	2001 Dodge truck VIN#1389	2001	5	-	-	1.6479	-	100%	-	100%	0%	-	-
113	wastewater facility project	2002	40	18,000	18,000	1.6044	28,880	35%	18,772	100%	0%	18,772	-
123	High Street pipe line	2002	40	36,530	36,530	1.6044	58,611	35%	38,097	100%	0%	38,097	-
124	Bell Avenue pipe line	2002	40	6,039	6,039	1.6044	9,689	35%	6,298	100%	0%	6,298	-
130	Osram-Sylvania sewer project	2003	50	85,435	85,435	1.5526	132,650	26%	98,161	100%	0%	98,161	-
127	concrete steps - 336 Kentucky Ave	2003	40	2,675	2,675	1.5526	4,153	33%	2,803	100%	0%	2,803	-
125	manhole risers/lids	2003	10	8,890	8,890	1.5526	13,803	100%	-	100%	0%	-	-
129	backhoe	2003	10	29,900	29,900	1.5526	46,424	100%	-	100%	0%	-	-
233	2003 Chevy truck VIN#0804	2004	5	-	-	1.4409	-	100%	-	100%	0%	-	-
133	sewer line project	2005	30	7,141	7,141	1.3770	9,833	37%	6,228	100%	0%	6,228	-
134	sewer line replacement - Bryanwood	2005	30	18,244	18,244	1.3770	25,122	37%	15,911	100%	0%	15,911	-
135	sewer line - Cedar Ridge	2006	30	100,800	-	1.3349	-	33%	-	0%	0%	-	-
136	manholes - Cedar Ridge	2006	30	77,400	-	1.3349	-	33%	-	0%	0%	-	-
137	sewer line - Rose Ridge	2006	30	48,600	-	1.3349	-	33%	-	0%	0%	-	-
138	manholes - Rose Ridge	2006	30	39,600	-	1.3349	-	33%	-	0%	0%	-	-
139	sewer line - Adena Trace	2006	30	95,940	-	1.3349	-	33%	-	0%	0%	-	-
140	manholes - Adena Trace	2006	30	45,000	-	1.3349	-	33%	-	0%	0%	-	-
145	sewer lines - Huntertown Glenn	2006	30	45,000	-	1.3349	-	33%	-	0%	0%	-	-
146	manholes - Huntertown Glenn	2006	30	28,500	-	1.3349	-	33%	-	0%	0%	-	-
132	pumps	2006	10	12,850	12,850	1.3349	17,154	100%	-	100%	0%	-	-
143	Chevy Silverado VIN#9675	2006	5	12,000	12,000	1.3349	16,019	100%	-	100%	0%	-	-

City of Versailles
Inventory and Current Value of Sewer Facilities

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144	2006 dump truck	2006	5	12,746	12,746	1.3349	17,015	100%	-	100%	0%	-	-
148	sewer line - Glenn Eagles	2007	30	39,600	-	1.3018	-	30%	-	0%	0%	-	-
147	manholes - Glenn Eagles	2007	30	28,600	-	1.3018	-	30%	-	0%	0%	-	-
149	sewer lines - Adena Woods	2007	30	55,000	-	1.3018	-	30%	-	0%	0%	-	-
150	manholes - Adena Woods	2007	30	31,500	-	1.3018	-	30%	-	0%	0%	-	-
142	sewer line replacement	2007	30	53,592	53,592	1.3018	69,764	30%	48,835	100%	0%	48,835	-
153	2 pumps w/concrete pad and installation	2007	10	60,622	60,622	1.3018	78,916	90%	7,892	100%	0%	7,892	-
151	1/2 dump truck (split w/water)	2007	10	22,384	22,384	1.3018	29,139	90%	2,914	100%	0%	2,914	-
152	1/2 utility truck (split w/water)	2007	10	9,230	9,230	1.3018	12,015	90%	1,202	100%	0%	1,202	-
158	1992 F-450 bucket truck VIN#4064	2007	5	6,500	6,500	1.3018	8,461	100%	-	100%	0%	-	-
191	pump station	2008	50	60,000	60,000	1.2314	73,886	16%	62,064	100%	0%	62,064	-
154	storage building 336 Kentucky Ave	2008	20	39,491	39,491	1.2314	48,631	40%	29,178	100%	0%	29,178	-
155	Case backhoe (1/4) VIN#7540	2008	10	14,129	14,129	1.2314	17,399	80%	3,480	100%	0%	3,480	-
156	flush truck	2008	10	225,000	225,000	1.2314	277,073	80%	55,415	100%	0%	55,415	-
159	portable respirator	2008	7	9,034	9,034	1.2314	11,125	100%	-	100%	0%	-	-
163	HVAC unit	2008	7	6,870	6,870	1.2314	8,460	100%	-	100%	0%	-	-
193	Ford F-150 truck (1/2) VIN#5559	2008	5	8,842	8,842	1.2314	10,888	100%	-	100%	0%	-	-
157	sewer line replacement	2009	30	12,800	12,800	1.2186	15,598	23%	11,959	100%	0%	11,959	-
160	handrail around tanks	2009	20	6,939	6,939	1.2186	8,456	35%	5,496	100%	0%	5,496	-
161	elliptical receptacle boxes	2009	10	6,500	6,500	1.2186	7,921	70%	2,376	100%	0%	2,376	-
162	pumps	2009	10	15,954	15,954	1.2186	19,442	70%	5,833	100%	0%	5,833	-
165	pumps	2009	10	5,211	5,211	1.2186	6,350	70%	1,905	100%	0%	1,905	-
192	basis adj - 2008 flush truck trade	2009	10	33,592	33,592	1.2186	40,936	70%	12,281	100%	0%	12,281	-
164	clarifier repairs	2009	5	24,142	24,142	1.2186	29,420	100%	-	100%	0%	-	-
199	2012 Ford E350 van - camera truck	2009	5	12,301	12,301	1.2186	14,990	100%	-	100%	0%	-	-
197	sewer line replacement - Cleveland	2010	30	65,916	65,916	1.1763	77,535	20%	62,028	100%	0%	62,028	-

City of Versailles
Inventory and Current Value of Sewer Facilities

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194	Ball Park pump station	2010	5	75,745	75,745	1.1763	89,097	100%	-	100%	0%	-	-
195	pump blower repair	2010	5	9,802	9,802	1.1763	11,530	100%	-	100%	0%	-	-
213	wastewater treatment plant	2012	40	4,960,373	4,660,793	1.1188	5,214,423	10%	4,692,981	100%	0%	4,692,981	-
200	KIA interceptor	2012	30	286,855	286,855	1.1188	320,929	13%	278,138	100%	0%	278,138	-
212	wastewater collection plant update	2012	30	10,250,176	9,651,048	1.1188	10,797,443	13%	9,357,784	100%	66%	3,186,325	6,171,459
204	pump control panel	2012	10	5,760	5,760	1.1188	6,444	40%	3,867	100%	0%	3,867	-
205	waste water pump	2012	10	11,236	11,236	1.1188	12,571	40%	7,542	100%	0%	7,542	-
209	Aries camera equipment for truck	2012	10	110,076	110,076	1.1188	123,151	40%	73,891	100%	0%	73,891	-
214	7 radios	2012	5	7,620	7,620	1.1188	8,525	80%	1,705	100%	0%	1,705	-
201	1/2 of 2012 Escape VIN#5549	2012	5	11,700	11,700	1.1188	13,090	80%	2,618	100%	0%	2,618	-
202	1/2 of Ford truck VIN#3398	2012	5	18,947	18,947	1.1188	21,198	80%	4,240	100%	0%	4,240	-
203	1/3 of Chevy truck VIN#0729	2012	5	10,797	10,797	1.1188	12,080	80%	2,416	100%	0%	2,416	-
206	Gooch Const Crossfield pump station	2013	15	25,377	25,377	1.0892	27,640	20%	22,112	100%	0%	22,112	-
208	Woodlands pump station upgrade	2013	15	8,156	8,156	1.0892	8,883	20%	7,107	100%	0%	7,107	-
215	dump truck	2013	10	23,767	23,767	1.0892	25,886	30%	18,120	100%	0%	18,120	-
216	2013 Ford F-150 VIN#4436	2013	5	22,803	22,803	1.0892	24,836	60%	9,934	100%	0%	9,934	-
217	sewer line replacement	2014	30	127,229	127,229	1.0598	134,835	7%	125,846	100%	0%	125,846	-
220	hydraulic hammer for backhoe	2014	10	9,125	9,125	1.0598	9,671	20%	7,736	100%	0%	7,736	-
221	diffuser for digester at WWTP	2014	10	5,336	5,336	1.0598	5,655	20%	4,524	100%	0%	4,524	-
222	2014 Ford F-150 (1/2) VIN#8515	2014	5	11,862	11,862	1.0598	12,571	40%	7,543	100%	0%	7,543	-
224	SSES Phase I rehab	2015	30	1,613,020	1,613,020	1.0372	1,673,079	3%	1,617,310	100%	0%	1,617,310	-
226	City Hall repairs	2015	15	8,000	8,000	1.0372	8,298	7%	7,745	100%	0%	7,745	-
230	Case backhoe	2015	10	26,450	26,450	1.0372	27,435	10%	24,691	100%	0%	24,691	-
223	software upgrade/printers	2015	5	11,831	11,831	1.0372	12,272	20%	9,817	100%	0%	9,817	-
225	land Rose Hill Ave (land)	2015	-	94,372	94,372	1.0372	97,886	0%	95,000	100%	0%	95,000	-
229	software upgrade (Springbrook)	2016	5	8,473	8,473	1.0000	8,473	0%	8,473	100%	0%	8,473	-

City of Versailles
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227	SSES Phase I and II	2016	30	1,275,843	1,275,843	1.0000	1,275,843	0%	1,275,843	100%	0%	1,275,843	-
228	lift stations - Stonegate, Charmil &	2016	40	437,071	437,071	1.0000	437,071	0%	437,071	100%	0%	437,071	-
	totals						\$51,464,347		\$27,217,978			\$21,046,519	\$6,171,459
												3	9

City of Versailles
2011 Issue Wastewater Revenue Bonds

year	principal payment	interest payment	total payment (p + (2)i)	daily use (MGD)	debt service per gallon
2018	\$61,000	\$3,831	\$ 64,831	2.768	\$ 0.0234
2019	\$62,500	\$3,069	\$ 68,638	2.849	\$ 0.0241
2020	\$64,500	\$2,131	\$ 68,763	2.930	\$ 0.0235
2021	\$66,500	\$1,164	\$ 68,828	3.010	\$ 0.0229
2022			\$ -	3.091	\$ -
2023			\$ -	3.169	\$ -
2024			\$ -	3.247	\$ -
2025			\$ -	3.326	\$ -
2026			\$ -	3.402	\$ -
2027			\$ -	3.478	\$ -
2028			\$ -	3.554	\$ -
2029			\$ -	3.630	\$ -
2030			\$ -	3.706	\$ -
2031			\$ -	3.782	\$ -
2032			\$ -	3.858	\$ -
2033			\$ -	3.925	\$ -
2034			\$ -	3.992	\$ -
2035			\$ -	4.060	\$ -
2036			\$ -	4.129	\$ -
2037			\$ -	4.199	\$ -
total	\$ 254,500	\$ 10,195	\$ 271,059		\$ 0.0938
NPV	\$229,251	\$9,365	\$244,306		\$0.08
4.25%	prime rate				14

principal and interest payments at 10% of bond schedule to reflect 10% sewer/90% water

City of Versailles
2012 Issue Wastewater Revenue Bonds

year	principal payment	interest payment	total payment (p + (2)i)	daily use (MGD)	debt service per gallon
2018	\$393,000	\$42,712	\$ 435,712	2.768	\$ 0.1574
2019	\$405,000	\$38,782	\$ 482,563	2.849	\$ 0.1694
2020	\$411,000	\$34,732	\$ 480,463	2.930	\$ 0.1640
2021	\$420,000	\$30,622	\$ 481,243	3.010	\$ 0.1599
2022	\$654,000	\$25,897	\$ 705,793	3.091	\$ 0.2283
2023	\$675,000	\$18,131	\$ 711,262	3.169	\$ 0.2244
2024	\$693,000	\$9,356	\$ 711,712	3.247	\$ 0.2192
2025			\$ -	3.326	\$ -
2026			\$ -	3.402	\$ -
2027			\$ -	3.478	\$ -
2028			\$ -	3.554	\$ -
2029			\$ -	3.630	\$ -
2030			\$ -	3.706	\$ -
2031			\$ -	3.782	\$ -
2032			\$ -	3.858	\$ -
2033			\$ -	3.925	\$ -
2034			\$ -	3.992	\$ -
2035			\$ -	4.060	\$ -
2036			\$ -	4.129	\$ -
2037			\$ -	4.199	\$ -
total	\$ 3,651,000	\$ 200,230	\$ 4,008,748		\$ 1.3226
NPV	\$3,042,776	\$175,381	\$3,352,567		\$1.11
4.25%	prime rate				15

principal and interest payments at 60% of bond schedule to reflect 60% sewer/40% water

City of Versailles
2013 Issue Wastewater Revenue Bonds

year	principal payment	interest payment	total payment (p + (2)i)	daily use (MGD)	debt service per gallon
2018	\$281,050	\$45,559	\$ 326,609	2.768	\$ 0.1180
2019	\$284,700	\$43,451	\$ 371,602	2.849	\$ 0.1304
2020	\$284,700	\$41,316	\$ 367,332	2.930	\$ 0.1254
2021	\$292,000	\$38,469	\$ 368,938	3.010	\$ 0.1226
2022	\$569,400	\$35,549	\$ 640,498	3.091	\$ 0.2072
2023	\$580,350	\$29,855	\$ 640,060	3.169	\$ 0.2020
2024	\$587,650	\$23,689	\$ 635,027	3.247	\$ 0.1956
2025	\$1,438,100	\$17,078	\$ 1,472,255	3.326	\$ 0.4427
2026			\$ -	3.402	\$ -
2027			\$ -	3.478	\$ -
2028			\$ -	3.554	\$ -
2029			\$ -	3.630	\$ -
2030			\$ -	3.706	\$ -
2031			\$ -	3.782	\$ -
2032			\$ -	3.858	\$ -
2033			\$ -	3.925	\$ -
2034			\$ -	3.992	\$ -
2035			\$ -	4.060	\$ -
2036			\$ -	4.129	\$ -
2037			\$ -	4.199	\$ -
total	\$ 4,317,950	\$ 274,964	\$ 4,822,319		\$ 1.5438
NPV	\$3,414,508	\$234,786	\$3,840,379		\$1.24
4.25%	prime rate				16

principal and interest payments at 73% of bond schedule to reflect 73% sewer/27% water

City of Versailles
2014 Issue Wastewater Revenue Bonds

year	principal payment	interest payment	total payment (p + (2)i)	daily use (MGD)	debt service per gallon
2018		\$102,601	\$ 102,601	2.768	\$ 0.0371
2019		\$102,601	\$ 205,202	2.849	\$ 0.0720
2020		\$102,601	\$ 205,202	2.930	\$ 0.0700
2021		\$102,601	\$ 205,202	3.010	\$ 0.0682
2022		\$102,601	\$ 205,202	3.091	\$ 0.0664
2023		\$102,601	\$ 205,202	3.169	\$ 0.0648
2024		\$102,601	\$ 205,202	3.247	\$ 0.0632
2025		\$102,601	\$ 205,202	3.326	\$ 0.0617
2026	\$630,000	\$102,601	\$ 835,202	3.402	\$ 0.2455
2027	\$650,000	\$92,994	\$ 835,988	3.478	\$ 0.2404
2028	\$675,000	\$82,269	\$ 839,538	3.554	\$ 0.2362
2029	\$695,000	\$70,963	\$ 836,926	3.630	\$ 0.2306
2030	\$720,000	\$58,800	\$ 837,600	3.706	\$ 0.2260
2031	\$750,000	\$45,660	\$ 841,320	3.782	\$ 0.2225
2032	\$780,000	\$31,410	\$ 842,820	3.858	\$ 0.2185
2033	\$810,000	\$16,200	\$ 842,400	3.925	\$ 0.2146
2034			\$ -	3.992	\$ -
2035			\$ -	4.060	\$ -
2036			\$ -	4.129	\$ -
2037			\$ -	4.199	\$ -
total	\$ 5,710,000	\$ 1,321,705	\$ 8,250,809		\$ 2.3375
NPV	\$4,719,016	\$995,573	\$5,275,267		\$1.52
4.25%	prime rate				17

principal and interest payments at 100% of bond schedule

City of Versailles
2016 Issue Wastewater Revenue Bonds

year	principal payment	interest payment	total payment (p + (2)i)	daily use (MGD)	debt service per gallon
2018		\$139,047	\$ 139,047	2.768	\$ 0.0502
2019		\$139,047	\$ 278,094	2.849	\$ 0.0976
2020		\$139,047	\$ 278,094	2.930	\$ 0.0949
2021		\$139,047	\$ 278,094	3.010	\$ 0.0924
2022		\$139,047	\$ 278,094	3.091	\$ 0.0900
2023		\$139,047	\$ 278,094	3.169	\$ 0.0878
2024		\$139,047	\$ 278,094	3.247	\$ 0.0856
2025		\$139,047	\$ 278,094	3.326	\$ 0.0836
2026	\$580,000	\$139,047	\$ 858,094	3.402	\$ 0.2522
2027	\$600,000	\$133,247	\$ 866,494	3.478	\$ 0.2491
2028	\$615,000	\$127,247	\$ 869,494	3.554	\$ 0.2447
2029	\$630,000	\$120,713	\$ 871,426	3.630	\$ 0.2401
2030	\$645,000	\$113,625	\$ 872,250	3.706	\$ 0.2354
2031	\$665,000	\$103,950	\$ 872,900	3.782	\$ 0.2308
2032	\$685,000	\$93,975	\$ 872,950	3.858	\$ 0.2263
2033	\$705,000	\$83,700	\$ 872,400	3.925	\$ 0.2223
2034	\$1,575,000	\$73,125	\$ 1,721,250	3.992	\$ 0.4312
2035	\$1,625,000	\$49,500	\$ 1,724,000	4.060	\$ 0.4246
2036	\$1,675,000	\$25,125	\$ 1,725,250	4.129	\$ 0.4178
2037			\$ -	4.199	\$ -
total	\$ 10,000,000	\$ 2,175,630	\$ 14,212,213		\$ 3.8566
NPV	\$7,458,039	\$1,552,183	\$8,316,830		\$2.31
4.25%	prime rate				18

principal and interest payments at 100% of bond schedule

City of Versailles
 Estimated Future Wastewater Revenue Bonds (20 Year Term)
 (with current prime rate)

year	principal payment	interest payment	total payment (p + (2)i)	daily use (MGD)	debt service per gallon
2018	\$1,001,921	\$807,660	\$1,809,581	2.768	\$0.6538
2019	\$1,031,979	\$785,916	\$1,817,895	2.849	\$0.6381
2020	\$1,062,938	\$762,847	\$1,825,785	2.930	\$0.6231
2021	\$1,094,826	\$738,374	\$1,833,200	3.010	\$0.6090
2022	\$1,127,671	\$712,410	\$1,840,081	3.091	\$0.5953
2023	\$1,161,501	\$684,865	\$1,846,366	3.169	\$0.5826
2024	\$1,196,346	\$655,642	\$1,851,989	3.247	\$0.5704
2025	\$1,232,237	\$624,640	\$1,856,877	3.326	\$0.5583
2026	\$1,269,204	\$591,750	\$1,860,954	3.402	\$0.5470
2027	\$1,307,280	\$556,856	\$1,864,136	3.478	\$0.5360
2028	\$1,346,498	\$519,838	\$1,866,337	3.554	\$0.5251
2029	\$1,386,893	\$480,566	\$1,867,459	3.630	\$0.5145
2030	\$1,428,500	\$438,901	\$1,867,401	3.706	\$0.5039
2031	\$1,471,355	\$394,699	\$1,866,055	3.782	\$0.4934
2032	\$1,515,496	\$347,806	\$1,863,302	3.858	\$0.4830
2033	\$1,560,961	\$298,056	\$1,859,017	3.925	\$0.4736
2034	\$1,607,790	\$245,277	\$1,853,067	3.992	\$0.4642
2035	\$1,656,023	\$189,284	\$1,845,307	4.060	\$0.4545
2036	\$1,705,704	\$129,880	\$1,835,584	4.129	\$0.4446
2037	\$1,756,875	\$66,859	\$1,823,734	4.199	\$0.4343
total	\$ 26,922,000	\$ 10,032,126	\$ 36,954,126		\$10.7047
NPV	\$17,181,801	\$7,354,365	\$24,536,165		\$7.32
4.25%	prime rate				19

using 3.0% for 20 years for debt

City of Versailles
 Estimated Administrative Costs for Impact Fee Program
 (with current prime rate)

year	rate analyst	city admin	total annual cost	daily use (MGD)	debt service per gallon
2018	\$6,000	\$6,000	\$12,000	2.768	\$0.0043
2019	\$0	\$6,000	\$6,000	2.849	\$0.0021
2020	\$0	\$6,000	\$6,000	2.930	\$0.0020
2021	\$0	\$6,000	\$6,000	3.010	\$0.0020
2022	\$0	\$6,000	\$6,000	3.091	\$0.0019
2023	\$4,000	\$6,000	\$10,000	3.169	\$0.0032
2024	\$0	\$6,000	\$6,000	3.247	\$0.0018
2025	\$0	\$6,000	\$6,000	3.326	\$0.0018
2026	\$0	\$6,000	\$6,000	3.402	\$0.0018
2027	\$0	\$6,000	\$6,000	3.478	\$0.0017
2028	\$4,000	\$6,000	\$10,000	3.554	\$0.0028
2029	\$0	\$6,000	\$6,000	3.630	\$0.0017
2030	\$0	\$6,000	\$6,000	3.706	\$0.0016
2031	\$0	\$6,000	\$6,000	3.782	\$0.0016
2032	\$0	\$6,000	\$6,000	3.858	\$0.0016
2033	\$4,000	\$6,000	\$10,000	3.925	\$0.0025
2034	\$0	\$6,000	\$6,000	3.992	\$0.0015
2035	\$0	\$6,000	\$6,000	4.060	\$0.0015
2036	\$0	\$6,000	\$6,000	4.129	\$0.0015
2037	\$0	\$6,000	\$6,000	4.199	\$0.0014
total	\$ 18,000	\$ 120,000	\$ 138,000		\$0.0404
NPV	\$13,457	\$79,766	\$93,223		\$0.03
4.25%	prime rate				20

APPENDIX B

Handouts



13 September 2017

Versailles Impact Fee Program

Program Summary

What the Impact Fee Program Is...

A way for new development to buy-in to the equity existing customers (owners) have built in the wastewater utility.

A way to help ensure that growth-related investments follow an established capital improvements plan.

The assessment of an impact fee provides a signal to developers of the costs incurred by the utility to accommodate their proposals.

Impact Fee revenues reduce the capital costs that must be debt-financed, thereby reducing increases to wastewater service rates.

What the Impact Fee Program Is Not...

The impact fee is not the same thing, nor a portion of, the tap fee.

The impact fee is not a tax.

Referenced Used

American Waterworks Association (AWWA) Manual M-1

Water Environment Federation (WEF) Manual of Practice #27

Nelson's "System Development Charges for Water, Wastewater and Stormwater Facilities"

Factors Used in Calculating the Impact Fee

- for the Equivalent Residential Unit (ERU): average annual residential wastewater flow to WWTP; estimated number of residential and small commercial customers (gallons)
- for the Systemwide Improvements Fee: current local asset value; capital improvements plan (CIP) systemwide improvements; planned system capacity (\$ per gallon)
- for the Growth-Related Expansion Fee: current local asset growth-related value; CIP growth-related costs; growth and excess capacity (\$ per gallon)
- adjustments: debt service, current and future (\$/gallon); administrative costs (\$/gallon); balance in fund (\$ subtracted from growth-related costs)

Critical Pieces of the Program

- The CIP must be a dynamic file of planned infrastructure projects.
- Impact Fee program revenues are "fenced" for eligible infrastructure projects.
- The Impact Fee program must meet rational nexus tests, best summarized by the Banberry Factors:
 - the cost of existing facilities;
 - how existing facilities were financed;
 - how much new development has already paid;
 - how much new development will pay in the future;
 - credit for facilities installed by developer;
 - extraordinary costs and time-price differentials;
 - new development benefits from fee it pays.

Rules of the Impact Fee Program

- collect from all new installations (single family residence = 1 ERU = $\frac{5}{8}$ inch meter)
- assess fee at time of building permit application or service request, former is preferred
- allow for refunds, refinements and appeals
- allow for installation-specific calculation of ERU factor
- allow for construction credits from developers
- determine if any exemptions will be allowed (federal and state agencies may be exempt)
- revisit the ERU every five years, at least
- update the capital improvements plan every year; revise the capital improvements element (the spreadsheet) with recalculation of impact fee
- update the ERU factor schedule periodically
- recalculate the impact fee every five years, at least
- move constructed items from CIE to inventory as auditor updates rate base/depreciation schedule
- perform obligatory planning and construction
- fence the impact fee proceeds and detail receipts/expenditures on audit
- determine the impact fee program administrator
- realize this version of impact fee calculation uses 2016 for a base year
- chose one, system-wide, service area to assess impact fees
- based the level of service on average daily flows, where water usage = sewer flow
- used the CIE in calculations; show details of the projects on the CIP
- used vintage capital cost calculations for existing and marginal cost for future/expansion (hybrid method)
- must expend collected impact fees within a specified amount of time
- may use impact fees for cost recovery for projects that added to available capacity at time of program initiation, but be extra cautious
- except for above, must assign collected impact fees, generally speaking, against the projects upon which they were calculated



19 September 2017

Versailles Impact Fee Program

Notes

What is an Impact Fee?

2-part definition:

- 1) A way for new development to buy-in to the equity existing customers (owners) have built in the wastewater utility.
- 2) A way for growth to pay its share of the costs for those facilities their demand necessitates. Impact Fee program revenues are "fenced" for eligible infrastructure projects.

Why do we need an Impact Fee program?

Impact Fee revenues reduce the capital costs that must be debt-financed, thereby reducing increases to wastewater service rates. And, the impact fee program recognizes the owner equity and assigns a value to it, albeit limited to those items in the rate base.

What do we use to calculate the Impact Fee?

- average wastewater flow of Versailles' households
- current value of rate base, growth-related assets separated
- estimated costs of items on capital improvements plan, growth-related items separated
- existing and planned WWTP capacity

The impact fee is not the same thing, nor a portion of, the tap fee.

The impact fee is not a tax.

Who pays an Impact Fee?

new customers, whether residential, commercial or industrial and existing customers who increase their burden on the wastewater treatment and/or collection system

How much is the Impact Fee?

- charges are based on meter size; residential units use 5/8-inch meters
- the one-time charge is \$1,369 per 5/8-inch meter
- we have an established impact fee schedule that goes from 5/8 to 12-inch meters
- there are allowances for refunds, refinements, developer contributions, and appeals

Who else in KY has an Impact Fee (System Development Charge, Developers Fee) program?

- Lexington-Fayette Urban County Government
- Owensboro-Daviess County (Regional Water Resource Agency)
- Louisville Water Company
- Williamstown
- Richmond Utilities
- Oak Grove
- Northern Madison County Sanitation District

Referenced Used

American Waterworks Association (AWWA) Manual M-1

Water Environment Federation (WEF) Manual of Practice #27

Nelson's "System Development Charges for Water, Wastewater and Stormwater Facilities"

APPENDIX C

Ordinance

CITY OF VERSAILLES
ORDINANCE NO. 2017-30

TITLE: AN ORDINANCE ESTABLISHING AN IMPACT FEE PROGRAM TO DEFRAY THE COST OF CAPITAL IMPROVEMENTS FOR WASTEWATER TREATMENT AND COLLECTION REQUIRED BY INCREASED DEMANDS UPON THE WASTEWATER SYSTEM.

Whereas, the City Council has determined that is necessary and appropriate to establish and impact fee program to allocate the cost of capital improvements for wastewater treatment and collection upon the developments, or redevelopments, that create the need for or increase the demands upon the City's wastewater utility;

NOW, THEREFORE, BE IT ORDAINED IN THE CITY OF VERSAILLES, KENTUCKY as follows:

SECTION 1. *Purpose.* The purpose of the impact fee program is to impose a portion of the cost of capital improvements for wastewater treatment and collection upon those developments and redevelopments that create the need for or increase the demands upon the Versailles wastewater utility.

SECTION 2. *Definitions.* For purposes of this ordinance, the following terms shall mean:

1. "Capital Improvements" shall mean public facilities or assets used for wastewater collection, transmission, treatment or disposal, or any combination.
2. "City" shall mean the city of Versailles, Kentucky.
3. "City Clerk" shall mean the Clerk of the city of Versailles, Kentucky.
4. "Council" shall mean the Versailles City Council.

5. "Development" shall mean all improvements on a site, including buildings, other structures, parking and loading areas, landscaping, paved or graveled areas, and areas devoted to exterior display, storage or activities which have the effect of increasing the demands upon the city's wastewater utility facilities. Development includes redevelopment of property which results in an increase in demand upon the city's wastewater utility facilities. Development includes improved open areas such as plaza and walkways, but does not include natural geologic forms or unimproved lands.

6. "Existing Customer" shall mean a customer of the Versailles wastewater utility who has, for 120 consecutive months, paid wastewater rates and fees to the city and who is in good standing with regard to overdue balances.

7. "Growth-Related Expansion" shall mean a fee for costs associated with capital improvements to be constructed after the date the fee is adopted pursuant to Section 4 of this ordinance.

8. "Impact Fee" shall mean a charge comprised of a systemwide improvements fee, a growth-related expansion fee, or a combination thereof, assessed or collected at the time of increased usage of the wastewater utility, at the time of issuance of a development permit or building permit, or at the time of connection to the wastewater system.

A. An impact fee charge is not payment or reimbursement for the utility's average cost of inspecting and installing connections with wastewater facilities—that reimbursement is called a "tap fee" and constitutes a separate charge.

B. An impact fee charge does not include fees assessed or collected as part of a local improvement district or a charge in lieu of a local improvement district assessment, or the cost of complying with requirements or conditions imposed by a land use decision.

9. "Land Area" shall mean the area of a parcel of land as measured by projection of the parcel boundaries upon a horizontal plane with the exception of a portion of the parcel within a recorded right-of-way or easement subject to a servitude for a public street or for a public scenic or preservation purpose.

10. "Owner" shall mean the Owner or Owners of record title of real property or the purchaser or purchasers under a recorded land sales agreement, and other persons having an interest of record in the described real property.

11. "Parcel of Land" shall mean a lot, parcel, block or other tract of land that in accordance with city regulations is occupied or may be occupied by a structure or structures or other use, and that includes the yards and other open spaces required under the zoning, subdivision, or other development ordinances and regulations.

12. "Permittee" shall mean the person or entity to whom a building permit, development permit, a permit or plan approval to connect to the city's wastewater system, or right-of-way access permit is issued.

13. "Program Administrator" shall mean the impact fee program administrator/coordinator. The Public Works Director for the city of Versailles, or his designee, shall be the impact fee program administrator/coordinator.

14. "Qualified Public Improvements" shall mean a capital improvement that is:

- A. required as a condition of development approval; or
- B. identified in the plan adopted pursuant to Section 8 of this Ordinance

and either:

- i. not located on or contiguous to a parcel of land that is the subject of the development approval; or
- ii. located in whole or in part on or contiguous to a parcel of land that is the subject of the development approval.

C. for purposes of this definition, contiguous means in a public way which abuts the parcel.

15. "Redevelopment" shall mean repurposing an existing structure.

16. "Systemwide Improvements Fee" shall mean a fee for costs associated with capital improvements constructed or under construction on the date the fee is adopted pursuant to Section 4 of this Ordinance, and for which the Council determines wastewater treatment capacity to exist.

17. "Utility" shall mean the publicly-owned wastewater treatment and collection system of the city of Versailles, Kentucky.

SECTION 3. The factors the City Council shall consider in determining an appropriate impact fee charge are as follows:

- 1. Equivalent Residential Unit, with the acronym ERU, shall be the basis of assigning an impact fee charge. The ERU shall be established on

the basis of the average residential water usage in the city, and serves as an estimation of the gallons of wastewater discharged daily to the city's wastewater treatment works by a single-family residence. As shown on the Impact Fee Charge Schedule, the impact fee is calculated by multiplying the ERU (in gallons per day) by the ERU factor (dimensionless), then by the impact fee (in dollars per gallon). The ERU shall be calculated specific to the Versailles wastewater utility. At a minimum, the ERU should be recalculated every 5 years.

2. Meter Size. Impact of new development, or redevelopment, upon the wastewater system shall be estimated by the meter size of the proposed facility. Since the vast majority of single-family residences are served through a $\frac{3}{4}$ inch line by $\frac{5}{8}$ inch water meter, the $\frac{5}{8}$ inch water meter will represent 1 equivalent residential unit (ERU). Other meter sizes are listed on the Impact Fee Charge Schedule and shall be assigned an ERU factor to estimate their impact on the wastewater system.

3. Agricultural Meters. Since Section 50.22 (c) of the Code of Ordinances permits customers of the Versailles wastewater utility to install an agricultural meter, at their own cost, and subsequently apply for a reduction to the volume upon which the wastewater service charge is calculated. A permittee may request a reduction of the impact fee charge for a new development or a redevelopment using data from the

agricultural meter. A reduction to the impact fee (in the form of a refund) will be considered by the impact fee administrator only after 12 months of wastewater flow data is collected. The permittee must contact the impact fee administrator prior to commencing data collection for specific data requirements. Under no circumstances shall a facility contributing wastewater to the wastewater utility be assigned an ERU factor of less than 1.0.

SECTION 4. Impact Fee Charge Established.

1. Impact Fee charges shall be established and may be revised by resolution of the Council. The resolution shall set the amount of the charge, the type of permit to which the charge applies, and, if the charge applies to a geographic area smaller than the entire city, the geographic area subject to the charge.

2. Unless otherwise exempted by the provisions of this ordinance or other local or state law, an impact fee charge is hereby imposed upon all development within the city, upon the act of making a connection to the city wastewater system within the city, and upon all development outside the boundary of the city that connects to or otherwise uses the wastewater facilities of the city.

SECTION 5. Methodology.

1. The methodology used to establish or modify the systemwide improvements fee shall, where applicable, be based on the current local asset value of facilities including without limitation design, financing and construction costs, prior contributions

by then-existing users, gifts or grants from federal or state government or private persons, the volume of unused capacity available to future system users, rate-making principals employed to finance publicly-owned capital improvements, and other relevant factors identified by the Council. The methodology shall promote the objective that future system users shall contribute no more than an equitable share of the cost of then-existing facilities.

2. The methodology used to establish or modify the growth-related expansion fee shall, where applicable, demonstrate consideration of the estimated cost of projected capital improvements needed to increase the capacity of the systems to which the fee is related. The methodology shall be calculated to obtain the cost of capital improvements for the projected need for available system capacity for future system users.

3. The equation and factors used to establish or modify the systemwide improvements fee, the growth-related expansion fee, or both, shall be contained in a resolution adopted by the Council.

SECTION 6. Authorized Expenditures.

1. Systemwide Improvements fees shall be applied only to capital improvements associated with the system for which the fees are assessed, including expenditures relating to repayment of indebtedness.

2. Growth-Related Expansion fees shall be spent only on capacity-increasing capital improvements associated with the system for which the fee is assessed,

including expenditures relating to repayment of future debt for the improvements. An increase in system capacity occurs if a capital improvement increases the level of performance or service provided by existing facilities or by providing new facilities.

A. The portion of the capital improvements funded by growth-related expansion must be related to demands created by current or projected development. A capital improvement being funded wholly or in part from revenues derived from the growth-related expansion fee shall be included in the plan adopted by the city pursuant to Section 8 of this Ordinance.

3. Notwithstanding Subsections (1) and (2) of this section, impact fee revenues may be expended on the direct costs of complying with the provisions of this ordinance, including the costs of developing impact fee charge methodologies and providing an annual accounting of impact fee expenditures.

4. There shall be created a restricted account entitled the “Wastewater Impact Fee Account.” All monies derived from the wastewater impact fee shall be placed in the Wastewater Impact Fee Account. Funds in the Wastewater Impact Fee Account shall be used solely to provide the wastewater capital improvements plan (CIP) listed capacity increasing improvements according to the wastewater CIP as it currently exists or as hereinafter adopted and amended, and eligible administrative costs. In this regard, wastewater impact fee revenues may be used for purposes that include:

- A. design and construction plan preparation;
- B. permitting;

- C. right-of-way acquisition, including any costs of acquisition and condemnation;
- D. construction of new wastewater treatment facilities, including, but not limited to, sludge handling facilities;
- E. construction of collection and interceptor lines;
- F. construction of pumping and lift stations;
- G. demolition that is part of the construction of any of the improvements on this list;
- H. payment of principal and interest, necessary reserves and costs of issuance under any bonds or other indebtedness issued by the city to provide money to construct or acquire wastewater facilities;
- I. direct costs of complying with the provisions of the Kentucky Revised Statutes that allows or limits impact fees/SDCs, including the costs of developing impact fee methodologies and providing an annual accounting of impact fee expenditures.

SECTION 7. Expenditure Restrictions.

1. Impact fee charges shall not be expended for costs associated with the construction of administrative office facilities that are more than an incidental part of other capital improvements.

2. Impact fee charges shall not be expended for costs of the operation or routine maintenance of capital improvements.

SECTION 8. Capital Improvements Plan.

1. Prior to the establishment of a wastewater impact fee, the Council shall adopt a Capital Improvements Plan that includes a list of:

A. the capital improvements that the council intends to fund in whole or in part with impact fee revenues;

B. the estimated cost and beginning date of construction of each improvement and the percentage of that cost eligible to be funded with growth-related expansion fee revenues; and,

C. a description of the process for modifying the plan.

2. In adopting this plan, the Council may incorporate by reference all or a portion of any public facilities plan, master plan, capital improvements plan or similar plan that contains the information required by this section.

3. The Council may modify such plan and list at any time. If the impact fee charge will be increased by a proposed modification to the list, to include a capacity-increasing public improvement, the Council will:

A. at least 30 days prior to adoption of the proposed modification, provide written notice to persons who have requested notice pursuant to Section 13 of this ordinance; and

B. hold a public hearing if a written request for a hearing is received within 7 days of the date of the proposed modification.

4. A change in the amount of a systemwide improvements fee or a growth-related expansion fee is not a modification of the impact fee charge if the change in amount is based on the periodic application of the Engineering News-Record's (ENR) Construction Cost Index or a modification to any of the factors related to the rate that are incorporated in the established methodology. The Council may elect to revise the impact fee, annually, based upon changes in the ENR Construction Cost Index.

SECTION 9. Collection of Wastewater Impact Fee Charge.

1. The wastewater impact fee charge is payable upon:
 - A. a request for water service;
 - B. a request for wastewater service; or
 - C. at the time tap fee(s) are collected, whichever is earliest.
2. If no building, development, or connect permit is required, the impact fee charge is payable at the time the usage of the capital improvement is increased based on changes in the use of the property unrelated to seasonal or orderly fluctuations in usage.
3. If development is commenced or connection is made to the wastewater system without an appropriate permit, the impact fee charge is immediately payable upon the earliest date that a permit was required.

4. If requested by the applicant, the City Clerk may provide the applicant an estimate of the impact fee charge when a permit that allows building or development of a parcel is issued.

5. The impact fee program administrator shall not issue such permit or allow such connection until the charge has been paid in full, or until provision for installment payments has been made pursuant to Section 10 of this Ordinance, or unless an exemption is granted pursuant to Section 11 of this Ordinance.

SECTION 10. Installment Payment.

1. When an impact fee charge based on a meter size of 4 inches or more is due and collectible, the owner of the parcel of land subject to the impact fee may apply for payment in 6 semi-annual installments, to include interest (at 2 points above the prime rate at the time of request) on the unpaid balance which shall be secured by a lien on the parcel subject to the impact fee.

2. The impact fee program administrator shall provide application forms for installment payments, which shall include a waiver of all rights to contest validity of the lien, except for the correction of computational errors.

3. An applicant for installment payments shall have the burden of demonstrating the applicant's authority to assent to the imposition of a lien on the parcel and that the property interest of the applicant is adequate to secure payment of the lien.

4. The impact fee program administrator shall report to the City Clerk the amount of the impact fee charge, the dates on which the payments are due, the name of the owner, and the description of the parcel.

5. The City Clerk shall record the lien for the unpaid portion of the impact fee charge. From that time the city shall have a lien upon the described parcel for the amount of the impact fee charge, together with interest on the unpaid balance at the rate established by the Council. The lien shall be enforceable in the manner provided KRS 82.720.

6. For property that has been subject to a cancellation of assessment of impact fees, a new installment payment contract shall be subject to the code provisions applicable to impact fees and installment payment contracts on file on the date the new contract is received by the city.

SECTION 11. Exemptions.

1. The council shall have the authority to waive the impact fee for any entity that is exempt from tap fees, i.e., charitable organizations, or other organizations determined to be working only for the good of the community.

2. Additions to single-family dwellings that do not constitute the addition of a dwelling unit, as defined by the Kentucky Uniform Building Code, are exempt from all portions of the wastewater impact fee.

3. An alteration, addition, replacement or change in use that does not increase the use of the wastewater utility and its facilities are exempt from all portions of the impact fee charge.

SECTION 12. Credits.

1. When a redevelopment occurs that is subject to an impact fee charge, the impact fee charge for the existing use, if applicable, shall be calculated and if it is less than the impact fee charge for the use that will result from the development, the difference between the impact fee for the existing use and the impact fee for the proposed use shall be the impact fee charge. If the change in the use results in the impact fee for the proposed use being less than the impact fee for the existing use, no impact fee charge shall be required. Since meter size is used to calculate impact fees, the impact on the wastewater system is assessed by considering the meter size of the existing development versus the meter size of the redevelopment. No refund or credit shall be given unless provided for by another subsection of this section.

2. A credit shall be given to the permittee for the cost of a qualified public improvement upon acceptance by the city of the public improvement. The credit shall not exceed the growth-related expansion fee even if the cost of the capital improvement exceeds the applicable growth-related expansion fee and shall only be for the growth-related expansion portion of the impact fee charged for the type of improvement being constructed.

3. If a qualified public improvement is located in whole or in part on or contiguous to the property that is the subject of the development approval and is required by the utilities manager for the city of Versailles to be built larger or with greater capacity than is necessary for the particular development project, a credit shall be given for the cost of the portion of the improvement that exceeds the city's minimum standard facility size or capacity needed to serve the particular development project or property. The applicant shall have the burden of demonstrating that a particular improvement qualifies for credit under this subsection. The request for credit shall be filed in writing no later than 60 days after acceptance of the improvement by the city. The city may deny the credit provided for in this section if the city demonstrates that the application does not meet the requirements of this section or if the improvement for which the credit is sought was not included in the improvement plan pursuant to Section 8 of this Ordinance.

4. When the construction of a qualified public improvement located in whole or in part or contiguous to the property that is the subject of development approval gives rise to a credit amount greater than the growth-related expansion fee that would otherwise be levied against the project, the credit in excess of the growth-related expansion fee for the original development project may be applied against growth-related expansion fees that accrue in subsequent phases of the original development project.

5. When an existing customer, as defined in Section 2 of this ordinance, constructs, or causes to be constructed, a new development within the Versailles wastewater utility service area, and abandons his existing residence or establishment that is also located within the Versailles wastewater utility service area, that customer may be granted a “buy-in” credit on his impact fee charge. The buy-in credit serves to acknowledge the equity that the existing customer has amassed in the wastewater utility. The credit is determined by calculating only the systemwide improvements portion of the impact fee charge using the factors in place at the time of the customer’s request for the credit. The amount of the systemwide improvements fee constitutes the amount of the buy-in credit. To qualify for the buy-in credit:

A. The size of the meter serving the new development must be equal to or less than the meter serving the existing account;

B. The purpose of the new development must be essentially the same as that of the existing account, i.e., single-family residence versus an existing account assigned to a single-family residence;

C. The existing water and wastewater account serving the existing residence of establishment must be closed by request of the customer; and

D. The customer must request the buy-in credit.

6. Notwithstanding Subsections 1 through 4 above, when establishing a methodology for a wastewater impact fee charge, the city may provide for a credit against the growth-related expansion fee, the systemwide improvements fee, or both,

for capital improvements constructed as part of the development which reduce the development's demand upon existing capital improvements and/or the need for future capital improvements, or a credit based upon any other rationale the Council finds reasonable.

7. Credits shall not be transferable from one development to another.

8. Credits shall not be transferable from type (systemwide improvement or growth-related expansion) of impact fee charge to another.

9. Credits shall be used within 10 years from the date the credit is given.

SECTION 13. Notice.

1. The city shall maintain a list of persons who have made a written request for notification prior to adoption or modification of a methodology for any impact fee charge. Written notice shall be mailed to persons on the list at least 90 days prior to the first hearing to establish or modify an impact fee charge. The methodology supporting the impact fee charge shall be available at least 60 days prior to the first hearing to adopt or amend an impact fee charge. The failure of a person on the list to receive a notice that was mailed does not invalidate the action of the city.

2. The city may periodically delete names from the list, but at least 30 days prior to removing a name from the list, the city must notify the person whose name is to be deleted that a new written request for notification is required if the person wishes to remain on the notification list.

SECTION 14. Segregation and Use of Revenue.

1. All funds derived from the wastewater impact fee charge are to be segregated by accounting practices from all other funds of the city. That portion of the impact fee charge calculated and collected on account of the wastewater system shall be used for no purpose other than set forth in Section 6 of this ordinance.

2. The City Clerk shall provide the City Council with an annual accounting, by January 1 of each year, for impact fee charges showing the total and the projects funded from each account in the previous fiscal year. A list of the amount spent on each project funded, in whole or in part, with impact fee charge revenues shall be included in the annual accounting.

SECTION 15. Refunds.

1. Refunds may be given by the impact fee program administrator upon finding that there was a clerical error in the calculation of the impact fee.

2. Refunds shall not be allowed for failure to timely claim credit or for failure to timely seek an alternative impact fee rate calculation at the time of submission of an application for a building permit.

3. The city shall refund to the applicant any impact fee revenues not expended within 10 years of receipt.

SECTION 16. Implementing Regulations; Amendments

1. The City Council hereby delegates authority to the public works director to adopt necessary procedures to implement the provisions of this ordinance including the

appointment of an impact fee program administrator. All rules adopted pursuant to this delegated authority shall be filed with the office of the public works director and be available for public inspection.

SECTION 17. Appeal Procedure.

1. A person challenging the propriety of an expenditure of impact fee charge revenues may appeal the decision or the expenditure to the City Council by filing a written request with the City Clerk describing, with particularity, the decision of the public works director and the expenditure of which the person appeals. An appeal of expenditure must be filed within 6 months after the date of the alleged improper expenditure.

2. Appeals of any other decision required or permitted to be made by the public works director under this ordinance must be filed in writing with the City Clerk within 10 days of the decision.

3. After providing notice to the appellant, the Council shall determine whether the public works director's decision or the expenditure is in accordance with this ordinance and may affirm, modify, or overrule the decision(s). If the Council determines that there has been an improper expenditure of impact fee charge revenues, the Council shall direct that a sum equal to the misspent amount shall be deposited within one year to the credit of the account or fund from which it was spent.

4. A legal action challenging the methodology adopted by the Council pursuant to Section 5 of this ordinance shall not be filed later than 60 days after adoption of such

methodology. A person shall contest the methodology used for calculating an impact fee charge only as provided in Subsection 5, and not otherwise.

5. A person who wishes to challenge an impact fee charge must make a written challenge to the charge and file the challenge with the City Clerk within 10 days of receiving the notification of charge. The written challenge must describe with particularity the calculation that the person appeals.

A. The written challenge shall state:

- i. the name and address of the appellant; and
- ii. the nature of the appeal.

Failure to file such written challenge within the time permitted shall be considered a waiver of any objections to the charge.

B. After providing timely notice to the challenger, the public works director shall determine whether the charge is in accordance with the resolution containing the methodology used to establish or modify the impact fee charge adopted by the city council.

C. Unless the challenger and the city agree to a longer period, a written challenge to the impact fee charge shall be heard by the Mayor within 10 working days of the receipt of the written challenge. At least 5 working days prior to the hearing, the city shall mail notice of the time and location thereof to the person who made the written challenge.

D. The Mayor shall hear and determine the challenge on the basis of the person's written challenge and any additional evidence he/she deems appropriate. At the hearing the challenger may present testimony and oral argument personally or by counsel. The Kentucky Rules of Evidence as used by courts of law shall not apply.

6. After exhausting the city's administrative review procedure pursuant to Section 17 (5) of this ordinance, the person challenging the impact fee charge may then petition for the Woodford Circuit Court to review of the final determination within thirty (30) days after the mailing of written notice of such decision.

SECTION 18. Change in Meter Size.

If any customer of the Versailles wastewater utility installs a water meter that is larger in size or maximum industry-assigned flow capacity than the meter utilized to determine the customer's impact fee charge, that customer is subject to a revised impact fee charge. The revised impact fee charge shall be the difference in the charges associated with the existing and new meter sizes. This section applies to any customer of the wastewater utility, not only those who have previously paid an impact fee.

SECTION 19. Prohibited Connection.

No person may connect to the water or wastewater systems of the city unless the appropriate impact fee charge has been paid or the lien or installment payment method has been applied for and applied.

SECTION 20. Penalty.

Violation of Section 19 of this ordinance is punishable by a fine not to exceed \$ 5,000.00.

SECTION 21. Construction.

For the purposes of administration and enforcement of this Ordinance, unless otherwise stated in this Ordinance, the following rules of construction shall apply:

1. In case of any difference of meaning or implication between the text of this ordinance and any caption, illustration, summary table, or illustrative table, the text shall control.

2. The word "shall" is always mandatory and not discretionary; the word "may" is permissive.

3. Words used in the present tense shall include the future; and words used in the singular number shall include the plural and the plural the singular, unless the context clearly indicates the contrary.

4. The phrase "used for" includes "arranged for," "designed for," "maintained for," or "occupied for."

5. Where a regulation involves 2 or more connected items, conditions, provisions, or events:

A. "And" indicates that all the connected terms, conditions, provisions or events shall apply;

B. "Or" indicates that the connected items, conditions, provisions or events may apply singly or in any combination.

C. The word "includes" shall not limit a term to the specific example, but is intended to extend its meaning to all other instances of like kind or character.

SECTION 22. Severability.

The provisions of this ordinance are severable, and it is the intention to confer the whole or any part of the powers herein provided for. If any clause, section or provision of this ordinance shall be declared unconstitutional or invalid for any reason or cause, the remaining portion of this ordinance shall be in full force and effect and be valid as if such invalid portion thereof had not been incorporated herein. It is hereby declared to be the Council's intent that this ordinance would have been adopted had such an unconstitutional provision not been included herein.

SECTION 23. Classification.

The City Council determines that any fee, rates or charges imposed by this Ordinance are not a tax subject to the property tax limitations of KRS 132.027.

SECTION 24. Effective Date.

This ordinance shall become effective after its passage and publication as required by law.

Introduced and given first reading at a meeting of the City Council of the City of Versailles, Kentucky, held on the ____ day of _____, 2017, and fully adopted

after the second reading at a meeting of said council held on the ____ day of _____, 2017.

CITY OF VERSAILLES

BRIAN TRAUOGOTT, MAYOR

ATTEST:

ALLISON B. WHITE, CITY CLERK

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Harrodsburg, KY 40330
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