




Memo

To: Michelle Metteer, Town Manager

From: James Mann, UMB 

Date: December 14, 2021

CC:

Subject: Water Tank Cost Alternative Impact Analysis

With the costs of the water tank project exceeding the original engineer's estimates, you have asked us to analyze the impact of potential increased cost on the projected rates. To determine the rate impacts, the rate methodology has been designed around the following growth scenario:

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Growth Assumptions											
Total SFE	782.58	810.58	841.58	883.58	925.58	967.58	1,009.58	1,051.58	1,093.58	1,135.58	
New SFE (Infill)	20.00	25.00	25.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	280
New SFE (Bolts Lake Development-Maloit Area)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
New SFE (School - Maloit Park)	0.00	3.00	6.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	93

The methodology further takes into consideration the following projects as part of the rate design:

Projects	Category	Funding	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Totals
Construct a new Minturn Tank	Tank	Revenue Debt	3,200,000	1,400,000										4,600,000
Construct New Membrane Plant (includes Maloit Park)	Treatment/Distrib	Revenue Debt			6,390,000									6,390,000
Raw Water Intake Improvements	Water Supply	Revenue Debt		25,000										25,000
New Well Field and pipeline to connect wells to WTP	Water Supply	Revenue Debt				6,560,000								6,560,000
Replace waterline in Eagle River at Bellum Bridge	Pipeline	Revenue Debt											570,000	570,000
Loop Taylor Street	Pipeline	Revenue Debt											130,000	130,000
Annual Replacement of Main	Pipeline	Cash	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	2,750,000
Actual CIP Costs			3,450,000	1,650,000	6,685,000	6,810,000	250,000	250,000	250,000	250,000	250,000	250,000	950,000	21,025,000

Please note that the above identifies the Water Tank Project as a \$4.4 M expense, however the following scenarios have been run to identify the cost impact of the various options the Town is evaluating:

- Base Plan - \$3.0 M Water Tank Project
- Add \$0.4 M Cost to Water Tank Project
- Add \$1.4 M Cost to Water Tank Project
- Add \$1.8 M Cost to Water Tank Project

Based on the above, we ran scenarios for the three "adds" at both a 20 and 30-year amortization utilizing the same CWRPDA interest rate, resulting the following impacts to the Minturn rate payers:

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Base Plan - Monthly Rate		51.72	100.03	116.17	111.00	106.25	101.87	97.81	94.03	90.49
Annual Impact/User		620.64	1,200.36	1,394.04	1,332.00	1,275.00	1,222.44	1,173.72	1,128.36	1,085.88
Add \$0.4 M Annual Impact										
20-Year		39.96	38.64	37.20	35.52	33.84	32.40	30.96	29.76	28.68
30-Year		29.52	28.56	27.48	26.16	24.96	23.88	22.80	21.96	21.12
Add \$1.4 M Annual Impact										
20-Year		144.84	139.92	134.64	128.28	122.52	117.12	112.20	107.76	103.68
30-Year		106.80	103.20	99.36	94.68	90.36	86.40	82.80	79.44	76.44
Add \$1.8 M Annual Impact										
20-Year		184.80	178.56	171.84	163.80	156.36	149.52	143.28	137.52	132.36
30-Year		136.32	131.64	126.72	120.72	115.32	110.28	105.60	101.40	97.56