



CITY OF BETHEL
PUBLIC WORKS COMMITTEE
WEDNESDAY, JUNE 19, 2024, 5:30 PM

LOCATION: 300 CHIEF EDDIE HOFFMAN HIGHWAY, BETHEL, ALASKA
JOIN ZOOM MEETING: <https://us06web.zoom.us/j/82789796061?pwd=eFpYa3hBcU1vZkpQME1Fd1p2UXc0dz09>
MEETING ID: 827 8979 6061
PASSCODE: 044846
888 475 4499 US TOLL-FREE 833 548 0276 US TOLL-FREE
833 548 0282 US TOLL-FREE 877 853 5257 US TOLL-FREE

MEMBERS	STAFF
Ryan Butte, Juan Delgado, Mark Springer- Council Rep. John Llyod	Ex-Officio Members: Bill Arnold, Public Works Director pwadmin@cityofbethel.net 907-543-3110

- I. CALL TO ORDER**
- II. ROLL CALL**
- III. PEOPLE TO BE HEARD – FIVE MINUTES PER PERSON**
 - A. Please submit written public comments to pwadmin@cityofbethel.net by 4:00 p.m. the day of the meeting.
- IV. APPROVAL OF AGENDA**
- V. APPROVAL OF MEETING MINUTES**
- VI. UNFINISHED BUSINESS**
 - A. Evaluation Of Committees 2024 Goals, Tasks And Priorities
 - B. Review of Committee Duties and Responsibilities and Determination of Committee Topics of Interest for 2024
 - C. Utility Rate Study
 - D. Feb 2, 2024 DEC O&M Best Practices Memo
- VII. NEW BUSINESS**
- VIII. EX OFFICIO REPORT**
 - A. April 2024, Public Works Director's Report
- IX. MEMBER COMMENTS**
- X. ADJOURNMENT**

Posted <<DATE>> at City Hall, AC Co., Swanson’s, and the Post Office.

Ex-Officio Staff

2.60.210 Public works committee duties.

- A. The public works committee may review and make recommendations to the council on:
1. The operations of the city's water and wastewater collection, distribution, treatment and compliance; and solid waste planning, collection, disposal and compliance.
 2. The development, operations, and maintenance of city properties, roads, traffic, drainage, snow removal, parks, cemeteries, grounds, and trails.
 3. The operations of the transit system.
 4. The operations and maintenance of the city's vehicle fleet and heavy equipment.
 5. The budget as it relates to public works operations and capital projects.
 6. City capital planning and implementation of projects related to public works.
 7. Energy and environmental improvements for city operations.
 8. The progress toward achieving the goals set out in the city's comprehensive plan as they relate to public works.
- B. The public works committee may perform other such duties as the city council may from time to time refer. [Ord. 21-20 § 4, 2021.]

The Bethel Municipal Code is current through Ordinance 22-37, passed November 8, 2022.

Disclaimer: The city clerk's office has the official version of the Bethel Municipal Code. Users should contact the city clerk's office for ordinances passed subsequent to the ordinance cited above.

[City Website: www.cityofbethel.org](http://www.cityofbethel.org)

[Code Publishing Company](#)

Article VIII. Public Works Committee

2.60.200 Establishment of public works committee.

There is established a public works committee for the purpose of advising the city council on city roads, facilities, utility operations, vehicle and equipment operations, and other public works-related matters. [Ord. 21-20 § 4, 2021.]

2.60.210 Public works committee duties.

A. The public works committee may review and make recommendations to the council on:

1. The operations of the city's water and wastewater collection, distribution, treatment and compliance; and solid waste planning, collection, disposal and compliance.
2. The development, operations, and maintenance of city properties, roads, traffic, drainage, snow removal, parks, cemeteries, grounds, and trails.
3. The operations of the transit system.
4. The operations and maintenance of the city's vehicle fleet and heavy equipment.
5. The budget as it relates to public works operations and capital projects.
6. City capital planning and implementation of projects related to public works.
7. Energy and environmental improvements for city operations.
8. The progress toward achieving the goals set out in the city's comprehensive plan as they relate to public works.

B. The public works committee may perform other such duties as the city council may from time to time refer. [Ord. 21-20 § 4, 2021.]



Utility Rate Study

Public Works Committee Meeting

Chase Bozett, Project Consultant

Angie Sanchez Virnoche,

Principal

May 17, 2023



City Utility Background

- **10 years since the last rate study**
- **Annual 3% rate increases written in Municipal Code for several years**
 - » Concerns about affordability
- **Study initiated to evaluate the utility's financial sustainability**
- **Piping projects on the horizon**
 - » Better understand the hauled vs piped systems costs



FCS Group Scope

- **Review individual utility past performance**
- **Project forward utility revenues and expenses**
- **Forecast rate increases for individual utility sufficiency**
- **Allocate costs cost to hauled or piped systems and compare to revenue**
- **Validate customer billing data and customer billing statistics**
- **Establish zones and rates related to the cost to serve customers**



Agenda

- **Utility Rate Study Overview**
- **Study Foundation**
- **Initial Results**
 - » Revenue Requirement
 - » Cost of Service
 - » Rate Design
- **Decision Points**



Why Are Rate Studies Important?

Your Utility Is An Enterprise Fund

- Revenues need to cover utility costs
- Quantifies policies, priorities, and initiatives
- Tells the “true” cost of providing service

Transparency

- Communicates impact of financial decisions
- Public meetings

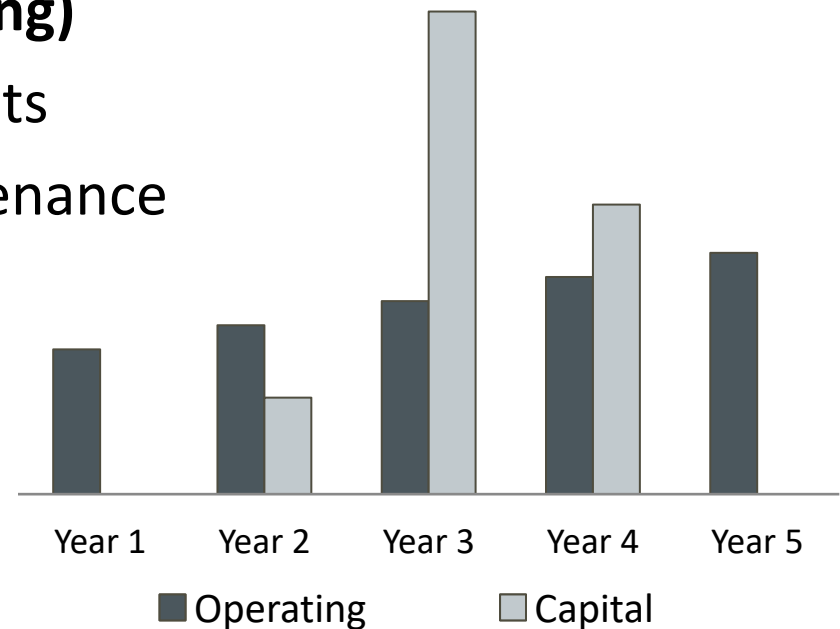


Introduction to Utility Rate Making

- **Utility rates are set to recover the cost of providing service**

- **Operating costs (regular / ongoing)**

- » Employee salaries and benefits
- » Routine inspections & maintenance
- » Professional services
- » Utilities / power / fuel



- **Capital costs (periodic)**

- » Infrastructure replacement
- » Facility expansions and upgrades



Common Components of a Rate Study

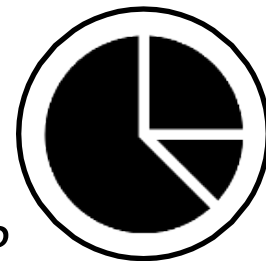
- **Revenue Requirement**

What revenue adjustments are needed to cover each utility's costs?



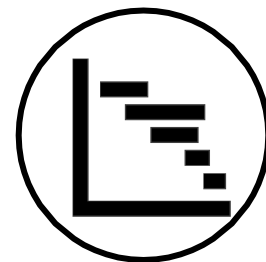
- **Cost of Service Analysis**

Do the utility's rates recover costs equitably from customers?



- **Rate Design**

How should revenue be collected by customer?



Study Foundation



**Forecast
Basis**
FY 2023 Budget



**Customer
Growth**
0.7% - 0.8%
Annual Increase



**Expense
Inflation**
3.0% to 8.0%
annual cost
inflation



**Operating
Reserve Target**
30 days O&M



**Capital Funding
Target**
\$1 million
annually



The background of the slide is a blurred image of a financial spreadsheet. A dark blue arrow points from the left edge towards the right, partially overlapping the text. The spreadsheet contains various numerical values, including '100,000', '10,000', '75,000', and '\$205,000'.

Revenue Requirement



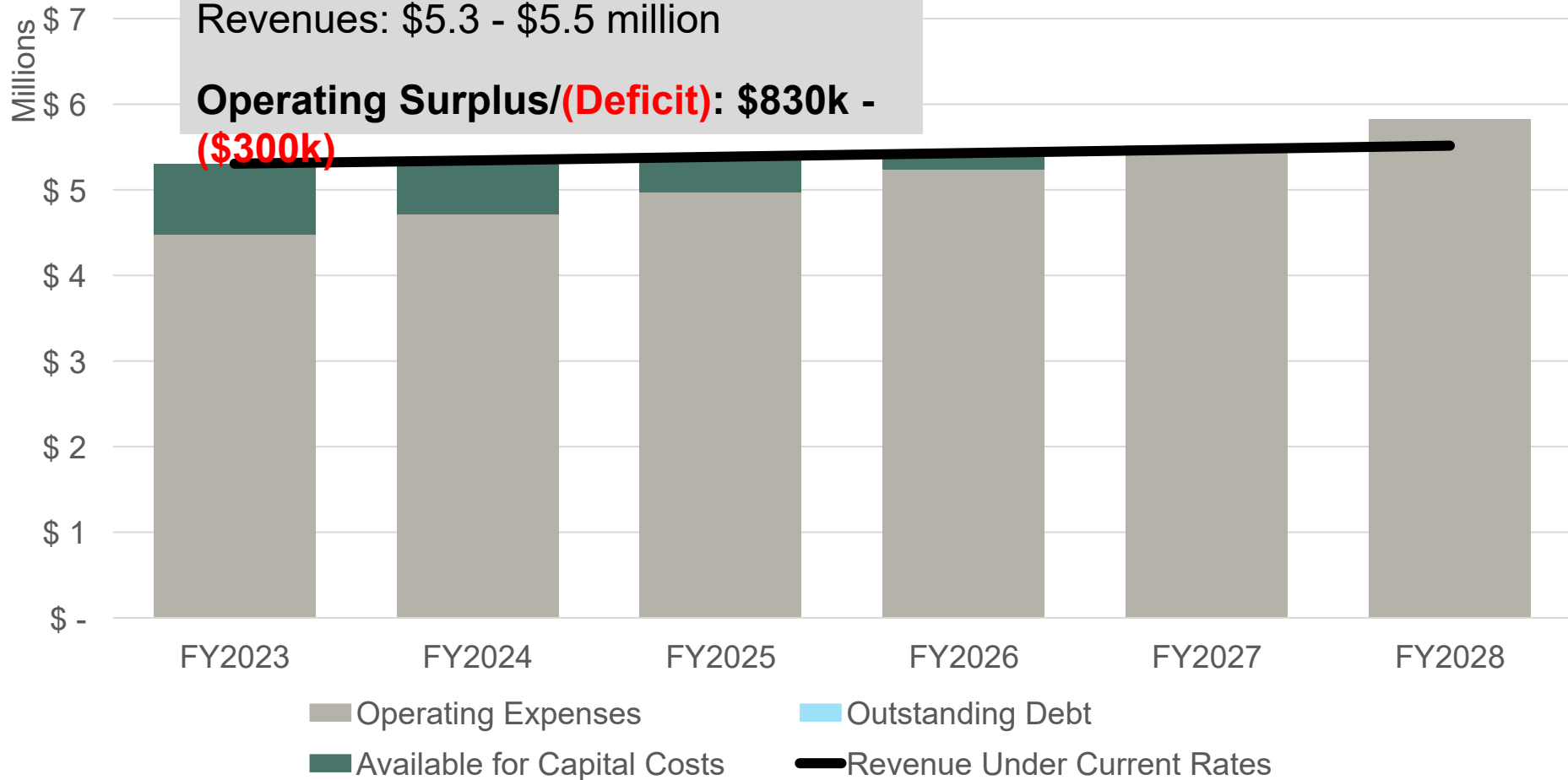
Water Utility Baseline

Operating Costs: \$4.5 - \$5.8 million

Outstanding Debt: No debt service

Revenues: \$5.3 - \$5.5 million

Operating Surplus/(Deficit): \$830k - (\$300k)





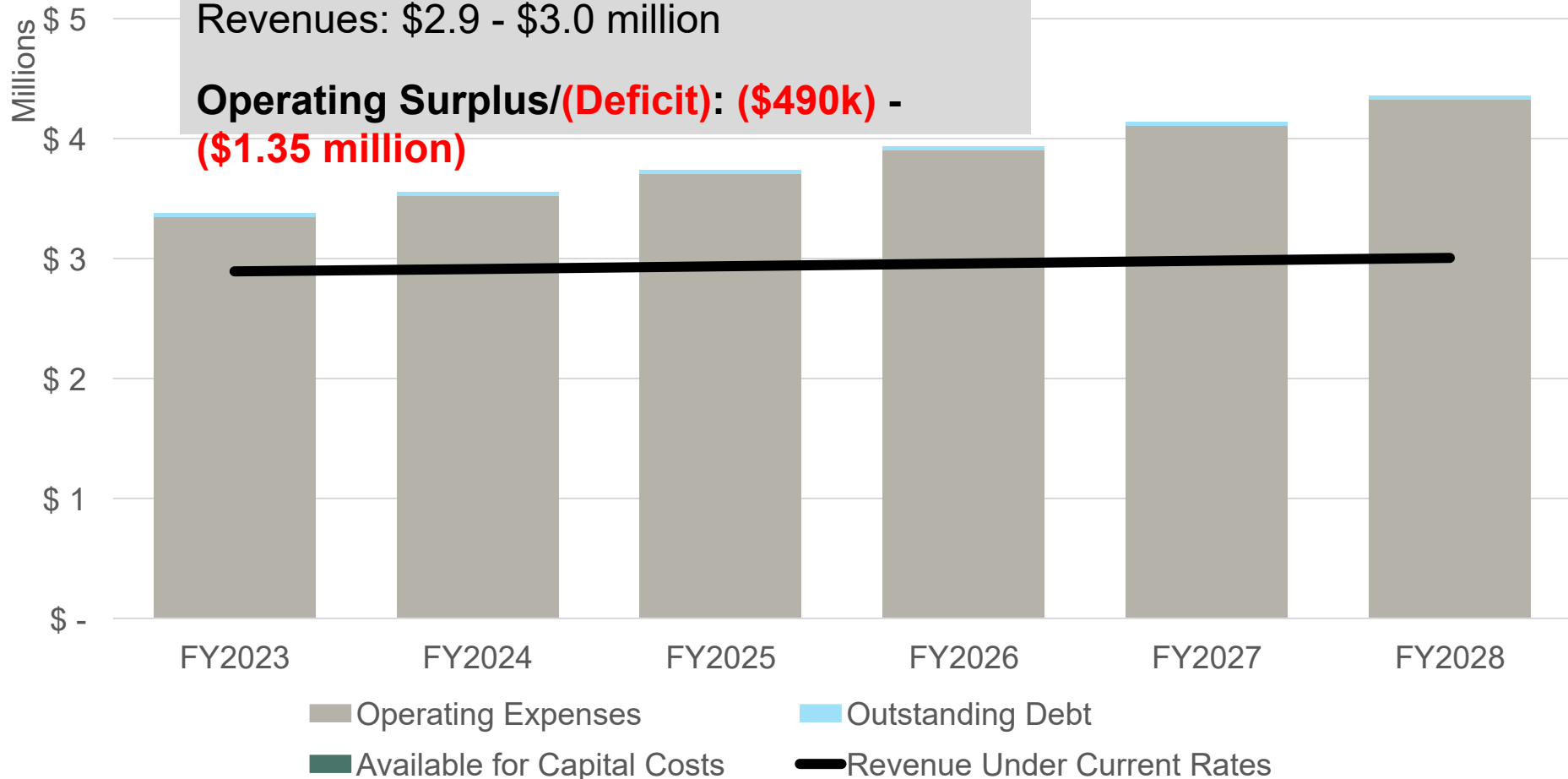
Sewer Utility Baseline

Operating Costs: \$3.35 - \$4.3 million

Outstanding Debt: \$35k annually

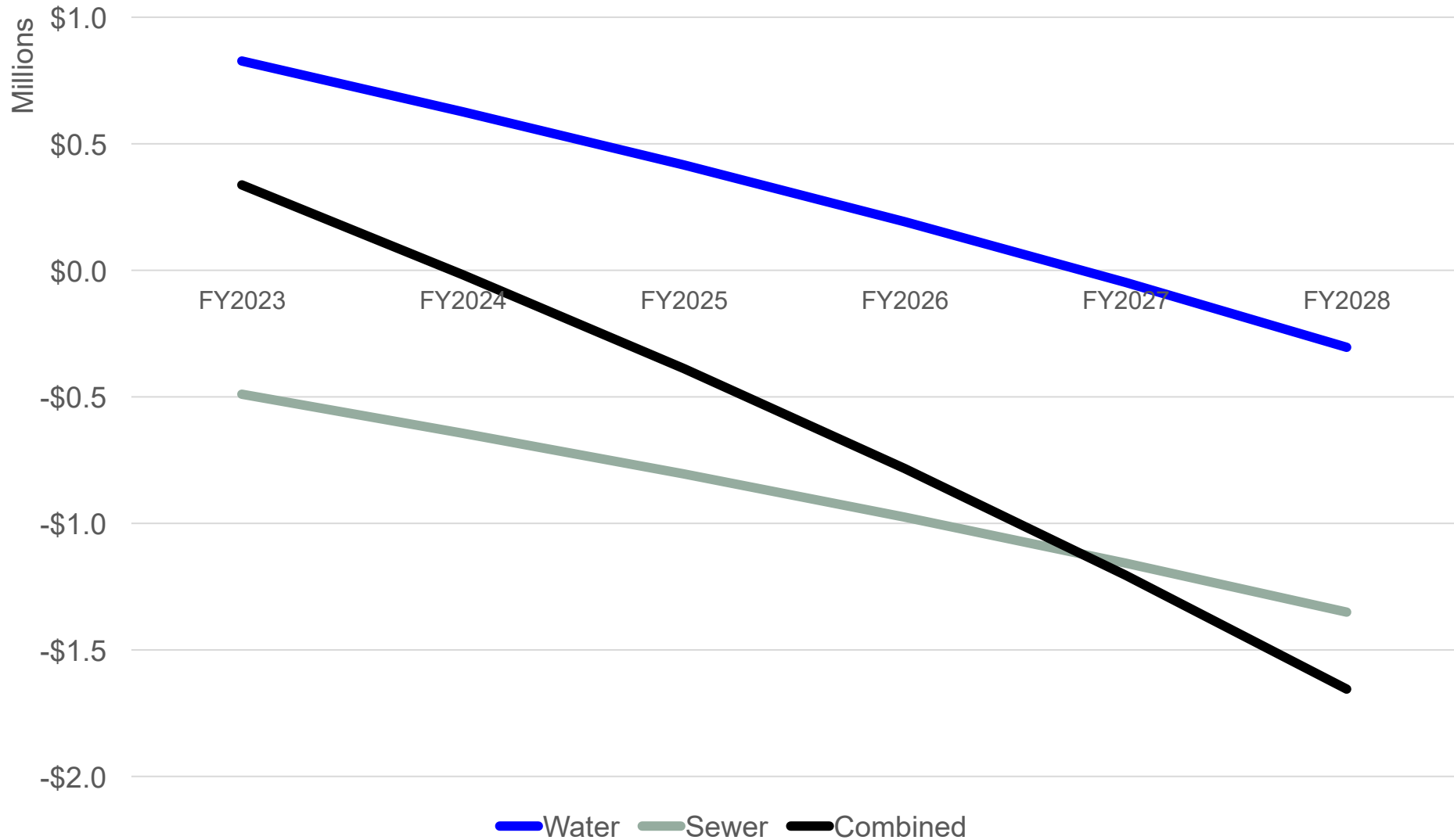
Revenues: \$2.9 - \$3.0 million

**Operating Surplus/(Deficit): (\$490k) -
(\$1.35 million)**





Cash Flow Under Current Rates





Proposed Rate Increases (FY 2024 – FY 2028)

- **Water:**

- » Service Charges: 3.5% across the board (ATB) annual increases
- » Subscription Charges: 3.5% annual increases

- **Sewer:**

- » Service Charges: 9.5% across the board (ATB) annual increases
- » Subscription Charges: 3.5% annual increases



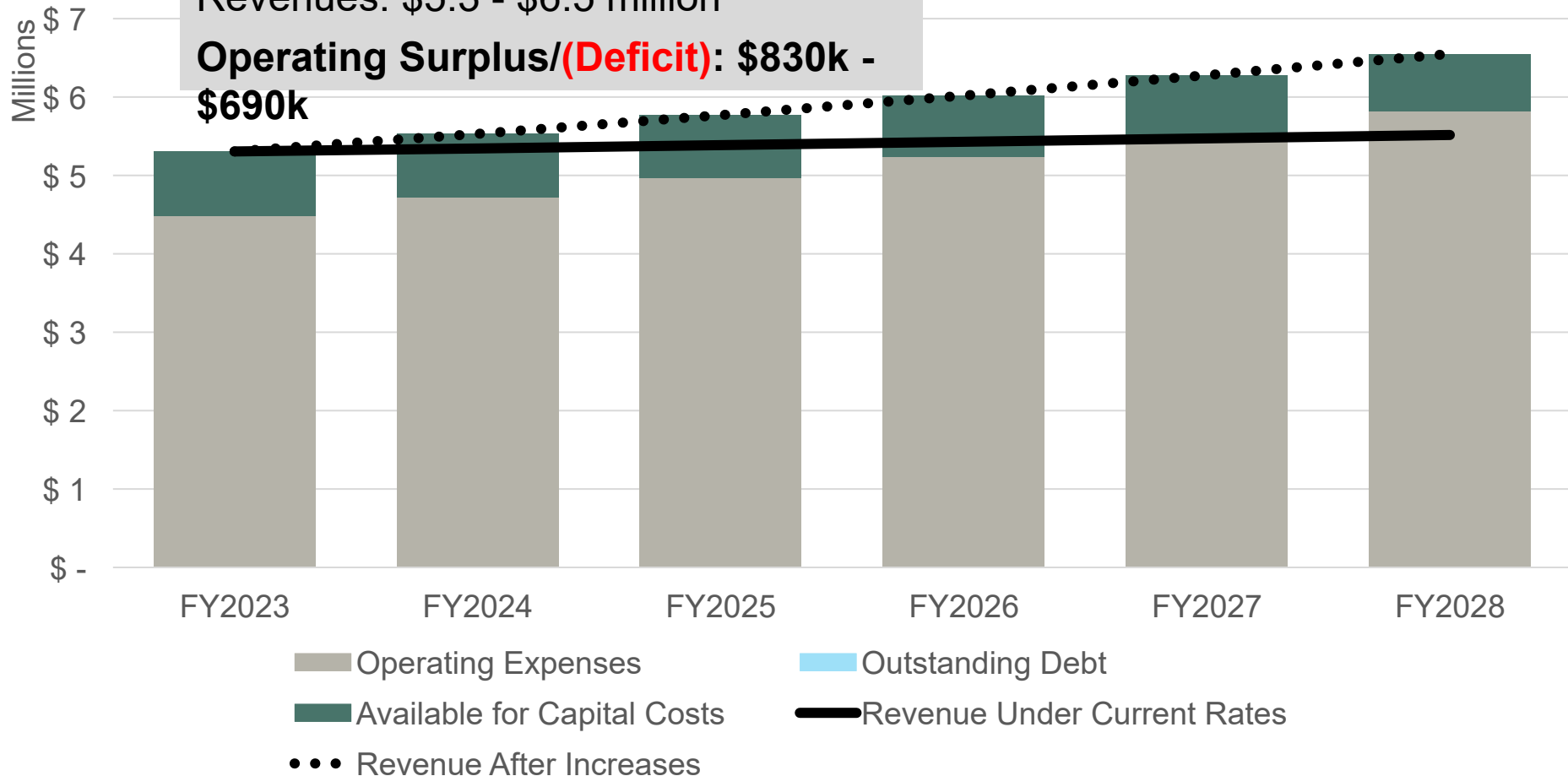
Water Utility After Increases

Operating Costs: \$4.5 - \$5.8 million

Outstanding Debt: No debt service

Revenues: \$5.3 - \$6.5 million

Operating Surplus/(Deficit): \$830k - \$690k





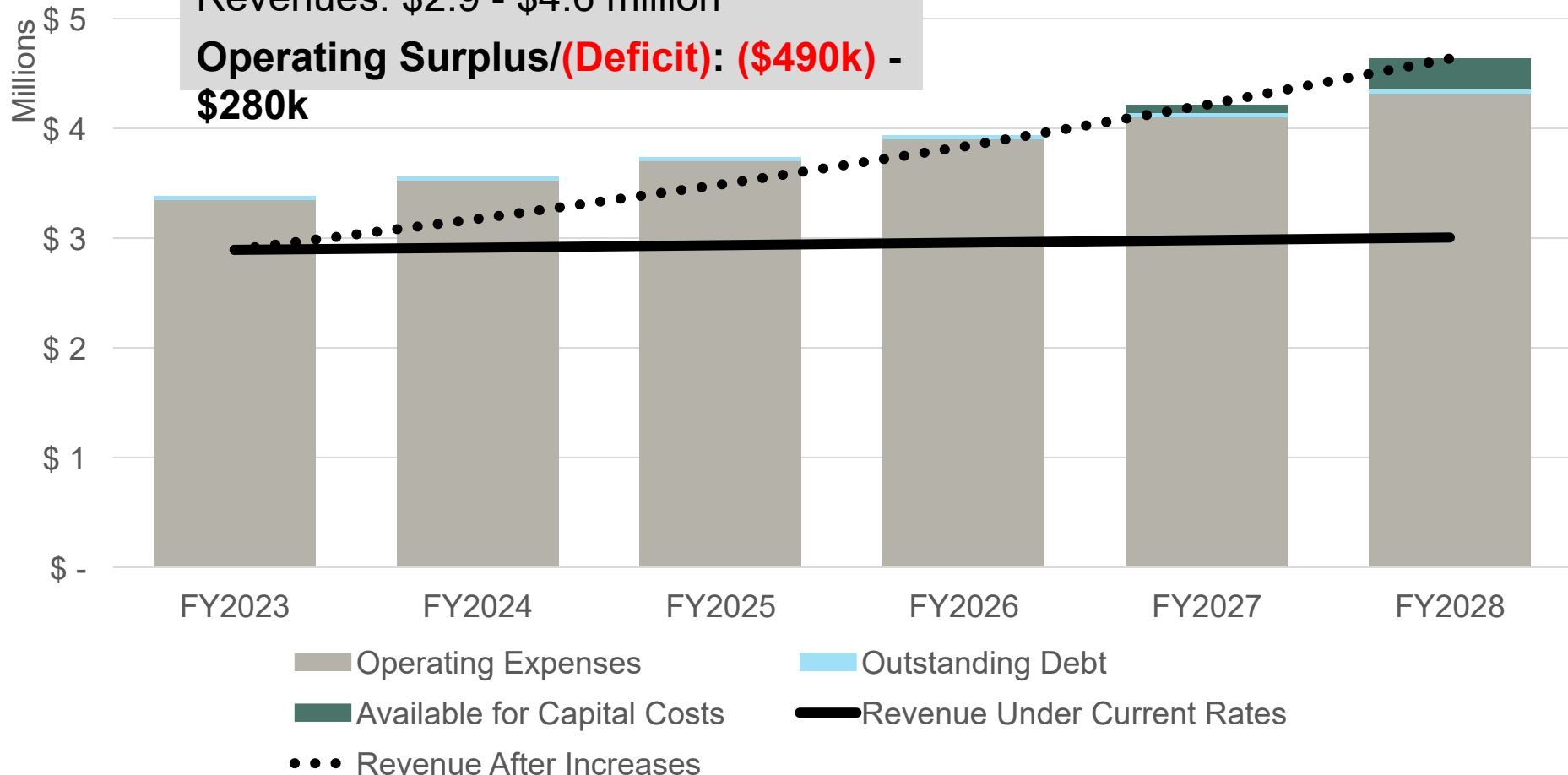
Sewer Utility After Increases

Operating Costs: \$3.35 - \$4.3 million

Outstanding Debt: \$35k annually

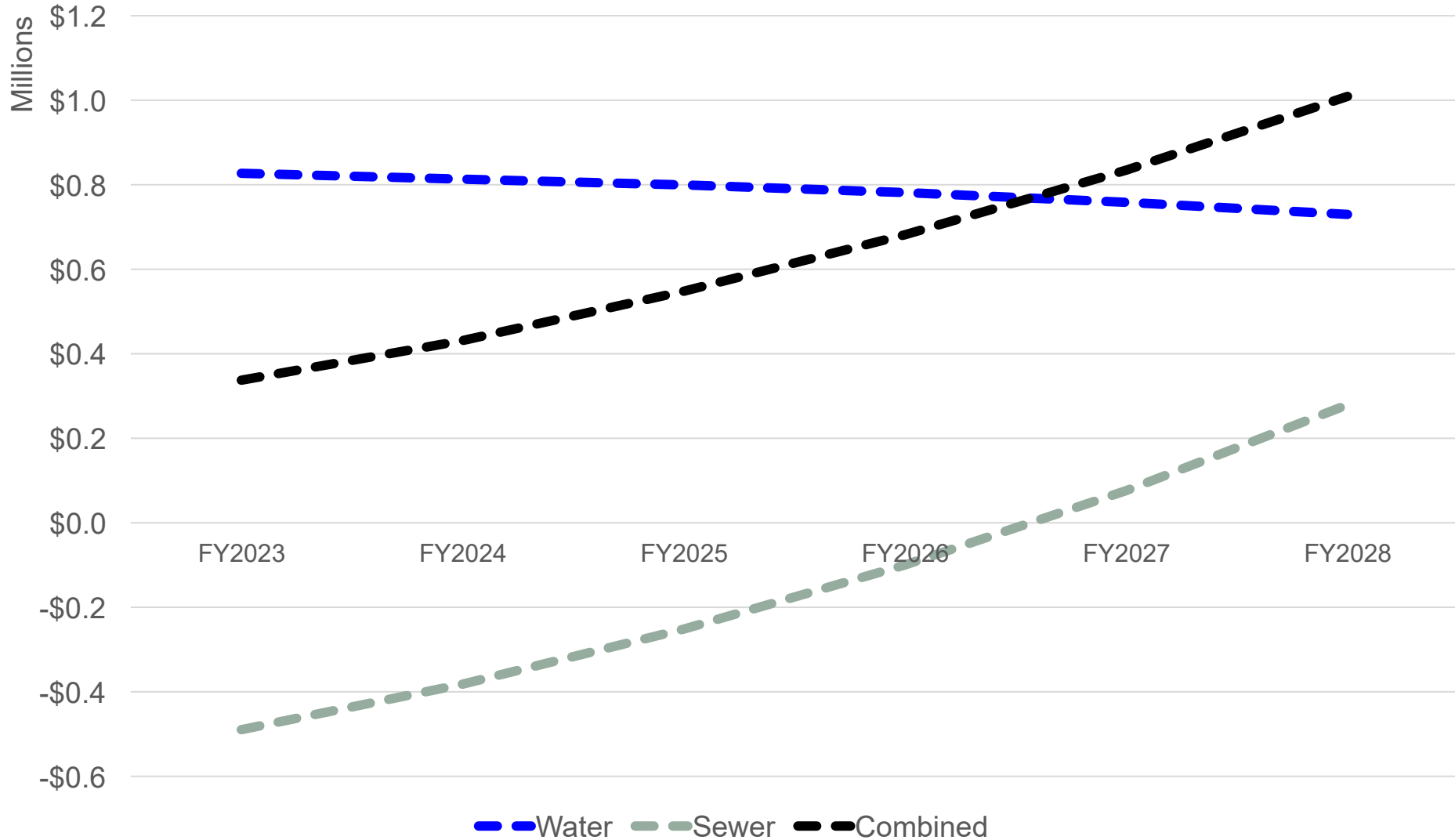
Revenues: \$2.9 - \$4.6 million

Operating Surplus/(Deficit): (\$490k) - \$280k





Combined Cash Flow After Increase



Cost of Service



Cost of Service Objectives

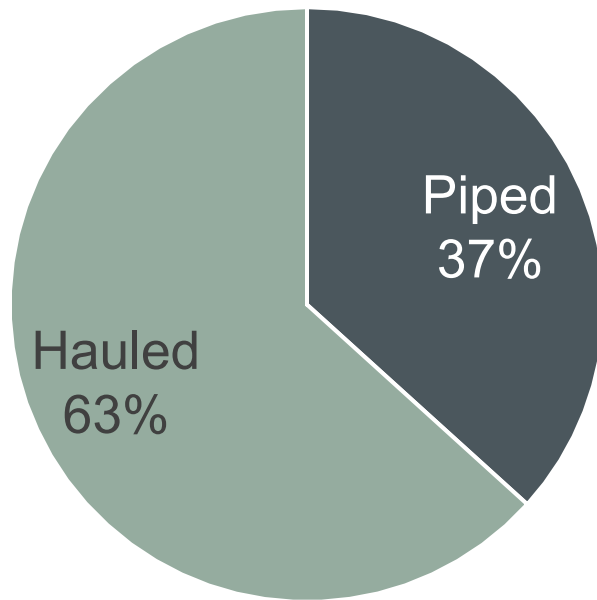
- **Allocate individual line items to hauled or piped utility costs**

Expense	Allocation Factor	% Hauled	% Piped
Admin	Based on customer counts	75	25
Hauled Budget	All to hauled	100	0
Piped Budget	All to piped	0	100
Water Treatment Budgets	Based on water consumption	35	65
Sewer Lagoon Budgets	Based on sewer disposal	47	53

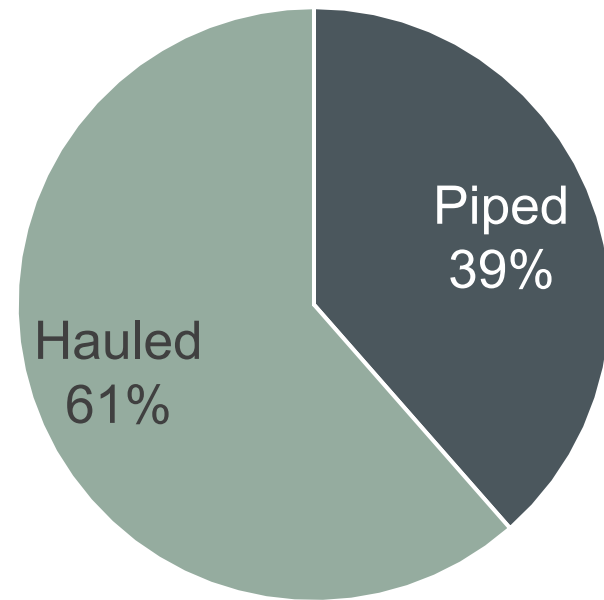
- **Make changes to rate to achieve cost of service results**
 - » Typically changes of less than 5% do not require an adjustment

Water Cost of Service

Current Rate Revenue Collection



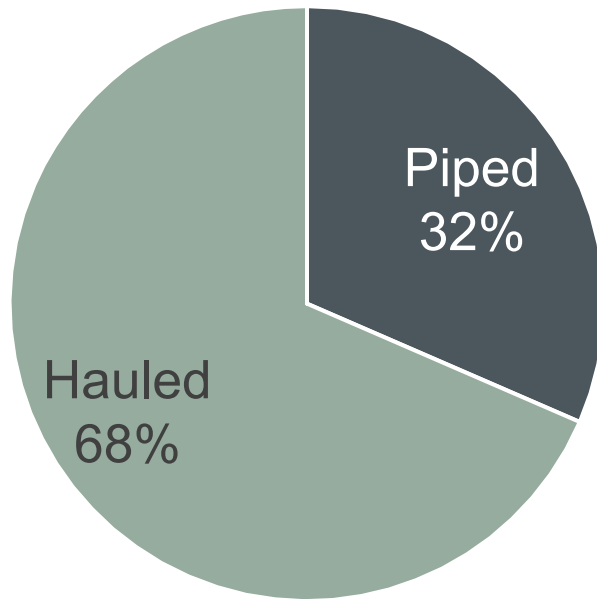
Cost of Service Allocation



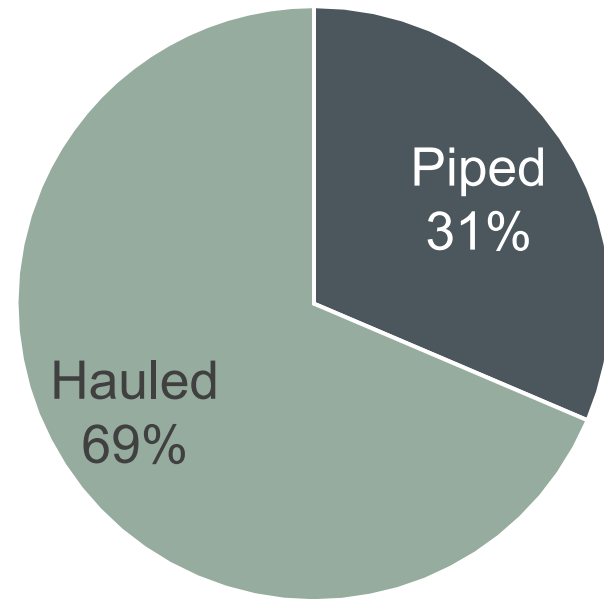
- **Current shifts in Cost of Service less than +/- 5 percent**
- **No changes in revenue collection between classes recommended**

Sewer Cost of Service

Current Rate Revenue Collection



Cost of Service Allocation



- **Current shifts in Cost of Service less than +/- 5 percent**
- **No changes in revenue collection between classes recommended**



Rate Design



Current Hauled Rate Design (Water Zone 1)

Capacity	1 Time/Month	2 Times/Month	1 Time/Week	2 Times/Week	3 Times/Week	4 Times/Week	Extra Haul
100	\$21.15	\$36.86	\$73.47	\$141.45	\$209.45	\$277.46	\$58.36
150	\$22.67	\$39.90	\$80.06	\$154.59	\$229.19	\$307.13	\$71.77
200	\$24.19	\$42.91	\$87.58	\$172.13	\$263.72	\$358.62	\$90.47
250	\$25.73	\$46.46	\$95.11	\$194.66	\$298.66	\$410.39	\$93.82
300	\$27.23	\$51.28	\$105.10	\$215.36	\$330.77	\$451.88	\$97.13
350	\$28.74	\$55.67	\$114.23	\$234.21	\$360.08	\$491.71	\$100.42
400	\$30.26	\$59.63	\$122.45	\$251.26	\$386.51	\$528.13	\$103.75
450	\$31.78	\$63.18	\$129.75	\$266.49	\$410.11	\$560.68	\$107.04
500	\$33.30	\$44.56	\$136.21	\$279.83	\$430.88	\$589.33	\$113.68
550	\$36.00	\$74.14	\$152.56	\$313.67	\$483.34	\$661.51	\$115.34
600	\$37.23	\$76.57	\$157.52	\$323.78	\$498.76	\$686.06	\$117.01
650	\$42.15	\$86.86	\$178.93	\$368.22	\$545.20	\$778.02	\$120.31
700	\$43.52	\$89.67	\$184.68	\$379.95	\$566.88	\$802.37	\$123.62
750	\$44.94	\$92.57	\$190.60	\$392.04	\$604.34	\$827.47	\$126.95
800	\$51.71	\$106.77	\$220.14	\$453.58	\$700.25	\$949.19	\$130.26
850	\$53.38	\$110.21	\$227.13	\$467.79	\$722.04	\$989.85	\$133.59
900	\$55.09	\$113.71	\$234.28	\$482.40	\$744.40	\$1,020.20	\$136.90
1,000	\$58.67	\$121.00	\$249.16	\$512.74	\$790.74	\$1,083.14	\$143.51
1,200	\$70.24	\$145.10	\$299.32	\$616.97	\$951.87	\$1,286.47	\$156.78
1,400	\$81.82	\$169.18	\$349.48	\$721.21	\$1,113.02	\$1,489.78	\$170.03
1,500	\$99.47	\$198.93	\$397.87	\$795.72	\$1,193.59	\$1,591.43	\$176.66
1,750	\$113.80	\$227.61	\$455.21	\$910.41	\$1,365.61	\$1,820.82	\$193.21
2,000	\$128.15	\$256.28	\$512.56	\$1,025.11	\$1,537.66	\$2,050.19	\$209.80
2,500	\$156.82	\$313.63	\$627.24	\$1,256.60	\$1,881.72	\$2,508.95	\$267.12
3,000	\$185.48	\$370.96	\$741.94	\$1,483.87	\$2,225.79	\$2,967.71	\$276.12

City of Bethel
Hauled Water Rates
07/01/2022
Zone 1

Capacity	1 Time/Month	2 Times/Month	1 Time/Week	2 Times/Week	3 Times/Week	4 Times/Week	Extra Haul
3,500	\$214.16	\$428.31	\$856.62	\$1,713.24	\$2,569.87	\$3,426.47	\$309.56
4,000	\$246.43	\$494.53	\$992.83	\$1,993.09	\$3,007.55	\$4,015.80	\$419.72
4,500	\$246.43	\$494.53	\$992.83	\$1,993.09	\$3,007.55	\$4,015.80	\$452.73
5,000	\$313.63	\$627.24	\$1,254.49	\$2,508.96	\$3,667.99	\$5,017.92	\$485.91
6,000							\$515.00
7,000							



Current Hauled Rate Design (Water Zone 2)

Capacity	1 Time/Month	2 Times/Month	1 Time/Week	2 Times/Week	3 Times/Week	4 Times/Week	Extra Haul
100	\$33.82	\$62.17	\$128.29	\$251.13	\$373.99	\$496.80	\$131.12
150	\$35.34	\$65.20	\$134.88	\$264.30	\$393.71	\$523.12	\$132.59
200	\$36.86	\$68.22	\$141.45	\$277.46	\$413.44	\$549.42	\$138.09
250	\$38.36	\$71.27	\$148.04	\$290.61	\$433.17	\$575.76	\$139.60
300	\$39.90	\$74.31	\$154.59	\$303.76	\$452.90	\$602.06	\$141.12
350	\$41.40	\$77.33	\$161.20	\$316.92	\$472.64	\$628.37	\$142.64
400	\$42.91	\$80.37	\$167.78	\$330.08	\$492.38	\$654.67	\$144.16
450	\$44.44	\$83.42	\$174.35	\$343.22	\$512.12	\$681.01	\$145.67
500	\$45.95	\$86.44	\$180.95	\$356.38	\$531.85	\$707.31	\$147.19
550	\$47.46	\$89.49	\$187.50	\$369.54	\$551.59	\$733.62	\$148.72
600	\$49.00	\$92.52	\$194.09	\$382.71	\$571.31	\$759.92	\$150.21
650	\$50.51	\$95.54	\$200.66	\$395.86	\$591.05	\$786.24	\$151.75
700	\$52.03	\$98.60	\$207.25	\$409.02	\$610.79	\$812.56	\$153.26
750	\$51.98	\$101.63	\$213.81	\$422.19	\$630.51	\$838.87	\$154.79
800	\$55.06	\$106.77	\$220.14	\$454.64	\$700.25	\$949.19	\$156.30
850	\$56.58	\$110.21	\$227.13	\$467.79	\$722.04	\$989.85	\$157.82
900	\$58.10	\$113.71	\$234.28	\$482.40	\$744.40	\$1,020.20	\$159.34
1,000	\$61.14	\$121.00	\$249.16	\$512.74	\$790.74	\$1,083.14	\$162.37
1,200	\$70.24	\$145.10	\$299.32	\$616.97	\$951.87	\$1,286.74	\$168.44
1,400	\$81.82	\$169.18	\$349.48	\$721.21	\$1,113.02	\$1,489.78	\$174.52
1,500	\$99.47	\$198.93	\$397.87	\$795.72	\$1,193.59	\$1,591.43	\$177.55
1,750	\$113.80	\$27.61	\$455.21	\$910.41	\$1,365.61	\$1,820.82	\$193.21
2,000	\$128.15	\$256.28	\$512.56	\$1,025.11	\$1,537.66	\$2,050.19	\$209.80
2,500	\$156.82	\$313.63	\$627.24	\$1,256.60	\$1,881.72	\$2,508.95	\$267.12
3,000	\$185.48	\$370.96	\$741.94	\$1,483.87	\$2,225.79	\$2,967.71	\$276.12

City of Bethel
Hauled Water Rates
07/01/2022
Zone 2

Capacity	1 Time/Month	2 Times/Month	1 Time/Week	2 Times/Week	3 Times/Week	4 Times/Week	Extra Haul
3,500	\$214.16	\$428.31	\$856.62	\$1,713.24	\$2,569.87	\$3,426.47	\$309.25
4,000	\$246.43	\$494.53	\$992.83	\$1,993.09	\$3,000.75	\$4,015.80	\$419.62
4,500	\$246.43	\$494.53	\$992.83	\$1,993.09	\$3,000.75	\$4,015.80	\$452.77
5,000	\$313.63	\$627.24	\$1,254.49	\$2,508.96	\$3,667.99	\$5,017.92	\$485.91
6,000	\$295.63	\$591.23	\$1,182.48	\$2,364.95	\$3,547.43	\$4,729.87	\$515
7,000	\$295.63	\$591.23	\$1,182.48	\$2,364.95	\$3,547.43	\$4,729.87	\$552.21



Current Hauled Rate Design (Sewer)

Capacity	1 Time/Month	2 Times/Month	1 Time/Week	2 Times/Week	3 Times/Week	4 Times/Week	Extra Haul
100	\$27.05	\$48.19	\$96.75	\$189.05	\$280.60	\$372.16	\$77.65
150	\$28.20	\$50.48	\$102.43	\$198.95	\$295.48	\$392.00	\$78.80
200	\$29.35	\$52.77	\$107.41	\$208.87	\$310.36	\$411.85	\$83.54
250	\$30.50	\$55.05	\$112.35	\$218.80	\$325.24	\$431.67	\$85.13
300	\$31.63	\$57.33	\$117.31	\$228.73	\$340.12	\$451.51	\$86.72
350	\$32.77	\$59.63	\$122.28	\$238.64	\$355.00	\$471.34	\$88.29
400	\$33.92	\$61.92	\$127.23	\$248.55	\$355.00	\$491.15	\$89.87
450	\$35.06	\$64.20	\$132.20	\$258.47	\$384.74	\$511.00	\$91.45
500	\$36.20	\$66.50	\$137.16	\$268.38	\$399.61	\$530.84	\$93.04
550	\$37.36	\$68.79	\$142.12	\$278.30	\$414.48	\$550.68	\$94.61
600	\$38.50	\$71.07	\$147.08	\$288.21	\$429.37	\$570.50	\$96.19
650	\$39.65	\$73.35	\$152.03	\$298.12	\$444.24	\$590.34	\$97.78
700	\$40.78	\$75.65	\$156.99	\$308.05	\$459.12	\$610.17	\$99.35
750	\$41.94	\$77.93	\$161.96	\$317.97	\$473.99	\$630.02	\$100.93
800	\$43.06	\$80.23	\$166.90	\$327.87	\$488.85	\$649.84	\$102.51
850	\$44.22	\$82.52	\$171.87	\$337.80	\$503.74	\$669.68	\$104.10
900	\$45.95	\$85.95	\$176.81	\$347.73	\$518.62	\$689.50	\$105.68
1,000	\$47.66	\$89.39	\$186.74	\$367.55	\$548.36	\$729.19	\$108.8
1,200	\$52.22	\$98.55	\$206.57	\$407.22	\$607.85	\$808.50	\$115.15
1,400	\$56.80	\$107.70	\$226.41	\$446.89	\$667.36	\$887.85	\$121.52
1,500	\$59.08	\$112.96	\$236.34	\$466.72	\$697.11	\$927.50	\$124.65
1,750	\$64.83	\$123.71	\$261.12	\$516.29	\$771.49	\$1,026.68	\$132.53
2,000	\$70.54	\$135.16	\$285.91	\$565.91	\$845.88	\$1,125.84	\$140.46
2,500	\$81.99	\$158.03	\$335.49	\$665.06	\$994.63	\$1,324.17	\$156.26
3,000	\$93.43	\$180.93	\$385.06	\$764.23	\$1,143.38	\$1,522.52	\$172.06

City of Bethel
Hauled Sewer Rates
07/01/2022

Capacity	1 Time/Month	2 Times/Month	1 Time/Week	2 Times/Week	3 Times/Week	4 Times/Week	Extra Haul
3,500	\$104.86	\$205.13	\$434.65	\$863.39	\$1,292.12	\$1,720.85	\$186.72
4,000	\$135.16	\$264.38	\$565.91	\$1,125.84	\$1,685.81	\$2,245.78	\$276.07
4,500	\$135.16	\$264.38	\$565.91	\$1,125.84	\$1,685.81	\$2,245.78	\$293.72
5,000	\$158.03	\$310.13	\$665.06	\$1,324.17	\$1,983.32	\$2,642.46	\$311.37
6,000	\$175.64	\$345.55	\$741.97	\$1,478.17	\$2,214.40	\$2,950.60	\$320.19
7,000	\$197.87	\$389.98	\$838.25	\$1,670.74	\$2,503.23	\$3,335.71	\$346.68
12,000	\$317.72	\$629.81	\$1,358.16	\$2,710.75	\$4,063.32	\$5,415.89	\$364.33



Rate Design Objectives

- **Determine costs based on actual cost to provide service**
 - » Incorporate distance-based rates
- **Consolidate rate schedule**
- **Provide additional transparency for customers**
- **Ease staff time in billing related tasks**



Explanation of Proposed Zones

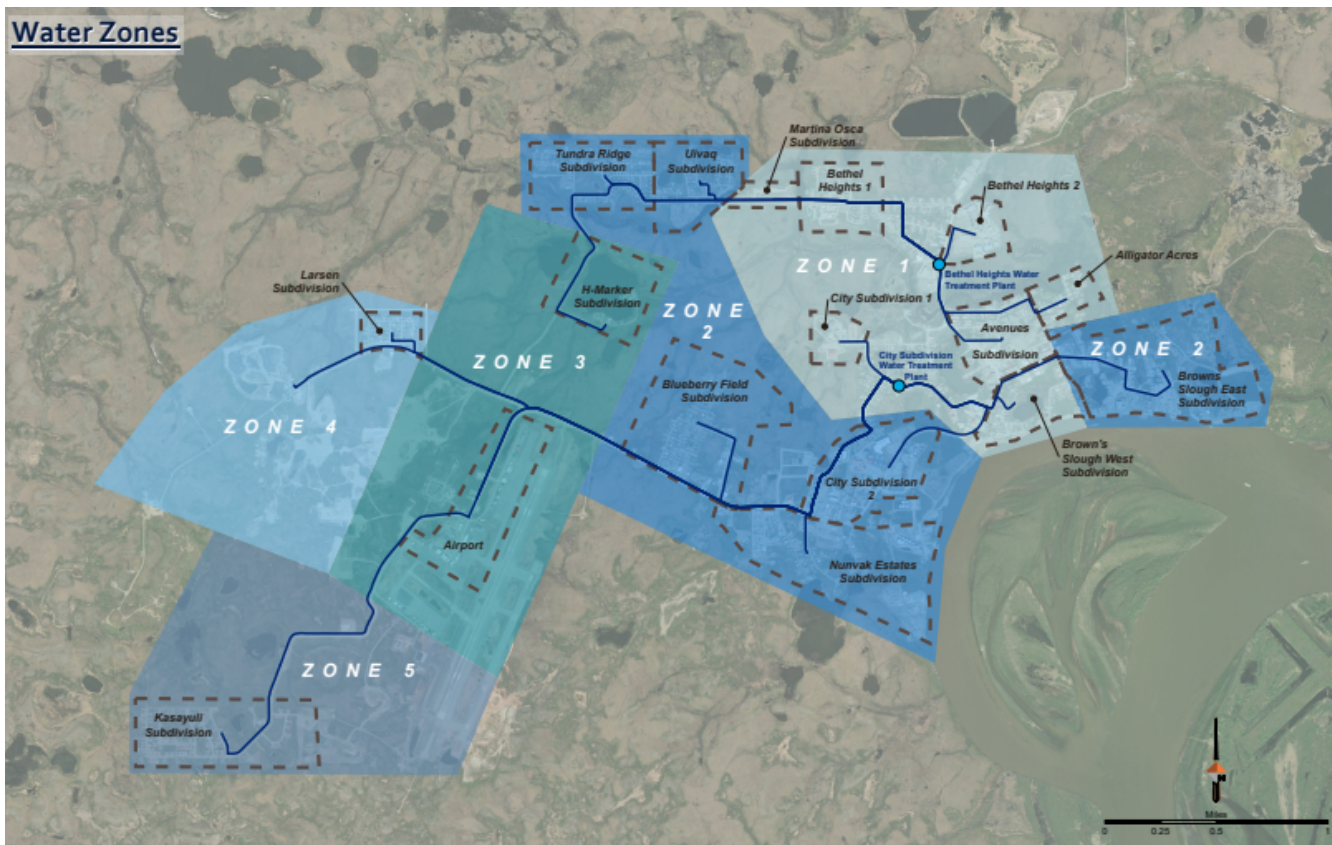
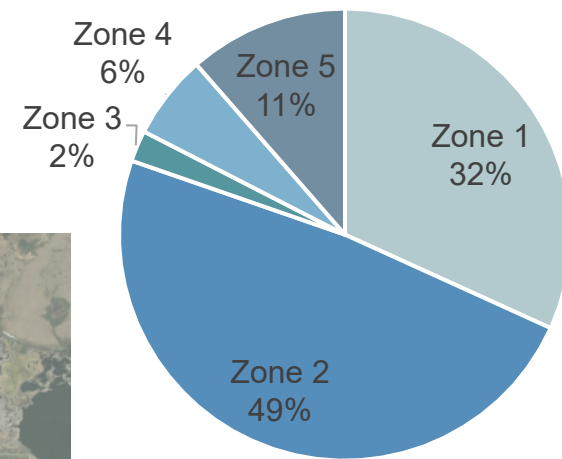
- Based on distance from nearest water treatment plant or distance to nearest sewer drop-off

Subdivision	Nearest Water Treatment	Zone
Bethel Heights 2	0.30	1
City Subdivision 1	0.39	1
Avenues Subdivision	0.53	1
Bethel Heights 1	0.63	1
Brown's Slough West Subdivision	0.64	1
Alligator Acres	0.82	1
Martina Osca Subdivision	0.93	1
Nunvak Estates Subdivision	1.04	2
City Subdivision 2	1.07	2
Uivaq Subdivision	1.36	2
Brown's Slough East Subdivision	1.54	2
Blueberry Field Subdivision	1.76	2
Tundra Ridge Subdivision	1.76	2
Airport	2.71	3
H-Marker Subdivision	2.71	3
Larson Subdivision	3.03	4
Sidney Street	3.42	4
Kasayuli Subdivision	4.74	5

Subdivision	Nearest Sewer Dropoff	Zone
Bethel Heights 1	0.55	1
Blueberry Field Subdivision	0.66	1
Airport	0.88	1
Bethel Heights 1	0.91	1
Nunvak Estates Subdivision	1.12	2
Avenues Subdivision	1.15	2
Larson Subdivision	1.15	2
Martina Osca Subdivision	1.20	2
H-Marker Subdivision	1.23	2
Brown's Slough West Subdivision	1.42	2
Alligator Acres	1.45	2
City Subdivision 2	1.45	2
City Subdivision 1	1.48	2
Sidney Street	1.54	2
Uivaq Subdivision	1.64	2
Tundra Ridge Subdivision	2.03	3
Brown's Slough East Subdivision	2.19	3
Kasayuli Subdivision	2.82	3



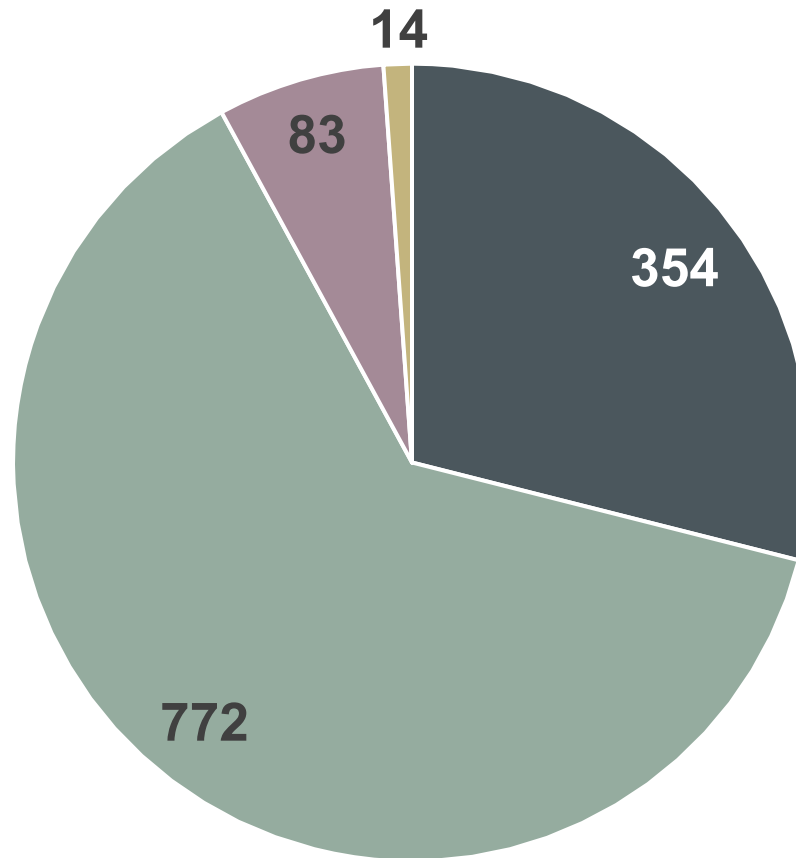
Proposed Water Zones



Subdivision	Water Zone
Airport	3
Aiviq Subdivision	2
Alligator Acres	1
Avenues Subdivision	1
Bethel Heights 1	1
Bethel Heights 2	1
Blueberry Field Subdivision	2
Brown's Slough East Subdivision	2
Brown's Slough West Subdivision	1
City Subdivision 1	1
City Subdivision 2	2
H-Marker Subdivision	3
Kasayuli Subdivision	5
Larson Subdivision	4
Martina Osca Subdivision	1
Nunvak Estates Subdivision	2
Sidney Street	4
Tundra Ridge Subdivision	2



Water Tank Size (Accounts)



■ 500 gallons or under

■ 1,001 - 2,000 gallons

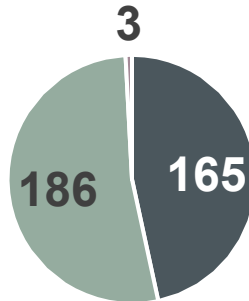
■ 501 - 1,000 gallons

■ Above 2,000 gallons

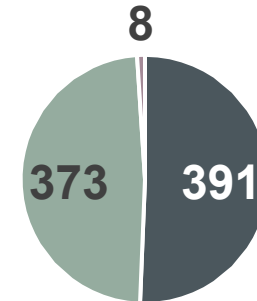


Water Pick-Up Frequency by Gallon Distribution

500 or Less



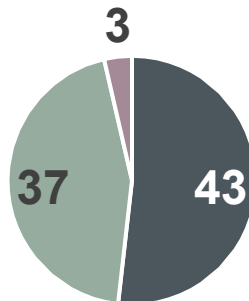
501 - 1,000



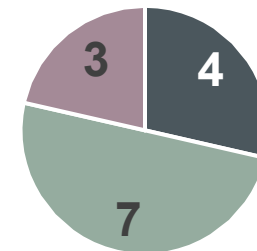
■ 1-2 per month ■ 1-2 per week ■ 3-4 per week

■ 1-2 per month ■ 1-2 per week ■ 3-4 per week

1,001 – 2,000



Over 2,000



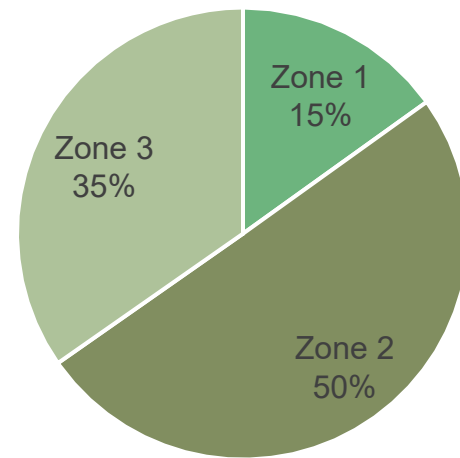
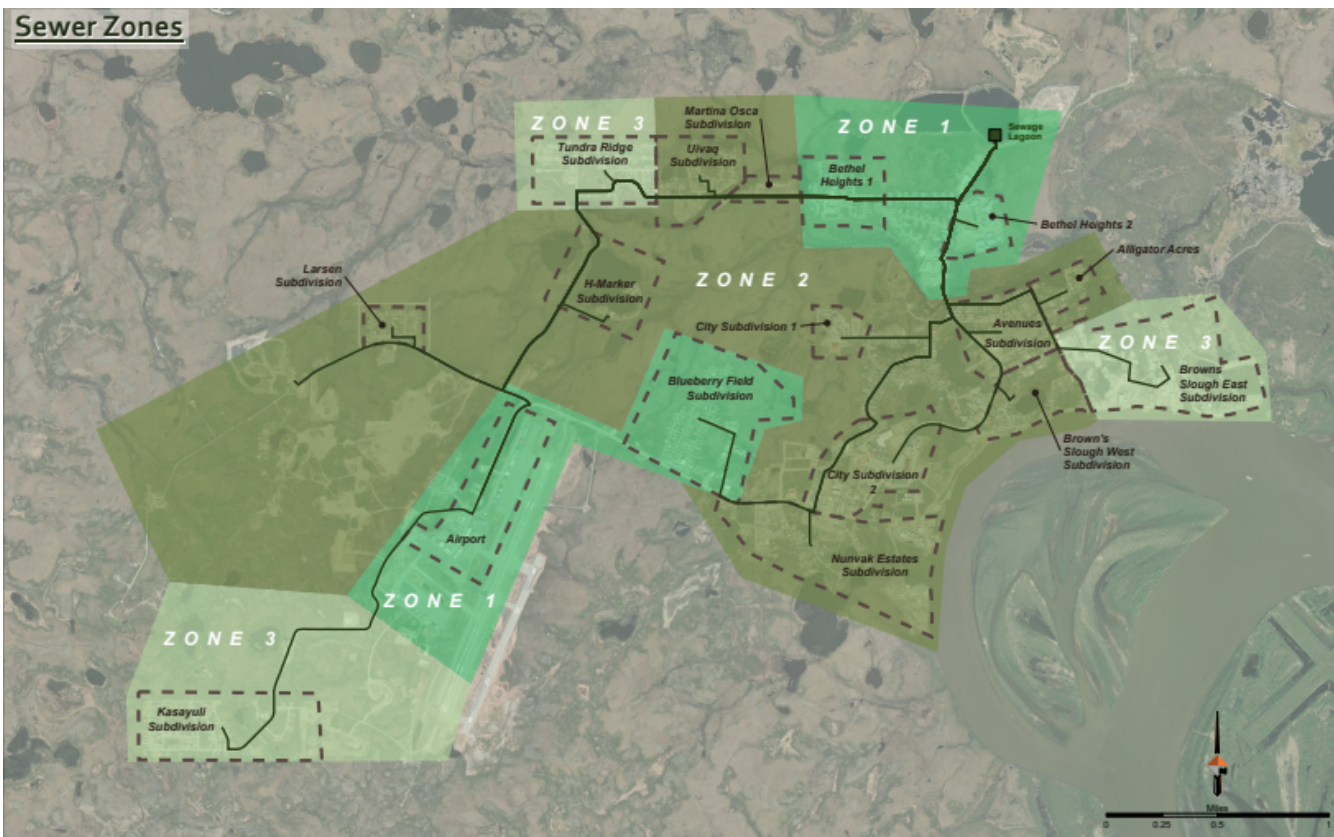
■ 1-2 per month ■ 1-2 per week ■ 3-4 per week

■ 1-2 per month ■ 1-2 per week ■ 3-4 per week



Proposed Sewer Zones

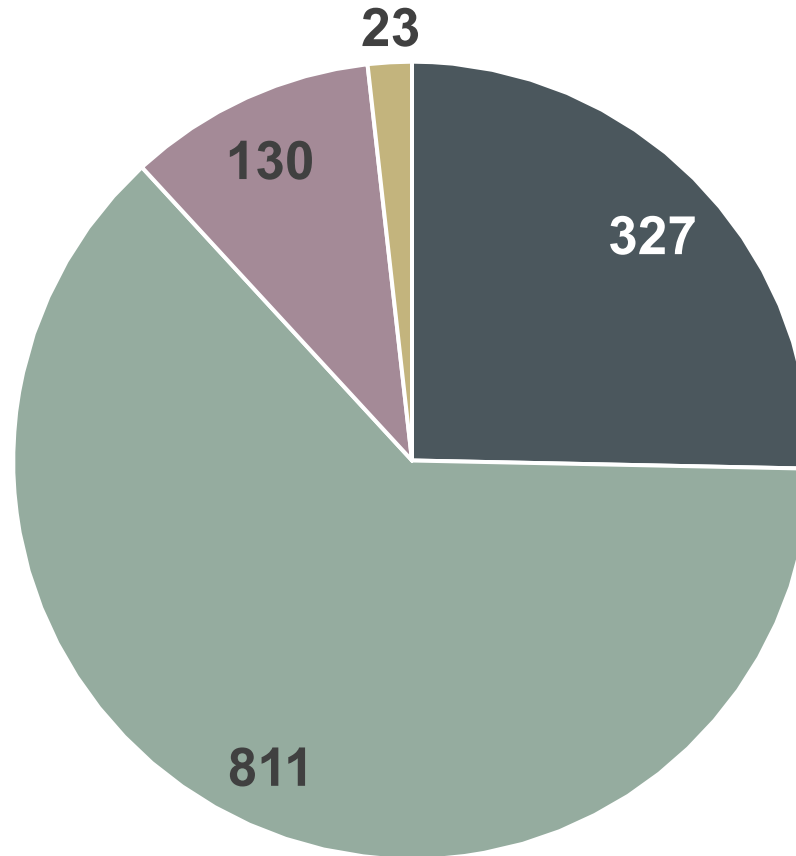
Sewer Zones



Subdivision	Sewer Zone
Airport	1
Aiviq Subdivision	2
Alligator Acres	2
Avenues Subdivision	2
Bethel Heights 1	1
Bethel Heights 2	1
Blueberry Field Subdivision	1
Brown's Slough East Subdivision	3
Brown's Slough West Subdivision	2
City Subdivision 1	2
City Subdivision 2	2
H-Marker Subdivision	2
Kasayuli Subdivision	3
Larson Subdivision	2
Martina Osca Subdivision	2
Nunvak Estates Subdivision	2
Sidney Street	2
Tundra Ridge Subdivision	3



Sewer Tank Size (Accounts)



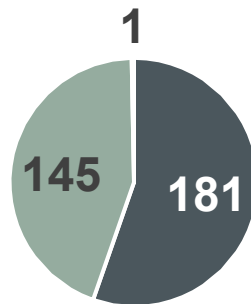
■ 500 gallons or under

■ 501 - 1,000 gallons

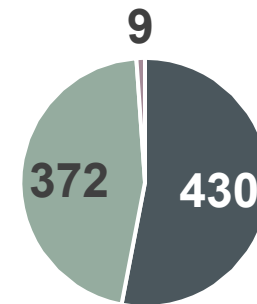


Sewer Pick-Up Frequency by Gallon Distribution

500 or Less



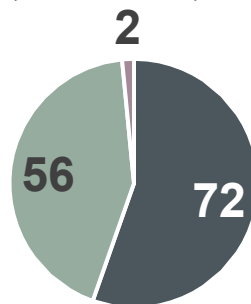
501 - 1,000



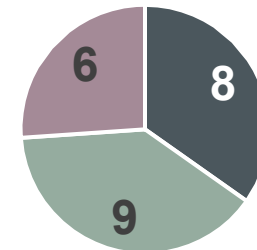
■ 1-2 per month ■ 1-2 per week ■ 3-4 per week

■ 1-2 per month ■ 1-2 per week ■ 3-4 per week

1,001 – 2,000



Over 2,000



■ 1-2 per month ■ 1-2 per week ■ 3-4 per week

■ 1-2 per month ■ 1-2 per week ■ 3-4 per week



Comparison of Charges

Component	Current	Proposed
Tank Size	Rates for 100 – 12,000 gallon tanks	Normalized to 1,000 gallons Based on pumping time
Frequency	Monthly – 4 times per week	Charged based on trips per month
Zones	2 water zones 1 sewer zone	5 water zones 3 sewer zones Based on average time to zone



Example of Charge Development

Zone Demand	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Total
Annual Deliveries	15,528	25,352	1,992	2,860	6,284	52,016
Annual Demand	10,948,400	21,568,200	2,182,600	2,536,800	6,761,200	43,997,200

Zone Annual Time Requirement	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Total
Delivery Time Requirement						
Annual Set-Up/Takedown Time, in hours	3,882	6,338	498	715	1,571	13,004
Water Pumping Time, in hours	2,147	4,229	428	497	1,326	8,627
Transit Time Requirement						
Travel Time to/from Zone, in hours	228	899	136	211	704	2,179
Total Time	6,257	11,466	1,062	1,424	3,601	23,810
<i>Allocation Percentage</i>	26.3%	48.2%	4.5%	6.0%	15.1%	100.0%

Zone Cost Allocations	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Total
	\$ 873,054	\$ 1,599,882	\$ 148,239	\$ 198,673	\$ 502,471	\$ 3,322,319

Zone Charges	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
Set-up/Takedown Cost per Delivery	\$ 36.93	\$ 39.83	\$ 44.44	\$ 45.20	\$ 50.52
Water Delivery Cost per 1,000 Gallons	27.36	27.36	27.36	27.36	27.36



Rate Schedule (Includes Increases)

Water Rate Design	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
Delivery Charge	\$36.93	\$39.83	\$44.44	\$45.20	\$50.52
Cost per 1,000 gallons	\$27.36				
Sewer Rate Design	Zone 1	Zone 2	Zone 3		
Haul Away Charge	\$28.90	\$30.60	\$33.40		
Cost per 1,000 gallons	\$7.13				



Sample Customer: 500 gallons 2x Month

	Existing		ATB		Proposed Rate Design				
	Zone 1	Zone 2	Zone 1	Zone 2	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
Monthly Rate	\$ 64.56	\$ 86.44	\$ 66.82	\$ 89.47					
Delivery Charge					73.87	79.66	88.88	90.40	101.05
Volume Charge					27.36	27.36	27.36	27.36	27.36
Subscription	10.14	10.14	10.49	10.49	10.49	10.49	10.49	10.49	10.49
Total Monthly Bill	\$ 74.70	\$ 96.58	\$ 77.31	\$ 99.96	\$ 111.72	\$ 117.51	\$ 126.73	\$ 128.25	\$ 138.90
<i>Rate Increase Change</i>			\$ 2.61	\$ 3.38					
			<i>Zone 1 ATB Change</i>		\$ 34.41	\$ 40.20	\$ 49.42	\$ 50.94	\$ 61.59
			<i>Zone 2 ATB Change</i>		\$ 11.76	\$ 17.55	\$ 26.77	\$ 28.29	\$ 38.94

	Existing	ATB	Proposed Rate Design		
			Zone 1	Zone 2	Zone 3
Current Charge	\$ 66.50	\$ 72.82			
Delivery Charge			57.79	61.21	66.80
Volume Charge			7.13	7.13	7.13
Subscription	10.14	10.49	10.49	10.49	10.49
Total Monthly Bill	\$ 76.64	\$ 83.31	\$ 75.41	\$ 78.83	\$ 84.42
<i>Rate Increase Change</i>		\$ 6.67			
		<i>ATB Change</i>	\$ (7.90)	\$ (4.48)	\$ 1.11



Sample Customer: 1,000 gallons 1x Month

	Existing		ATB		Proposed Rate Design				
	Zone 1	Zone 2	Zone 1	Zone 2	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
Monthly Rate	\$ 58.67	\$ 61.14	\$ 60.72	\$ 63.28					
Delivery Charge					36.93	39.83	44.44	45.20	50.52
Volume Charge					27.36	27.36	27.36	27.36	27.36
Subscription	10.14	10.14	10.49	10.49	10.49	10.49	10.49	10.49	10.49
Total Monthly Bill	\$ 68.81	\$ 71.28	\$ 71.21	\$ 73.77	\$ 74.78	\$ 77.68	\$ 82.29	\$ 83.05	\$ 88.37
<i>Rate Increase Change</i>			\$ 2.40	\$ 2.49					
			<i>Zone 1 ATB Change</i>		\$ 3.57	\$ 6.47	\$ 11.08	\$ 11.84	\$ 17.16
			<i>Zone 2 ATB Change</i>		\$ 1.01	\$ 3.91	\$ 8.52	\$ 9.28	\$ 14.60

	Existing	ATB	Proposed Rate Design		
			Zone 1	Zone 2	Zone 3
Current Charge	\$ 47.66	\$ 52.19			
Delivery Charge			28.90	30.60	33.40
Volume Charge			7.13	7.13	7.13
Subscription	10.14	10.49	10.49	10.49	10.49
Total Monthly Bill	\$ 57.80	\$ 62.68	\$ 46.52	\$ 48.22	\$ 51.02
<i>Rate Increase Change</i>		\$ 4.88			
		<i>ATB Change</i>	\$ (16.16)	\$ (14.46)	\$ (11.66)



Decision Points

- **Piped Customers**

- » Water: 3.5% ATB annual rate increases
- » Sewer 9.5% ATB annual rate increases

- **Hauled Customers**

- » Water
 - 3.5% ATB annual rate increases
 - Adopted new rate design (includes 3.5% annual rate increases)
 - ATB increases after FY 2024
- » Sewer
 - 9.5% ATB annual rate increases
 - Adopted new rate design (includes 9.5% annual rate increases)
 - ATB increases after FY 2024

- **All customers**

- » 3.5% annual subscription charge increases

Thank you!

Questions?

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THE STATE
of **ALASKA**
GOVERNOR MIKE DUNLEAVY

Department of Environmental
Conservation

DIVISION OF WATER
Facilities Programs

P.O. Box 111800
Juneau, Alaska 99811-1800
Main: 907.465.1139
Fax 907.465.5177
Dec.alaska.gov

February 2, 2024

Dear Community Representative,

The Department of Environmental Conservation's (DEC) Village Safe Water Program (VSW) works with rural communities to address water, sewer, and solid waste infrastructure improvement needs. Annually, federal and state funds are made available through the VSW Capital Improvement Project (CIP) competitive application process. ~~The 2024 CIP application period will begin on February 12, 2024 for planning projects~~ and April 1, 2024 for construction projects. This letter provides additional information about the CIP application process.

Substantial Eligibility Changes in 2024

DEC is committed to ensuring communities have access to safe sanitation and that ongoing operation and maintenance of facilities are not overly burdensome to residents. Additionally, DEC has heard the concerns expressed by communities regarding implementation of Operations and Maintenance Best Practices (O&M Best Practices) assessment tool for CIP funding eligibility. To more effectively meet the needs of communities, collaborate with our partners, and ensure efficient and timely use of available funds, ***DEC will no longer use the outcome of the O&M Best Practices as an eligibility criteria for VSW CIP funding.*** O&M Best Practices will continue to be used as a component of the CIP project scoring criteria.

During the 2022 CIP funding cycle, VSW introduced the requirement that communities pursuing funding for first time piped service will be required to submit a Sustainability Plan demonstrating a realistic plan for funding ongoing operations and maintenance while maintaining affordable user rates for customers. DEC's Technical Assistance Programs and the Department of Commerce, Community, and Economic Development's Rural Utility Business Advisor (RUBA) program are available to assist communities in development of Sustainability Plans. Additionally, as with all public water systems, communities will be required to demonstrate that they are capable of sustaining the utility before construction approval will be issued. We believe that the required Sustainability Plans and capacity assessments will provide sufficient assurance of local plans for sustainability, such that use of the O&M Best Practices for CIP eligibility is no longer necessary.

This change in procedure will provide DEC and our partners at RUBA greater opportunities to work directly with communities to develop the tools and resources necessary to successfully operate and maintain their facilities.

Planning Projects (Applications accepted February 12, 2024 through March 8, 2024)

Completing a planning project is the first step toward receiving construction project funding. Planning funds are used to produce a Preliminary Engineering Report (PER) or Technical Memorandum (Tech Memo),

which will identify and describe current sanitation issues and provide a range of possible solutions. The document includes cost estimates for design and construction, as well as long term operations and maintenance costs, for each alternative considered. Once complete, all planning documents must be reviewed and approved by the Multi-Agency Review Committee comprised of representatives from VSW and federal sanitation funding agencies, as well as DEC programs responsible for approving construction plans for water, wastewater, and solid waste projects. This review ensures that the proposed solution is fundable by various funding agencies, as well as approvable by the regulatory programs before funding is awarded. Gathering this consensus at the planning stage reduces the potential for project delays during design and construction. An approved PER or Tech Memo is required to apply for construction project funding.

The Alaska Native Tribal Health Consortium (ANTHC), with funding from the Indian Health Service, is developing comprehensive piped service planning projects for all unserved and underserved communities. *Therefore, planning project applications related to providing new piped water and sewer service in unserved communities are not being considered for CIP funding at this time.*

Each community is eligible for only one CIP funded planning project at a time. If your community has an ongoing planning project, the PER/Tech Memo must be reviewed and approved by the Multi-Agency Review Committee before a new planning application will be considered.

All planning project applications must be supported by a Tier 3 project in the Indian Health Service's Sanitation Deficiency System (SDS) database identifying the deficiencies that the planning project will address. Your assigned engineer with VSW or ANTHC can assist you with this requirement.

Construction Projects (Applications accepted April 1, 2024 – May 3, 2024)

Communities that have a complete PER or Tech Memo that has been approved for CIP funding are eligible to apply for a CIP construction project funding. In 2024, communities are invited to submit construction applications even if they have an ongoing CIP funded construction project. Additionally, communities are welcome to submit applications for multiple construction projects, as long as each project has an approved planning document.

How to Apply for CIP Funding

Your community is assigned an engineer from either VSW or ANTHC to provide assistance in obtaining funding and implementing sanitation improvement projects. It is important that your assigned engineer know about the sanitation needs in your community. Each spring, engineers enter information about construction project needs of every community into the online SDS database. All applications for CIP construction funding must be associated with a specific project in the SDS data system. If you have not already done so, please contact your assigned engineer to be sure they have information about your project needs. The Community Water and Sewer Improvements Contact List identifies the engineer assigned to assist each community and is available at: <https://dec.alaska.gov/water/village-safe-water>.

Access to all application materials and instructions is available through the VSW website at <https://dec.alaska.gov/water/village-safe-water/grant-application>. Please work closely with your assigned engineer at VSW or ANTHC when completing your applications. You can also ask for assistance by calling VSW at (907) 465-5143.

Sincerely,



Carrie Bohan

Facility Programs Manager



William Arnold, Public Works Director
1155 Ridgecrest Drive
PO Box 649 Bethel, AK 99559
P: (907) 543-3110
F: (907) 543-2046
warnold@cityofbethel.net

MEMORANDUM

DATE: 04.30.2024
TO: City Manager
FROM: Bill Arnold, Public Works Director
SUBJECT: Manager's Report – Public Works Department
Programs/Divisions

Hauled Utilities:

We are still having personnel issues. Trying to interview and get people hired. We currently have one utility truck I down for maintenance. I am grateful for the pullouts provided by Road maintenance. We have continued to respond when needed by utility maintenance. Vendors issues finding replacement parts for the plumbing and valves for the sewer trucks.

Utility Maintenance:

- 8 alarms on residential lift stations were responded to. Multiple issues with grinder pumps, and float systems
- Monthly meter reading and service connections were completed.
- Clean up and organization of shops and vehicles.
- 8 residential lift station repairs.
- Tundra Center lift station still in dire need of repairs/ replacement. Currently, lift station is not functioning at full capacity/ has required creativity to modify pump to continue to operate.
- Mixing up main lift station by hand with soap to prevent matt build up
- leveling activities on low-flow and plugged sewer lines
- The few flushing activities that have required longer than 16 hours of work have been handled by rotating men on rest.
- Utility Maintenance has 3 vacant staff workers still short staffed

Property Maintenance:

COURTHOUSE: Shovel snow from entrances. Replaced fuel pump, Primary control module, and RIB low voltage controller on boiler. Replaced air filters. Reset breaker in DA offices due to heaters being plugged in at desks. Replace lamps and ballasts in light fixtures.

PUBLIC WORKS: Shovel snow from entrances. Replace flags around city. Cleaned both

steamers. Replace motor and fuel purge card on boiler 2. Replaced motor on steamer. Change fill pump on steamer. Repair exhaust fan. Repair urinal.

CITY SUB WATER PLANT: Replace gasket on unit heater. Replace fuel pump on boiler 2. Replace air vent on pressure tank. Repair and replace leaking parts on unit heaters.

BETHEL HEIGHTS WATER PLANT: Replace coin vent on boiler. Repair customer dollar machine for water.

POLICE DEPARTMENT: Work on overhead door. Work on water pumps.

LAND FILL: Replace water pump. Install new water filter. Replace expansion tank.

TRANSIT: Work with AVEC locating and repairing loose power connections to building.

Road Maintenance: Typical spring, lots of draining lots of blading.

Vehicles and Equipment: As usual just keeping up on services and repairs of all city vehicles and equipment.

Transit System:

Another busy month with ridership. Had to utilize Bus 439 when the regular Bus 440 was down for maintenance a couple times. Ridership consisted of .791 Seniors, 17 Youth, 143 Adults, 111 Disabled, and 1,240 Pass riders. 143 Day and 17 Month Passes were purchased for the month of which ONC paid for their 12 clients for 3 months (APR-MAY-JUN). Total bus fares-\$3,638.00. Bus 439 logged 1,795 miles and used 200.019 gallons while 440 logged 785 and 116.818 gallons of fuel was used.

Landfill & Hauled Refuse:

Aprils Landfill log shows 78 city dump truck loads and 4 City truck loads. 73 private citizen loads have been delivered to the landfill as well. 1,846 commercial cubic yards have been delivered. 3 refrigerators/freezers were disposed, and 3 vehicles were brought in as well as 3 dump truck cover loads. Our landfill equipment has been repaired and in operation. Clean up green up bags have been delivered to all pick up sites and 3 CSW from the Tundra Center were utilized to help with dumpster site clean ups. The use of CSW's will continue throughout the clean up months.

Staffing Issues/Concerns/Training: