

Round Hill Rate Study

Part 4: Rate Scenarios

March 15, 2023 - Introduction of Issues

April 5, 2023 – Capital Project Scenarios

April 19, 2023 – Near Term Financing (w/Davenport)

 May 3, 2023 – Rate Scenarios

Rate Study Recap

- March 15: overview of utility system
 - Outlined challenges facing current rate structure
 - Significant increase in projected CIP costs due to aging and resiliency needs
 - Difficult inflation environment for future operating and capital costs

- April 5: determining the CIP plan
 - Council chose a baseline scenario with \$12M in projected CIP
 - 4 major projects (Airmont Tank, ESTP, Well-D, Filter replacements)
 - \$10.3M specified, \$1.7M unspecified → now \$10.8M specified, \$1.6M unspecified

- April 19 meeting was a discussion with Davenport on near-term financing options to fund this years CIP with a bank placement
 - Possible range is \$1.5M to \$2.5M depending on circumstances

Today is a discussion of rate scenarios needed to fund the \$12.4M CIP plan under some inflation assumptions

CIP, Debt and Inflation Baselines

- Mayor and Town Manager have refined project list several times
 - Converging at \$10.8M in specified projects
 - Some smaller items in capital budget are 'unspecified' in study

- No further CIP scenarios recommended for rate study
 - Well D and Tertiary filters this summer/fall
 - Airmont Tank next summer
 - ESTP begins construction only after Tank is wrapping up
 - Spreads out loans, lets staff focus on 1-2 big projects at a time

- Fixing the CIP list allows a single debt scenario
 - Town has debt margin to finance the 4 major projects
 - Davenport has provided interest rate assumptions for rate study

- Assuming 5% O&M inflation rate in baseline

Water CIP	5-year Total
SthrnTank	\$ 4,200,000
Well-D	\$ 570,000
EveningStarWTP	\$ 3,400,000
Valves	\$ 540,000
GroundWater	\$ 45,000
Stoneleigh	\$ 130,000
WWBldg	\$ 70,000
Unspecified	\$ 650,000
Water Total	\$ 9,605,000
Sewer CIP	5-year Total
WWTPUpgrades	\$ 630,000
Fleet	\$ 135,000
TertiaryFilters	\$ 900,000
WWBldg	\$ 180,000
Unspecified	\$ 950,000
Sewer Total	\$ 2,795,000
Grand Total	\$ 12,400,000

New Debt Instruments	Baseline Debt Plan					
	Year	Principal	Term	Rate	%Water	%Sewer
Bank Placement Bond	2024	\$ 2.5M	20	5.0%	35%	65%
Southern Tank Bond	2025	\$ 4.0M	30	5.0%	100%	0%
ESTP Bond	2027	\$ 3.0M	20	5.5%	100%	0%

Key Fiscal Policies

- Town has adopted official fiscal policies to guide rate-setting process
 - **Cash Reserve Benchmark** – keep 12 months of utility operating costs + debt payments
 - **Debt Ratio** – servicing costs <30% of utility fund expenses
 - Reserve policy tends to drive rates
 - Debt ratio limits long term debt by limiting interest payments
 - **CIP Financing** – pay for at least 25% of CIP with non-debt sources
 - Calculated as a 5-year rolling average since CIP expenses can spike in a year
 - CIP finance policy limits rapid issuance of new debt
 - **Total Debt Limit** – pro-rata utility debt <2% of real-estate assessments
 - Pro-rated for in-town population (14%) vs. total service population
 - Not an issue for Round Hill
- Annual audits verify compliance with policies
- Rate Study is a financial model that predicts future financial statements (audits)
 - Future revenues, expenses, debt, etc.
- Check future compliance over 5-year outlook, with look-ahead to 10 years

Financial Model of Current Rates

\$12.4M CIP

(Baseline Debt)

Current rates w/3% escalator

	Historical				5-year Projection				
	Actual 2020	Actual 2021	Actual 2022	Projected 2023	Projected 2024	Projected 2025	Projected 2026	Projected 2027	Projected 2028
Water Operating Receipts	\$ 893,153	\$ 952,513	\$ 980,521	\$ 1,011,787	\$ 1,028,808	\$ 1,062,050	\$ 1,097,208	\$ 1,132,527	\$ 1,169,777
Sewer Operating Receipts	\$ 1,293,471	\$ 1,374,895	\$ 1,419,678	\$ 1,508,421	\$ 1,492,750	\$ 1,541,032	\$ 1,591,245	\$ 1,642,616	\$ 1,695,153
Operating Receipts	\$ 2,186,624	\$ 2,327,408	\$ 2,400,199	\$ 2,520,209	\$ 2,521,558	\$ 2,603,082	\$ 2,688,452	\$ 2,775,143	\$ 2,864,931
Water Operating Payments	\$ (708,089)	\$ (1,040,905)	\$ (971,460)	\$ (1,039,463)	\$ (1,091,436)	\$ (1,146,008)	\$ (1,203,308)	\$ (1,263,473)	\$ (1,326,647)
Sewer Operating Payments	\$ (1,196,139)	\$ (1,136,757)	\$ (1,100,245)	\$ (1,177,262)	\$ (1,236,125)	\$ (1,297,931)	\$ (1,362,828)	\$ (1,430,969)	\$ (1,502,517)
Operating Payments	\$ (1,904,228)	\$ (2,177,662)	\$ (2,071,705)	\$ (2,216,724)	\$ (2,327,561)	\$ (2,443,939)	\$ (2,566,136)	\$ (2,694,442)	\$ (2,829,164)
Operating Surplus/(Deficit)	\$ 282,396	\$ 149,746	\$ 328,494	\$ 303,485	\$ 193,998	\$ 159,143	\$ 122,317	\$ 80,700	\$ 35,766
Total Debt Service (P+I)	\$ (493,073)	\$ (415,176)	\$ (409,846)	\$ (422,141)	\$ (406,959)	\$ (609,625)	\$ (871,121)	\$ (871,178)	\$ (1,116,350)
Water Cash-funded Capital	\$ (190,732)	\$ (364,912)	\$ (560,775)	\$ (92,500)	\$ (461,911)	\$ (131,196)	\$ (251,912)	\$ (462,546)	\$ (348,053)
Sewer Cash-funded Capital	\$ (70,507)	\$ (154,845)	\$ (235,264)	\$ (337,500)	\$ (217,161)	\$ (48,446)	\$ (121,912)	\$ (245,046)	\$ (275,553)
Cash-funded capital	\$ (261,239)	\$ (519,757)	\$ (796,039)	\$ (430,000)	\$ (679,071)	\$ (179,642)	\$ (373,823)	\$ (707,592)	\$ (623,605)
Availability fees	\$ 787,100	\$ 992	\$ 1,038,124	\$ 200,000	\$ 175,494	\$ 180,759	\$ 186,186	\$ 191,770	\$ 197,522
Non-Operating Surplus/(Deficit)	\$ 32,788	\$ (933,941)	\$ (167,761)	\$ (652,141)	\$ (910,537)	\$ (608,509)	\$ (1,058,758)	\$ (1,387,000)	\$ (1,542,434)
Total Cash Surplus/(Deficit)	\$ 315,184	\$ (784,195)	\$ 160,733	\$ (348,657)	\$ (716,539)	\$ (449,366)	\$ (936,442)	\$ (1,306,300)	\$ (1,506,667)
Water Cash Reserves	\$ 2,849,557	\$ 2,334,424	\$ 2,188,388	\$ 2,094,892	\$ 1,588,968	\$ 1,324,299	\$ 658,835	\$ (239,582)	\$ (1,296,974)
Sewer Cash Reserves	\$ 3,161,022	\$ 2,891,960	\$ 3,198,729	\$ 2,943,568	\$ 2,732,954	\$ 2,548,257	\$ 2,277,278	\$ 1,869,396	\$ 1,420,121
Total Cash Reserves	\$ 6,010,582	\$ 5,226,387	\$ 5,387,120	\$ 5,038,463	\$ 4,321,924	\$ 3,872,558	\$ 2,936,117	\$ 1,629,817	\$ 123,149
Reserve Target (Op Pmts + Debt)	\$ 2,397,301	\$ 2,592,838	\$ 2,481,551	\$ 2,638,866	\$ 2,734,520	\$ 3,053,564	\$ 3,437,257	\$ 3,565,621	\$ 3,945,515
Months of Reserve (>12)	30.1	24.2	26.1	22.9	19.0	15.2	10.3	5.5	0.4
Total Expenditures	\$ 2,697,862	\$ 3,118,005	\$ 3,295,330	\$ 3,128,866	\$ 5,754,520	\$ 5,603,564	\$ 5,867,257	\$ 6,565,621	\$ 5,345,515
Debt Servicing Ratio (<30%)	18%	13%	12%	13%	7%	11%	15%	13%	21%
CIP Expenses (5-year annual avg)	\$ (323,034)	\$ (384,533)	\$ (499,389)	\$ (546,354)	\$ (1,029,901)	\$ (1,479,789)	\$ (1,860,756)	\$ (2,298,000)	\$ (2,480,000)
Debt Funded CIP (5-year annual avg)	\$ 15,084	\$ 5,294	\$ 4,639	\$ -	\$ 436,500	\$ 873,000	\$ 1,261,000	\$ 1,697,500	\$ 1,843,000
Non-debt funded CIP (>25%)	95%	99%	99%	100%	58%	41%	32%	26%	26%
Total Debt	\$ 5,130,000	\$ 3,965,000	\$ 3,740,000	\$ 3,510,000	\$ 5,765,000	\$ 9,429,394	\$ 9,014,801	\$ 11,583,229	\$ 11,038,290
Pro-Rata Debt	\$ 769,500	\$ 594,750	\$ 561,000	\$ 491,400	\$ 822,651	\$ 1,352,308	\$ 1,299,273	\$ 1,677,660	\$ 1,606,512
Pro-Rata Debt vs. Assessments (<2%)	0.7%	0.6%	0.5%	0.4%	0.7%	1.0%	1.0%	1.2%	1.1%

Financial Model w/5% escalator, CIP cuts

\$5.2M CIP

(No tank, no ESTP)

Current rates w/5% escalator

	Historical				5-year Projection				
	Actual 2020	Actual 2021	Actual 2022	Projected 2023	Projected 2024	Projected 2025	Projected 2026	Projected 2027	Projected 2028
Water Operating Receipts	\$ 893,153	\$ 952,513	\$ 980,521	\$ 1,011,787	\$ 1,048,624	\$ 1,104,352	\$ 1,162,240	\$ 1,223,934	\$ 1,287,826
Sewer Operating Receipts	\$ 1,293,471	\$ 1,374,895	\$ 1,419,678	\$ 1,508,421	\$ 1,521,428	\$ 1,601,149	\$ 1,685,583	\$ 1,773,979	\$ 1,866,363
Operating Receipts	\$ 2,186,624	\$ 2,327,408	\$ 2,400,199	\$ 2,520,209	\$ 2,570,052	\$ 2,705,501	\$ 2,847,823	\$ 2,997,913	\$ 3,154,189
Water Operating Payments	\$ (708,089)	\$ (1,040,905)	\$ (971,460)	\$ (1,039,463)	\$ (1,091,436)	\$ (1,146,008)	\$ (1,203,308)	\$ (1,263,473)	\$ (1,326,647)
Sewer Operating Payments	\$ (1,196,139)	\$ (1,136,757)	\$ (1,100,245)	\$ (1,177,262)	\$ (1,236,125)	\$ (1,297,931)	\$ (1,362,828)	\$ (1,430,969)	\$ (1,502,517)
Operating Payments	\$ (1,904,228)	\$ (2,177,662)	\$ (2,071,705)	\$ (2,216,724)	\$ (2,327,561)	\$ (2,443,939)	\$ (2,566,136)	\$ (2,694,442)	\$ (2,829,164)
Operating Surplus/(Deficit)	\$ 282,396	\$ 149,746	\$ 328,494	\$ 303,485	\$ 242,491	\$ 261,562	\$ 281,688	\$ 303,471	\$ 325,025
Total Debt Service (P+I)	\$ (493,073)	\$ (415,176)	\$ (409,846)	\$ (422,141)	\$ (406,959)	\$ (649,747)	\$ (651,037)	\$ (731,336)	\$ (725,470)
Water Cash-funded Capital	\$ (190,732)	\$ (364,912)	\$ (560,775)	\$ (92,500)	\$ (123,041)	\$ (28,514)	\$ (73,907)	\$ (59,998)	\$ (23,157)
Sewer Cash-funded Capital	\$ (70,507)	\$ (154,845)	\$ (235,264)	\$ (337,500)	\$ (174,529)	\$ (29,626)	\$ (3,907)	\$ (59,998)	\$ (23,157)
Cash-funded capital	\$ (261,239)	\$ (519,757)	\$ (796,039)	\$ (430,000)	\$ (297,570)	\$ (58,140)	\$ (77,814)	\$ (119,997)	\$ (46,314)
Availability fees	\$ 787,100	\$ 992	\$ 1,038,124	\$ 200,000	\$ 178,906	\$ 187,857	\$ 197,249	\$ 207,116	\$ 217,471
Non-Operating Surplus/(Deficit)	\$ 32,788	\$ (933,941)	\$ (167,761)	\$ (652,141)	\$ (525,623)	\$ (520,030)	\$ (531,602)	\$ (644,217)	\$ (554,314)
Total Cash Surplus/(Deficit)	\$ 315,184	\$ (784,195)	\$ 160,733	\$ (348,657)	\$ (283,132)	\$ (258,468)	\$ (249,914)	\$ (340,746)	\$ (229,289)
Water Cash Reserves	\$ 2,849,557	\$ 2,334,424	\$ 2,188,388	\$ 2,094,892	\$ 1,949,200	\$ 1,799,432	\$ 1,608,928	\$ 1,398,211	\$ 1,230,633
Sewer Cash Reserves	\$ 3,161,022	\$ 2,891,960	\$ 3,198,729	\$ 2,943,568	\$ 2,806,128	\$ 2,697,428	\$ 2,638,018	\$ 2,507,989	\$ 2,446,278
Total Cash Reserves	\$ 6,010,582	\$ 5,226,387	\$ 5,387,120	\$ 5,038,463	\$ 4,755,331	\$ 4,496,863	\$ 4,246,949	\$ 3,906,203	\$ 3,676,914
Reserve Target (Op Pmts + Debt)	\$ 2,397,301	\$ 2,592,838	\$ 2,481,551	\$ 2,638,866	\$ 2,734,520	\$ 3,093,685	\$ 3,217,172	\$ 3,425,779	\$ 3,554,635
Months of Reserve (>12)	30.1	24.2	26.1	22.9	20.9	17.4	15.8	13.7	12.4
Total Expenditures	\$ 2,697,862	\$ 3,118,005	\$ 3,295,330	\$ 3,128,866	\$ 5,754,520	\$ 3,643,685	\$ 3,647,172	\$ 4,025,779	\$ 4,154,635
Debt Servicing Ratio (<30%)	18%	13%	12%	13%	7%	18%	18%	18%	17%
CIP Expenses (5-year annual avg)	\$ (323,034)	\$ (384,533)	\$ (499,389)	\$ (546,354)	\$ (1,029,901)	\$ (1,079,789)	\$ (1,060,756)	\$ (1,018,000)	\$ (1,040,000)
Debt Funded CIP (5-year annual avg)	\$ 15,084	\$ 5,294	\$ 4,639	\$ -	\$ 512,160	\$ 582,000	\$ 620,800	\$ 688,700	\$ 776,000
Non-debt funded CIP (>25%)	95%	99%	99%	100%	50%	46%	41%	32%	25%
Total Debt	\$ 5,130,000	\$ 3,965,000	\$ 3,740,000	\$ 3,510,000	\$ 6,265,000	\$ 5,914,272	\$ 6,544,008	\$ 6,128,738	\$ 5,686,955
Pro-Rata Debt	\$ 769,500	\$ 594,750	\$ 561,000	\$ 491,400	\$ 894,000	\$ 848,190	\$ 943,166	\$ 887,657	\$ 827,679
Pro-Rata Debt vs. Assessments (<2%)	0.7%	0.6%	0.5%	0.4%	0.7%	0.6%	0.7%	0.6%	0.6%

Financial Model w/1 big step, 5% escalator

\$12.4M CIP

(Baseline Debt)

24% FY24, 5% each year after

	Historical				5-year Projection				
	Actual 2020	Actual 2021	Actual 2022	Projected 2023	Projected 2024	Projected 2025	Projected 2026	Projected 2027	Projected 2028
Water Operating Receipts	\$ 893,153	\$ 952,513	\$ 980,521	\$ 1,011,787	\$ 1,237,358	\$ 1,302,611	\$ 1,370,885	\$ 1,443,963	\$ 1,519,294
Sewer Operating Receipts	\$ 1,293,471	\$ 1,374,895	\$ 1,419,678	\$ 1,508,421	\$ 1,796,861	\$ 1,891,279	\$ 1,990,483	\$ 2,095,426	\$ 2,206,150
Operating Receipts	\$ 2,186,624	\$ 2,327,408	\$ 2,400,199	\$ 2,520,209	\$ 3,034,220	\$ 3,193,891	\$ 3,361,367	\$ 3,539,389	\$ 3,725,443
Water Operating Payments	\$ (708,089)	\$ (1,040,905)	\$ (971,460)	\$ (1,039,463)	\$ (1,091,436)	\$ (1,146,008)	\$ (1,203,308)	\$ (1,263,473)	\$ (1,326,647)
Sewer Operating Payments	\$ (1,196,139)	\$ (1,136,757)	\$ (1,100,245)	\$ (1,177,262)	\$ (1,236,125)	\$ (1,297,931)	\$ (1,362,828)	\$ (1,430,969)	\$ (1,502,517)
Operating Payments	\$ (1,904,228)	\$ (2,177,662)	\$ (2,071,705)	\$ (2,216,724)	\$ (2,327,561)	\$ (2,443,939)	\$ (2,566,136)	\$ (2,694,442)	\$ (2,829,164)
Operating Surplus/(Deficit)	\$ 282,396	\$ 149,746	\$ 328,494	\$ 303,485	\$ 706,659	\$ 749,952	\$ 795,232	\$ 844,947	\$ 896,279
Total Debt Service (P+I)	\$ (493,073)	\$ (415,176)	\$ (409,846)	\$ (422,141)	\$ (406,959)	\$ (609,625)	\$ (858,111)	\$ (858,168)	\$ (1,120,076)
Water Cash-funded Capital	\$ (190,732)	\$ (364,912)	\$ (560,775)	\$ (92,500)	\$ (461,911)	\$ (402,960)	\$ (150,840)	\$ (442,705)	\$ (104,676)
Sewer Cash-funded Capital	\$ (70,507)	\$ (154,845)	\$ (235,264)	\$ (337,500)	\$ (217,161)	\$ (38,910)	\$ (108,140)	\$ (215,505)	\$ (235,876)
Cash-funded capital	\$ (261,239)	\$ (519,757)	\$ (796,039)	\$ (430,000)	\$ (679,071)	\$ (441,870)	\$ (258,980)	\$ (658,211)	\$ (340,552)
Availability fees	\$ 787,100	\$ 992	\$ 1,038,124	\$ 200,000	\$ 211,283	\$ 221,852	\$ 232,947	\$ 244,595	\$ 256,828
Non-Operating Surplus/(Deficit)	\$ 32,788	\$ (933,941)	\$ (167,761)	\$ (652,141)	\$ (874,748)	\$ (829,644)	\$ (884,143)	\$ (1,271,784)	\$ (1,203,800)
Total Cash Surplus/(Deficit)	\$ 315,184	\$ (784,195)	\$ 160,733	\$ (348,657)	\$ (168,089)	\$ (79,692)	\$ (88,912)	\$ (426,837)	\$ (307,521)
Water Cash Reserves	\$ 2,849,557	\$ 2,334,424	\$ 2,188,388	\$ 2,094,892	\$ 1,813,761	\$ 1,536,538	\$ 1,280,056	\$ 749,898	\$ 308,583
Sewer Cash Reserves	\$ 3,161,022	\$ 2,891,960	\$ 3,198,729	\$ 2,943,568	\$ 3,056,611	\$ 3,254,142	\$ 3,421,712	\$ 3,525,033	\$ 3,658,827
Total Cash Reserves	\$ 6,010,582	\$ 5,226,387	\$ 5,387,120	\$ 5,038,463	\$ 4,870,375	\$ 4,790,683	\$ 4,701,771	\$ 4,274,935	\$ 3,967,413
Reserve Target (Op Pmts + Debt)	\$ 2,397,301	\$ 2,592,838	\$ 2,481,551	\$ 2,638,866	\$ 2,734,520	\$ 3,053,564	\$ 3,424,246	\$ 3,552,610	\$ 3,949,240
Months of Reserve (>12)	30.1	24.2	26.1	22.9	21.4	18.8	16.5	14.4	12.1
Total Expenditures	\$ 2,697,862	\$ 3,118,005	\$ 3,295,330	\$ 3,128,866	\$ 5,754,520	\$ 5,603,564	\$ 5,854,246	\$ 6,552,610	\$ 5,349,240
Debt Servicing Ratio (<30%)	18%	13%	12%	13%	7%	11%	15%	13%	21%
CIP Expenses (5-year annual avg)	\$ (323,034)	\$ (384,533)	\$ (499,389)	\$ (546,354)	\$ (1,029,901)	\$ (1,079,789)	\$ (1,060,756)	\$ (1,018,000)	\$ (1,040,000)
Debt Funded CIP (5-year annual avg)	\$ 15,084	\$ 5,294	\$ 4,639	\$ -	\$ 512,160	\$ 582,000	\$ 620,800	\$ 688,700	\$ 776,000
Non-debt funded CIP (>25%)	95%	99%	99%	100%	50%	46%	41%	32%	25%
Total Debt	\$ 5,130,000	\$ 3,965,000	\$ 3,740,000	\$ 3,510,000	\$ 5,765,000	\$ 9,229,394	\$ 8,817,811	\$ 11,589,400	\$ 11,042,044
Pro-Rata Debt	\$ 769,500	\$ 594,750	\$ 561,000	\$ 491,400	\$ 822,651	\$ 1,323,625	\$ 1,270,881	\$ 1,678,553	\$ 1,607,058
Pro-Rata Debt vs. Assessments (<2%)	0.7%	0.6%	0.5%	0.4%	0.7%	1.0%	0.9%	1.2%	1.1%

Financial Model w/2 steps, 5% escalator

\$12.4M CIP

(Baseline Debt)

15% FY24&FY25, 5% after

	Historical				5-year Projection				
	Actual 2020	Actual 2021	Actual 2022	Projected 2023	Projected 2024	Projected 2025	Projected 2026	Projected 2027	Projected 2028
Water Operating Receipts	\$ 893,153	\$ 952,513	\$ 980,521	\$ 1,011,787	\$ 1,148,384	\$ 1,324,235	\$ 1,394,324	\$ 1,466,645	\$ 1,543,802
Sewer Operating Receipts	\$ 1,293,471	\$ 1,374,895	\$ 1,419,678	\$ 1,508,421	\$ 1,666,509	\$ 1,920,031	\$ 2,021,011	\$ 2,126,953	\$ 2,239,468
Operating Receipts	\$ 2,186,624	\$ 2,327,408	\$ 2,400,199	\$ 2,520,209	\$ 2,814,893	\$ 3,244,266	\$ 3,415,334	\$ 3,593,598	\$ 3,783,270
Water Operating Payments	\$ (708,089)	\$ (1,040,905)	\$ (971,460)	\$ (1,039,463)	\$ (1,091,436)	\$ (1,146,008)	\$ (1,203,308)	\$ (1,263,473)	\$ (1,326,647)
Sewer Operating Payments	\$ (1,196,139)	\$ (1,136,757)	\$ (1,100,245)	\$ (1,177,262)	\$ (1,236,125)	\$ (1,297,931)	\$ (1,362,828)	\$ (1,430,969)	\$ (1,502,517)
Operating Payments	\$ (1,904,228)	\$ (2,177,662)	\$ (2,071,705)	\$ (2,216,724)	\$ (2,327,561)	\$ (2,443,939)	\$ (2,566,136)	\$ (2,694,442)	\$ (2,829,164)
Operating Surplus/(Deficit)	\$ 282,396	\$ 149,746	\$ 328,494	\$ 303,485	\$ 487,332	\$ 800,327	\$ 849,199	\$ 899,156	\$ 954,105
Total Debt Service (P+I)	\$ (493,073)	\$ (415,176)	\$ (409,846)	\$ (422,141)	\$ (406,959)	\$ (609,625)	\$ (858,111)	\$ (858,168)	\$ (1,120,076)
Water Cash-funded Capital	\$ (190,732)	\$ (364,912)	\$ (560,775)	\$ (92,500)	\$ (461,911)	\$ (406,480)	\$ (153,658)	\$ (444,743)	\$ (105,905)
Sewer Cash-funded Capital	\$ (70,507)	\$ (154,845)	\$ (235,264)	\$ (337,500)	\$ (217,161)	\$ (42,430)	\$ (110,958)	\$ (217,543)	\$ (237,105)
Cash-funded capital	\$ (261,239)	\$ (519,757)	\$ (796,039)	\$ (430,000)	\$ (679,071)	\$ (448,910)	\$ (264,615)	\$ (662,287)	\$ (343,009)
Availability fees	\$ 787,100	\$ 992	\$ 1,038,124	\$ 200,000	\$ 195,943	\$ 225,329	\$ 236,600	\$ 248,430	\$ 260,852
Non-Operating Surplus/(Deficit)	\$ 32,788	\$ (933,941)	\$ (167,761)	\$ (652,141)	\$ (890,088)	\$ (833,206)	\$ (886,126)	\$ (1,272,025)	\$ (1,202,233)
Total Cash Surplus/(Deficit)	\$ 315,184	\$ (784,195)	\$ 160,733	\$ (348,657)	\$ (402,756)	\$ (32,879)	\$ (36,927)	\$ (372,869)	\$ (248,128)
Water Cash Reserves	\$ 2,849,557	\$ 2,334,424	\$ 2,188,388	\$ 2,094,892	\$ 1,717,825	\$ 1,460,285	\$ 1,226,082	\$ 718,310	\$ 302,101
Sewer Cash Reserves	\$ 3,161,022	\$ 2,891,960	\$ 3,198,729	\$ 2,943,568	\$ 2,917,880	\$ 3,142,541	\$ 3,339,816	\$ 3,474,720	\$ 3,642,801
Total Cash Reserves	\$ 6,010,582	\$ 5,226,387	\$ 5,387,120	\$ 5,038,463	\$ 4,635,708	\$ 4,602,829	\$ 4,565,901	\$ 4,193,033	\$ 3,944,905
Reserve Target (Op Pmts + Debt)	\$ 2,397,301	\$ 2,592,838	\$ 2,481,551	\$ 2,638,866	\$ 2,734,520	\$ 3,053,564	\$ 3,424,246	\$ 3,552,610	\$ 3,949,240
Months of Reserve (>12)	30.1	24.2	26.1	22.9	20.3	18.1	16.0	14.2	12.0
Total Expenditures	\$ 2,697,862	\$ 3,118,005	\$ 3,295,330	\$ 3,128,866	\$ 5,754,520	\$ 5,603,564	\$ 5,854,246	\$ 6,552,610	\$ 5,349,240
Debt Servicing Ratio (<30%)	18%	13%	12%	13%	7%	11%	15%	13%	21%
CIP Expenses (5-year annual avg)	\$ (323,034)	\$ (384,533)	\$ (499,389)	\$ (546,354)	\$ (1,029,901)	\$ (1,079,789)	\$ (1,060,756)	\$ (1,018,000)	\$ (1,040,000)
Debt Funded CIP (5-year annual avg)	\$ 15,084	\$ 5,294	\$ 4,639	\$ -	\$ 512,160	\$ 582,000	\$ 620,800	\$ 688,700	\$ 776,000
Non-debt funded CIP (>25%)	95%	99%	99%	100%	50%	46%	41%	32%	25%
Total Debt	\$ 5,130,000	\$ 3,965,000	\$ 3,740,000	\$ 3,510,000	\$ 5,765,000	\$ 9,229,394	\$ 8,817,811	\$ 11,589,400	\$ 11,042,044
Pro-Rata Debt	\$ 769,500	\$ 594,750	\$ 561,000	\$ 491,400	\$ 822,651	\$ 1,323,625	\$ 1,270,881	\$ 1,678,553	\$ 1,607,058
Pro-Rata Debt vs. Assessments (<2%)	0.7%	0.6%	0.5%	0.4%	0.7%	1.0%	0.9%	1.2%	1.1%

Financial Model w/3 steps, 5% escalator

\$12.4M CIP

(Baseline Debt)

12% FY24/25/26, 5% after

	Historical				5-year Projection				
	Actual 2020	Actual 2021	Actual 2022	Projected 2023	Projected 2024	Projected 2025	Projected 2026	Projected 2027	Projected 2028
Water Operating Receipts	\$ 893,153	\$ 952,513	\$ 980,521	\$ 1,011,787	\$ 1,118,725	\$ 1,255,716	\$ 1,408,820	\$ 1,482,944	\$ 1,561,026
Sewer Operating Receipts	\$ 1,293,471	\$ 1,374,895	\$ 1,419,678	\$ 1,508,421	\$ 1,623,102	\$ 1,822,405	\$ 2,045,514	\$ 2,153,226	\$ 2,266,704
Operating Receipts	\$ 2,186,624	\$ 2,327,408	\$ 2,400,199	\$ 2,520,209	\$ 2,741,828	\$ 3,078,121	\$ 3,454,334	\$ 3,636,170	\$ 3,827,730
Water Operating Payments	\$ (708,089)	\$ (1,040,905)	\$ (971,460)	\$ (1,039,463)	\$ (1,091,436)	\$ (1,146,008)	\$ (1,203,308)	\$ (1,263,473)	\$ (1,326,647)
Sewer Operating Payments	\$ (1,196,139)	\$ (1,136,757)	\$ (1,100,245)	\$ (1,177,262)	\$ (1,236,125)	\$ (1,297,931)	\$ (1,362,828)	\$ (1,430,969)	\$ (1,502,517)
Operating Payments	\$ (1,904,228)	\$ (2,177,662)	\$ (2,071,705)	\$ (2,216,724)	\$ (2,327,561)	\$ (2,443,939)	\$ (2,566,136)	\$ (2,694,442)	\$ (2,829,164)
Operating Surplus/(Deficit)	\$ 282,396	\$ 149,746	\$ 328,494	\$ 303,485	\$ 414,267	\$ 634,182	\$ 888,198	\$ 941,727	\$ 998,565
Total Debt Service (P+I)	\$ (493,073)	\$ (415,176)	\$ (409,846)	\$ (422,141)	\$ (406,959)	\$ (609,625)	\$ (858,111)	\$ (858,168)	\$ (1,120,076)
Water Cash-funded Capital	\$ (190,732)	\$ (364,912)	\$ (560,775)	\$ (92,500)	\$ (461,911)	\$ (407,652)	\$ (157,531)	\$ (448,107)	\$ (108,686)
Sewer Cash-funded Capital	\$ (70,507)	\$ (154,845)	\$ (235,264)	\$ (337,500)	\$ (217,161)	\$ (43,602)	\$ (114,831)	\$ (220,907)	\$ (239,886)
Cash-funded capital	\$ (261,239)	\$ (519,757)	\$ (796,039)	\$ (430,000)	\$ (679,071)	\$ (451,255)	\$ (272,363)	\$ (669,014)	\$ (348,573)
Availability fees	\$ 787,100	\$ 992	\$ 1,038,124	\$ 200,000	\$ 190,834	\$ 213,733	\$ 239,382	\$ 251,355	\$ 263,926
Non-Operating Surplus/(Deficit)	\$ 32,788	\$ (933,941)	\$ (167,761)	\$ (652,141)	\$ (895,197)	\$ (847,147)	\$ (891,092)	\$ (1,275,827)	\$ (1,204,723)
Total Cash Surplus/(Deficit)	\$ 315,184	\$ (784,195)	\$ 160,733	\$ (348,657)	\$ (480,929)	\$ (212,965)	\$ (2,894)	\$ (334,099)	\$ (206,157)
Water Cash Reserves	\$ 2,849,557	\$ 2,334,424	\$ 2,188,388	\$ 2,094,892	\$ 1,685,846	\$ 1,353,350	\$ 1,131,030	\$ 637,519	\$ 237,150
Sewer Cash Reserves	\$ 3,161,022	\$ 2,891,960	\$ 3,198,729	\$ 2,943,568	\$ 2,871,685	\$ 2,991,216	\$ 3,210,642	\$ 3,370,054	\$ 3,564,266
Total Cash Reserves	\$ 6,010,582	\$ 5,226,387	\$ 5,387,120	\$ 5,038,463	\$ 4,557,534	\$ 4,344,569	\$ 4,341,675	\$ 4,007,576	\$ 3,801,419
Reserve Target (Op Pmts + Debt)	\$ 2,397,301	\$ 2,592,838	\$ 2,481,551	\$ 2,638,866	\$ 2,734,520	\$ 3,053,564	\$ 3,424,246	\$ 3,552,610	\$ 3,949,240
Months of Reserve (>12)	30.1	24.2	26.1	22.9	20.0	17.1	15.2	13.5	11.6
Total Expenditures	\$ 2,697,862	\$ 3,118,005	\$ 3,295,330	\$ 3,128,866	\$ 5,754,520	\$ 5,603,564	\$ 5,854,246	\$ 6,552,610	\$ 5,349,240
Debt Servicing Ratio (<30%)	18%	13%	12%	13%	7%	11%	15%	13%	21%
CIP Expenses (5-year annual avg)	\$ (323,034)	\$ (384,533)	\$ (499,389)	\$ (546,354)	\$ (1,029,901)	\$ (1,079,789)	\$ (1,060,756)	\$ (1,018,000)	\$ (1,040,000)
Debt Funded CIP (5-year annual avg)	\$ 15,084	\$ 5,294	\$ 4,639	\$ -	\$ 512,160	\$ 582,000	\$ 620,800	\$ 688,700	\$ 776,000
Non-debt funded CIP (>25%)	95%	99%	99%	100%	50%	46%	41%	32%	25%
Total Debt	\$ 5,130,000	\$ 3,965,000	\$ 3,740,000	\$ 3,510,000	\$ 5,765,000	\$ 9,229,394	\$ 8,817,811	\$ 11,589,400	\$ 11,042,044
Pro-Rata Debt	\$ 769,500	\$ 594,750	\$ 561,000	\$ 491,400	\$ 822,651	\$ 1,323,625	\$ 1,270,881	\$ 1,678,553	\$ 1,607,058
Pro-Rata Debt vs. Assessments (<2%)	0.7%	0.6%	0.5%	0.4%	0.7%	1.0%	0.9%	1.2%	1.1%

Financial Model w/8% O&M inflation

\$12.4M CIP

(Baseline Debt)

35% FY24, 5% after, 8% O&M inflation

	Historical				5-year Projection				
	Actual 2020	Actual 2021	Actual 2022	Projected 2023	Projected 2024	Projected 2025	Projected 2026	Projected 2027	Projected 2028
Water Operating Receipts	\$ 893,153	\$ 952,513	\$ 980,521	\$ 1,011,787	\$ 1,347,902	\$ 1,418,838	\$ 1,492,820	\$ 1,571,635	\$ 1,654,498
Sewer Operating Receipts	\$ 1,293,471	\$ 1,374,895	\$ 1,419,678	\$ 1,508,421	\$ 1,955,891	\$ 2,058,562	\$ 2,167,760	\$ 2,281,962	\$ 2,402,776
Operating Receipts	\$ 2,186,624	\$ 2,327,408	\$ 2,400,199	\$ 2,520,209	\$ 3,303,794	\$ 3,477,399	\$ 3,660,580	\$ 3,853,596	\$ 4,057,274
Water Operating Payments	\$ (708,089)	\$ (1,040,905)	\$ (971,460)	\$ (1,039,463)	\$ (1,122,620)	\$ (1,212,429)	\$ (1,309,424)	\$ (1,414,177)	\$ (1,527,312)
Sewer Operating Payments	\$ (1,196,139)	\$ (1,136,757)	\$ (1,100,245)	\$ (1,177,262)	\$ (1,271,443)	\$ (1,373,158)	\$ (1,483,011)	\$ (1,601,652)	\$ (1,729,784)
Operating Payments	\$ (1,904,228)	\$ (2,177,662)	\$ (2,071,705)	\$ (2,216,724)	\$ (2,394,062)	\$ (2,585,587)	\$ (2,792,434)	\$ (3,015,829)	\$ (3,257,095)
Operating Surplus/(Deficit)	\$ 282,396	\$ 149,746	\$ 328,494	\$ 303,485	\$ 909,731	\$ 891,812	\$ 868,146	\$ 837,767	\$ 800,178
Total Debt Service (P+I)	\$ (493,073)	\$ (415,176)	\$ (409,846)	\$ (422,141)	\$ (406,959)	\$ (609,625)	\$ (858,111)	\$ (858,168)	\$ (1,120,076)
Water Cash-funded Capital	\$ (190,732)	\$ (364,912)	\$ (560,775)	\$ (92,500)	\$ (461,911)	\$ (399,633)	\$ (144,990)	\$ (435,277)	\$ (96,807)
Sewer Cash-funded Capital	\$ (70,507)	\$ (154,845)	\$ (235,264)	\$ (337,500)	\$ (217,161)	\$ (35,583)	\$ (102,290)	\$ (208,077)	\$ (228,007)
Cash-funded capital	\$ (261,239)	\$ (519,757)	\$ (796,039)	\$ (430,000)	\$ (679,071)	\$ (435,216)	\$ (247,280)	\$ (643,354)	\$ (324,814)
Availability fees	\$ 787,100	\$ 992	\$ 1,038,124	\$ 200,000	\$ 230,016	\$ 241,514	\$ 253,591	\$ 266,266	\$ 279,585
Non-Operating Surplus/(Deficit)	\$ 32,788	\$ (933,941)	\$ (167,761)	\$ (652,141)	\$ (856,015)	\$ (803,327)	\$ (851,800)	\$ (1,235,256)	\$ (1,165,306)
Total Cash Surplus/(Deficit)	\$ 315,184	\$ (784,195)	\$ 160,733	\$ (348,657)	\$ 53,717	\$ 88,485	\$ 16,346	\$ (397,488)	\$ (365,127)
Water Cash Reserves	\$ 2,849,557	\$ 2,334,424	\$ 2,188,388	\$ 2,094,892	\$ 1,901,623	\$ 1,686,456	\$ 1,461,010	\$ 925,083	\$ 436,505
Sewer Cash Reserves	\$ 3,161,022	\$ 2,891,960	\$ 3,198,729	\$ 2,943,568	\$ 3,190,554	\$ 3,494,206	\$ 3,735,997	\$ 3,874,437	\$ 3,997,887
Total Cash Reserves	\$ 6,010,582	\$ 5,226,387	\$ 5,387,120	\$ 5,038,463	\$ 5,092,180	\$ 5,180,665	\$ 5,197,010	\$ 4,799,522	\$ 4,434,395
Reserve Target (Op Pmts + Debt)	\$ 2,397,301	\$ 2,592,838	\$ 2,481,551	\$ 2,638,866	\$ 2,801,021	\$ 3,195,213	\$ 3,650,545	\$ 3,873,997	\$ 4,377,171
Months of Reserve (>12)	30.1	24.2	26.1	22.9	21.8	19.5	17.1	14.9	12.2
Total Expenditures	\$ 2,697,862	\$ 3,118,005	\$ 3,295,330	\$ 3,128,866	\$ 5,821,021	\$ 5,745,213	\$ 6,080,545	\$ 6,873,997	\$ 5,777,171
Debt Servicing Ratio (<30%)	18%	13%	12%	13%	7%	11%	14%	12%	19%
CIP Expenses (5-year annual avg)	\$ (323,034)	\$ (384,533)	\$ (499,389)	\$ (546,354)	\$ (1,029,901)	\$ (1,079,789)	\$ (1,060,756)	\$ (1,018,000)	\$ (1,040,000)
Debt Funded CIP (5-year annual avg)	\$ 15,084	\$ 5,294	\$ 4,639	\$ -	\$ 512,160	\$ 582,000	\$ 620,800	\$ 688,700	\$ 776,000
Non-debt funded CIP (>25%)	95%	99%	99%	100%	50%	46%	41%	32%	25%
Total Debt	\$ 5,130,000	\$ 3,965,000	\$ 3,740,000	\$ 3,510,000	\$ 5,765,000	\$ 9,229,394	\$ 8,817,811	\$ 11,589,400	\$ 11,042,044
Pro-Rata Debt	\$ 769,500	\$ 594,750	\$ 561,000	\$ 491,400	\$ 822,651	\$ 1,323,625	\$ 1,270,881	\$ 1,678,553	\$ 1,607,058
Pro-Rata Debt vs. Assessments (<2%)	0.7%	0.6%	0.5%	0.4%	0.7%	1.0%	0.9%	1.2%	1.1%

Summary of Scenarios

- Baseline \$12.4M CIP, Baseline \$9.5M new Debt
 - Meets debt-related fiscal policies (debt ratio, CIP financing, total debt)
 - Scenario: Current rates w/3% escalator → System bankrupt in 5 years
 - Scenario: 1 big step, 24-5-5-5-5 → meets all policies
 - Scenario: 2 medium steps, 15-15-5-5-5 → meets all policies
 - Scenario: 3 smaller steps, 12-12-12-5-5 → (mostly) meets policies

- To avoid a big increase, need to drastically reduce projects to \$5.4M CIP
 - No Southern Tank, no ESTP (but Well D and Filters)
 - Scenario: Current rates w/5% escalator → meets all policies

- Baseline CIP+Debt, but w/8% O&M inflation instead of 5% inflation
 - Scenario: 1 huge step, 35-5-5-5-5 → meets all policies
 - Shows sensitivity of rate increase to annual O&M inflation
 - Even a 24% rate increase may not be enough if inflation does not settle

Fiscal Policy Checks by Scenario

Fiscal Policy Checks

24% FY24, 5% after
 24% FY24, 11/1% after
 15% FY24&FY25, 5% after
 12% FY24/25/26, 5% after

Reserve Level (>12 months operating/debt expenses)					
2023	2024	2025	2026	2027	2028
22.9 mo	21.4 mo	18.8 mo	16.5 mo	14.4 mo	12.1 mo
22.9 mo	21.4 mo	18.8 mo	16.6 mo	14.6 mo	12.3 mo
22.9 mo	21.4 mo	18.9 mo	16.5 mo	14.5 mo	12.1 mo
22.9 mo	20.0 mo	17.1 mo	15.2 mo	13.5 mo	11.6 mo
Non-debt funded CIP Ratio (>25% total CIP)					
2023	2024	2025	2026	2027	2028
100%	58%	45%	34%	28%	26%
100%	58%	45%	34%	28%	26%
100%	58%	45%	34%	28%	26%
100%	58%	45%	34%	28%	26%

24% FY24, 5% after
 24% FY24, 11/1% after
 15% FY24&FY25, 5% after
 12% FY24/25/26, 5% after

Fiscal Policy Checks

24% FY24, 5% after
 24% FY24, 11/1% after
 15% FY24&FY25, 5% after
 12% FY24/25/26, 5% after

Debt Service Ratio (<30% expenditures)					
2023	2024	2025	2026	2027	2028
13%	7%	11%	15%	13%	21%
13%	7%	11%	15%	13%	21%
13%	7%	11%	15%	13%	21%
13%	7%	11%	15%	13%	21%
Pro-Rata Debt vs. Assessments Ratio (<2%)					
2023	2024	2025	2026	2027	2028
0.4%	0.7%	1.0%	0.9%	1.2%	1.1%
0.4%	0.7%	1.0%	0.9%	1.2%	1.1%
0.4%	0.7%	1.0%	0.9%	1.2%	1.1%
0.4%	0.7%	1.0%	0.9%	1.2%	1.1%

24% FY24, 5% after
 24% FY24, 11/1% after
 15% FY24&FY25, 5% after
 12% FY24/25/26, 5% after

- 10-year outlook shows reserve levels slowly dropping to 6-7 months
 - Could prevent by assuming new debt is secured for CIP in 2029-2033 window

Easing the Water/Sewer Split

- Baseline single-step increase is 24-5-5-5-5
 - Same increase to both water and sewer rates in each year
 - Combined rate is 40% for water service and 60% for sewer service
 - System costs now evenly split 50/50 between water/sewer service
 - Sewer-only users (all 13 of them) significantly overpaying (20% above cost of service)
 - Water-only users (all 73 of them) significantly underpaying (20% below cost of service)
 - Everyone else (~1750 combined users) are paying the correct rate

- Trying to fix this in one year can be too disruptive
 - 53% water increase, 4% sewer increase gives a 24% average increase
 - Only affects 86 customers, but does so very abruptly

- Could ease water-sewer split over a 5-year interval
 - Year 1: 24% water, 24% sewer, average 24% (water/sewer split still 40/60)
 - Year 2: 11% water, 1% sewer, average 5% (water/sewer split now 42.5/57.5)
 - Year 3: 10.5% water, 1% sewer, average 5% (water/sewer split now 45/55)
 - Year 4: 10% water, 1% sewer, average 5% (water/sewer split now 47.5/52.5)
 - Year 5: 9.5% water, 1% sewer, average 5% (water/sewer split now 50/50)

Next Steps

- Council determines rate structure to use for rate study
 - Final rates calculated by May 10 (between meetings)
 - Final utility operating budget and rate/fee schedule can be prepared and advertised

- Draft rate study write-up available at May 17 meeting