

**2024 Water and Wastewater Rate Study
For the City of Waverly
Council Summary
September 10, 2024**

Water Department

The proposed water rates were designed to cover the costs associated with the Operation and Maintenance (O&M) of the water system, capital improvements, and future water bonds.

The existing rate structure is shown in the following table.

Table 1: Existing Water Rate Schedule

Customer Monthly Charge¹	
Base Charges	\$/Month
5/8"	\$17.42
3/4"	\$17.54
1"	\$17.87
1-1/2"	\$39.48
2"	\$64.58
3"	\$142.17
4"	\$231.53
Commodity Charges	\$/1,000 Gal
0 to 10,000	\$1.92
10,001 to 20,000	\$2.47
Over 20,001	\$3.09

¹ Fees shown above are for residents of the City of Waverly only. Non-resident fees are double that of resident fees.

The proposed rate structures are shown in the following table.

Proposed Water Rates - Schedule 2						
Category	2024	2025	2026	2027	2028	2029
Meter Size	Cost/Month					
3/4" and Under	\$17.54	\$18.77	\$20.08	\$21.49	\$22.99	\$24.60
1"	\$17.87	\$19.12	\$20.46	\$21.89	\$23.42	\$25.06
1 1/2"	\$39.48	\$42.24	\$45.20	\$48.36	\$51.75	\$55.37
2"	\$64.58	\$69.10	\$73.94	\$79.11	\$84.65	\$90.58
3"	\$142.17	\$152.12	\$162.77	\$174.16	\$186.36	\$199.40
4"	\$231.53	\$247.74	\$265.08	\$283.63	\$303.49	\$324.73
Commodity Rate	Cost/1,000 Gal/Month					
0 to 10,000	\$1.92	\$2.05	\$2.20	\$2.35	\$2.52	\$2.69
10,001 to 20,000	\$2.47	\$2.64	\$2.83	\$3.03	\$3.24	\$3.46
Over 20,001	\$3.09	\$3.31	\$3.54	\$3.79	\$4.05	\$4.33

The following table shows the anticipated monthly bill and increase from the previous year for various types of users.

Proposed Water Rate Schedule 2							
Monthly Bill	Usage/Month (gal)	2024	2025	2026	2027	2028	2029
Low User - 1" Meter	2,500	\$22.67	\$24.26	\$25.95	\$27.77	\$29.72	\$31.80
Average User - 1" Meter	7,500	\$32.27	\$34.53	\$36.95	\$39.53	\$42.30	\$45.26
High User - 1" Meter	15,000	\$49.42	\$52.88	\$56.58	\$60.54	\$64.78	\$69.31
High User - 2" Meter	240,000	\$788.28	\$843.46	\$902.50	\$965.68	\$1,033.27	\$1,105.60
High User - 3" Meter	100,000	\$433.27	\$463.60	\$496.05	\$530.77	\$567.93	\$607.68
Average 4" Meter	495,000	\$1,743.18	\$1,865.20	\$1,995.77	\$2,135.47	\$2,284.95	\$2,444.90
Monthly Bill Increase from Previous Year	Usage/Month (gal)	2024	2025	2026	2027	2028	2029
Low User - 1" Meter	2,500	\$0.00	\$1.59	\$1.70	\$1.82	\$1.94	\$2.08
Average User - 1" Meter	7,500	\$0.00	\$2.26	\$2.42	\$2.59	\$2.77	\$2.96
High User - 1" Meter	15,000	\$0.00	\$3.46	\$3.70	\$3.96	\$4.24	\$4.53
High User - 2" Meter	240,000	\$0.00	\$55.18	\$59.04	\$63.18	\$67.60	\$72.33
High User - 3" Meter	100,000	\$0.00	\$30.33	\$32.45	\$34.72	\$37.15	\$39.76
Average 4" Meter	495,000	\$0.00	\$122.02	\$130.56	\$139.70	\$149.48	\$159.95

City of Waverly, Nebraska						
Utility Rate Study						
Flow of Future Funds - Water						
W RS-2						
Monthly Water Use Rate Categories:						
	All User Rates					
	2024	2025	2026	2027	2028	2029
<u>Base Charges (Based on Meter Size)</u>						
3/4" and Under	\$17.54	\$18.77	\$20.08	\$21.49	\$22.99	\$24.60
1"	\$17.87	\$19.12	\$20.46	\$21.89	\$23.42	\$25.06
1 1/2"	\$39.48	\$42.24	\$45.20	\$48.36	\$51.75	\$55.37
2"	\$64.58	\$69.10	\$73.94	\$79.11	\$84.65	\$90.58
3"	\$142.17	\$152.12	\$162.77	\$174.16	\$186.36	\$199.40
4"	\$231.53	\$247.74	\$265.08	\$283.63	\$303.49	\$324.73
<u>Commodity Charges</u>						
0 to 10,000	\$/1,000 Gal \$1.92	\$/1,000 Gal \$2.05	\$/1,000 Gal \$2.20	\$/1,000 Gal \$2.35	\$/1,000 Gal \$2.52	\$/1,000 Gal \$2.69
10,001 to 20,000	\$2.47	\$2.64	\$2.83	\$3.03	\$3.24	\$3.46
Over 20,001	\$3.09	\$3.31	\$3.54	\$3.79	\$4.05	\$4.33
Average Yearly Revenue Increase:	9.2%	Inflation:	4.0%	Reserve Fund:	5.0%	
Projected Years						
	2024	2025	2026	2027	2028	2029
Operating Revenue & Expenses						
Water Revenue	\$851,950	\$929,111	\$1,014,484	\$1,107,802	\$1,209,554	\$1,320,787
Other Income	\$49,700	\$49,700	\$49,700	\$49,700	\$49,700	\$49,700
Total Operating Revenue	\$901,650	\$978,811	\$1,064,184	\$1,157,502	\$1,259,254	\$1,370,487
O & M Expenses (Less Depreciation, Capital Improvements, and Debt Service)	\$574,400	\$1,020,400	\$1,044,800	\$1,070,200	\$1,096,400	\$1,123,400
Net Operating Revenue	\$327,250	(\$41,589)	\$19,384	\$87,302	\$162,854	\$247,087
Debt Service						
Proposed Bond Issuance	\$0	\$1,100,000	\$0	\$2,707,300	\$0	\$0
Existing Bond and Interest Payments	\$136,213	\$130,598	\$129,821	\$128,873	\$127,723	\$131,340
Proposed Bond and Interest Payments	\$0	\$97,214	\$97,214	\$336,474	\$336,474	\$336,474
Other Obligations						
Capital Improvement Projects	\$157,700	\$541,460	\$541,460	\$541,460	\$541,460	\$541,460
Reserve	\$42,598	\$46,456	\$50,724	\$55,390	\$60,478	\$66,039
Total Other Obligations	\$200,298	\$587,916	\$592,184	\$596,850	\$601,938	\$607,499
Total Annual Revenue	\$901,650	\$2,078,811	\$1,064,184	\$3,864,802	\$1,259,254	\$1,370,487
Total Annual Expenses	\$910,910	\$1,836,127	\$1,864,019	\$2,132,396	\$2,162,534	\$2,198,713
Deficiency of Water Service Revenue	-1%	---	-75%	---	-72%	-60%
Beginning Cash Balance	\$1,738,923	\$1,729,663	\$1,972,347	\$1,172,512	\$2,904,917	\$2,001,638
Ending Cash Balance	\$1,729,663	\$1,972,347	\$1,172,512	\$2,904,917	\$2,001,638	\$1,173,411

Wastewater Department

The proposed wastewater rates were designed to cover the costs associated with the Operation and Maintenance (O&M) of the wastewater system, capital improvements, and future water bonds.

The existing rate structure is shown in the following table.

Customer Monthly Charge	Residents
Base Charges¹ (by Meter Size)	\$/Month
5/8"	\$36.17
3/4"	\$36.17
1"	\$36.17
1 1/2"	\$47.84
2"	\$55.48
3"	\$72.46
4"	\$113.23
Commodity Charges (by User Type)	\$/1,000 Gal
Residential (Dec-Feb Avg/Month)	\$3.52
Commercial (Oct-Sept Avg/Month)	\$5.02
Industrial (Oct-Sept Avg/Month)	\$6.88

¹Base charges are based on meter size only and are independent of user type.

Additionally, any industrial users who introduce "High Pollutant Waste" into the system shall be charged a monthly surcharge based on the strength of their loadings, at the following rates.

Wastewater Characteristic	Surcharge (\$/lb)
BOD ¹	\$0.84
COD ¹	\$0.50
TSS	\$0.43

¹User is charged per pound of BOD or COD, whichever is greater.

The proposed rate structures are shown in the table on the following page.

Proposed Wastewater Rates - Schedule 3						
Category	2024	2025	2026	2027	2028	2029
Meter Size	Cost/Month					
Up to 1" Commercial	\$36.17	\$36.89	\$37.63	\$38.38	\$39.15	\$39.93
1.5" Commercial	\$47.84	\$48.80	\$49.77	\$50.77	\$51.78	\$52.82
2" Commercial	\$55.48	\$56.59	\$57.72	\$58.88	\$60.05	\$61.25
3" Commercial	\$72.46	\$73.91	\$75.39	\$76.90	\$78.43	\$80.00
4" Commercial	\$113.23	\$115.49	\$117.80	\$120.16	\$122.56	\$125.02
5/8"	\$36.17	\$36.89	\$37.63	\$38.38	\$39.15	\$39.93
3/4"	\$36.17	\$36.89	\$37.63	\$38.38	\$39.15	\$39.93
1"	\$36.17	\$36.89	\$37.63	\$38.38	\$39.15	\$39.93
1.5"	\$47.84	\$48.80	\$49.77	\$50.77	\$51.78	\$52.82
2"	\$55.48	\$56.59	\$57.72	\$58.88	\$60.05	\$61.25
4"	\$113.23	\$115.49	\$117.80	\$120.16	\$122.56	\$125.02
1.5 WA Industrial	\$47.84	\$48.80	\$49.77	\$50.77	\$51.78	\$52.82
2" WA IN Industrial	\$55.48	\$56.59	\$57.72	\$58.88	\$60.05	\$61.25
SW Manual Avg C	\$36.17	\$36.89	\$37.63	\$38.38	\$39.15	\$39.93
SW Manual Avg	\$36.17	\$36.89	\$37.63	\$38.38	\$39.15	\$39.93
SW Manual Avg I	\$113.23	\$115.49	\$117.80	\$120.16	\$122.56	\$125.02
MBA Sewer	\$113.23	\$115.49	\$117.80	\$120.16	\$122.56	\$125.02
Commodity Rate	Cost/1,000 Gal					
Residential	\$3.52	\$3.59	\$3.66	\$3.74	\$3.81	\$3.89
Commercial	\$5.02	\$5.12	\$5.22	\$5.33	\$5.43	\$5.54
Industrial	\$6.88	\$7.02	\$7.16	\$7.30	\$7.45	\$7.60
Surcharge Rates	\$/lb					
BOD (if over 250 mg/l)	\$0.84	\$0.86	\$0.87	\$0.89	\$0.91	\$0.93
COD (if over 400 mg/l)	\$0.50	\$0.51	\$0.52	\$0.53	\$0.54	\$0.55
TSS (if over 250 mg/l)	\$0.43	\$0.44	\$0.45	\$0.46	\$0.47	\$0.47

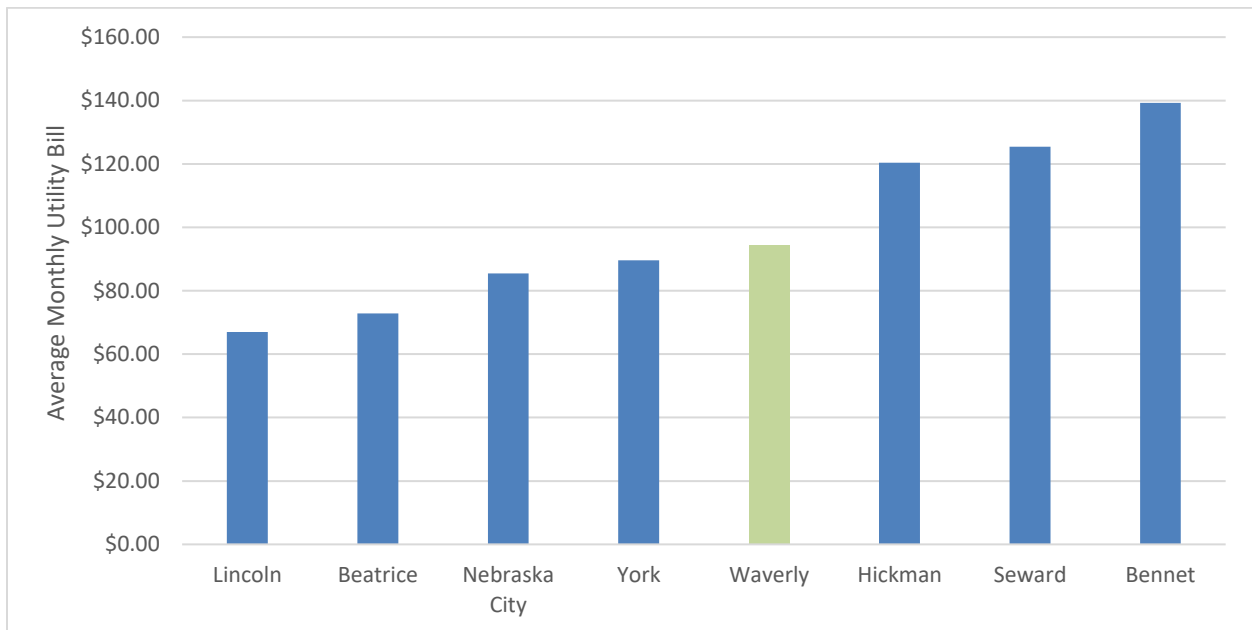
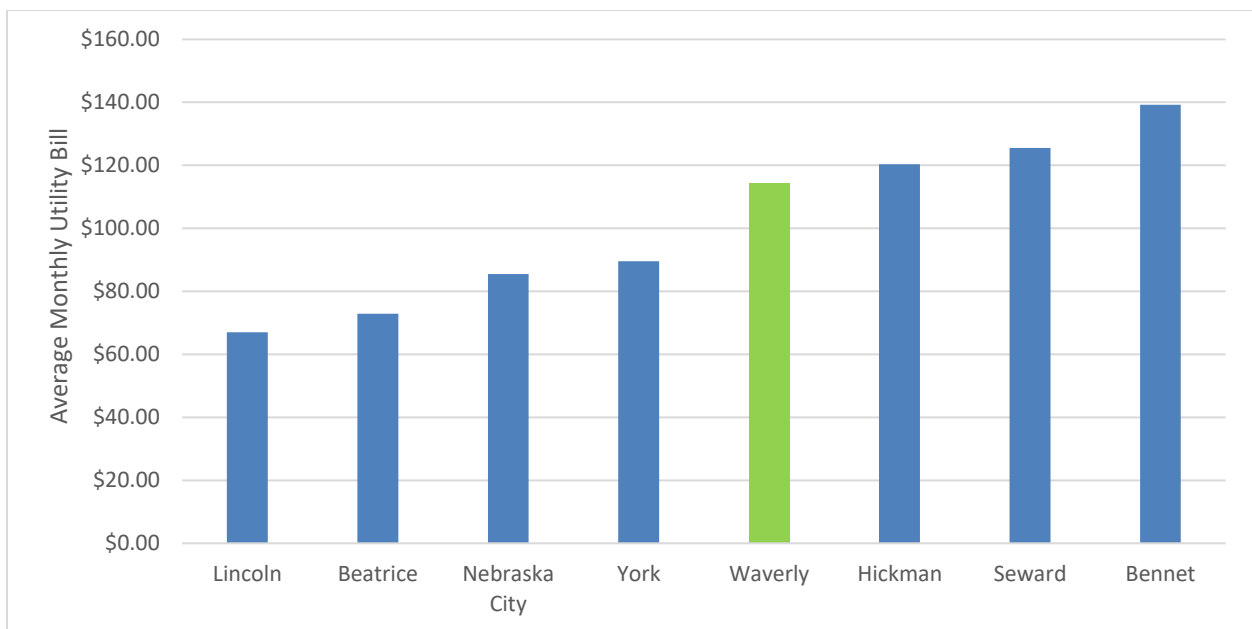
The following table shows the anticipated monthly bill and increase from the previous year for various types of users.

Proposed Wastewater Rate Structure 3							
Monthly Bill	Usage/Month	2024	2025	2026	2027	2028	2029
Residential							
Low User - 1" Meter	1,500	\$41.45	\$42.28	\$43.12	\$43.99	\$44.87	\$45.76
Average User - 1" Meter	7,500	\$62.57	\$63.82	\$65.10	\$66.40	\$67.73	\$69.08
High User - 1" Meter	10,000	\$71.37	\$72.80	\$74.25	\$75.74	\$77.25	\$78.80
Commercial							
Low User - 3" Meter	20,000	\$172.86	\$176.32	\$179.84	\$183.44	\$187.11	\$190.85
Average User - 3" Meter	80,000	\$474.06	\$483.54	\$493.21	\$503.08	\$513.14	\$523.40
High User - 3" Meter	150,000	\$825.46	\$841.97	\$858.81	\$875.98	\$893.50	\$911.37
Industrial							
MBA - 4" Meter	2,242,044	\$32,197.77	\$32,841.72	\$33,498.56	\$34,168.53	\$34,851.90	\$35,548.94

Monthly Bill Increase from Previous Year	Usage/Month	2024	2025	2026	2027	2028	2029
Residential							
Low User - 1" Meter	1,500	\$0.00	\$0.83	\$0.85	\$0.86	\$0.88	\$0.90
Average User - 1" Meter	7,500	\$0.00	\$1.25	\$1.28	\$1.30	\$1.33	\$1.35
High User - 1" Meter	10,000	\$0.00	\$1.43	\$1.46	\$1.49	\$1.51	\$1.55
Commercial							
Low User - 3" Meter	20,000	\$0.00	\$3.46	\$3.53	\$3.60	\$3.67	\$3.74
Average User - 3" Meter	80,000	\$0.00	\$9.48	\$9.67	\$9.86	\$10.06	\$10.26
High User - 3" Meter	150,000	\$0.00	\$16.51	\$16.84	\$17.18	\$17.52	\$17.87
Industrial							
MBA - 4" Meter	2,242,044	\$0.00	\$643.96	\$656.83	\$669.97	\$683.37	\$697.04

City of Waverly, Nebraska						
Utility Rate Study						
Flow of Future Funds - Wastewater						
WW RS-3						
Monthly Sewer Use Rate Categories:						
	All User Rates					
	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>
<u>Base Charges (Based on Meter Size)</u>						
Up to 1" Commercial	\$36.17	\$36.89	\$37.63	\$38.38	\$39.15	\$39.93
1.5" Commercial	\$47.84	\$48.80	\$49.77	\$50.77	\$51.78	\$52.82
2" Commercial	\$55.48	\$56.59	\$57.72	\$58.88	\$60.05	\$61.25
3" Commercial	\$72.46	\$73.91	\$75.39	\$76.90	\$78.43	\$80.00
4" Commercial	\$113.23	\$115.49	\$117.80	\$120.16	\$122.56	\$125.02
5/8"	\$36.17	\$36.89	\$37.63	\$38.38	\$39.15	\$39.93
3/4"	\$36.17	\$36.89	\$37.63	\$38.38	\$39.15	\$39.93
1"	\$36.17	\$36.89	\$37.63	\$38.38	\$39.15	\$39.93
1.5"	\$47.84	\$48.80	\$49.77	\$50.77	\$51.78	\$52.82
2"	\$55.48	\$56.59	\$57.72	\$58.88	\$60.05	\$61.25
4"	\$113.23	\$115.49	\$117.80	\$120.16	\$122.56	\$125.02
1.5 WA Industrial	\$47.84	\$48.80	\$49.77	\$50.77	\$51.78	\$52.82
2" WA IN Industrial	\$55.48	\$56.59	\$57.72	\$58.88	\$60.05	\$61.25
SW Manual Avg C	\$36.17	\$36.89	\$37.63	\$38.38	\$39.15	\$39.93
SW Manual Avg	\$36.17	\$36.89	\$37.63	\$38.38	\$39.15	\$39.93
SW Manual Avg I	\$113.23	\$115.49	\$117.80	\$120.16	\$122.56	\$125.02
MBA Sewer	\$113.23	\$115.49	\$117.80	\$120.16	\$122.56	\$125.02
<u>Commodity Charges</u>						
	\$/1,000 Gal	\$/1,000 Gal	\$/1,000 Gal	\$/1,000 Gal	\$/1,000 Gal	\$/1,000 Gal
Residential	\$3.52	\$3.59	\$3.66	\$3.74	\$3.81	\$3.89
Commercial	\$5.02	\$5.12	\$5.22	\$5.33	\$5.43	\$5.54
Industrial	\$6.88	\$7.02	\$7.16	\$7.30	\$7.45	\$7.60
<u>Industrial Surcharge Fees</u>						
BOD (if over 250 mg/l)	\$0.84	\$0.86	\$0.87	\$0.89	\$0.91	\$0.93
COD (if over 400 mg/l)	\$0.50	\$0.51	\$0.52	\$0.53	\$0.54	\$0.55
TSS (if over 250 mg/l)	\$0.43	\$0.44	\$0.45	\$0.46	\$0.47	\$0.47

Average Yearly Revenue Increase:		4.1%	Inflation:		4.0%	Reserve Fund:		5.0%
Projected Years								
	2024	2025	2026	2027	2028	2029		
Operating Revenue & Expenses								
Wastewater Revenue	\$1,464,114	\$1,519,251	\$1,583,724	\$1,650,929	\$1,720,985	\$1,794,010		
Other Income	\$42,200	\$44,100	\$46,100	\$48,100	\$50,200	\$52,400		
Total Operating Revenue	\$1,506,314	\$1,563,351	\$1,629,824	\$1,699,029	\$1,771,185	\$1,846,410		
O & M Expenses (Less Depreciation, Capital Improvements, and Debt Service)	\$497,900	\$594,600	\$614,700	\$635,500	\$657,100	\$679,600		
Net Operating Revenue	\$1,008,414	\$968,751	\$1,015,124	\$1,063,529	\$1,114,085	\$1,166,810		
Debt Service								
Proposed Bond Issuance	\$0	\$0	\$0	\$0	\$0	\$0		
Existing Bond and Interest Payments	\$556,223	\$553,209	\$554,613	\$560,118	\$559,768	\$558,558		
Proposed Bond and Interest Payments	\$0	\$0	\$0	\$0	\$0	\$0		
Other Obligations								
Capital Improvements Projects	\$48,700	\$258,800	\$258,800	\$258,800	\$258,800	\$258,800		
Reserve	\$73,206	\$75,963	\$79,186	\$82,546	\$86,049	\$89,700		
Total Other Obligations	\$121,906	\$334,763	\$337,986	\$341,346	\$344,849	\$348,500		
Total Annual Revenue	\$1,506,314	\$1,563,351	\$1,629,824	\$1,699,029	\$1,771,185	\$1,846,410		
Total Annual Expenses	\$1,176,028	\$1,482,571	\$1,507,299	\$1,536,964	\$1,561,717	\$1,586,658		
Deficiency of Sewer Service Revenue	---	---	---	---	---	---		
Beginning Cash Balance	\$4,900,412	\$5,230,698	\$5,311,477	\$5,434,002	\$5,596,067	\$5,805,535		
Ending Cash Balance	\$5,230,698	\$5,311,477	\$5,434,002	\$5,596,067	\$5,805,535	\$6,065,287		

Existing Total Utility Rate Survey Comparison**Proposed Total Utility Rate Survey Comparison**

*Proposed Total Utility Rates for comparison communities assumes no rate increases for those communities by 2024