
MEMORANDUM TO COUNCIL

To: Mayor and City Council Members
From: Dan Winters, Director of Public Utilities
Through: Erin Reinders, City Manager
Date: April 13, 2021
Re: Wastewater and Solid Waste Rate Adjustments

SUMMARY: At this evening's Council Meeting, Staff and Aldrich LLP presents options to Council for the Wastewater and Solid Waste Proprietary Fund's rate increases. Staff is seeking direction from Council on which option or options to use to implement the rate increases. Staff recommends Option 1B, which will increase the Wastewater Utility Rates by 40%, evenly across all customer classes, and achieve a Debt Services Coverage Ratio (DSC) of 1.40. Option 1B will also increase the Solid Waste Utility Rates by 33% evenly across all material classes and realize a 1.43 DSC ratio. If Council so chooses, the rate increases can be phased in over four years, and the first-year rate increase will take effect July 1, 2021. Staff also recommends Council adopt Option 3, increasing the sales tax by 1%, which will create a Utility Infrastructure Fund, supplementing the Utility Proprietary Funds.

PREVIOUS COUNCIL ACTION: At the February 28, 2017 Council Meeting, Council adopted Resolution 2017-14. Through Resolution 2017-14, Council approved a consecutive four-year rate increase in the Wastewater Proprietary Fund and a consecutive three-year rate increase in the Solid Waste Proprietary Fund.

At the June 9, 2020 Council Meeting, Council adopted Fiscal Year 2021 Operating and Capital Budget through Resolution 2020-10.

At the February 23, 2021 Council Work Session, James Keen and Amber Miller of Aldrich LLP presented the FY2021 Rate Study to Council.

At the March 9, 2021 Council Work Session, conversations focused on the cost of service and rates for electric and water. Council's general consensus was for a one-time 6.1% increase in electrical rates to all customer classes, and a one-time 3.6% increase in water rates to all customer classifications. Council had general consensus to proceed with an increase to the sales tax by 1%, which will create a Utility Infrastructure Fund, supplementing the Utility Proprietary Funds.

BACKGROUND: Department of Public Utilities Staff performs a rate study on each of the Utility Proprietary Funds approximately every three years. In 2012, Staff contracted Mike Hubbard of the Financial Engineering Company to perform a High-Level Rate Study, which depicted a rate increase of 29% for the Water Fund, 68% for the Wastewater Fund, and 75% for the Solid Waste Fund was needed by 2016. Rates increased consecutively

for three years starting in FY2013. The sum of these rate increases was 21.3% for Water, 42.3% for Wastewater, and 32.1% for Solid Waste. These rate increases brought the difference between expenses and revenues closer to the budget before the new Water, and Wastewater Plants became operational. However, the rate increases did little to make up for the budget shortfall after the new plants were online.

Staff performed the last rate study in 2016. A rate increase of 15% for the Wastewater Proprietary Fund over four years, and a rate increase of 13.5% for the Solid Waste Proprietary Fund, over three years, was initiated on July 1, 2017. During Staff’s discussion with Council, there was a clear consensus that another monetary source was necessary to reduce impacts on needed rate increases. Council decided that using a portion of the 1% Sales Tax Special Revenue Fund was the most logical approach. Council approved using an amount not to exceed \$1,300,000 to supplement the Water, Wastewater, and Solid Waste Proprietary Funds. This supplement from the 1% Special Revenue Fund helped slow the timing of the inevitable rate increases. However, the lack of a rate increase to fully meet the revenue requirements, increased costs of chemicals, personnel, and inflation, we are again looking at extreme rate increases for the Utility Proprietary Funds.

DISCUSSION: As was presented at February 23, 2021, Council Meeting, the Wastewater and Solid Waste Proprietary Funds need significant rate increases to meet their complete revenue requirements. As shown in Table 1 below, the Wastewater Utility has an annual deficit of (\$1,851,293) in revenue. The Solid Waste Utility has a yearly revenue deficit of (\$1,540,289). This deficit equates to a 75% rate increase for the Wastewater Utility and a 60.1% rate increase for the Solid Waste Utility to meet the complete revenue requirements.

TABLE 1

	Wastewater	Solid Waste
Budgeted Customer Revenues	\$ 2,468,212	\$ 2,562,531
Full Revenue Requirements	\$ 4,319,505	\$ 4,102,820
Surplus (Deficit)	\$ (1,851,293)	\$ (1,540,289)
Revenue Increase Required	75.00%	60.10%

Aldrich LLP and Staff have developed three options that we believe are the most logical for the rate increases. At this evening's Council Meeting, Staff is seeking direction from Council that is twofold. To provide guidance on which option, or options, to implement the rate increases for the Wastewater and Solid Waste Proprietary Funds. Staff also needs Council's direction concerning implementing Council's chosen options evenly across all customer classes or implementing the rate increases according to the cost causer is the cost payer, following the Cost of Service Study (COSS). These options are:

Option 1A: This option consists of increasing the rates according to the Cost of Study-Based Rates. The rate increase will be different for each customer class over four years. This rate increase will obtain the needed revenues required to complete the Debt Services

Coverage Ratio (DSC) of 1.25 for each Proprietary Fund. The DSC ratio is the amount of net cash recovered from operations before debt service divided by debt service. Currently, the Wastewater Proprietary fund's DSC ratio is -0.55%, and the DSC ratio for the Solid Waste Proprietary Fund is -1.36%.

Table 2 below shows the Wastewater current revenue, the proposed revenue, the deficit from the required revenue, and the rate increase for each customer class. This rate increase will realize an overall revenue increase of 40% and a DSC of 1.34.

TABLE 2
Wastewater Cost of Study Based Rates Increase

	Total	Unmetered		
		Residential	Commercial	Metered Industrial
Current:	\$ 2,468,212	\$ 470,187	\$ 1,909,490	\$ 88,536
Proposed:	\$ 3,455,497	\$ 661,723	\$ 2,093,640	\$ 700,134
Surplus/Deficit:	\$ (987,285)	\$ (191,536)	\$ (184,150)	\$ (611,598)
% Increase/(Decrease):	40.0%	40.7%	9.6%	690.8%
DSC:	1.34			

Solid Waste Utility is different from Wastewater Utility because Solid Waste does not have customer classes. The Solid Waste Utility charges by the material brought to the Landfill. Table 3 below describes the current revenue, the proposed revenue, the deficit from the required revenue, and the rate increase for each material class. This rate increase will realize an overall revenue increase of 33% and a DSC of 1.43. The material classes with a current revenue deficit show a rate increase. The material classes that offer a current revenue surplus show a rate decrease. This rate increase management exercise will place the monetary gain toward those material classes where needed. This rate increase would be phased in over four years.

TABLE 3
Solid Waste Cost of Study Based Rate Increase

Total	LF20 Gen	LF23	LF24 Scrap	LF51 Misc STL	LF52 Nets	LF53 Fish	LF54	LF01	
	Waste	Equipment	Metal HM	(Labor)		Waste	Refrigerant	Maintenance	
Current:	\$ 1,641,558	\$ 42,484	\$ 274,041	\$ 22,310	\$ 109,616	\$ 109,616	\$ 8,769	\$ 354,137	
Proposed:	\$ 2,504,793	\$ 89,534	\$ 161,754	\$ 44,145	\$ 59,296	\$ 197,722	\$ 7,377	\$ 343,547	
Surplus/Deficit:	\$ (863,235)	\$ (47,050)	\$ 112,286	\$ (21,834)	\$ 50,320	\$ (88,106)	\$ 1,392	\$ 10,590	
% Increase/(Decrease):	33.0%	52.6%	110.7%	-41.0%	97.9%	-45.9%	80.4%	-15.9%	-3.0%

Option 1B: Across the Board Increases to meet the DSC requirement. If Council selects Option 1B, across the board rate increases would be implemented over four years.

Table 4 below shows the annual revenue increase, the DSC, and percentage rate increase per year for the Wastewater Proprietary Fund to realize a 40% rate increase.

Table 4
Wastewater 40% Rate Increase Phased in Over Four-Years

Phased-In 40% Rate Increase	FY2021	FY2022	FY2023	FY2024	FY2025
Annual Revenues	\$ 2,468,212	\$ 2,715,034	\$ 2,961,855	\$ 3,208,676	\$ 3,455,497
Debt Service Coverage (DSC) Ratio	-0.55	-0.08	0.40	0.90	1.40
Rate Increase (%) to meet DSC	0.0%	10.0%	9.1%	8.3%	7.7%

Table 5 below shows the annual revenue gains, the DSC yearly increase, and the annual percentage increase over a four-year period, for the Solid Waste Proprietary fund to realize a 33% rate increase.

Table 5
Solid Waste Four-Year Rate Increase

Phased-In 33% Rate Increase	FY2021	FY2022	FY2023	FY2024	FY2025
Annual Revenues	\$ 2,562,531	\$ 2,773,940	\$ 2,985,349	\$ 3,196,757	\$ 3,408,166
Debt Service Coverage (DSC) Ratio	-1.36	-0.69	0.00	0.70	1.43
Rate Increase (%) to meet DSC	0.0%	8.3%	7.6%	7.1%	6.6%

Option 1C: This option is only for the Wastewater proprietary Fund. The Wastewater Industrial Class ratepayers are paying 41.5% less their fair share of the rates. Option 1C is a modified rate design that increases the Wastewater industrial rates more than the other classes. This option will reduce the increase needed from the other classes but short of the increase indicated by Option 1B. For example, the industrial class has an 80% increase phased in over four years. The other classes would have a minor increase, also phased in over four years. Table 3 below shows the Wastewater current rate, the proposed rate, the rate increase per rate class, and the total revenue increase for Option 1C.

TABLE 6

1.34 DSC: 80% Industrial Increase, Equal increase for other classes

	Total	Unmetered	Metered	
		Residential	Commercial	Industrial
Current:	\$ 2,468,212	\$ 470,187	\$ 1,909,490	\$ 88,536
Proposed:	\$ 3,455,497	\$ 651,264	\$ 2,644,869	\$ 159,364
Surplus/Deficit:	\$ (987,285)	\$ (181,077)	\$ (735,379)	\$ (70,829)
% Increase/(Decrease):	40.0%	38.5%	38.5%	80.0%

Option 2: Increase rates to meet the full income-based revenue requirement. According to the Income-Based Cost of Services, this option will increase the Wastewater and Solid Waste Proprietary Funds rates to complete the full revenue requirements. Also included is net revenue for capital expenditures.

The Wastewater Proprietary Fund requires a 75% rate increase to meet the full revenue requirements. The Solid Waste Proprietary Fund will require a 60.1% rate increase. Typically, these types of more significant rate increases are implemented consecutively over four years. Table 7 shows the rate increase for each customer class.

Table 7
Wastewater Rate Increase to Meet the Full Revenue Requirement

	Total	Unmetered		
		Residential	Commercial	Metered Industrial
Current:	\$ 2,468,212	\$ 470,187	\$ 1,909,490	\$ 88,536
Proposed:	\$ 4,319,505	\$ 827,179	\$ 2,617,131	\$ 875,195
Surplus/Deficit:	\$ (1,851,292)	\$ (356,992)	\$ (707,641)	\$ (786,659)
% Increase/(Decrease):	75.0%	75.9%	37.1%	888.5%

The Solid Waste Proprietary Fund will need a 60.1% rate increase to satisfy the total revenue requirement. As with the other rate increase options, Staff would implement this rate increase over four years. Table 8 shows the Option 2 monetary impact on charges for material brought to the Landfill.

Table 8
Solid Waste Rate Increase to Meet the Full Revenue Requirement

Total	LF20 Gen	LF23	LF24 Scrap	LF51 Misc STL	LF52 Nets	LF53 Fish	LF54	LF01
	Waste	Equipment	Metal HM	(Labor)	Waste	Refrigerant	Maintenance	
Current: \$ 2,562,531	\$ 1,641,558	\$ 42,484	\$ 274,041	\$ 22,310	\$ 109,616	\$ 109,616	\$ 8,769	\$ 354,137
Proposed: \$ 4,102,820	\$ 3,015,319	\$ 107,783	\$ 194,723	\$ 53,142	\$ 71,382	\$ 238,022	\$ 8,881	\$ 413,568
Surplus/Deficit: \$ (1,540,289)	\$(1,373,762)	\$ (65,299)	\$ 79,318	\$ (30,832)	\$ 38,234	\$ (128,405)	\$ (112)	\$ (59,432)
% Increase/(Decrease): 60.1%	83.7%	153.7%	-28.9%	138.2%	-34.9%	117.1%	1.3%	16.8%

Option 3: Create a Utility Infrastructure Fund through a 1% Sales Tax increases. This option consists of increasing the sales tax by 1%. Doing so would create a Utility Infrastructure Fund that will supplement the Utility Proprietary Funds. An increase in the sales tax will require a vote of the residents of Unalaska.

Table 9 below illustrates the FY21 projected revenue generated from the 1% Sales Tax Special Revenue of \$2,666,667. It is the opinion of Staff that a 1% sale tax increase will generate the same revenue.

TABLE 9

	FY2017 Actual	FY2018 Actual	FY2019 Actual	FY2020 Budget	Adopted Budget
1% Sales Tax Special Revenue					
REVENUES					
11010040 - 41310 1% Capital Sales tax	3,705,737	3,522,767	3,629,169	3,500,000	2,666,667

ALTERNATIVES: Staff and Aldrich LLP have researched all options concerning the needed rate increases and believe the options brought forward to Council are the most logical approach. However, the staff is always willing to research other options that Council may consider are viable.

FINANCIAL IMPLICATIONS: The economic implications vary between the different options to increase the utility rates. Currently, the Wastewater Rates achieve revenues of \$2,468,212. The revenue requirements for the Wastewater Proprietary Fund are \$4,319,505. The difference between the actual revenue and the needed revenue leaves a revenue deficit of (\$1,851,293) or 75% rate deficiency, as Table 10 below illustrates.

Table 10

Budgeted Customer Revenues:	\$	2,468,212
Income-Based Revenue Requirement:		<u>4,319,505</u>
Revenue Increase:	\$	1,851,293
Overall % Increase:		75.0%

Currently, the Solid Waste rates realize revenues of \$2,562,531. The revenue requirements for the Solid Waste Proprietary Fund are \$4,102,820. The difference between the actual and needed revenue leaves a revenue deficiency of (\$1,540,289) or 60.1% rate deficiency, as Table 11 depicts.

Table 11

Budgeted Customer Revenues:	\$	2,562,531
Income-Based Revenue Requirement:		<u>4,102,820</u>
Revenue Increase:	\$	1,540,289
Overall % Increase:		60.1%

Suppose Council selects Option 1B, as Staff has recommended. In that case, this will increase the Wastewater Revenue by 40% and the Solid Waste Revenue by 33%. The tables in Table 12 below show the monetary growth and the rate increases phased in over four years. This economic growth does not meet the total revenue need for both proprietary funds. Option 1b will meet the DSC ratio of 1.25 for both proprietary funds. A DSC ratio above 1.25 will be needed when applying for bonds or low-interest loans for future projects in the proprietary funds.

Table 12

Wastewater Rate Increases and Monetary Growth Based on Option 1b

Phased-In 40% Rate Increase	FY2021	FY2022	FY2023	FY2024	FY2025
Annual Revenues	\$ 2,468,212	\$ 2,715,034	\$ 2,961,855	\$ 3,208,676	\$ 3,455,497
Debt Service Coverage (DSC) Ratio	-0.55	-0.08	0.40	0.90	1.40
Annual Rate Increase (%) Required	0.0%	10.0%	9.1%	8.3%	7.7%

Solid Waste Rate Increases and Monetary Growth Based on Option 1b

Phased-In 33% Rate Increase	FY2021	FY2022	FY2023	FY2024	FY2025
Annual Revenues	\$ 2,562,531	\$ 2,773,940	\$ 2,985,349	\$ 3,196,757	\$ 3,408,166
Debt Service Coverage (DSC) Ratio	-1.36	-0.69	0.00	0.70	1.43
Annual Rate Increase (%) Required	0.0%	8.3%	7.6%	7.1%	6.6%

LEGAL: None needed at this time.

STAFF RECOMMENDATION: No formal action is taking place at this time. Staff is seeking feedback and guidance in preparation of formal action, currently planned for April 27. Staff recommends Council adopt Option 1b for the Wastewater and Solid Waste rate increases. In doing so, the Wastewater Utility Rates will be increased by 40%, evenly across all customer classes. The Solid Waste Utility Rates will also be increased by 33% across all material and service charges. Staff also recommends Council adopt Option 3, increasing the sales tax by 1%, which will create a Utility Infrastructure Fund, supplementing the Utility Proprietary Funds.

PROPOSED MOTION: No motion is necessary at this time, as no formal action is taking place. Staff is seeing feedback and guidance in preparation of formal action, currently planned for the April 27, 2021 Council Meeting.

CITY MANAGER COMMENTS: City Staff works with consultants to conduct utility rate studies and cost of service analysis about every three years. I thank Aldrich LLP for their professionalism and collaboration, as well as city staff for their hard work on this complex project. This is the third of four planned meetings on these topics, each building from the last. The consultant team, with the support of staff, continue working with Council to identify a path forward.

ATTACHMENTS:

- Attachment 1: Impact to Residential and Commercial Customers due to the Rate Increases.
- City of Unalaska Wastewater & Solid Waste Utilities Cost of Service Study Results & Recommendation.

ATTACHMENT 1

Impact to Residential and Commercial Customers due to the Rate Increases.

Option 1a: Wastewater Cost of Service Study Based Rates Phased in Over Four-Years

Class	Charge	Unit	Current	FY2022	FY2023	FY2024	FY2025
Unmetered Residential:	Customer	\$/month	\$ 114.04	\$ 125.65	\$ 137.27	\$ 148.88	\$ 160.50
	Volume	\$/000 Gal	\$ -	\$ -	\$ -	\$ -	\$ -
Annual Rate Increase:			0.0%	10.2%	9.2%	8.5%	7.8%
Rate Increase From FY2021			0.0%	10.2%	20.4%	30.6%	40.7%
Metered Commercial:	Customer	\$/month	\$ 20.87	\$ 21.37	\$ 21.88	\$ 22.38	\$ 22.88
	Volume	\$/000 Gal	\$ 17.79	\$ 18.22	\$ 18.65	\$ 19.08	\$ 19.51
Annual Rate Increase:			0.0%	2.4%	2.4%	2.3%	2.2%
Rate Increase From FY2021			0.0%	2.4%	4.8%	7.2%	9.6%
Metered Industrial:	Customer	\$/month	\$ 20.87	\$ 56.91	\$ 92.95	\$ 129.00	\$ 165.04
	Volume	\$/000 Gal	\$ 1.13	\$ 3.08	\$ 5.03	\$ 6.98	\$ 8.94
Annual Rate Increase:			0.0%	172.7%	63.3%	38.8%	27.9%
Rate Increase From FY2021			0.0%	172.7%	345.4%	518.1%	690.8%

Option 1a: Solid Waste Cost of Service Study Based Rates Phased in Over Four-Years

Class	Unit	Current	FY2022	FY2023	FY2024	FY2025
LF20 Gen Waste - Sch B Tipping Fees:	Per Ton	\$ 251.20	\$ 284.22	\$ 317.25	\$ 350.27	\$ 383.30
Annual Rate Increase:		0.0%	13.1%	11.6%	10.4%	9.4%
Rate Increase From FY21:		0.0%	13.1%	26.3%	39.4%	52.6%
LF23 Equipment:	Per Hour	\$ 166.43	\$ 212.51	\$ 258.59	\$ 304.67	\$ 350.75
Annual Rate Increase:		0.0%	27.7%	21.7%	17.8%	15.1%
Rate Increase From FY21:		0.0%	27.7%	55.4%	83.1%	110.7%
LF24 Scrap Metal HM:	Per Ton	\$ 1,073.54	\$ 963.57	\$ 853.60	\$ 743.63	\$ 633.66
Annual Rate Increase:		0.0%	-10.2%	-11.4%	-12.9%	-14.8%
Rate Increase From FY21:		0.0%	-10.2%	-20.5%	-30.7%	-41.0%
LF51 Misc STL (Labor):	Per Hour	\$ 87.40	\$ 108.78	\$ 130.17	\$ 151.55	\$ 172.93
Annual Rate Increase:		0.0%	24.5%	19.7%	16.4%	14.1%
Rate Increase From FY21:		0.0%	24.5%	48.9%	73.4%	97.9%

Option 1b: Wastewater Across the Board Rate Increase Phased in Over Four-Years

Class	Charge	Unit	Current	FY2022	FY2023	FY2024	FY2025
Unmetered Residential:	Customer	\$/month	\$ 114.04	\$ 125.44	\$ 136.85	\$ 148.25	\$ 159.66
	Volume	\$/000 Gal	\$ -	\$ -	\$ -	\$ -	\$ -
Annual Rate Increase:			0.0%	10.0%	9.1%	8.3%	7.7%
Rate Increase From FY2021			0.0%	10.0%	20.0%	30.0%	40.0%
Metered Commercial:	Customer	\$/month	\$ 20.87	\$ 22.96	\$ 25.04	\$ 27.13	\$ 29.22
	Volume	\$/000 Gal	\$ 17.79	\$ 19.57	\$ 21.35	\$ 23.13	\$ 24.91
Annual Rate Increase:			0.0%	10.0%	9.1%	8.3%	7.7%
Rate Increase From FY2021			0.0%	10.0%	20.0%	30.0%	40.0%
Metered Industrial:	Customer	\$/month	\$ 20.87	\$ 22.96	\$ 25.04	\$ 27.13	\$ 29.22
	Volume	\$/000 Gal	\$ 1.13	\$ 1.24	\$ 1.36	\$ 1.47	\$ 1.58
Annual Rate Increase:			0.0%	10.0%	9.1%	8.3%	7.7%
Rate Increase From FY2021			0.0%	10.0%	20.0%	30.0%	40.0%

Option 1b: Solid Waste Across the Board Rate Increase Phased in Over Four-Years

Class	Unit	Current	FY2022	FY2023	FY2024	FY2025
LF20 Gen Waste - Sch B Tipping Fees:	Per Ton	\$ 251.20	\$ 271.92	\$ 292.65	\$ 313.37	\$ 334.10
Annual Rate Increase:		0.0%	8.3%	7.6%	7.1%	6.6%
Rate Increase From FY21:		0.0%	8.3%	16.5%	24.8%	33.0%
LF23 Equipment:	Per Hour	\$ 166.43	\$ 180.16	\$ 193.89	\$ 207.62	\$ 221.35
Annual Rate Increase:		0.0%	8.3%	7.6%	7.1%	6.6%
Rate Increase From FY21:		0.0%	8.3%	16.5%	24.8%	33.0%
LF24 Scrap Metal HM:	Per Ton	\$ 1,073.54	\$ 1,162.11	\$ 1,250.67	\$ 1,339.24	\$ 1,427.81
Annual Rate Increase:		0.0%	8.3%	7.6%	7.1%	6.6%
Rate Increase From FY21:		0.0%	8.3%	16.5%	24.8%	33.0%
LF51 Misc STL (Labor):	Per Hour	\$ 87.40	\$ 94.61	\$ 101.82	\$ 109.03	\$ 116.24
Annual Rate Increase:		0.0%	8.3%	7.6%	7.1%	6.6%
Rate Increase From FY21:		0.0%	8.3%	16.5%	24.8%	33.0%
Class	Unit	Current	FY2022	FY2023	FY2024	FY2025
LF52 Trawl Nets:	Per Cubic Yard	\$ 1,073.54	\$ 1,162.11	\$ 1,250.67	\$ 1,339.24	\$ 1,427.81
Annual Rate Increase:		0.0%	8.3%	7.6%	7.1%	6.6%
Rate Increase From FY21:		0.0%	8.3%	16.5%	24.8%	33.0%
LF53 Fish Waste:	Per Ton	\$ 536.77	\$ 581.05	\$ 625.34	\$ 669.62	\$ 713.90
Annual Rate Increase:		0.0%	8.3%	7.6%	7.1%	6.6%
Rate Increase From FY21:		0.0%	8.3%	16.5%	24.8%	33.0%
LF54 Appliance with Refrigerant:	Each	\$ 107.35	\$ 116.21	\$ 125.06	\$ 133.92	\$ 142.78
Annual Rate Increase:		0.0%	8.3%	7.6%	7.1%	6.6%
Rate Increase From FY21:		0.0%	8.3%	16.5%	24.8%	33.0%
LF01 Sch A Landfill Maintenance Fee:	Per Utility Bill	\$ 27.97	\$ 30.28	\$ 32.59	\$ 34.89	\$ 37.20
Annual Rate Increase:		0.0%	8.3%	7.6%	7.1%	6.6%
Rate Increase From FY21:		0.0%	8.3%	16.5%	24.8%	33.0%

Option 1c: Wastewater Only Hybrid Cost of Service Based/ Across the Board Rate Increase

Class	Charge	Unit	Current	FY2022	FY2023	FY2024	FY2025
Unmetered Residential:	Customer	\$/month	\$ 114.04	\$ 125.02	\$ 136.00	\$ 146.98	\$ 157.96
	Volume	\$/000 Gal	\$ -	\$ -	\$ -	\$ -	\$ -
Annual Rate Increase:			0.0%	9.6%	8.8%	8.1%	7.5%
Rate Increase From FY2021:			0.0%	9.6%	19.3%	28.9%	38.5%
Metered Commercial:	Customer	\$/month	\$ 20.87	\$ 22.88	\$ 24.89	\$ 26.90	\$ 28.91
	Volume	\$/000 Gal	\$ 17.79	\$ 19.50	\$ 21.22	\$ 22.93	\$ 24.64
Annual Rate Increase:			0.0%	9.6%	8.8%	8.1%	7.5%
Rate Increase From FY2021:			0.0%	9.6%	19.3%	28.9%	38.5%
Metered Industrial:	Customer	\$/month	\$ 20.87	\$ 25.04	\$ 29.22	\$ 33.39	\$ 37.57
	Volume	\$/000 Gal	\$ 1.13	\$ 1.36	\$ 1.58	\$ 1.81	\$ 2.03
Annual Rate Increase:			0.0%	20.0%	16.7%	14.3%	12.5%
Rate Increase From FY2021:			0.0%	20.0%	40.0%	60.0%	80.0%

Option 2: Wastewater Rate Increase to Meet the Full Revenue Requirements

Class	Charge	Unit	Current	FY2022	FY2023	FY2024	FY2025
Unmetered Residential:	Customer	\$/month	\$ 114.04	\$ 135.69	\$ 157.33	\$ 178.98	\$ 200.63
	Volume	\$/000 Gal	\$ -	\$ -	\$ -	\$ -	\$ -
Annual Rate Increase:			0.0%	19.0%	16.0%	13.8%	12.1%
Rate Increase From FY2021:			0.0%	19.0%	38.0%	56.9%	75.9%
Metered Commercial:	Customer	\$/month	\$ 20.87	\$ 22.80	\$ 24.74	\$ 26.67	\$ 28.60
	Volume	\$/000 Gal	\$ 17.79	\$ 19.44	\$ 21.09	\$ 22.73	\$ 24.38
Annual Rate Increase:			0.0%	9.3%	8.5%	7.8%	7.2%
Rate Increase From FY2021:			0.0%	9.3%	18.5%	27.8%	37.1%
Metered Industrial:	Customer	\$/month	\$ 20.87	\$ 67.23	\$ 113.59	\$ 159.95	\$ 206.30
	Volume	\$/000 Gal	\$ 1.13	\$ 3.64	\$ 6.15	\$ 8.66	\$ 11.17
Annual Rate Increase:			0.0%	222.1%	69.0%	40.8%	29.0%
Rate Increase From FY2021:			0.0%	222.1%	444.3%	666.4%	888.5%

Option 2: Solid Waste Rate Increase to Meet the Full Revenue Requirements

Class	Unit	Current	FY2022	FY2023	FY2024	FY2025
LF20 Gen Waste - Sch B Tipping Fees:	Per Ton	\$ 251.20	\$ 303.76	\$ 356.31	\$ 408.87	\$ 461.42
Annual Rate Increase:		0.0%	20.9%	17.3%	14.7%	12.9%
Rate Increase From FY21:		0.0%	20.9%	41.8%	62.8%	83.7%
LF23 Equipment:	Per Hour	\$ 166.43	\$ 230.38	\$ 294.33	\$ 358.28	\$ 422.23
Annual Rate Increase:		0.0%	38.4%	27.8%	21.7%	17.8%
Rate Increase From FY21:		0.0%	38.4%	76.9%	115.3%	153.7%
LF24 Scrap Metal HM:	Per Ton	\$ 1,073.54	\$ 995.86	\$ 918.18	\$ 840.50	\$ 762.82
Annual Rate Increase:		0.0%	-7.2%	-7.8%	-8.5%	-9.2%
Rate Increase From FY21:		0.0%	-7.2%	-14.5%	-21.7%	-28.9%
LF51 Misc STL (Labor):	Per Hour	\$ 87.40	\$ 117.60	\$ 147.79	\$ 177.99	\$ 208.18
Annual Rate Increase:		0.0%	34.5%	25.7%	20.4%	17.0%
Rate Increase From FY21:		0.0%	34.5%	69.1%	103.6%	138.2%
Class	Unit	Current	FY2022	FY2023	FY2024	FY2025
LF52 Trawl Nets:	Per Cubic Yard	\$ 1,073.54	\$ 979.93	\$ 886.32	\$ 792.70	\$ 699.09
Annual Rate Increase:		0.0%	-8.7%	-9.6%	-10.6%	-11.8%
Rate Increase From FY21:		0.0%	-8.7%	-17.4%	-26.2%	-34.9%
LF53 Fish Waste:	Per Ton	\$ 536.77	\$ 693.96	\$ 851.16	\$ 1,008.35	\$ 1,165.55
Annual Rate Increase:		0.0%	29.3%	22.7%	18.5%	15.6%
Rate Increase From FY21:		0.0%	29.3%	58.6%	87.9%	117.1%
LF54 Appliance with Refrigerant:	Each	\$ 107.35	\$ 107.69	\$ 108.03	\$ 108.37	\$ 108.72
Annual Rate Increase:		0.0%	0.3%	0.3%	0.3%	0.3%
Rate Increase From FY21:		0.0%	0.3%	0.6%	1.0%	1.3%
LF01 Sch A Landfill Maintenance Fee:	Per Utility Bill	\$ 27.97	\$ 29.14	\$ 30.32	\$ 31.49	\$ 32.66
Annual Rate Increase:		0.0%	4.2%	4.0%	3.9%	3.7%
Rate Increase From FY21:		0.0%	4.2%	8.4%	12.6%	16.8%

City of Unalaska

Wastewater & Solid Waste Utilities Cost of Service Study Results & Recommendations

April 13, 2021

James Keen, CDP; Michelle Barnett, CRRRA; & Amber Miller, CPA - Aldrich Advisors + CPAs

Our Scope of Work

- Rate Review for Electric, Water & Wastewater and Solid Waste Utilities
- Phase 1: Determine the appropriate Revenue Requirement for each utility.
 - FY2021 Budget was used as the basis for the study
 - ✓ • Results were presented on February 23rd
- Phase 2: Develop cost-based rates for each utility and perform rate design
 - ✓ • Electric & Water: Presented on March 9th
 - ➔ • Wastewater & Solid Waste: Presented today - April 13th

Recap of Prior Presentations

- General reviews performed periodically, most recently in 2012 and 2016.
- There are two different ways to develop a revenue requirement:
 1. Income Basis (a bottom-up approach)
 - Used in traditional ratemaking
 - Includes all operating expenses and interest on debt and depreciation (a non-cash expense)
 2. Cash Basis (a top-down approach)
 - Includes all operating expenses, interest on debt, principal payments, and an additional cash requirement defined by a Debt Service Coverage (DSC) ratio.

What is a Cost of Service Study (COSS)?

- How to slice the “Revenue Requirement Pie”
- An analytical method of allocating costs between groups of customers and determining how those costs will be collected in rate elements.



Overview of Results (Income Basis Revenue Requirement)

	<u>Electric</u>	<u>Water</u>	<u>Wastewater</u>	<u>Solid Waste</u>
Budgeted Customer Revenues:	\$ 7,248,373	\$ 2,616,686	\$ 2,468,212	\$ 2,562,531
Full Revenue Requirement:	<u>9,762,823</u>	<u>3,530,573</u>	<u>4,319,505</u>	<u>4,102,820</u>
Surplus/(Deficit):	\$ (2,514,450)	\$ (913,887)	\$ (1,851,293)	\$ (1,540,289)
Revenue Increase/(Decrease) Required:	34.7%	34.9%	75.0%	60.1%

Most Favored Electric & Water Recommendations from March 9, 2021:

- **Electric Option 1b:** Increase Rates to Meet a 1.25 DSC (+6.1%) and apply on an Across-the-Board Basis
- **Water Option 1b:** Increase Rates to Meet a 2.00 DSC (+3.6%) and apply on an Across-the-Board Basis
- **Electric & Water Option 3:** Seek implementation of a 1.0% Utility Infrastructure Tax (+\$2.7M estimated)

Results and Recommendations will be presented two ways:

1. Applying the revenue requirement to the Cost of Service Study results.
 - For example, an overall revenue increase of 30% would be split differently between customer groups, based upon cost-causation.
2. Applying the revenue requirement equally to all customer groups.
 - A rate increase will be shared equally by all customer classes (across-the-board) and be reflected equally in each billing component (e.g. customer charge, demand charge, volumetric charge)

Overview of Recommended Options

1. Increase rates to meet a cash-based revenue requirement with a target 1.25 DSC ratio for the wastewater and solid waste utilities, with the overall rate increase rounded up to allow for some inflation.
2. Increase rates to meet the full income-based revenue requirement.
3. Create a Utility Infrastructure Fund through a 1% Sales Tax increase.

NOTE: Options 1 and 3 could be combined.

Overview:

- **Income-Based:** includes \$100,000 in margins.
- **Cash-Based:** 1.25 DSC Target with increase rounded up from 38.2 to 40.0%

Wastewater

Income-Based Revenue Requirement

Budgeted Customer Revenues:	\$	2,468,212
Income-Based Revenue Requirement:		<u>4,319,505</u>
Revenue Increase:	\$	1,851,293
Overall % Increase:		75.0%

Cash-Based Revenue Requirement

Budgeted Customer Revenues:	\$	2,468,212
Cash-Based Revenue Requirement:	\$	<u>3,455,497</u>
Revenue Increase:	\$	987,285
Overall % Increase:		40.0%

Wastewater Option 1: **Cash-Based Revenue Requirement that will achieve a 1.25 DSC**

Option 1: Cash-Based Revenue Requirement with 1.25 DSC

- Why 1.25 DSC?
 - Municipal ordinance requires meeting a minimum 1.25 DSC
 - Achieved DSC is currently -0.55 and rate study results support a rate increase
 - Using a higher target DSC will provide more security and allow the utility to generate more cash towards capital expenditures
- Advantages:
 - The minimum DSC requirement would be met through rates.
 - Rate increase is mitigated.
- Disadvantages:
 - It remains almost \$909,000 below the income-based revenue requirement

COU Wastewater Cost of Service Study

Wastewater Utility Option 1: Cash-Based achieving 1.25 DSC

Option 1a: Cost of Service Study Based Rates Revenue Requirement Results

	Total	Unmetered Residential	Metered	
			Commercial	Industrial
Current:	\$ 2,468,212	\$ 470,187	\$ 1,909,490	\$ 88,536
Proposed:	\$ 3,455,497	\$ 661,723	\$ 2,093,640	\$ 700,134
Surplus/Deficit:	\$ (987,285)	\$ (191,536)	\$ (184,150)	\$ (611,598)
% Increase/(Decrease):	40.0%	40.7%	9.6%	690.8%
DSC:	1.34			

COU Wastewater Cost of Service Study

Wastewater Utility Option 1: Cash-Based achieving 1.25 DSC

Option 1a: Cost of Service Study Based Rates

Class	Charge	Unit	Current	FY2022	FY2023	FY2024	FY2025
Unmetered Residential:	Customer	\$/month	\$ 114.04	\$ 125.65	\$ 137.27	\$ 148.88	\$ 160.50
	Volume	\$/000 Gal	\$ -	\$ -	\$ -	\$ -	\$ -
Annual Rate Increase:			0.0%	10.2%	9.2%	8.5%	7.8%
Rate Increase From FY2021			0.0%	10.2%	20.4%	30.6%	40.7%
Metered Commercial:	Customer	\$/month	\$ 20.87	\$ 21.37	\$ 21.88	\$ 22.38	\$ 22.88
	Volume	\$/000 Gal	\$ 17.79	\$ 18.22	\$ 18.65	\$ 19.08	\$ 19.51
Annual Rate Increase:			0.0%	2.4%	2.4%	2.3%	2.2%
Rate Increase From FY2021			0.0%	2.4%	4.8%	7.2%	9.6%
Metered Industrial:	Customer	\$/month	\$ 20.87	\$ 56.91	\$ 92.95	\$ 129.00	\$ 165.04
	Volume	\$/000 Gal	\$ 1.13	\$ 3.08	\$ 5.03	\$ 6.98	\$ 8.94
Annual Rate Increase:			0.0%	172.7%	63.3%	38.8%	27.9%
Rate Increase From FY2021			0.0%	172.7%	345.4%	518.1%	690.8%

COU Wastewater Cost of Service Study

Wastewater Utility Option 1: Cash-Based achieving 1.25 DSC

Option 1b: Across-the-Board Rate Increase Revenue Requirement Results

	Total	Unmetered Residential	Metered	
			Commercial	Industrial
Current:	\$ 2,468,212	\$ 470,187	\$ 1,909,490	\$ 88,536
Proposed:	\$ 3,455,497	\$ 658,262	\$ 2,673,286	\$ 123,950
Surplus/Deficit:	\$ (987,285)	\$ (188,075)	\$ (763,796)	\$ (35,414)
% Increase/(Decrease):	40.0%	40.0%	40.0%	40.0%
DSC:	1.34			

COU Wastewater Cost of Service Study

Wastewater Utility Option 1: Cash-Based achieving 1.25 DSC

Option 1b: Across-the-Board Rate Increase

Class	Charge	Unit	Current	FY2022	FY2023	FY2024	FY2025
Unmetered Residential:	Customer	\$/month	\$ 114.04	\$ 125.44	\$ 136.85	\$ 148.25	\$ 159.66
	Volume	\$/000 Gal	\$ -	\$ -	\$ -	\$ -	\$ -
Annual Rate Increase:			0.0%	10.0%	9.1%	8.3%	7.7%
Rate Increase From FY2021			0.0%	10.0%	20.0%	30.0%	40.0%
Metered Commercial:	Customer	\$/month	\$ 20.87	\$ 22.96	\$ 25.04	\$ 27.13	\$ 29.22
	Volume	\$/000 Gal	\$ 17.79	\$ 19.57	\$ 21.35	\$ 23.13	\$ 24.91
Annual Rate Increase:			0.0%	10.0%	9.1%	8.3%	7.7%
Rate Increase From FY2021			0.0%	10.0%	20.0%	30.0%	40.0%
Metered Industrial:	Customer	\$/month	\$ 20.87	\$ 22.96	\$ 25.04	\$ 27.13	\$ 29.22
	Volume	\$/000 Gal	\$ 1.13	\$ 1.24	\$ 1.36	\$ 1.47	\$ 1.58
Annual Rate Increase:			0.0%	10.0%	9.1%	8.3%	7.7%
Rate Increase From FY2021			0.0%	10.0%	20.0%	30.0%	40.0%

COU Wastewater Cost of Service Study

Wastewater Utility Option 1: Cash-Based achieving 1.25 DSC

Option 1c: Hybrid Cost of Service Based/Across-the-Board Rate Increase Revenue Requirement Results

	Total	Unmetered Residential	Metered	
			Commercial	Industrial
Current:	\$ 2,468,212	\$ 470,187	\$ 1,909,490	\$ 88,536
Proposed:	\$ 3,455,497	\$ 651,264	\$ 2,644,869	\$ 159,364
Surplus/Deficit:	\$ (987,285)	\$ (181,077)	\$ (735,379)	\$ (70,829)
% Increase/(Decrease):	40.0%	38.5%	38.5%	80.0%
DSC:	1.34			

COU Wastewater Cost of Service Study

Wastewater Utility Option 1: Cash-Based achieving 1.25 DSC

Option 1c: Hybrid Cost of Service Based/Across-the-Board Rate Increase

Class	Charge	Unit	Current	FY2022	FY2023	FY2024	FY2025
Unmetered Residential:	Customer	\$/month	\$ 114.04	\$ 125.02	\$ 136.00	\$ 146.98	\$ 157.96
	Volume	\$/000 Gal	\$ -	\$ -	\$ -	\$ -	\$ -
Annual Rate Increase:			0.0%	9.6%	8.8%	8.1%	7.5%
Rate Increase From FY2021			0.0%	9.6%	19.3%	28.9%	38.5%
Metered Commercial:	Customer	\$/month	\$ 20.87	\$ 22.88	\$ 24.89	\$ 26.90	\$ 28.91
	Volume	\$/000 Gal	\$ 17.79	\$ 19.50	\$ 21.22	\$ 22.93	\$ 24.64
Annual Rate Increase:			0.0%	9.6%	8.8%	8.1%	7.5%
Rate Increase From FY2021			0.0%	9.6%	19.3%	28.9%	38.5%
Metered Industrial:	Customer	\$/month	\$ 20.87	\$ 25.04	\$ 29.22	\$ 33.39	\$ 37.57
	Volume	\$/000 Gal	\$ 1.13	\$ 1.36	\$ 1.58	\$ 1.81	\$ 2.03
Annual Rate Increase:			0.0%	20.0%	16.7%	14.3%	12.5%
Rate Increase From FY2021			0.0%	20.0%	40.0%	60.0%	80.0%

COU Wastewater Cost of Service Study

Wastewater Utility Option 1: Cash-Based achieving 1.25 DSC

Option 1: Average Monthly Customer Impact Comparison

	Current Rates	Option 1a: Cost-Based Rates	Options 1b: Across-the- Board Increase	Options 1c: Hybrid
Unmetered Residential	\$ 114.04	\$ 160.50	\$ 159.66	\$ 157.96
% Change:	0.0%	40.7%	40.0%	38.5%
Metered Commercial	\$ 611.04	\$ 669.96	\$ 855.45	\$ 846.36
% Change:	0.0%	9.6%	40.0%	38.5%
Metered Industrial	\$ 1,475.59	\$ 11,668.90	\$ 2,065.83	\$ 2,656.07
% Change:	0.0%	690.8%	40.0%	80.0%

Wastewater Option 2: **Income-Based Revenue Requirement**

Option 2: Income-Based Revenue Requirement

- Advantages:
 - It is the traditional, nationally-accepted approach to ratemaking
 - It will more than amply meet all DSC requirements
 - It will provide a cash flow that can be used to reinvest in new projects
- Disadvantages:
 - It is a significant rate increase overall (75.0%)
 - It would hit some classes of customers harder than others
 - It would likely need to be phased-in

COU Wastewater Cost of Service Study

Wastewater Utility Option 2: Income-Based

Option 2: Cost of Service Study Based Rates Revenue Requirement Results

	Total	Unmetered Residential	Metered	
			Commercial	Industrial
Current:	\$ 2,468,212	\$ 470,187	\$ 1,909,490	\$ 88,536
Proposed:	\$ 4,319,505	\$ 827,179	\$ 2,617,131	\$ 875,195
Surplus/Deficit:	\$ (1,851,292)	\$ (356,992)	\$ (707,641)	\$ (786,659)
% Increase/(Decrease):	75.0%	75.9%	37.1%	888.5%

COU Wastewater Cost of Service Study

Wastewater Utility Option 2: Income-Based

Option 2: Cost of Service Study Based Rates

Class	Charge	Unit	Current	FY2022	FY2023	FY2024	FY2025
Unmetered Residential:	Customer	\$/month	\$ 114.04	\$ 135.69	\$ 157.33	\$ 178.98	\$ 200.63
	Volume	\$/000 Gal	\$ -	\$ -	\$ -	\$ -	\$ -
Annual Rate Increase:			0.0%	19.0%	16.0%	13.8%	12.1%
Rate Increase From FY2021			0.0%	19.0%	38.0%	56.9%	75.9%
Metered Commercial:	Customer	\$/month	\$ 20.87	\$ 22.80	\$ 24.74	\$ 26.67	\$ 28.60
	Volume	\$/000 Gal	\$ 17.79	\$ 19.44	\$ 21.09	\$ 22.73	\$ 24.38
Annual Rate Increase:			0.0%	9.3%	8.5%	7.8%	7.2%
Rate Increase From FY2021			0.0%	9.3%	18.5%	27.8%	37.1%
Metered Industrial:	Customer	\$/month	\$ 20.87	\$ 67.23	\$ 113.59	\$ 159.95	\$ 206.30
	Volume	\$/000 Gal	\$ 1.13	\$ 3.64	\$ 6.15	\$ 8.66	\$ 11.17
Annual Rate Increase:			0.0%	222.1%	69.0%	40.8%	29.0%
Rate Increase From FY2021			0.0%	222.1%	444.3%	666.4%	888.5%

COU Wastewater Cost of Service Study

Wastewater Utility Option 2: Income-Based

Option 2: Average Monthly Customer Impact Comparison

	Option 2: Cost-Based	
	Current Rates	Rates
Unmetered Residential	\$ 114.04	\$ 200.63
% Change:	0.0%	75.9%
Metered Commercial	\$ 611.04	\$ 837.48
% Change:	0.0%	37.1%
Metered Industrial	\$ 1,475.59	\$ 14,586.58
% Change:	0.0%	888.5%

Wastewater Option 3: **Implement Utility Infrastructure Tax**

Option 3: Utility Infrastructure Tax

- Receipts from a 1% increase in Sales Tax could provide a cash flow to be used for funding utility infrastructure needs and directed towards specific projects at the direction of the City Council

	FY2017 Actual	FY2018 Actual	FY2019 Actual	FY2020 Budget	Adopted Budget
1% Sales Tax Special Revenue					
REVENUES					
11010040 - 41310 1% Capital Sales tax	3,705,737	3,522,767	3,629,169	3,500,000	2,666,667

\$2,666,667 estimated
FY2021 receipts

Overview:

- **Income-Based:** includes \$100,000 in margins.
- **Cash-Based:** 1.25 DSC Target with increase rounded up from 31.7 to 33.0%

Solid Waste

Income-Based Revenue Requirement

Budgeted Customer Revenues:	\$	2,562,531
Income-Based Revenue Requirement:		<u>4,102,820</u>
Revenue Increase:	\$	1,540,289
Overall % Increase:		60.1%

Cash-Based Revenue Requirement

Budgeted Customer Revenues:	\$	2,562,531
Cash-Based Revenue Requirement:	\$	<u>3,408,166</u>
Revenue Increase:	\$	845,635
Overall % Increase:		33.0%

Solid Waste Option 1: **Cash-Based Revenue Requirement that will achieve a 1.25 DSC**

Option 1: Cash-Based Revenue Requirement achieving 1.25 DSC

- Why 1.25 DSC?
 - Municipal ordinance requires meeting a minimum 1.25 DSC
 - Achieved DSC is currently -1.36 and rate study results support a rate increase
 - Using a higher target DSC will provide more security and allow the utility to generate more cash towards capital expenditures
- Advantages:
 - The minimum DSC requirement would be met through rates.
 - Rate increase is mitigated.
- Disadvantages:
 - It remains almost \$695,000 below the income-based revenue requirement

COU Solid Waste Cost of Service Study

Solid Waste Utility Option 1: Cash-Based achieving 1.25 DSC

Option 1a: Cost of Service Study Based Rates Revenue Requirement Results

	Total	LF20 Gen Waste	LF23 Equipment	LF24 Scrap Metal HM	LF51 Misc STL (Labor)	LF52 Nets	LF53 Fish Waste	LF54 Refrigerant	LF01 Maintenance
Current:	\$ 2,562,531	\$ 1,641,558	\$ 42,484	\$ 274,041	\$ 22,310	\$ 109,616	\$ 109,616	\$ 8,769	\$ 354,137
Proposed:	\$ 3,408,168	\$ 2,504,793	\$ 89,534	\$ 161,754	\$ 44,145	\$ 59,296	\$ 197,722	\$ 7,377	\$ 343,547
Surplus/Deficit:	\$ (845,637)	\$ (863,235)	\$ (47,050)	\$ 112,286	\$ (21,834)	\$ 50,320	\$ (88,106)	\$ 1,392	\$ 10,590
% Increase/(Decrease):	33.0%	52.6%	110.7%	-41.0%	97.9%	-45.9%	80.4%	-15.9%	-3.0%

COU Solid Waste Cost of Service Study

Solid Waste Utility Option 1: Cash-Based achieving 1.25 DSC

Option 1a: Cost of Service Study Based Rates

Class	Unit	Current	FY2022	FY2023	FY2024	FY2025
LF20 Gen Waste - Sch B Tipping Fees:	Per Ton	\$ 251.20	\$ 284.22	\$ 317.25	\$ 350.27	\$ 383.30
Annual Rate Increase:		0.0%	13.1%	11.6%	10.4%	9.4%
Rate Increase From FY21:		0.0%	13.1%	26.3%	39.4%	52.6%
LF23 Equipment:	Per Hour	\$ 166.43	\$ 212.51	\$ 258.59	\$ 304.67	\$ 350.75
Annual Rate Increase:		0.0%	27.7%	21.7%	17.8%	15.1%
Rate Increase From FY21:		0.0%	27.7%	55.4%	83.1%	110.7%
LF24 Scrap Metal HM:	Per Ton	\$ 1,073.54	\$ 963.57	\$ 853.60	\$ 743.63	\$ 633.66
Annual Rate Increase:		0.0%	-10.2%	-11.4%	-12.9%	-14.8%
Rate Increase From FY21:		0.0%	-10.2%	-20.5%	-30.7%	-41.0%
LF51 Misc STL (Labor):	Per Hour	\$ 87.40	\$ 108.78	\$ 130.17	\$ 151.55	\$ 172.93
Annual Rate Increase:		0.0%	24.5%	19.7%	16.4%	14.1%
Rate Increase From FY21:		0.0%	24.5%	48.9%	73.4%	97.9%

COU Solid Waste Cost of Service Study

Solid Waste Utility Option 1: Cash-Based achieving 1.25 DSC

Option 1a: Cost of Service Study Based Rates, cont.

Class	Unit	Current	FY2022	FY2023	FY2024	FY2025
LF52 Trawl Nets:	Per Cubic Yard	\$ 1,073.54	\$ 950.34	\$ 827.13	\$ 703.93	\$ 580.73
Annual Rate Increase:		0.0%	-11.5%	-13.0%	-14.9%	-17.5%
Rate Increase From FY21:		0.0%	-11.5%	-23.0%	-34.4%	-45.9%
LF53 Fish Waste:	Per Ton	\$ 536.77	\$ 644.63	\$ 752.49	\$ 860.35	\$ 968.21
Annual Rate Increase:		0.0%	20.1%	16.7%	14.3%	12.5%
Rate Increase From FY21:		0.0%	20.1%	40.2%	60.3%	80.4%
LF54 Appliance with Refrigerant:	Each	\$ 107.35	\$ 103.09	\$ 98.83	\$ 94.57	\$ 90.31
Annual Rate Increase:		0.0%	-4.0%	-4.1%	-4.3%	-4.5%
Rate Increase From FY21:		0.0%	-4.0%	-7.9%	-11.9%	-15.9%
LF01 Sch A Landfill Maintenance Fee:	Per Utility Bill	\$ 27.97	\$ 27.76	\$ 27.55	\$ 27.34	\$ 27.13
Annual Rate Increase:		0.0%	-0.7%	-0.8%	-0.8%	-0.8%
Rate Increase From FY21:		0.0%	-0.7%	-1.5%	-2.2%	-3.0%

COU Solid Waste Cost of Service Study

Solid Waste Utility Option 1: Cash-Based achieving 1.25 DSC

Option 1b: Across-the-Board Rate Increase

	Total	LF20 Gen Waste	LF23 Equipment	LF24 Scrap Metal HM	LF51 Misc STL (Labor)	LF52 Nets	LF53 Fish Waste	LF54 Refrigerant	LF01 Maintenance
Current:	\$ 2,562,531	\$ 1,641,558	\$ 42,484	\$ 274,041	\$ 22,310	\$ 109,616	\$ 109,616	\$ 8,769	\$ 354,137
Proposed:	\$ 3,408,168	\$ 2,183,273	\$ 56,504	\$ 364,474	\$ 29,673	\$ 145,790	\$ 145,790	\$ 11,663	\$ 471,002
Surplus/Deficit:	\$ (845,637)	\$ (541,715)	\$ (14,020)	\$ (90,434)	\$ (7,362)	\$ (36,173)	\$ (36,173)	\$ (2,894)	\$ (116,865)
% Increase/(Decrease):	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%

COU Solid Waste Cost of Service Study

Solid Waste Utility Option 1: Cash-Based achieving 1.25 DSC

Option 1b: Across the Board Rate Increase

Class	Unit	Current	FY2022	FY2023	FY2024	FY2025
LF20 Gen Waste - Sch B Tipping Fees:	Per Ton	\$ 251.20	\$ 271.92	\$ 292.65	\$ 313.37	\$ 334.10
Annual Rate Increase:		0.0%	8.3%	7.6%	7.1%	6.6%
Rate Increase From FY21:		0.0%	8.3%	16.5%	24.8%	33.0%
LF23 Equipment:	Per Hour	\$ 166.43	\$ 180.16	\$ 193.89	\$ 207.62	\$ 221.35
Annual Rate Increase:		0.0%	8.3%	7.6%	7.1%	6.6%
Rate Increase From FY21:		0.0%	8.3%	16.5%	24.8%	33.0%
LF24 Scrap Metal HM:	Per Ton	\$ 1,073.54	\$ 1,162.11	\$ 1,250.67	\$ 1,339.24	\$ 1,427.81
Annual Rate Increase:		0.0%	8.3%	7.6%	7.1%	6.6%
Rate Increase From FY21:		0.0%	8.3%	16.5%	24.8%	33.0%
LF51 Misc STL (Labor):	Per Hour	\$ 87.40	\$ 94.61	\$ 101.82	\$ 109.03	\$ 116.24
Annual Rate Increase:		0.0%	8.3%	7.6%	7.1%	6.6%
Rate Increase From FY21:		0.0%	8.3%	16.5%	24.8%	33.0%

COU Solid Waste Cost of Service Study

Solid Waste Utility Option 1: Cash-Based achieving 1.25 DSC

Option 1b: Across the Board Rate Increase, cont.

Class	Unit	Current	FY2022	FY2023	FY2024	FY2025
LF52 Trawl Nets:	Per Cubic Yard	\$ 1,073.54	\$ 1,162.11	\$ 1,250.67	\$ 1,339.24	\$ 1,427.81
Annual Rate Increase:		0.0%	8.3%	7.6%	7.1%	6.6%
Rate Increase From FY21:		0.0%	8.3%	16.5%	24.8%	33.0%
LF53 Fish Waste:	Per Ton	\$ 536.77	\$ 581.05	\$ 625.34	\$ 669.62	\$ 713.90
Annual Rate Increase:		0.0%	8.3%	7.6%	7.1%	6.6%
Rate Increase From FY21:		0.0%	8.3%	16.5%	24.8%	33.0%
LF54 Appliance with Refrigerant:	Each	\$ 107.35	\$ 116.21	\$ 125.06	\$ 133.92	\$ 142.78
Annual Rate Increase:		0.0%	8.3%	7.6%	7.1%	6.6%
Rate Increase From FY21:		0.0%	8.3%	16.5%	24.8%	33.0%
LF01 Sch A Landfill Maintenance Fee:	Per Utility Bill	\$ 27.97	\$ 30.28	\$ 32.59	\$ 34.89	\$ 37.20
Annual Rate Increase:		0.0%	8.3%	7.6%	7.1%	6.6%
Rate Increase From FY21:		0.0%	8.3%	16.5%	24.8%	33.0%

COU Solid Waste Cost of Service Study

Solid Waste Utility Option 1: Cash-Based achieving 1.25 DSC

Average Customer Impact Comparison

	Current Rates	Option 1a: Cost-Based Rates	Options 1b: Across-the- Board Increase
LF01 Sch A Landfill Maintenance Fee	\$ 27.97	\$ 27.13	\$ 37.20
% Change:	0.0%	-3.0%	33.0%

Solid Waste Option 2: **Income-Based Revenue Requirement**

Option 2: Income-Based Revenue Requirement

- Advantages:
 - It is the traditional, nationally-accepted approach to ratemaking
 - It will more than amply meet all DSC requirements
 - It will provide a cash flow that can be used to reinvest in new projects
- Disadvantages:
 - It is a significant rate increase overall (60.1%)
 - It would likely need to be phased-in

COU Solid Waste Cost of Service Study

Solid Waste Utility Option 2: Income-Based

Option 2: Cost of Service Study Based Rates Revenue Requirement Results

	Total	LF20 Gen Waste	LF23 Equipment	LF24 Scrap Metal HM	LF51 Misc STL (Labor)	LF52 Nets	LF53 Fish Waste	LF54 Refrigerant	LF01 Maintenance
Current:	\$ 2,562,531	\$ 1,641,558	\$ 42,484	\$ 274,041	\$ 22,310	\$ 109,616	\$ 109,616	\$ 8,769	\$ 354,137
Proposed:	\$ 4,102,820	\$ 3,015,319	\$ 107,783	\$ 194,723	\$ 53,142	\$ 71,382	\$ 238,022	\$ 8,881	\$ 413,568
Surplus/Deficit:	\$ (1,540,289)	\$ (1,373,762)	\$ (65,299)	\$ 79,318	\$ (30,832)	\$ 38,234	\$ (128,405)	\$ (112)	\$ (59,432)
% Increase/(Decrease):	60.1%	83.7%	153.7%	-28.9%	138.2%	-34.9%	117.1%	1.3%	16.8%

COU Solid Waste Cost of Service Study

Solid Waste Utility Option 2: Income-Based

Option 2: Cost of Service Study Based Rates

Class	Unit	Current	FY2022	FY2023	FY2024	FY2025
LF20 Gen Waste - Sch B Tipping Fees:	Per Ton	\$ 251.20	\$ 303.76	\$ 356.31	\$ 408.87	\$ 461.42
Annual Rate Increase:		0.0%	20.9%	17.3%	14.7%	12.9%
Rate Increase From FY21:		0.0%	20.9%	41.8%	62.8%	83.7%
LF23 Equipment:	Per Hour	\$ 166.43	\$ 230.38	\$ 294.33	\$ 358.28	\$ 422.23
Annual Rate Increase:		0.0%	38.4%	27.8%	21.7%	17.8%
Rate Increase From FY21:		0.0%	38.4%	76.9%	115.3%	153.7%
LF24 Scrap Metal HM:	Per Ton	\$ 1,073.54	\$ 995.86	\$ 918.18	\$ 840.50	\$ 762.82
Annual Rate Increase:		0.0%	-7.2%	-7.8%	-8.5%	-9.2%
Rate Increase From FY21:		0.0%	-7.2%	-14.5%	-21.7%	-28.9%
LF51 Misc STL (Labor):	Per Hour	\$ 87.40	\$ 117.60	\$ 147.79	\$ 177.99	\$ 208.18
Annual Rate Increase:		0.0%	34.5%	25.7%	20.4%	17.0%
Rate Increase From FY21:		0.0%	34.5%	69.1%	103.6%	138.2%

COU Solid Waste Cost of Service Study

Solid Waste Utility Option 2: Income-Based

Option 2: Cost of Service Study Based Rates, cont.

Class	Unit	Current	FY2022	FY2023	FY2024	FY2025
LF52 Trawl Nets:	Per Cubic Yard	\$ 1,073.54	\$ 979.93	\$ 886.32	\$ 792.70	\$ 699.09
Annual Rate Increase:		0.0%	-8.7%	-9.6%	-10.6%	-11.8%
Rate Increase From FY21:		0.0%	-8.7%	-17.4%	-26.2%	-34.9%
LF53 Fish Waste:	Per Ton	\$ 536.77	\$ 693.96	\$ 851.16	\$ 1,008.35	\$ 1,165.55
Annual Rate Increase:		0.0%	29.3%	22.7%	18.5%	15.6%
Rate Increase From FY21:		0.0%	29.3%	58.6%	87.9%	117.1%
LF54 Appliance with Refrigerant:	Each	\$ 107.35	\$ 107.69	\$ 108.03	\$ 108.37	\$ 108.72
Annual Rate Increase:		0.0%	0.3%	0.3%	0.3%	0.3%
Rate Increase From FY21:		0.0%	0.3%	0.6%	1.0%	1.3%
LF01 Sch A Landfill Maintenance Fee:	Per Utility Bill	\$ 27.97	\$ 29.14	\$ 30.32	\$ 31.49	\$ 32.66
Annual Rate Increase:		0.0%	4.2%	4.0%	3.9%	3.7%
Rate Increase From FY21:		0.0%	4.2%	8.4%	12.6%	16.8%

COU Solid Waste Cost of Service Study

Solid Waste Utility Option 2: Income-Based

Average Customer Impact Comparison

	Current Rates	Option 2: Cost-Based Rates
LF01 Sch A Landfill Maintenance Fee	\$ 27.97	\$ 32.66
% Change:	0.0%	16.8%

Solid Waste Option 3: **Implement Utility Infrastructure Tax**

Option 3: Utility Infrastructure Tax

- Receipts from a 1% increase in Sales Tax could provide a cash flow to be used for funding utility infrastructure needs and directed towards specific projects at the direction of the City Council

	FY2017 Actual	FY2018 Actual	FY2019 Actual	FY2020 Budget	Adopted Budget
1% Sales Tax Special Revenue					
REVENUES					
11010040 - 41310 1% Capital Sales tax	3,705,737	3,522,767	3,629,169	3,500,000	2,666,667

\$2,666,667 estimated
FY2021 receipts

Combining Options 1 & 3: **Overall Impact**

Combining Options 1 & 3

The table below estimates the impact of combining Option 1 (cash-based DSC target revenue requirement) and Option 3 (1% Utility Infrastructure Tax) in comparison to the income-based revenue requirement (after phased increase).

	Electric	Water	Wastewater	Solid Waste	Total
Achieved DSC:	1.25	2.00	1.40	1.43	N/A
Budgeted Customer Revenues:	\$ 7,248,373	\$ 2,616,686	\$ 2,468,212	\$ 2,562,531	\$ 14,895,802
Cash-Based Revenue Requirement:	\$ 7,692,809	\$ 2,711,218	\$ 3,455,497	\$ 3,408,166	\$ 17,267,691
Revenue Increase:	\$ 444,436	\$ 94,532	\$ 987,285	\$ 845,635	\$ 2,371,888
Overall % Increase:	6.1%	3.6%	40.0%	33.0%	15.9%
Income-Based Revenue					
Requirement:	\$ (2,514,450)	\$ (913,887)	\$ (1,851,293)	\$ (1,540,289)	\$ (6,819,919)
Increased Revenues from Option 1:	\$ 444,436	\$ 94,532	\$ 987,285	\$ 845,635	\$ 2,371,888
	\$ (2,070,014)	\$ (819,355)	\$ (864,008)	\$ (694,654)	\$ (4,448,030)
Income from 1% Infrastructure Tax:	\$ 666,667	\$ 666,667	\$ 666,667	\$ 666,667	\$ 2,666,667 *
Outstanding Deficit:	\$ (1,403,347)	\$ (152,688)	\$ (197,341)	\$ (27,987)	\$ (1,781,363)

* Assumes even distribution of infrastructure tax for the purpose of illustration

City Staff Recommendations

City Staff Recommendations:

- **Wastewater Option 1b:** Increase Rates to achieve over 1.25 DSC (+40.0%) and apply on an Across-the-Board Basis, phased in over 4 years
- **Solid Waste Option 1b:** Increase Rates to achieve over 1.25 DSC (+33.0%) and apply on an Across-the-Board Basis, phased in over 4 years
- **Electric & Water Option 3:** Seek implementation of a 1.0% Utility Infrastructure Tax (+\$2.7M estimated)

Rates for City Staff Recommended Options:

- Rates based on Wastewater Option 1 b:

Phased-In 40% Rate Increase	FY2021	FY2022	FY2023	FY2024	FY2025
Annual Revenues	\$ 2,468,212	\$ 2,715,034	\$ 2,961,855	\$ 3,208,676	\$ 3,455,497
Debt Service Coverage (DSC) Ratio	-0.55	-0.08	0.40	0.90	1.40
Annual Rate Increase (%) Required	0.0%	10.0%	9.1%	8.3%	7.7%

- Rates based on Solid Waste Option 1 b:

Phased-In 33% Rate Increase	FY2021	FY2022	FY2023	FY2024	FY2025
Annual Revenues	\$ 2,562,531	\$ 2,773,940	\$ 2,985,349	\$ 3,196,757	\$ 3,408,166
Debt Service Coverage (DSC) Ratio	-1.36	-0.69	0.00	0.70	1.43
Annual Rate Increase (%) Required	0.0%	8.3%	7.6%	7.1%	6.6%