

Utility Rate Discussion Commission Work Session

Tuesday, November 8, 2022

5:00 p.m.

Water Rate History

2013

- In December the City Commission approved a water rate increase for 2014 & 2015

2014

- Rates increased by \$2.78/mo to \$16.53/mo. for the first 200 cu.ft.

2015

- Water rate increased by \$1.12/mo. as per the 2013 ordinance (**last time water rates increased**)

Sewer Rate History

2013

- Plant Upgrade Fee created to pay for significant upgrades to the Wastewater Treatment Plant (20-year loan). The fee is **38 percent of a customer's sewer charge**. Commission at the time said that when construction was complete and actual costs known, they would consider reducing the fee.

2013

- The City Commission approved a regular sewer rate increase for 2015, 2016, 2017, & 2018 of \$1.59/mo

2015

- **In January**, a **rate increase** was implemented of **\$1.59/mo** to the regular rate for each customer

Sewer Rate History

2016

- In January, a rate increase was implemented of **\$1.59/mo** to the regular rate.
- In September, the City Commission voted to **keep the Plant Upgrade Fee (38%)** in place in order to **pay off the plant loan 10-11 years early**. However, they asked that **the increase to the regular rate be taken from the plant upgrade revenues to offset the planned rate increase approved in 2016**.

2017

- No increase to regular rate, **\$1.59/mo/customer was transferred from the plant upgrade fee revenues** to offset the regular rate for 2017 and each year forward as Commission directed in 2016.

2018

- No increase to regular rate, an additional **\$1.59/mo/customer was transferred from the plant upgrade fee revenues** to offset the regular rate increase for 2018 and each year forward as Commission directed in 2016.

Definition of Two Sewer Charges



1. Regular Rates—pays for operating budget expenses & debt service payments for all projects bonded or for state loans payments, except for the WWTP Project



2. Plant Upgrade Fee—pays for the annual debt service payments & the extra principal payment on the state project loan.

What service is being provided for regular sewer rates?

Take what goes down the drain & turn it into...a clean product.



What service is being provided for regular sewer rates?

Wastewater collection system—Sewer lines (123 miles of sewer with 2,448 manholes) carry wastewater from homes and businesses to the Treatment Plant. All these lines are cleaned and maintained approximately one time per year if a 6" or 8" line. Larger lines are cleaned every 3 years unless it is problem location that is on our hot spot list.

Lift stations — 8 to maintain, problematic during power outages

Wastewater Treatment Plant —treats about 2.5 million gallons/day that comes in as raw sewage and goes out as clean water. Maximum flow during rain events could be 9 million gallons or more.

Effluent line —Clean discharge from the WWTP goes to the Golf Course to water the course and to the wetlands to keep it wet. This line and system is maintained & continually monitored.



What service is being provided for regular sewer rates?

21 miles of storm sewer lines, 677 box inlets, 162 manholes

6,371 miles of street sweeping/year

Drainage ditch maintenance

Sand Creek maintenance

Storm Sewer NPDES Permit Compliance

Wastewater Treatment

Salaries of maintenance & support staff

Equipment replacement

Major infrastructure projects

Bond & interest payments, etc.

What service is being provided for regular sewer rates?

Aging Infrastructure Requires Rehabilitation ---Sewer Projects Recently Completed & Bonded

Sand Creek Dam Rehabilitation

Old Main Sewer Upsizing

8th & Sand Creek Sewer Upsizing

Increase in Annual Debt Service Bond Payment: \$195,310



Sewer Plant Upgrade Low Interest Loan Payments to KDHE for Project Completed in 2016.

Purpose of project:

1. To meet changing regulations of our permit
2. To increase the capacity of the plant
3. To replace equipment and infrastructure that had outlived its useful life

What does the Plant Upgrade Fee pay for?

Total Funds Saved By Making Extra Payments On WWTP Loan from Plant Upgrade Fee

Comparison	Original 2013	Nov. 2022	If Keep Plant Upgrade Fee	If End Plant Upgrade Fee
WWTP Loan Payoff Year	2044	2033	2026	2033
Savings in Interest	\$ -	\$ 770,000	\$ 2,300,000	\$ 770,000
Extra Principal Payments	\$ -	\$ 5,600,000	\$ 9,681,000	\$ 5,600,000

Note: Savings in Interest if Keep Plant Upgrade Fee is estimated.

Regular Sewer Rates (Plant Upgrade Fee is separate)

	A	B	C	D	E	F
	Monthly Minimum Inside City	Taken From 38% Plant Upgrade Fee	Total of Monthly Minimum +Taken from 38% Plant Upgrade Fee	Each 100 cu.ft. Thereafter Inside City	Monthly Minimum Outside City	Each 100 cu.ft. Thereafter Outside City
Year						
2014	\$31.78		\$31.78	\$8.70	\$58.48	\$11.30
2015	\$33.37		\$33.37	\$8.70	\$61.65	\$11.30
2016	\$34.96		\$34.96	\$9.00	\$64.83	\$11.70
2017	\$34.96	\$1.59	\$36.55	\$9.00	\$64.83	\$11.70
2018	\$34.96	\$1.59	\$38.14	\$9.00	\$64.83	\$11.70
2019	\$34.96		\$38.14	\$9.00	\$64.83	\$11.70
2020	\$34.96		\$38.14	\$9.00	\$64.83	\$11.70
2021	\$34.96		\$38.14	\$9.00	\$64.83	\$11.70
2022	\$34.96		\$38.14	\$9.00	\$64.83	\$11.70

Current Plant Upgrade Fee Revenues

Plant Upgrade Fee Breakdown	
Total Fees Collected	\$ 19,340,997
\$1.59 Transferred (2 yrs)	\$ (1,509,915)
Debt Service	\$ (8,230,950)
Extra Payments	\$ (5,600,000)
Reserve Required by State Loan	\$ (1,881,602)
Plant Maintenance Reserve as est. by Commission	\$ (962,500)
Remainder for 2023 Extra Payment	\$ 1,156,030





What service is provided for water rate?

Water production – pumped from groundwater in Equus Beds (14 city wells)

Water treatment at Mission Plant

Water transmission from treatment plant to 1st Street Booster Station (20 miles of lines)





What service is being provided for water rate?

Water distribution from Booster Station to water towers through underground lines to your home or business (161 miles of lines, 907 fire hydrants)

Replace meters 500-800 per year on 10- to 20-year cycle (approx. 8,600 meters total)

Maintenance of all wells, lines, towers, pump stations, booster stations, hydrants, valves, etc.

Salaries of maintenance & support staff

Equipment replacement

Major infrastructure projects

Bond & interest payments, etc.

Issues Impacting Expenses For Water & Sewer

Pandemic—Spring of 2020, COVID-19 begins impacting USA and Newton, Kansas.

Texas Freeze—natural disaster declared in February of 2021. 2 of 3 largest PVC pipe manufacturers in the nation were impacted causing material shortages & price increases.

Hurricanes—shut down supply chains & caused increased material prices.

New Federal Regulations—updates to lead & copper rule, CDL regulations, NPDES permit



Staffing Issues—Turn-over, more staff needed, more training

Material Price Increases—pipe, all pipeline appurtenances, meters, concrete/asphalt, chemicals, fuel, vehicles, etc...



Sewer Maintenance Increases 2012-2022

Sewer Lift Station Enzymes 28%

Saw Motors 14%

Televising Vehicle 21%

Vactor Truck 39%

Air Sweeper 25%

High Loader 55%

Insurance (Property & Liability) 13%

Stormwater Maintenance 150%



Water Maintenance Expense Increases 2012-2022

- Meter Pits 53%
- Meter Setters 48%
- Meters 21-26%
- Pipe (various) 67-80%
- Meter Radios 16%
- Repair Clamps 81%
- Fuel 33%
- Caustic Soda 53%
- Chlorine 64%
- Fluoride 8%
- Insurance (Property & Liability) 13%

What Have We Done To Keep Utility Expenses Down?

- Refinanced bonds to save interest costs for both Sewer & Water
- Moved state required water analysis at WWTP to private lab to save on equipment purchases & staff time (Kept operational plant process lab analysis in-house)
- Ongoing analysis of WWTP process & how to operate the least amount of powered equipment & polymer additive to still achieve state required treatment results
- Working on pilot project for using sludge to create Class A biosolids to use as cover(top layer of dirt) on construction projects
- Remotely control treatment plants on weekends to save OT costs
- Buried electrical lines from wells to Mission Plant to improve reliability & limit outages/damages from storms

What Have We Done To Keep Sewer Expenses Down?

Paid Cash For The Following Projects To Avoid Debt & Interest Costs:

- 2016 Sewer Rehab
- NMC Sewer Extension
- 4th & Boyd Culvert Repair
- Grandview Drainage
- Centennial Park Sewer Lift Station
- Centennial Park Drainage Channel
- Slate Creek Channel Rehab
- Suderman Drainage
- Portion of 8th & Sand Creek Sewer Upsize
- Windows 10 Upgrade for Utility Computers
- SE 14th Street Storm Sewer
- Girl Scout Little House Sewer
- Upgrade 2 of 4 influent pumps at WWTP w/VFD's

Projects from 2016 -2021

Total Cost of These Projects: \$1,723,314

What Have We Done To Keep Water Expenses Down?

Paid Cash For The Following Projects To Avoid Debt & Interest Costs:

- 5th & Elm Large Water Main Break
- Equipment Purchases
- Windows 10 Upgrades for Utility Computers
- Ground Level Storage Tank, W. 1st
- Wheatridge Waterline
- Security Cameras for Facilities
- Switch gear for generator transfer switch upgrade & VFD Additions on high service pumps at Mission

Projects from 2016 -2021

Total Cost of These Projects: \$560,731

Lawrence City Commission to discuss proposal to increase water rates by 8.75% in 2023, possible expansion of utility assistance

NEWS
SEP 9, 2022 - 1:50PM
ROCHELLE VALVERDE
rvalverde@jworld.com

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Lots of Cities ↑ \$\$

South Hutchinson Council approves seeking water rate study

John Green
The Hutchinson News
Published 4:50 p.m. CT Oct. 25, 2022
View Comments



BWL board OKs two-year price hike for electric, water customers

Mike Ellis
Lansing State Journal

Published 7:23 p.m. ET Sept. 27, 2022
View Comments

Customers will be paying more for water and electric from the Lansing Board of Water and Light after a rate increase was approved Tuesday.

The utility will raise electricity rates 9% and water prices more than 18% over the next two years, with about half of the increase starting Nov. 1 and the rest kicking in a year later.

BWL hopes to raise electric, water rates for Lansing area customers

The rates will increase by 4.5% and water rates more than 9% effective Nov. 1, with the same electric increases and a slightly larger water increase on Nov. 1, 2023. Customers would see the first increase in their December bills and by December 2023 a typical residential customer with both electric and water service would see their annual costs rise by \$208, or more than \$17 a month.

The Wichita Eagle

Obituaries Sports Business Voter Guide Opinion Dining Jobs/Recruiting Personal Finance Betting

POLITICS & GOVERNMENT

Wichita poised for more water, sewer rate increases in 2023 if council approves plan

BY MATTHEW KELLY
OCTOBER 14, 2022 1:55 PM

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The South Hutchinson City Council made a couple of... the ongoing pursuit of additional water for the city. But to loom on the complex issue.

Not All Cities & Utilities Are Created Equal

Different Treatment Types

Water Regulations

- ❖ Depends on size of city & flow
- ❖ Depends on type of source (ground or surface)
- ❖ Depends on water analysis which is triggered by water source and type of water lines used
- ❖ Depends on Water Right Allocation & Status
- ❖ EPA, KDHE, & DWR Regulated

Wastewater Regulations

- ❖ Depends on size of city & flow
- ❖ Depends on receiving stream or lake
- ❖ Depends on time in permit cycle
- ❖ Some have storm water utilities
- ❖ EPA & KDHE Regulated

Not All Cities & Utilities Are Created Equal

Different Treatment Types

Water Treatment Types

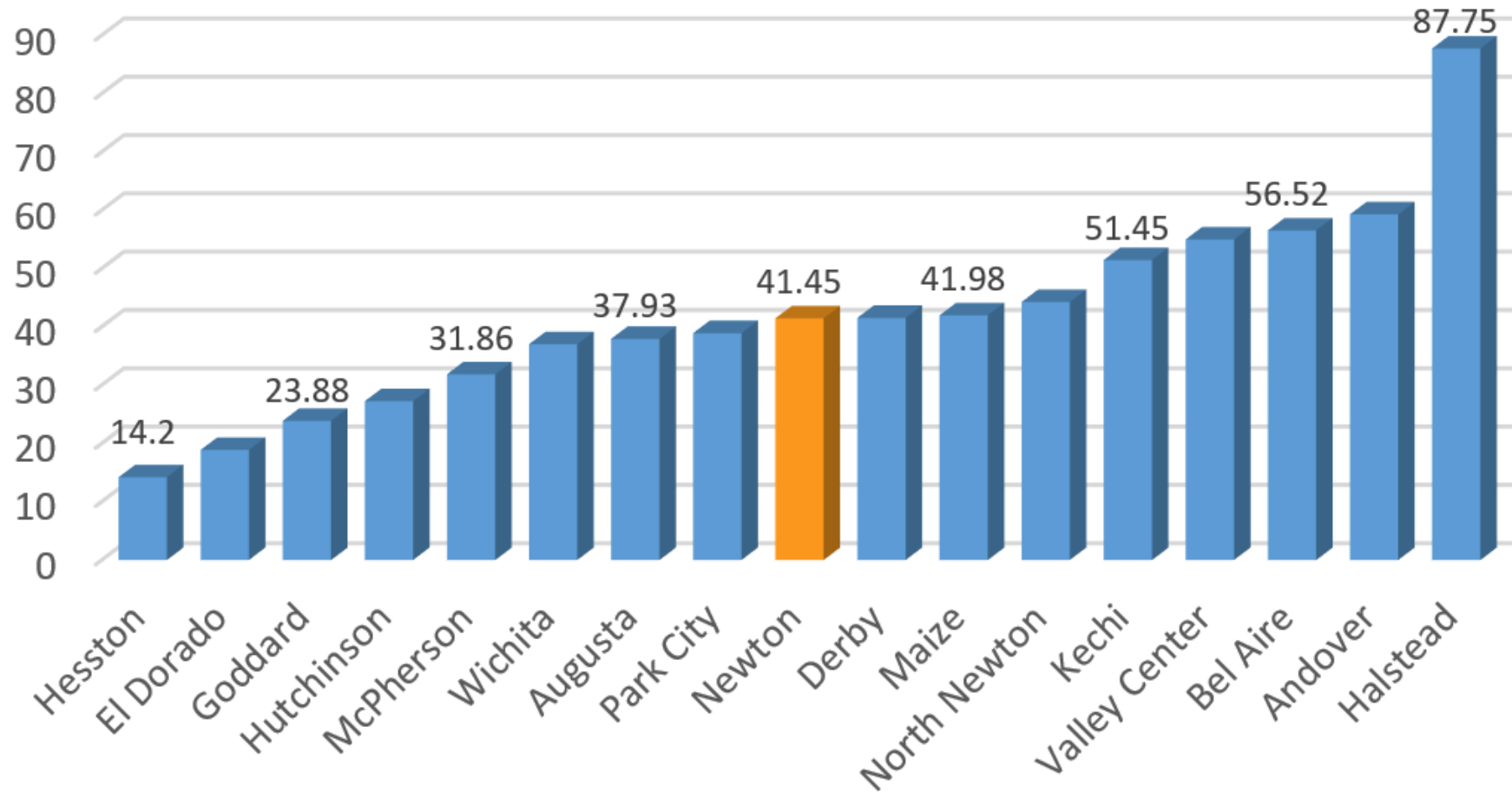
- ❖ Chlorine (most everyone)
- ❖ Lead & Copper, adjust pH using Caustic (Sodium Hydroxide), Sodium Bicarbonate for corrosion control
- ❖ Fluoride (extra)
- ❖ Surface Water Bacteria Issues, Filters and/or UV

Wastewater Treatment Types

- ❖ Natural vs. Chemical
- ❖ Conventional: primaries & sludge
- ❖ Activated Sludge: most popular
- ❖ Activated Sludge Plus: BNR (growing bacteria w/on-off air), ENR (treating P&N w/air & chemical), LOT (best technology)
- ❖ Disinfection: Chlorine or UV

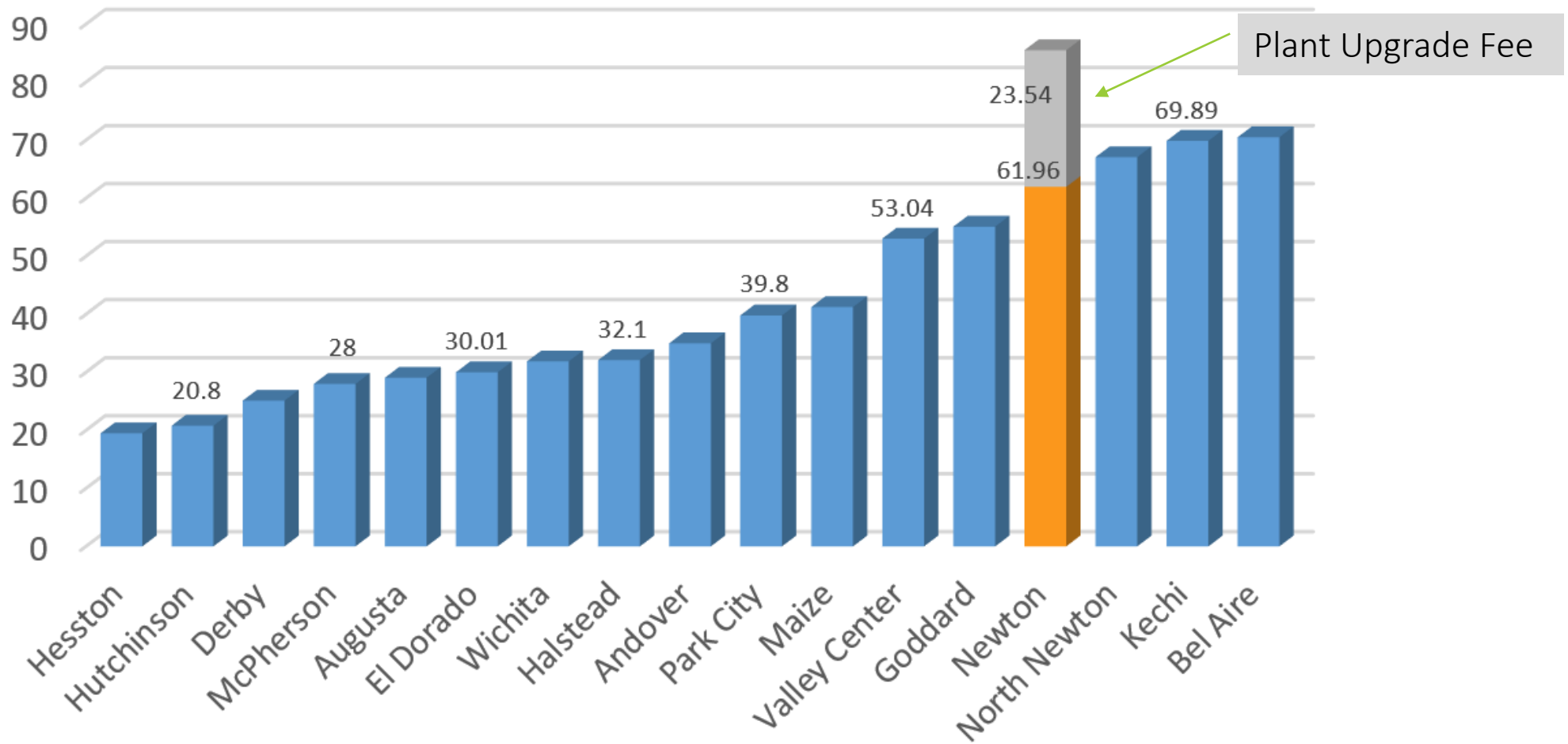
Water rates in Wichita area

Water Cost for 600 cubic feet (~5000 gallons)



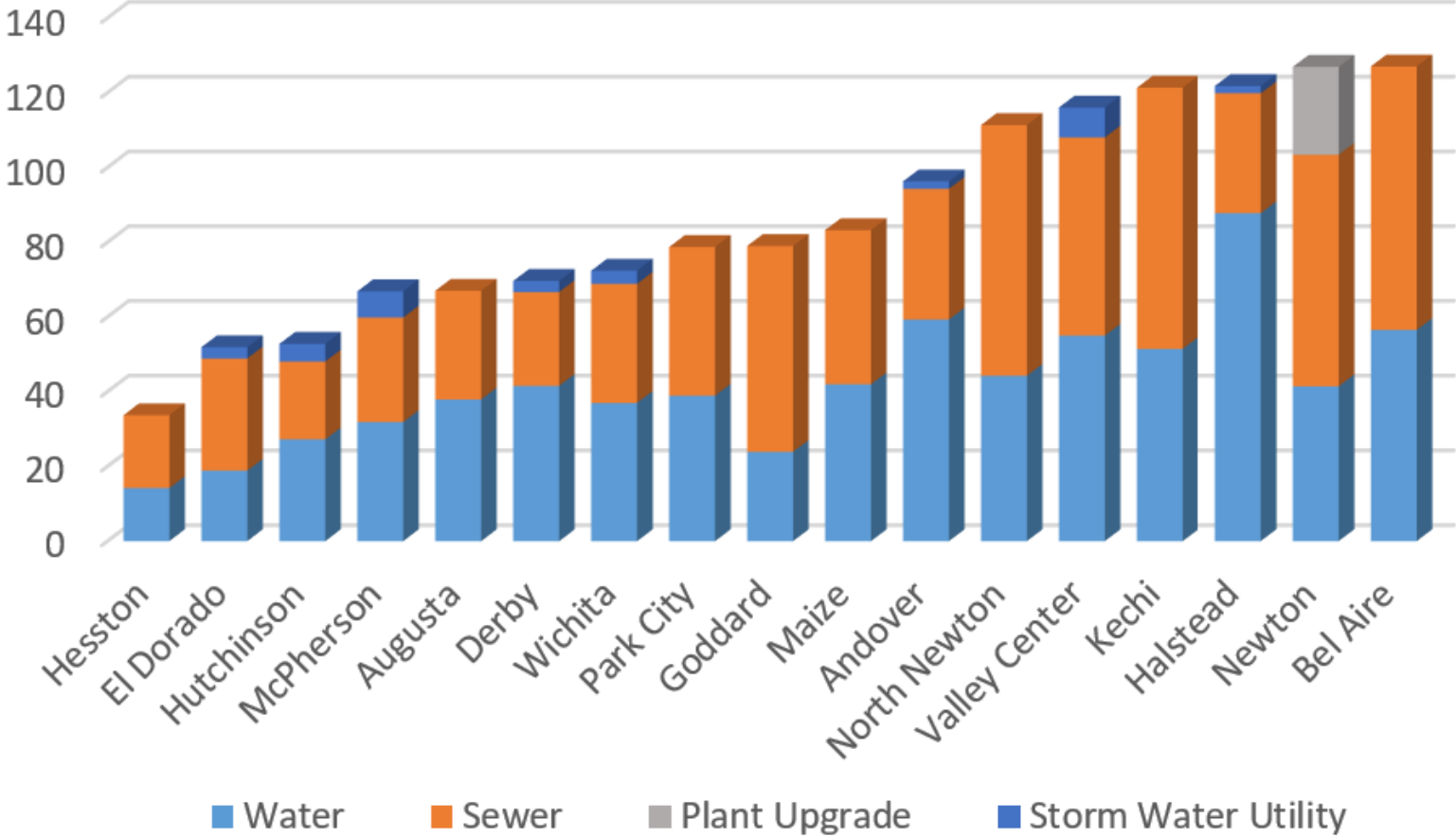
Sewer rates in Wichita area

Sewer Cost for 600 cubic feet (~5000 gallons)



Utility bills in Wichita area

Water/Sewer Bill for 600 cu ft (5000 gallons)



Jerry McKenzie—Rate Study Overview

- ❖ Senior Manager, Performance Solutions Group
- ❖ 35+ years experience in completing utility rate reviews
- ❖ Public Utility Accounting Lead Instructor since 1989
- ❖ Completed over 300 individual utility rate reviews



Background—Rate Analysis

1. Driving the need for rate changes
 - i. *Infrastructure needs (environmental concerns & upgrades)*
 - ii. *Nature of Utilities (capital debt intensive)*
2. Last study decision made to focus rate adjustments on base usage
 - i. *Since all customers benefit from infrastructure changes*
 - ii. *Inline with national trends (away from tiers-consolidation)*
 - iii. *Tiers are hard to defend from cost/causation standpoint*



The 2022 Rate Review Process

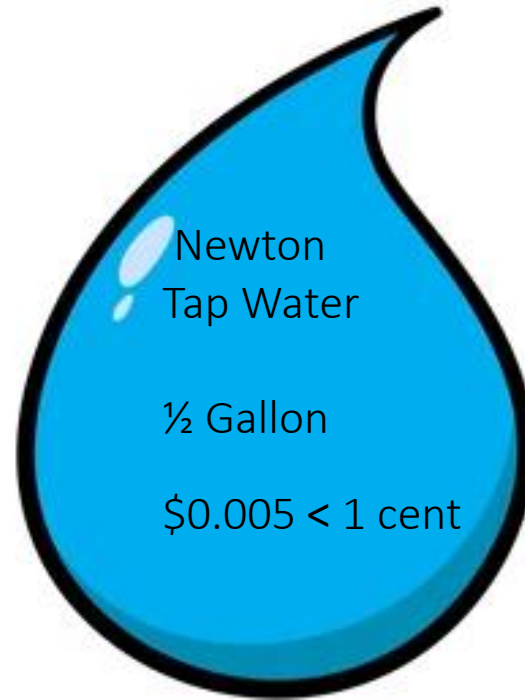
1. Utilized MGT Utility Rate Forecasting Model
2. Analysis based on 2023 Budget for both water & sewer
3. Reviewed past audited costs & revenue patterns
4. Expenditures analyzed at very detailed level
 - i. Reviewed/forecast (10 years)
 - ii. At Dept/Div level (Admin/Billing/Distr/Trans/Prod/Plant)
 - iii. Further examined by acct WITHIN Pers/Contr/Comod/Cap/Tsf
5. Results presented in same format as Schedule of Rev/ Exp & Chgs in Fund Bal (ACFR)
6. Draft results presented and several rate adjustment options were considered & vetted



Current Water Rate Comparison



2Liters = 1/2 Gallon



Base rate 200 cu.ft. =1,496 Gallons

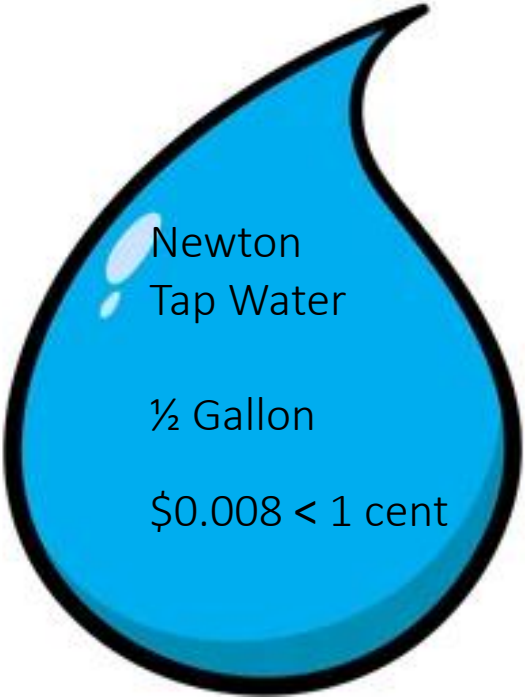


Proposed 9.5% Increase Water Rate Comparison



2Liters = 1/2 Gallon

38-45%
Increase
in last
4 years



Base rate 200 cu.ft. =1,496 Gallons



25%
Increase
since
2019

\$\$ Prices for pop & milk from Walmart 10/7/22

Sewer Rate Options

Option 1—Save in Long Run

Pay off WWTP in 2026

Keep Plant Upgrade Fee until 2026

Base Rate Increases 3% in 2023



Base Rate for 2023 is \$36.01

+

Plant Upgrade Fee is 38% of sewer bill

Option 2—No Rate Change

Pay off WWTP in 2033

Stop extra payment for WWTP

Plant Upgrade Fee is eliminated

Base Rate Increases 38% in 2023



Base Rate for 2023 is \$48.24

Plant Upgrade Fee is 0.

Option 3—Save Upfront

Pay off WWTP 2033

Stop extra payment for WWTP

Plant Upgrade Fee is eliminated

Overall Sewer Rate decreases



Base Rate for 2023 \$39.16

Plant Upgrade Fee is 0.

WASTEWATER			Option #1 - PAY OFF EARLY/SAVE IN THE LONG RUN						
	Percent Increase	Current	2023	2024	2025	2026	2027	2028	2029
			3%	6%	6%	15%	0%	0%	0%
Base Inc. 300cf	34.96		36.01	38.17	40.46	46.53	46.53	46.53	46.53
Per 100/CF	9.00		9.27	9.83	10.42	11.98	11.98	11.98	11.98
Plt Upgrade	38%		38%	38%	38%	-	-	-	-
Small base usage	300	34.96	36.01	38.17	40.46	46.53	46.53	46.53	46.53
Per 100/CF		9.00	9.27	9.83	10.42	11.98	11.98	11.98	11.98
Plt Upgrade		16.70	17.21	18.24	19.33	-	-	-	-
		60.66	62.48	66.23	70.21	58.51	58.51	58.51	58.51
Medium base usage	600	34.96	36.01	38.17	40.46	46.53	46.53	46.53	46.53
Per 100/CF		27.00	27.81	29.48	31.25	35.93	35.93	35.93	35.93
Plt Upgrade		23.54	24.25	25.71	27.25	-	-	-	-
		85.50	88.07	93.35	98.96	82.46	82.46	82.46	82.46
Large base usage	900	34.96	36.01	38.17	40.46	46.53	46.53	46.53	46.53
Per 100/CF		54.00	55.62	58.96	62.49	71.87	71.87	71.87	71.87
Plt Upgrade		33.80	34.82	36.91	39.12	-	-	-	-
		122.76	126.45	134.03	142.08	118.40	118.40	118.40	118.40

Sewer Rate
Option 1-
Save In
Long Run

Current Base Fee			Option #3 - SAVE UPFRONT - STOP EXTRA PAYMENT						
			2023	2024	2025	2026	2027	2028	2029
Percent Increase			12%	12%	12%	6%	6%	6%	6%
Base Inc. 300cf	34.96		39.16	43.85	49.12	52.06	55.19	58.50	62.01
Per 100/cf	9.00		10.08	11.29	12.64	13.40	14.21	15.06	15.96
Plt Upgrade	38%		-	-	-	-	-	-	-
Small usage	300	34.96	39.16	43.85	49.12	52.06	55.19	58.50	62.01
Per 100/cf		9.00	10.08	11.29	12.64	13.40	14.21	15.06	15.96
Plt Upgrade		16.70	-	-	-	-	-	-	-
		60.66	49.24	55.14	61.76	65.47	69.39	73.56	77.97
Medium usage	600	34.96	39.16	43.85	49.12	52.06	55.19	58.50	62.01
Per 100/cf		27.00	30.24	33.87	37.93	40.21	42.62	45.18	47.89
Plt Upgrade		23.54	-	-	-	-	-	-	-
		85.50	69.40	77.72	87.05	92.27	97.81	103.68	109.90
Large usage	900	34.96	39.16	43.85	49.12	52.06	55.19	58.50	62.01
Per 100/cf		54.00	60.48	67.74	75.87	80.42	85.24	90.36	95.78
Plt Upgrade		33.80	-	-	-	-	-	-	-
		122.76	99.64	111.59	124.98	132.48	140.43	148.86	157.79

Sewer Rate Option 3- Save Upfront

Water Rate Increase

No Rate Increase Since 2015

Current Water Rate			Rate Increase Option						
			2023	2024	2025	2026	2027	2028	2029
Percent Increase			9.5%	9.5%	9.5%	9.5%	5%	5%	5%
Base Inc. 200 cf	17.65		19.33	21.16	23.17	25.37	26.64	27.98	29.37
Per 100/CF	5.95		6.52	7.13	7.81	8.55	8.98	9.43	9.90
Small usage	300	17.65	19.33	21.16	23.17	25.37	26.64	27.98	29.37
		5.95	6.52	7.13	7.81	8.55	8.98	9.43	9.90
		23.60	25.84	28.30	30.99	33.93	35.63	37.41	39.28
Medium usage	600	17.65	19.33	21.16	23.17	25.37	26.64	27.98	29.37
		23.80	26.06	28.54	31.25	34.22	35.93	37.72	39.61
		41.45	45.39	49.70	54.42	59.59	62.57	65.70	68.98
Large usage	900	17.65	19.33	21.16	23.17	25.37	26.64	27.98	29.37
		41.65	45.61	49.94	54.68	59.88	62.87	66.02	69.32
		59.30	64.93	71.10	77.86	85.25	89.52	93.99	98.69

CURRENT			2023	2024	2025	2026	2027	2028	2029
WASTEWATER			Option #1 - PAY OFF EARLY/SAVE IN THE LONG RUN						
	Percent Increase		2023	2024	2025	2026	2027	2028	2029
			3%	6%	6%	15%	0%	0%	0%
Base Inc. 300cf	34.96		36.01	38.17	40.46	46.53	46.53	46.53	46.53
Per 100/cf	9.00		9.27	9.83	10.42	11.98	11.98	11.98	11.98
Plant Upgrade	38%		38%	38%	38%	-	-	-	-
Small usage	300	34.96	36.01	38.17	40.46	46.53	46.53	46.53	46.53
Per 100/cf		9.00	9.27	9.83	10.42	11.98	11.98	11.98	11.98
Plant Upgrade		16.70	17.21	18.24	19.33	-	-	-	-
		60.66	62.48	66.23	70.21	58.51	58.51	58.51	58.51
Medium usage	600	34.96	36.01	38.17	40.46	46.53	46.53	46.53	46.53
Per 100/cf		27.00	27.81	29.48	31.25	35.93	35.93	35.93	35.93
Plant Upgrade		23.54	24.25	25.71	27.25	-	-	-	-
		85.50	88.07	93.35	98.96	82.46	82.46	82.46	82.46
Large usage	900	34.96	36.01	38.17	40.46	46.53	46.53	46.53	46.53
Per 100/cf		54.00	55.62	58.96	62.49	71.87	71.87	71.87	71.87
Plant Upgrade		33.80	34.82	36.91	39.12	-	-	-	-
		122.76	126.45	134.03	142.08	118.40	118.40	118.40	118.40
WATER			Option #1						
	Percent Increase		2023	2024	2025	2026	2027	2028	2029
			9.5%	9.5%	9.5%	9.5%	5%	5%	5%
Base Inc. 200 cf	17.65		19.33	21.16	23.17	25.37	26.64	27.98	29.37
Per 100/cf	5.95		6.52	7.13	7.81	8.55	8.98	9.43	9.90
Small usage	300	17.65	19.33	21.16	23.17	25.37	26.64	27.98	29.37
		5.95	6.52	7.13	7.81	8.55	8.98	9.43	9.90
		23.60	25.84	28.30	30.99	33.93	35.63	37.41	39.28
Medium usage	600	17.65	19.33	21.16	23.17	25.37	26.64	27.98	29.37
		23.80	26.06	28.54	31.25	34.22	35.93	37.72	39.61
		41.45	45.39	49.70	54.42	59.59	62.57	65.70	68.98
Large usage	900	17.65	19.33	21.16	23.17	25.37	26.64	27.98	29.37
		41.65	45.61	49.94	54.68	59.88	62.87	66.02	69.32
		59.30	64.93	71.10	77.86	85.25	89.52	93.99	98.69
Trash/Sanitation	24.37		24.37	24.37	24.37	24.37	24.37	24.37	24.37
Sewer Option #1			2023	2024	2025	2026	2027	2028	2029
TOTAL BILL: Sewer + Water + Trash									
Small Usage	300 c.f.	108.63	112.70	118.90	125.56	116.81	118.50	120.28	122.15
Medium Usage	600 c.f.	151.32	157.83	167.42	177.75	166.42	169.40	172.53	175.82
Large Usage	900 c.f.	206.43	215.75	229.51	244.30	228.02	232.28	236.76	241.46

Total Bill Combined

Sewer Option 1

Water Increase

Existing Trash

Sewer Option #1			2023	2024	2025	2026	2027	2028	2029
TOTAL BILL: Sewer + Water + Trash									
Small Usage	300 c.f.	108.63	112.70	118.90	125.56	116.81	118.50	120.28	122.15
Medium Usage	600 c.f.	151.32	157.83	167.42	177.75	166.42	169.40	172.53	175.82
Large Usage	900 c.f.	206.43	215.75	229.51	244.30	228.02	232.28	236.76	241.46

Total Bill Combined

Sewer Option #1

Water Increase

Existing Trash

CURRENT									
WASTEWATER			Option #2 - NO RATE CHANGE - STOP EXTRA PAYMENT						
			2023	2024	2025	2026	2027	2028	2029
	Percent Increase		38.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Base Inc. 300cf	34.96		48.24	48.24	48.24	48.24	48.24	48.24	48.24
Per 100/cf	9.00		12.42	12.42	12.42	12.42	12.42	12.42	12.42
Plant Upgrade	38%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Small usage	300	34.96	48.24	48.24	48.24	48.24	48.24	48.24	48.24
Per 100/cf		9.00	12.42	12.42	12.42	12.42	12.42	12.42	12.42
Plant Upgrade		16.70	-	-	-	-	-	-	-
		60.66	60.66	60.66	60.66	60.66	60.66	60.66	60.66
Medium usage	600	34.96	48.24	48.24	48.24	48.24	48.24	48.24	48.24
Per 100/cf		27.00	37.26	37.26	37.26	37.26	37.26	37.26	37.26
Plant Upgrade		23.54	-	-	-	-	-	-	-
		85.50	85.50	85.50	85.50	85.50	85.50	85.50	85.50
Large usage	900	34.96	48.24	48.24	48.24	48.24	48.24	48.24	48.24
Per 100/cf		54.00	74.52	74.52	74.52	74.52	74.52	74.52	74.52
Plant Upgrade		33.80	-	-	-	-	-	-	-
		122.76	122.76	122.76	122.76	122.76	122.76	122.76	122.76
WATER			Option #2						
			2023	2024	2025	2026	2027	2028	2029
	Percent Increase		9.5%	9.5%	9.5%	9.5%	5.0%	5.0%	5.0%
Base Inc. 200 cf	17.65		19.33	21.16	23.17	25.37	26.64	27.98	29.37
Per 100/cf	5.95		6.52	7.13	7.81	8.55	8.98	9.43	9.90
Small usage	300	17.65	19.33	21.16	23.17	25.37	26.64	27.98	29.37
		5.95	6.52	7.13	7.81	8.55	8.98	9.43	9.90
		23.60	25.84	28.30	30.99	33.93	35.63	37.41	39.28
Medium usage	600	17.65	19.33	21.16	23.17	25.37	26.64	27.98	29.37
		23.80	26.06	28.54	31.25	34.22	35.93	37.72	39.61
		41.45	45.39	49.70	54.42	59.59	62.57	65.70	68.98
Large usage	900	17.65	19.33	21.16	23.17	25.37	26.64	27.98	29.37
		41.65	45.61	49.94	54.68	59.88	62.87	66.02	69.32
		59.30	64.93	71.10	77.86	85.25	89.52	93.99	98.69
Trash/Sanitation		24.37	24.37	24.37	24.37	24.37	24.37	24.37	24.37
Sewer Option #2			2023	2024	2025	2026	2027	2028	2029
TOTAL BILL: Sewer + Water + Trash									
Small Usage	300 c.f.	108.63	110.88	113.33	116.02	118.96	120.66	122.44	124.31
Medium Usage	600 c.f.	151.32	155.26	159.57	164.30	169.47	172.45	175.57	178.86
Large Usage	900 c.f.	206.43	212.07	218.24	224.99	232.39	236.65	241.13	245.83

Total Bill
 Combined
 Sewer Option 2
 Water Increase
 Existing Trash

Sewer Option #2			2023	2024	2025	2026	2027	2028	2029
TOTAL BILL: Sewer + Water + Trash									
Small Usage	300 c.f.	108.63	110.88	113.33	116.02	118.96	120.66	122.44	124.31
Medium Usage	600 c.f.	151.32	155.26	159.57	164.30	169.47	172.45	175.57	178.86
Large Usage	900 c.f.	206.43	212.07	218.24	224.99	232.39	236.65	241.13	245.83

Total Combined Bill

Sewer Option #2
 Increased Water
 Existing Trash

WASTEWATER				Option #3 - SAVE UPFRONT - STOP EXTRA PAYMENT							
				2023	2024	2025	2026	2027	2028	2029	
Percent Increase				12%	12%	12%	6%	6%	6%	6%	
Base Inc. 300cf	34.96			39.16	43.85	49.12	52.06	55.19	58.50	62.01	
Per 100/cf	9.00			10.08	11.29	12.64	13.40	14.21	15.06	15.96	
Plant Upgrade	38%										
Small usage	300	34.96		39.16	43.85	49.12	52.06	55.19	58.50	62.01	
Per 100/cf		9.00		10.08	11.29	12.64	13.40	14.21	15.06	15.96	
Plant Upgrade		16.70		-	-	-	-	-	-	-	
		60.66		49.24	55.14	61.76	65.47	69.39	73.56	77.97	
Medium usage	600	34.96		39.16	43.85	49.12	52.06	55.19	58.50	62.01	
Per 100/cf		27.00		30.24	33.87	37.93	40.21	42.62	45.18	47.89	
Plant Upgrade		23.54		-	-	-	-	-	-	-	
		85.50		69.40	77.72	87.05	92.27	97.81	103.68	109.90	
Large usage	900	34.96		39.16	43.85	49.12	52.06	55.19	58.50	62.01	
Per 100/cf		54.00		60.48	67.74	75.87	80.42	85.24	90.36	95.78	
Plant Upgrade		33.80		-	-	-	-	-	-	-	
		122.76		99.64	111.59	124.98	132.48	140.43	148.86	157.79	
WATER				Option #2							
				2023	2024	2025	2026	2027	2028	2029	
Percent Increase				9.5%	9.5%	9.5%	9.5%	5.0%	5.0%	5.0%	
Base Inc. 200 cf	17.65			19.33	21.16	23.17	25.37	26.64	27.98	29.37	
Per 100/cf	5.95			6.52	7.13	7.81	8.55	8.98	9.43	9.90	
Small usage	300	17.65		19.33	21.16	23.17	25.37	26.64	27.98	29.37	
		5.95		6.52	7.13	7.81	8.55	8.98	9.43	9.90	
		23.60		25.84	28.30	30.99	33.93	35.63	37.41	39.28	
Medium usage	600	17.65		19.33	21.16	23.17	25.37	26.64	27.98	29.37	
		23.80		26.06	28.54	31.25	34.22	35.93	37.72	39.61	
		41.45		45.39	49.70	54.42	59.59	62.57	65.70	68.98	
Large usage	900	17.65		19.33	21.16	23.17	25.37	26.64	27.98	29.37	
		41.65		45.61	49.94	54.68	59.88	62.87	66.02	69.32	
		59.30		64.93	71.10	77.86	85.25	89.52	93.99	98.69	
Trash/Sanitation		24.37		24.37	24.37	24.37	24.37	24.37	24.37	24.37	
Sewer Option #3				2023	2024	2025	2026	2027	2028	2029	
TOTAL BILL: Sewer + Water + Trash											
Small Usage	300 c.f.	108.63		99.45	107.81	117.12	123.77	129.39	135.33	141.62	
Medium Usage	600 c.f.	151.32		139.15	151.79	165.84	176.23	184.75	193.75	203.25	
Large Usage	900 c.f.	206.43		188.94	207.06	227.21	242.10	254.32	267.22	280.85	

Total Bill
 Combined
 Sewer Option 3
 Water Increase
 Existing Trash

Sewer Option #3			2023	2024	2025	2026	2027	2028	2029
TOTAL BILL: Sewer + Water + Trash									
Small Usage	300 c.f.	108.63	99.45	107.81	117.12	123.77	129.39	135.33	141.62
Medium Usage	600 c.f.	151.32	139.15	151.79	165.84	176.23	184.75	193.75	203.25
Large Usage	900 c.f.	206.43	188.94	207.06	227.21	242.10	254.32	267.22	280.85

Total Combined Bill

Sewer Option #3
 Increased Water
 Existing Trash



QUESTIONS?
COMMENTS?