Cherry Valley Rochdale Water District, Financial Planning & Forecast Study



FINDINGS & RECOMMENDATIONS February 3, 2025



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SCOPE:

Review of the most recent capital improvement plan completed for the District including a summary of completed and on-going active projects and projection of updated costs for projects remaining to be initiated.

DATA REVIEWED:

- 1. Cherry Rochdale Water District Water System Capital Improvement Plan 2024-2044, RCAP Solutions.
- 2. 2018 Water Distribution System Study, Tata & Howard

COMMENTS: RCAP Solutions Capital Improvement Plan

This evaluation was based loosely upon the asset management approach, which uses "Business Risk" to rank improvements. Business risk is defined as the likelihood of a particular asset failing to meet a defined Level of Service (LOS) goal as a result of mortality failure (pipe bursts) or by performance (undersized pipe or pump) multiplied by the Consequences of Failure (COF) (who or what is impacted and the degree of that impact).

The LOS goals cover the complete range of performance measures (requirements) of a public water supply. The LOS goals include regulatory compliance, fire protection, service continuity, and reduction risk of physical damage to properties, disruption of key public service and roadways due to asset failure. Consequences of failure are based upon a number of factors depending upon the corresponding Level of Service. This is important as an asset management evaluation involves a considerable degree of uncertainty relative to asset condition.

This approach is technically sound and considered to be a best practice relative to developing a capital plan that is inherently defendable as it not only justifies the logic behind each improvement but can also be used to explain what might happen if the asset is <u>not</u> replaced (or rehabilitated). Finally, one of the most significant benefits of this approach is that by including stakeholders (i.e. the Commissioners) in the development and ranking of both LOS and COF factors which has the distinct benefit of looking at the system from a broad perspective and building consensus around the resulting plan.

The following comments and observations are based upon review of the deliverables:

- 1. Work products consist of an excel workbook and a draft report. The workbook consists of asset inventory sheets as well as "CIP" sheets which contain the assets identified for replacement as shown in the table to the right.
- 2. Scheduling of replacements is based solely upon adding the 'standard' expected useful life for an asset to the year of installation without taking into account operating conditions or District experience. Fire flow deficiencies identified in the Tata & Howard report (a performance vs. mortality failure) were not incorporated.

RCAP Data Summary			Replacen	nent Year
Sheet	# Assets	# With Costs	Min	Max
Buildings	6	3	2034	2095
Booster Pumphouse and Well	14	14	2042	2057
Land	5	1		
pump station	6	0	2051	2051
Water Storage Tank	3	3	2021	2045
Garage and outside equipment				
Garage and outside equipmenCIP	28	25	1990	2037
Valves				
Valves CIP	48	0	1963	2020
Hydrants				
Hydrants CIP	64	64	1970	2044
Office	30	16	2009	2032
Water Mains				
Water Mains CIP	83	0	1960	2042
Meter Pits Water	8	0	2043	2043
Treatment Facility	14	0	2024	2052
Total	309	126		

COMMENTS: RCAP Solutions Capital Improvement Plan Cont'd

- 3. Recommendations consist of replacement of the entire asset versus rehabilitation (year; water storage tanks are typically recoated / repaired vs. replaced), which is not realistic in many cases.
- 4. Horizontal assets (watermains, valves and hydrants) are inventoried separately and are not cross referenced (i.e. it is not readily determinable which pipe a valve or hydrant is associated with. Criticality is based upon a list of the six most driven streets and two critical customers however it is not possible to know which applies to an individual asset and the criticality is not used in the determination of the replacement year.
- Costs are provided for ~40% of the assets identified for replacement. Costs are escalated from the reference year to the replacement year; however, the calculation method is incorrect (costs are escalated in the CIP Planner, see p. 8)
- 6. Vertical assets are evaluated similarly, criticality for all sub-assets in a facility (i.e. the treatment facility) are given the same criticality.
- 7. See page 3 for a description of how these recommendations were incorporated.



COMMENTS: 2018 Water Distribution System Study, Tata & Howard

- 1. Work products consist of written report which evaluates water system demands, adequacy of supply and the results of a hydraulic evaluation. An inventory of the distribution system with pipe ID's, material, diameter, length and Hazen Williams C values determined from the model from hydrant flow tests.
- 2. The report recommended \$14,533,000 worth of improvements (2024\$)
 - \$9,227,000 to improve transmission hydraulic improvements associated with the Worcester connection and local fire flow deficiencies.
 - \$5,306,000 to address residential fire flow deficiencies (actual fire flow does not meet ISO fire flow requirements).

INCORPORATION OF RECOMMENDATIONS INTO CAPITAL IMPROVEMENT PLANNER

The RCAP asset inventory appears to include virtually all physical assets owned by the District. Vertical assets (Treatment specifically) typically have the potential for the largest risks (i.e. losing disinfection), the lack of cost data prevents incorporation.

In terms of watermain improvements, based upon the fact that the T&H recommendations were based upon a hydraulic evaluation which identified fire flow deficiencies and the number and cost of these improvements all of the T&H projects were included in the Capital Improvement Planner (p.9) while only the hydrant replacements (considered as a placeholder) and the small diameter pipe replacements (6" or smaller) from the RCAP plan were incorporated.

In terms of scheduling these projects distributed to prevent overloading District staff, prevent undue disruption to public roads, and to distribute costs somewhat evenly. The years shown on the CIP planner for the watermain replacements <u>DO NOT</u> **represent recommendations by CSS** and <u>DO NOT</u> take into account risks due to insufficient fire protection or mortality failure due to pipe condition.

Distribution System Inventory

			% of		Age	
Material	Diameter	Length	Total	Min.	Max.	Avg
Ductile Iron	4"	1,646		55	115	83
	6"	19,196		-	115	68
	8"	25,770		5	115	53
	10"	4,582		45	115	80
	12"	11,102		19	115	68
Ductile Iron Total		62,296	50.1%			
Cast Iron	2"	295		-	0	0
	4"	950		66	69	68
	6"	21,647		-	115	78
	8"	21,486		-	115	94
	10"	2,759		115	115	115
	12"	9,973		-	115	91
Cast Iron Total		57,109	45.9%			
Galvanized	2"	3,500		-	115	72
Galvanized Total		3,500	2.8%			
Plastic	2"	333		9	65	37
Plastic Total		333	0.3%			
Copper	1"	229		-	0	0
Copper Total		229	0.2%			
PVC	1"	262		7	7	7
	2"	170		2	8	5
PVC Total		432	0.3%			
Unknown	(blank)	226		45	45	45
Unknown Total		226	0.2%			
Galvanized Iron	2"	179				
Galvanized Iron Total		179	0.1%			
Grand Total		124,305				



CONCLUSIONS AND RECOMMENDATIONS

- 1. Capital Improvements are the largest driver of annual rate increases and although minimizing rate increases and customer impacts is important, the magnitude of savings resulting from continuing to defer capital improvements (most notably the fire flow deficiencies identified in 2018) pales in comparison to the cost of failure. Additionally, the District has experienced several mortality failures in the distribution system.
- 2. The District should be commended for starting an asset management evaluation, however, the RCAP evaluation **can not be considered complete** for a number of reasons including lack of cost data and methodology.
- 3. The District should discuss the projects developed by Tata & Howard to determine if completing the projects from Table 7-1 may improve fire flow deficiencies in the watermains included in Table 7-2. If not, the District should reconsider timing based upon risk.
- 4. We strongly recommend that the District use the existing asset inventory to continue its asset management evaluation starting with a top-down approach that starts with identifying the LOS goals (Regulatory compliance, continuity of service, commercial and roadway disruption and damage, etc.) and Consequence of Failure (COF) factors then evaluating assets accordingly incorporating District experience etc. A Capital Plan developed and implemented in order of Business risk is inherently less expensive in the long run. A Capital Plan developed and implemented in order of risk is far more economical over the long term.





1/16/2025

RATE EVALUATION PROCESS



Notes

1. The methodology used for this evaluation is based upon projecting future expenses and revenues in a streamlined fashion and may not represent actual workflows and approval processes.



1/16/2025

1. ESTABLISH REVENUE REQUIREMENTS: OPERATING EXPENSES

REVENUE / EXPENSE SOURCE DATA

		(1	2	2 3))		3			
FY	Туре	Code	Category	Name	i	Budget		Actual	Actual_Adj		Sewer Share	Est	. Reimb
2024	EXP	5010	Officers Salaries	Officers Salaries	\$	6,400	\$	11,516	\$	6,280	45%	\$	5.236
2024	EXP	5020	Personnel Services	Gross Payroll	\$	315.407	\$	344.871	\$	266,019	20%	\$	78.852
2024	EXP	5045	OPS: Technology	Technology	\$	19.515	\$	39.571	\$	20,057	50%	\$	19,515
2024	EXP	5065	OPS: Motor Vehicle	Motor Vehicle Expense	\$	12,600	\$	15.078	\$	9.678	30%	\$	5.400
2024	EXP	5090	Admin.:Utili/Heat	Utilities / Heat	\$	3.080	\$	1,519	\$	199	30%	\$	1,320
2024	EXP	5095	Admin.: Ins	Insurance	\$	127.088	\$	153.028	\$	121,256	20%	\$	31,772
2024	EXP	6010	OPS: Supply: Util &Elec	Utilities / Electricity	\$	59.319	\$	38,717	\$	30.628	12%	\$	8,089
2024	EXP	6015	Admin.: Office Exp.	Office Expense	\$	14,140	\$	19.275	\$	13,215	30%	\$	6,060
2024	EXP	6020	Admin: Postage	Postage	\$	7,245	\$	8,606	\$	5,501	30%	\$	3.105
2024	EXP	6035	Admin.: Phone	Utilities / Telephone	\$	3.640	\$	3,810	\$	2,250	30%	\$	1,560
2024	EXP	8006	CAP_EX: Exist Debt	MWPAT Loans	\$	34.464	\$	34.464	\$	34,464	0%	\$	-
2024	EXP	8001	Capital	Capital	\$	20,000					0%	\$	-
2024	EXP	5040	OPS: General	Consulting Services	\$	15,000	\$	10,860	\$	10.860	A ^{0/}	*	
2024	EXP	5050	Admin.: Other	Worcester Regional Assessm	\$	72,655	¢						
2024	EXP	5055	OPS: Distribution	Field Supplies	-								
		5056	OPS: Supply: Treatment	Chornin									

2	
Cost Categories	
Personnel Services	
Personnel Services: OPEB	
OPS: General	
OPS: Metering & Billing	
OPS: Supply: Purch.	
OPS: Supply: Treatment	
OPS: Distribution	
CAP_EX: Distribution	
CAP_EX: Ex. Debt Service	
CAP_EX: Other	
CAP_EX: Source	
CAP_EX: Vehicles	

Notes

- 1. The values shown under the Budget and Actual categories was taken from revenue and expense reports (FYXX Expenditure Update.xls) provided by the District.
- 2. Cost categories were developed and applied to expense items by expense code to better separate costs by activity. (Note: Budget line items such as electricity likely span multiple categories in a given year.)
- Line items with a non-zero sewer share are split between the Water and Sewer divisions, according to the percentages shown. The annual budget amounts shown reflect the Water Department share however, the actual cost reflects costs incurred for both Water and Sewer giving the appearance that budgets had been exceeded.
- 4. The values in the "Actual_Adj" column are the reported actual expenditures minus the estimated reimbursement (5). This provides a more accurate representation of budget performance, albeit based upon the assumption that actual costs for water and sewer reflect the cost share ratios shown. As a result, sewer reimbursements are not shown as revenues.



1. ESTABLISH REVENUE REQUIREMENTS: OPERATING EXPENSES

Operating Expenses	Fund 2	FY2022	FY2023	FY2024	FY2025	FY2026
Personnel Services	Budget: Shared	298,566	309.985	323.407	331,418	405.651
Officers Salaries	Budget: Shared	6,400	6,400	6,400	6,400	6,400
Admin.: Office Exp.	Budget: Shared	17.500	18,410	14,140	16,450	16,450
Admin.: Phone	Budget: Shared	3,220	3.532	3.640	3,815	3,815
Admin.:Utili/Heat	Budget: Shared	9.170	12,618	3,080	3,080	3,080
Admin: Postage	Budget: Shared	7.000	7.000	7.245	7.560	9,280
Admin.: Ins	Budget: Shared	116.747	117.370	127.088	134.485	167.378
Admin.: Other	Budget	109.339	116,921	117.275	131,207	140.595
OPS: General	Budget	86,000	86,800	92.587	93.515	96,467
OPS: Distribution (4)	Budget	22,000	23.050	28.573	28,050	29.053
OPS: Supply: Purch.	Budget	390,000	275.000	245,000	280,000	315.245
OPS: Supply: Treatment	Budget	23.750	33.087	42.694	32,662	33,804
OPS: Metering & Billing	Budget	33.700	35.000	35.000	40,600	61,740
OPS: Motor Vehicle	Budget: Shared	11,550	12,600	12,600	12,600	13,230
OPS: Supply: Util &Elec	Budget: Shared	15.000	25.202	59.319	59.319	59.319
OPS: Technology	Budget: Shared	18,339	18,820	19.515	27.900	29,250
Reserve	Budget	50,000	50,000	50,000	50,000	50,000
Capital	Budget	-	20,000	20,000	20,000	20,000
Total Operating Expenses		1,218,281	1,171,793	1,207,563	1,279,061	1,460.757
Delta Previous			▼3.8%	▲ 3.1%	▲ 5.9%	▲ 14.2%

Notes

- 1. Sum of (Revised) budget items by categories described on the previous page.
- 2. Indicates how item is funded and whether shared with Sewer. Note: Budgets reflect the water portion only, shared items identified for purposes of calculating reimbursements.
- 3. Annual change from given year from previous year. Values for FY2026 on are projected by increasing the previous year by the percentage given in the "USE" column.
- Projected water purchase costs (FY26 on) based upon the assumption that the District will produce 50,000 gpd from Grindstone and purchase the remainder of projected demand from Worcester. Worcester rate assumed to increase 1.5% per year.
- 5. Turnbacks represent the percentage of unexpended budget for each line item based upon the *adjusted* actual values. Negative values indicate that actual exceeded budget. Turnbacks assumed to close to free cash.
- 6. Turnback factors used in projected years to estimate free cash balance.

Annual Change in Budget ³	FY2024	FY2025	FY2026	AVG.	USE 3	Turnbacks 5	FY2022	FY2023	FY2024	AVG.	USE 6
Personnel Services	▲ 4.3%	▲ 2.5%	▲ 22.4%	▲ 9.7%	▲ 3.5%	Personnel Services	▲ 10.0%	▲ 9.4%	▲ 16.6%	▲ 12.0%	▲ 10.0%
Officers Salaries					▲ 2.0%	Officers Salaries	▲ 16.6%	▲ 1.9%	▲ 1.9%	▲ 6.8%	▲ 2.0%
Admin.: Office Exp.	₹23.2%	▲ 16.3%		₹2.3%	▲ 5.0%	Admin.: Office Exp.	▲ 15.8%	▲ 54.6%	▲ 6.5%	▲ 25.7%	▲ 5.0%
Admin.: Phone	▲ 3.1%	▲ 4.8%		▲ 2.6%	▲ 8.0%	Admin.: Phone	▲ 26.4%	▲ 31.9%	▲ 38.2%	▲ 32.2%	▲ 20.0%
Admin::Utili/Heat	₹75.6%			₹25.2%	▲ 10.0%	Admin.:Utili/Heat	₹43.2%	▲ 123.1%	▲ 93.5%	▲ 57.8%	▲ 15.0%
Admin: Postage	▲ 3.5%	▲ 4.3%	▲ 22.8%	▲ 10.2%	▲ 3.5%	Admin: Postage	▲ 37.4%	▲ 33.1%	▲ 24.1%	▲ 31.5%	▲ 15.0%
Admin.: Ins	▲ 8.3%	▲ 5.8%	▲ 24.5%	▲ 12.9%	▲ 5.0%	Admin.: Ins	▲ 7.6%	₹8.1%	▲ 4.6%	▲ 1.4%	
Admin.: Other	▲ 0.3%	▲ 11.9%	▲ 7.2%	▲ 6.4%	▲ 3.5%	Admin.: Other	▲ 14.1%	▲ 13.7%	▲ 11.8%	▲ 13.2%	▲ 10.0%
OPS: General	▲ 6. 7 %	▲ 1.0%	▲ 3.2%	▲ 3.6%	▲ 3.5%	OPS: General	▲ 17.7%	▲ 22.4%	▲ 54.6%	▲ 31.6%	▲ 20.0%
OPS: Distribution	▲ 24.0%	▼1.8%	▲ 3.6%	▲ 8.6%	▲ 8.0%	OPS: Distribution	▲ 30.2%	₹14.7%	▲ 27 .6%	▲ 14.4%	▲ 5.0%
OPS: Supply: Purch.	₹10.9%	▲ 14.3%	▲ 12.6%	▲ 5.3%	▲(4)%	OPS: Supply: Purch.	▲ 13.8%	▼10.1%	▼11.3%	₹2.5%	
OPS: Supply: Treatment	▲ 29.0%	₹23.5%	▲ 3.5%	▲ 3.0%	▲ 8.0%	OPS: Supply: Treatment	▲ 55.9%	▲ 23.2%	47.7%	▲ 42.3%	▲ 20.0%
OPS: Metering & Billing		▲ 16.0%	▲ 52.1%	▲ 22.7%	▲ 8.0%	OPS: Metering & Billing	₹7.0%	▲ 15.2%	▲ 2.6%	▲ 3.6%	▲ 8.0%
OPS: Motor Vehicle			▲ 5.0%	▲ 1.7%	▲ 3.5%	OPS: Motor Vehicle	▲ 100.0%	▲ 37.5%	▲ 23.2%	▲ 53.6%	▲ 20.0%
OPS: Supply: Util &Elec	▲ 135.4%		▲ 0.0%	▲ 45.1%	▲ 5.0%	OPS: Supply: Util &Elec	▲ 52.8%	▲ 14.5%	▲ 48.4%	▲ 38.6%	▲ 25.0%
OPS: Technology	▲ 3.7%	▲ 43.0%	▲ 4.8%	▲ 17.2%	▲ 5.0%	OPS: Technology	▲ 30.6%	▲ 2.0%	₹2.8%	▲ 9.9%	



Operating Costs

ITEM	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23
Gross Payroll	2,549	2,549	2,549	2,549	2,549	2,549	2,549	2,549	2,549	2,549	2,549	2,549	2,549
Chemical Supplies	1,006	438	0	404	194	0	0	404	170	533	0	44	404
Lab Work	2,194	1,894	3.194	2,111	0	3.369	1,108	1,134	2,995	2.795	1,445	1,973	831
DEP/SDWA Assessment	639	0	0	0	0	0	0	0	0	0	0	0	0
Master Meter Calibration	0	0	0	0	0	0	0	0	675	0	0	0	0
Utilities / Electricity	390	790	1,115	8,179	1,162	3.727	4.840	3,628	3.008	3.034	2,871	2,298	2,075
Media	1,222	1,222	1,222	1,222	1,222	1,222	1,222	1,222	1,222	1,222	1,222	1,222	1,222
TOTAL	7,999	6,892	8,079	14,464	5,127	10,867	9,719	8,936	10,619	10,134	8,087	8,085	7,080

Estimated Gross Payroll

		Labor	Hours			
	Normal O Hou Waskiy		Media Change Hours	Total Hours	Labor	Costs
Employee	Weekly	Annual	Annual	Annual	Hourly Rate	Total
Benjamin Morris	4	208	8	216	\$45.03	\$9,727
Employee 1	14	728	10	738	\$26.77	\$19,756
Employee 2		0	10	10	\$29.00	\$240
Wood, Jennifer	1	26		26	\$33.11	\$861

Total Annual Cost \$ 30,584

Monthly \$ 2.549

Notes

- 1. Operating costs taken from monthly budget update reports, all items except for gross labor were assumed to be 100% of total value.
- 2. Estimated Gross Payroll hours based upon District input; costs based upon FY24 budget values.
- 3. Monthly media costs based upon \$22,000 media cost divided by 18-month replacement cycle.



Finished Water Cost of Treatment vs. Purchase

Purchased vs. Treated Volumes

Description	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23
Purch (Gal)	4.492.469	4,897,156	3,598,628	3.369.740	3,845,468	3,401,156	5.599.528	3.977,116	3.590,400	3,713,820	3,996,564	3.659.964	3,898,576
Produced (Gal)	559.760	895.721	1,505,546	1,922,956	1,831,188	1,139,251	630,834	1,852,799	1,842,813	1,719,545	1,842,045	1,500,553	1,689,803
Purch (HCF)	5,998	6,538	4,805	4.499	5,134	4.541	7.476	5,310	4.794	4.958	5,336	4.886	5,205
Produced (HCF)	747	1,196	2,010	2,567	2.445	1,521	842	2.474	2,460	2,296	2.459	2,003	2,256
Percent Produced	11.1%	15.5%	29.5%	36.3%	32.3%	25.1%	10.1%	31.8%	33.9%	31.6%	31.5%	29.1%	30.2%

Cost Comparison

ITEM	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23
% Water Purch	89%	85%	71%	64%	68%	75%	90%	68%	66%	68%	68%	71%	70%
Treat (\$/HCF)	\$10.70	\$5.76	\$4.02	\$5.63	\$2.10	\$7.14	\$11.54	\$3.61	\$4.32	\$4.41	\$3.29	\$4.04	\$3.14
Purchase (\$/HCF)	\$3.93	\$3.93	\$3.93	\$3.93	\$3.93	\$3.93	\$3.93	\$3.93	\$3.93	\$3.93	\$3.93	\$3.93	\$3.93
Ratio Purchase / Treat	2.7 X	1.5 X	1.0 X	1.4 X	0.5 X	1.8 X	2.9 X	0.9 X	1.1 X	1.1 X	0.8 X	1.0 X	0.8 X





1. ESTABLISH REVENUE REQUIREMENTS: Capital Improvements

CAPITAL IMPROVEMENT PLANNER

CAPIT					2		3	(4)	5	6		7
Project ID	Source	Project / Item	System Element	Procurement	Est. Cost	Cost Year	Funding	Term	Project Year (FY)	Budget		Adj. Cost
WTR-23	District Input	Grindstone Brook CC Transmission Main - Phase 1 (swamp line)	Distribution	Design & Const.	\$ 1,462,000	2024	Debt - CP	30	2026	2027	\$	1,611,855
WTR-18	RCAP Asset DB	Hydrants - Immediate (6) (10	Distribution	Design & Const.	\$ -	2019	R.E.	1	2026	2026	\$	-
WTR-29	District Input	Server & Laptops	Admin	Equipment	\$ -	2023	R.E.	1	2026	2026	\$	-
WTR-14	T&H 2018 Report	12A. Old MainStreet and Main Street	Distribution	Design & Const.	\$ 462,000	2024	Debt - CP	30	2027	2028	\$	534,823
WTR-16	District Input	Grindstone Brook CC Transmission Main - Phase 2 (Office Side)	Distribution	Design & Const.	\$ 1,436,400	2024	Debt - CP	30	2027	2028	\$	1,662,813
WTR-01	T&H 2018 Report	1. Redfield Road and Main Street (Sargent St Bottomley Ave.)	Distribution	Design & Const.	\$ 1,265,000	2024	Debt - CP	30	2028	2029	\$	1,537,615
WTR-02	T&H 2018 Report	3* Old Main Street, Main Street, Willow Hill Road and Henshaw St.	Distribution	Design & Const.	\$ 1,880,000	2018	Debt - CP	30	2029	2030	\$	3,215,438
WTR-28	RCAP Asset DB	Outside Equipment - 2026 - 2032 replacement (spread over 3 Years)	Ops	Equipment	\$ 8,660	2024	R.E.	3	2030	2030	\$	11,605
WTR-27	RCAP Asset DB	Outside Equipment - Pre 2025 replacement (spread over 3 Years)	Ops	Equipment	\$ 123,551	2024	R.E.	3	2030	2030	\$	165,570
WTR-03	T&H 2018 Report	4a. Pleasant Street and Cross Country Main	Distribution	Construction	\$ 1,500,000	2024	Debt - CP	30	2030	2031	\$	2,010,143
WTR-20	RCAP Asset DB	Ford F250 2015	Ops	Vehicle	\$ 85,000	2024	R.E.	1	2031	2031	\$	119,604
WTR-30	RCAP Asset DB	Server components 2029 - 2032 (50% of cost used)	Admin	Equipment	\$ 52,960	2023	R.E.	1	2031	2031	\$	78,246
WTR-24	RCAP Asset DB	Office / Server Room 2029 - 2032 (50% of cost used)	Admin	Design & Const.	\$ 33,760	2024	Debt - CP	30	2032	2033	\$	49,879
WTR-04	T&H 2018 Report	4b. Stafford Street	Distribution	Construction	\$ 1,650,000	2024	Debt - CP	30	2032	2033	\$	2,437,801
WTR-26	RCAP Asset DB	John Deere Skidsteer	Admin	Equipment	\$ 15,000	2024	R.E.	1	2033	2033	\$	23,270
WTR-05	T&H 2018 Report	5. Pleasant Street and Cross Country Main	Distribution	Design & Const.	\$ 2,932,000	2024	Debt - CP	30	2033	2034	\$	4,548,494
WTR-06	T&H 2018 Report	6a. Main Street (Locust St - McCarthy Ave.)	Distribution	Design & Const.	\$ 495,000	2024	Debt - CP	30	2034	2035	\$	806,303
WTR-07	T&H 2018 Report	6b. McCarthy Avenue (Main St Keefe Ct.)	Distribution	Design & Const.	\$ 482,000	2024	Debt - CP	30	2034	2035	\$	785,127
WTR-08	T&H 2018 Report	7. Church Street (Main St Olney St.)	Distribution	Design & Const.	\$ 184,000	2024	Debt - CP	30	2034	2035	\$	299,717
WTR-09	T&H 2018 Report	8. Auburn Street (Amin St to End Auburn St.)	Distribution	Design & Const.	\$ 1,516,000	2024	Debt - CP	30	2034	2035	\$	2,469,404
WTR-10	T&H 2018 Report	9. Bottomley Avenue (Main St West St.)	Distribution	Design & Const.	\$ 644,000	2024	Debt - CP	30	2035	2036	\$	1,101,459
WTR-11	T&H 2018 Report	10. Main Street (Willow Hill Road - End Main St.)	Distribution	Design & Const.	\$ 1,200,000	2024	Debt - CP	30	2035	2036	\$	2,052,407
WTR-12	T&H 2018 Report	11. River Street and Charlton Street	Distribution	Design & Const.	\$ 785,000	2024	Debt - CP	30	2035	2036	\$	1,342,616
WTR-19	RCAP Asset DB	Hydrants - Five Year (7)	Distribution	Design & Const.	\$ -	2019	R.E.	1	2036	2036	\$	-
WTR-17	T&H 2018 Report	12B. Cross Street and Willow Hill Road	Distribution	Design & Const.	\$ 1,200,000	2024	Debt - CP	30	2036	2037	\$	2,155,028
WTR-15	T&H 2018 Report	12C. Henshaw Street	Distribution	Design & Const.	\$ 785.000	2024	Debt - CP	30	2036	2037	\$	1,409,747
WTR-13	RCAP Asset DB	RCAP Watermains <8"	Distribution	Design & Const.	\$ 2,428,618	2024	Debt - CP	30	2037	2038	\$	4,579,521
				TOTAL =	\$ 22,625,949						\$3	5,008,486

Notes:

- 1. Project or item taken from listed source/ what is nature of procurement
- 2. Estimated Cost: See P.3
- 3. Funding Source:

R.E.: Retained Earnings (Free Cash), any non-debt item or project

- Debt CP: Debt, constant principal at 3.5% assumed annual interest rate.
- 4. Term of loan for debt funded projects, no. of years cost is spread over for non-debt items.

- 5. Year of purchase for equipment purchases, or construction year
- Budget year represents the year the cost is incurred, for items funded by free cash, Budget year = Project Year. Design & Const. projects funded by debt assume that the design and construction are bonded together with design costs (assumed to be 8% of construction), funded by a Bond Anticipation Note (BAN) in the <u>project year.</u>
- 7. Estimated cost escalated from cost year to budget year by 5.0% annually.
- 10. Leicester technically owns the fire hydrants and is responsible for funding maintenance, therefore, this item should be considered a placeholder.



1. ESTABLISH REVENUE REQUIREMENTS: PROJECTED EXPENSES

Operating Expenses	Fund	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035
Personnel Services	Budget: Shared	323.407	331,418	405,651	419,848	434-543	449.752	465.493	481,786	498,648	516,101	534,164	552,860
Officers Salaries	Budget: Shared	6,400	6,400	6,400	6,528	6,659	6,792	6,928	7.066	7.207	7.352	7.499	7.649
Admin: Office Exp.	Budget: Shared	14.140	16,450	16,450	17.273	18,136	19.043	19.995	20,995	22.045	23.147	24.304	25.519
Admin: Phone	Budget: Shared	3.640	3,815	3,815	4,120	4.450	4.806	5,190	5,605	6.054	6.538	7,061	7,626
Admin:Utili/Heat	Budget: Shared	3.080	3.080	3.080	3.388	3.727	4.099	4.509	4.960	5.456	6,002	6,602	7,262
Admin: Postage	Budget: Shared	7.245	7.560	9,280	9,605	9.941	10,289	10,649	11,022	11,407	11,807	12,220	12,648
Admin: Ins	Budget: Shared	127.088	134.485	167.378	175.747	184.535	193.762	203.450	213,622	224.303	235.518	247.294	259,659
Admin: Other	Budget	117,275	131,207	140.595	145.516	150,609	155.880	161,336	166,983	172,827	178,876	185.137	191,617
OPS: General	Budget	92.587	93.515	96.467	99,843	103.338	106,955	110,698	114.573	118,583	122.733	127,029	131.475
OPS: Distribution	Budget	28,573	28,050	29.053	31.377	33,887	36,598	39.526	42,688	46,103	49.791	53.774	58,076
OPS: Supply: Purch.	Budget	245,000	280,000	315.245	208,900	208,900	212,033	212,033	215,214	215,214	218,442	218,442	221,718
OPS: Supply: Treatment	Budget	42,694	32,662	33.804	36,508	39.429	42.583	45.990	49,669	53.643	57.934	62,569	67.574
OPS: Metering & Billing	Budget	35.000	40,600	61,740	66,679	72,014	77.775	83.997	90.716	97.974	105,812	114,276	123,419
OPS: Motor Vehicle	Budget: Shared	12,600	12,600	13,230	13.693	14.172	14,668	15,182	15.713	16,263	16,832	17.421	18,031
OPS: Supply: Util &Elec	Budget: Shared	59.319	59.319	59.319	62,285	65.399	68,669	72,103	75.708	79.493	83,468	87.641	92,023
OPS: Technology	Budget: Shared	19.515	27.900	29,250	30.713	32,248	33.861	35-554	37.331	39.198	41,158	43.216	45.376
Reserve	Budget	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50.000	50,000	50.000	50.000	50,000
Capital	Budget	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
Total Operating Expenses		1,207.563	1,279,061	1,460.757	1,402,023	1,451,985	1,507,564	1,562,632	1,623,650	1,684.417	1,751,510	1,818,650	1,892,533
Delta Previous		▲ 3.1%	▲ 5.9%	▲ 14.2%	₹4.0%	▲ 3.6%	▲ 3.8%	▲ 3.7%	▲ 3.9%	▲ 3.7%	4 .0%	▲ 3.8%	▲ 4.1%
Capital - Expenses	Fund												
CAP_EX	R.E.	444.000	295,298	2.954	-	-	-	59.058	256,908	59.058	23,270	-	-
CAP_EX: Exist Debt	Budget	34.464	34.470	34.476	34.483	34.489	34.496	34.503	34.510	34.518	34.525	34.533	34-539
CAP_EX: New Debt	Budget	-	-	3.761	111,391	262,022	390,843	596,100	722.747	709,806	877,236	1,150,987	1,425.599
Total Capital Expenses		478,464	329.768	41,191	145.874	296,512	425.339	689,662	1,014,166	803.382	935.030	1,185.520	1,460,138
Grand Total													
Grand Total		1,686,026	1,608,828	1,501,948	1.547.897	1.748.497	1,932,904	2,252,293	2.637.816	2,487.799	2,686,540	3.004.170	3.352,671
Delta Previous		▼3.0%	₹4.6%	₹6.6%	3 .1%	1 3.0%	▲ 10.5%	▲ 16.5%	▲ 17.1%	▼5.7%	▲ 8.0%	▲ 11.8%	▲ 11.6%
	ي \$4.0												
Capital Expenses	ة 111 \$3.5												▲ 11.6%
Existing Debt	¥3.0								▲ 17.1%	0/	▲ 8.0%	▲ 11.8%	
■New Debt	\$2.5							▲ 16.5%		▼5.7%			
New Debt	\$2.0	₹3.0%	- . C9/			▲ 13.0 %	▲ 10.5%						
Operations	\$1.5		▼4.6%	▼6.6%	▲ 3.1%								
Administration	\$1.0												
	t • •												
Deveryonal Constants	\$0.5												
Personnel Services	\$0.5 \$0.0	//////											



1/16/2025

Revenues Received	FY	v		
Category	J FY20)22	FY2023	FY2024
User Charges	1,2	47.446	1,256,113	1,197,000
Reimbursements	1	46,846	155,854	150,199
SBA Rental		20,081	22,589	21,293
Solar		18,000	18,000	18,000
Liens		15.889	13.710	10,094
Real Estate Taxes		3,233	1,617	3.791
Miscellaneous			8,662	268
Grand Total	1,4	51,496	1,476,544	1,400,646

HISTORIC REVENUE SUMMARY

Notes

- 1. User charges comprise 85% of revenue
- 2. Sewer Reimbursements. NOTE: although the District reports these as revenue, they are not shown as such in the proformas as such because they are accounted for in the expended (actuals) as discussed on p.5.
- 3. SBA rentals projected to increase at 3% per year
- 4. Solar to remain at \$18,000 / Year
- 5. Water rate revenue is based upon receipts vs billed amounts (commitments), liens represent the difference between billed and receivables. Future rate revenues are based upon 100% of the projected usage and rates, therefore liens are not projected.
- 6. Taxes projected at 5% increase annually based upon a conservative review of historic revenue.

FIRE PROTECTION CHARGES

	FY	(Bill Date)	Values			
		20	23		20	24
Month (Bill Date) 🖵	(Charges	No. Accounts	(Charges	No. Accounts
1	\$	375.00	15	\$	400.00	16
2	\$	375.00	15	\$	400.00	16
3	\$	375.00	15	\$	425.00	17
4	\$	375.00	15	\$	425.00	17
5	\$	400.00	16	\$	425.00	17
6	\$	400.00	16	\$	425.00	17
7	\$	350.00	15	\$	400.00	16
8	\$	25.00	15	\$	400.00	16
9	\$	-	15	\$	400.00	16
10	\$	750.00	15	\$	800.00	16
11	\$	375.00	15	\$	400.00	16
12	\$	375.00	15	\$	400.00	16
Grand Total	\$	4,175.00	17	\$	5,300.00	19



1/16/2025

2. REVENUE EVALUATION: USAGE SUMMARY AND MODEL CALIBRATION

SOURCE DATA EVALUATION (1) BILLED USAGE BY CALENDAR YEAR (2)

	2(022	2	023
Month 	No. Accounts	Usage	No. Accounts	Usage
1	1,226	549,234	1,226	528,080
2	1,227	549,478	1,226	532,201
3	1,228	528,050	1,229	588,034
4	1,225	538,386	1,224	617,919
5	1,229	540,107	1,228	547,795
6	1,224	(3) 590,373	1,229	3 655,686
7	1,225	637,498	1,229	624,388
8	1,224	609,940	1,232	602,718
9	1,225	630,970	1,234	635,971
10	1,229	525,795	1,235	591,726
11	1,226	539,737	1,236	704.348
12	1,227	602,535	1,235 -	616,672
Total	1,291	6,842,103	1,295	7,245,538
MG		51.179		54.197
MGD		0.140		0.148

USAGE BY BILL CLASS ⁽⁹⁾

		No.	Total	% of	Avg.	Max.
-+-	Bill Class 📮	Accounts	Usage	Total	Usage	Usage
1	RESIDENTIAL	1,214	5,914,546	85.1%	427	6,926
18	RESIDENTAL INSTITUTION	2	429,975	6.2%	17,916	61,834
2	COMMERCIAL	9	257,812	3.7%	2,553	52,570
15	RETAIL	43	184,448	2.7%	366	4,029
16	RESTAURANT	3	68,014	1.0%	1,889	6,236
7	MISCELLANEOUS	7	44,441	0.6%	483	24,251
19	RECREATIONAL	3	26,039	0.4%	723	2,904
9	DAY CARE	1	19,314	0.3%	1,610	2,285
10	MUNICIPAL	10	3,889	0.1%	45	281
14	SERVICE STATION	2	2,399	0.0%	100	168
Total		1,293	6,950,877	100.0%	471	61,834

BILLED USAGE BY FISCAL YEAR (CF)⁵

FY	Tier 1	Tier 2	Tier 3	Tier 4	Total	Total 6		
F T T		Tiel 2	THEF 3	ner 4	Usage	Charges		
2023	5,872,567	278,575	96,551	703,184	6,950,877	\$1,182,193		
2024	5,905,441	265,948	99,407	1,184,866	7,455,662	\$1,275,218		

MODEL CALIBRATION

Description	FY23		FY24
Base	\$	388,800	\$ 389,700
Tier 1	\$	624,841	\$ 628,339
Tier 2	\$	39,223	\$ 37,445
Tier 3	\$	15,757	\$ 16,223
Tier 4	\$	132,480	\$ 223,229
Total	\$	1,201,101	\$ 1,294,936
Charges	\$	1,182,193	\$ 1,275,218
∆ Charges		▼1.6%	▼1.5 %

BILLED USAGE VS. ASR (MG)

YEAR	ASR	METER DATA	DELTA
2022	51.180	51.179	0.00%
2023	55.060	54.197	-1.57%

Notes:

- 1. Metered usage is the largest revenue component of a public water system and future water usage is projected starting with the FY24 data; therefore, account level monthly metered usage was selected for the analysis as it is the most granular and accurate data.
- 2. Usage summarized by calendar year for comparison to data submitted to the MADEP with the Annual Statistical Report (ASR) to gauge consistency and accuracy.
- 3. Number of accounts read each month is notably consistent.
- 4. Strong correlation indicates consistent data sets.
- 5. Account level billed usage data is broken down into existing tiers and summarized by fiscal year and input into the rate model.
- 6. "Charges" represent the total amount billed per customer for each monthly read event, (similar to municipal "Commitments") they are compared to the model (calculated revenue) to determine model accuracy.
- 7. Model revenue based upon usage by fiscal year (5) and customer count data.
- 8. Model calibration is well within acceptable range
- Billing data includes a Bill Class which corresponds loosely to customer types, Note: churches were reclassified to Bill Class 7 – Miscellaneous due to miscoding.



2. REVENUE EVALUATION: RATE EVALUATION & DESIGN

EXISTING RATE STRUCTURE EVALUATION

RATES: ALT A - EXISTING STRUCTURE 🕚

Description	Units	Rate Factor	FY24
Base	Each	12	\$25.00
Tier 1 3	1,000 CF/MO	1.0X	\$0.1064
Tier 2	1,001 - 1,500 CF/MO.	1.4X	\$0.1408
Tier 3	1,501 - 2,000 CF/MO.	1.7X	\$0.1632
Tier 4	>2,000 CF/MO	2.2X	\$0.1884
Fire Suppression	Monthly / Account		\$25.00

Notes:

- 1. The existing rate structure consists of a base charge and tiered usage charges which are defined by the volume of each tier (Units) and the rate factor (the ratio of the charge for each tier to Tier 1).
- 2. More than 85% of the customers in the District are residential
- 3. Conceptually, tier *volumes* are based upon three fundamental categories of water usage: essential, discretionary and excessive. The Rate Factors are then used to encourage conservation by sending a price signal to the customer, the highest tier being considered somewhat of a penalty. These categories, however, are implicitly based upon human activity (i.e., cooking, cleaning, laundry, gardening, etc.). Thus, applying a tiered rate structure to user classes with different usage patterns may result in inequities.
- 4. To evaluate the 'fit' of the existing rate structure, the existing tiers are shown superimposed over a histogram of Residential customers for the month of July 2024 (summer peak).
- 5. The current Tier 1 upper limit is 1,000 CF/Month, which is equivalent to a 5person household using 50 gallons per day each, while the histogram indicates that 90% of residential customer use less than this in the highest use month.
- 6. The usage volume associated with 50% of bills is typically used as the Tier 1 boundary.
- 7. Applying this type of rate structure to all customers can result in non-residential customers being 'penalized' based upon the volume of usage irrespective of usage patterns or conservation efforts.

USAGE BY BILL CLASS 2

	Bill Class 🚚	No. Accounts	Total Usage	% of Total	Avg. Usage	Max. Usage
1	RESIDENTIAL	1,214	5,914,546	85.1%	427	6,926
18	RESIDENTAL INSTITUTION	2	429,975	6.2%	17,916	61,834
2	COMMERCIAL	9	257,812	3.7%	2,553	52,570
15	RETAIL	43	184,448	2.7%	366	4,029
16	RESTAURANT	3	68,014	1.0%	1,889	6,236
7	MISCELLANEOUS	7	44,441	0.6%	483	24,251
19	RECREATIONAL	3	26,039	0.4%	723	2,904
9	DAY CARE	1	19,314	0.3%	1,610	2,285
10	MUNICIPAL	10	3,889	0.1%	45	281
14	SERVICE STATION	2	2,399	0.0%	100	168
Total		1,293	6,950,877	100.0%	471	61,834





2. REVENUE EVALUATION: RATE EVALUATION & DESIGN

ALTERNATE RATE STRUCTURE DEVELOPMENT

RESIDE	RESIDENTIAL USER COST ANALYSIS ¹ User Charge									rge
Low usag				I	Base	Tier 1	Μ	Ionthly	Α	nnually
200	CF/ Mo.	ALT A	Usage Distribution			200				
50	GPD	(Existing	Bill Breakdown (\$)	\$	25.00	\$ 21.28	\$	46.28	\$	555.36
20%	Cumulative %	Rates)	Bill Breakdown (%)		54%	2 46%				
Typical us	Typical usage									
400	CF/ Mo.	ALT A	Usage Distribution			400				
100	GPD	(Existing	Bill Breakdown (\$)	\$	25.00	\$ 42.56	\$	67.56	\$	810.72
50%	Cumulative %	Rates)	Bill Breakdown (%)		37%	63%				
High usag	ge									
800	CF/ Mo.	ALT A	Usage Distribution			800				
200	GPD	(Existing	Bill Breakdown (\$)	\$	25.00	\$ 85.12	\$	110.12	\$	1,321.44
85%	Cumulative %	Rates)	Bill Breakdown (%)		23%	77%				

AWWA METER ³ EQUIVALENTS							
METER							
SIZE	FACTOR						
5/8"	1.0 X						
3/4"	1.5 X						
1"	2.5 X						
1 1/2"	5.0 X						
2"	8.0 x						
3"	15.0 X						
4"	25.0 X						
6"	50.0 X						
8"	80.0 x						

Notes:

- 1. User cost breakdown of residential user data from June 2023 shows that the base charge factors heavily into the low user bill amount and that none of the residential user types usage exceeded Tier 1.
- 2. As shown on the previous page, the existing tier structure and universal base charge make it difficult to tailor rates to the various customer classes, with the low usage residential user a particular concern.
- 3. The most common modification to a rate structure with a single base charge such as the existing rate structure would be to implement base charges that increase by meter size according to the AWWA's meter equivalent ratios. This allows for development of base charges that take into account not only usage but potential usage, sometimes referred to as "Readiness to serve". While this is both effective and equitable, it requires a reasonable distribution of meter sizes across the entire user base. However, the Districts customers are served almost entirely by 5/8" meters, rendering this option impractical.
- 4. Reducing the volume of the Tier 1 boundary increases the granularity of the structure and improves the ability to better control customer cost impacts, particularly for low users. However, as the Residential User Cost Analysis below shows, the base charge is the largest component of annual costs for low usage customers.

5. In order to address the issues associated with applying one rate structure across all users, the alternative developed for evaluation is based upon applying a similar base fee / tiered usage rate structure but tailored for two classes of users: Residential and Non-Residential.



2. REVENUE EVALUATION: RATE EVALUATION & DESIGN

ALTERNATE RATE STRUCTURE DEVELOPMENT

RATES: ALT B - MODIFIED BASE AND TIERS

Description	Units	Rate Factor	Bill Freq	FY24
Base_RES	Monthly Base Charge		12.0 X	\$15.00 2
ALTB_RES_Tier 1	500 CF/MO	1.00 X	1.0 X	\$0.1224
ALTB_RES_Tier 2	1,000 CF/MO.	1.50 X	3 ^{1.0 X}	\$0.1835
ALTB_RES_Tier 3	1,500 CF/MO.	1.75 X	1.0 X	\$0.2141
ALTB_RES_Tier 4	>1,500 CF/MO	2.00 X	1.0 X	\$0.2447
Base_NON_RES	Monthly Base Charge		12.0 X	\$35.00 (2)
ALTB_NON_RES_Tier 1	500 CF/MO	1.00 X	1.0 X	\$0.1436 4
ALTB_NON_RES_Tier 2	1,000 CF/MO.	1.00 X	3) 1.0 X	\$0.1436
ALTB_NON_RES_Tier 3	1,500 CF/MO.	1.00 X 1.0 X		\$0.1436
ALTB_NON_RES_Tier 4	>1,500 CF/MO	1.00 X	1.0 X	\$0.1436
Fire Suppression 2 in	Monthly Charge	8.0 X	12.0 X	\$25.00 5
Fire Suppression 4 in	Monthly Charge	25.0 X	12.0 X	\$25.00
Fire Suppression 6 in	Monthly Charge	50.0 X	12.0 X	\$25.00
Fire Suppression 8 in	Monthly Charge	80.0 X	12.0 X	\$40.00
Fire Suppression 10 in	Monthly Charge	115.0 X	12.0 X	\$50.00

Fire Suppression Customers									
Size	Count								
Fire Suppression 2 in	2								
Fire Suppression 4 in	6								
Fire Suppression 6 in	5								
Fire Suppression 8 in	35								
Fire Suppression 10 in	27								
Total	75								



Notes:

- 1. The Alternate rate structure consists of modified tier volumes which are applied to both residential and non-residential user classes however the rate factors and base charges were adjusted separately for each.
- 2. Base fees set separately to avoid undue impact on low usage residential customers
- 3. Rate factor for residential modified based upon revised tier volumes, non-residential rate factors set to 1.00 to prevent inequities caused by applying one tiered rate structure to all customer classes.
- 4. The starting point for pricing was based upon developing the same amount billed in FY24 under the existing rates.
- 5. Fire suppression charges were developed by assuming the existing charge would be maintained for 6 inch and smaller connections, then applying the meter equivalent ratios (P. 13) which relate to the potential usage / readiness to serve concept to determine the charges for 8- and 10-inch connections.



2. REVENUE EVALUATION: USAGE ANALYSIS

PROJECTING FUTURE USAGE 1



Notes

- 1. Increasing water usage / number of customers provides a larger user base over which to spread costs. However, projecting future demands is difficult in general, especially for water districts as they are not as well integrated into the host communities.
- 2. The Intermunicipal Agreement (IMA) with the City of Worcester requires that the District impose the same usage restrictions as the City, as of 2016 the District imposed a total outdoor water use ban. As a result, overall water use decreased and the summer to winter ratio (a good indicator of irrigation) decreased as well. Worcester is currently in a Stage 3 Drought restriction.
- 3. Total water use has been well below the 270,000 gallon per day (98.55 MG / year) limit imposed by the IMA, indicating opportunity for growth.
- 4. The Districts boundaries are described by metes and bounds in Chapter 105 of the Acts of 1996, what is unusual about the existing service area is the fact that it is not contiguous. *However, Section 15 of Chapter 105 lays out a straightforward means of adding abutting properties to the district by means of a vote at a District meeting*.
- 5. The primary challenge of small water systems is economy of scale, increasing the customer base and billed usage are both valuable means to manage user cost impacts.
- 6. Projected usage for FY26 held at the FY25 annual volume of 55.77 MG.





1/16/2025

3. Proforma Development: Revenue & Free Cash Projection Methodologies

		FY2024	FY2025	FY2026	FY2027
	Revenue Rate Increase			8.0% (2)	10.0%
	User Charges	1,197,000	1.317.436	1,423,803	1,567,609
	Liens	10,094			
	SBA Rental	21,293	25,000	25.750	26,523
	Solar	18,000	18,000	18,000	18,000
	Real Estate Taxes	3.791	3.800	3,800	3,800
Sa	Miscellaneous	268	3.500	3.500	3.500
at	Total Water Revenues	1,250,447	1,367,736	1,474,853	1,619,432
R	Net Revenue 3	8,421	54,206	(24,141)	69,366
Alt A - Existing Rates	Retained Earnings (Free Cash)	FY2024	FY2025	FY2026	FY2027
tin	Begin Year	651,887	927.791	300,944	397.888
isi	Transfer In - Net Revenue	8,421	54,206	-	69.366
X	Transfer In - Turnbacks (Op_Ex)	135.904	43.006	46.506	48.725
-	Transfer IN - Capital	20,000	20,000	20,000	20,000
A	Transfer IN - Reserves	50,000	50,000	50,000	50,000
lt.	Transfer IN - Other			110,000	
A	Transfer IN - Turnbacks (Cap_Ex)	63.550	-	-	-
	Transfer Out - Capital Exp.	(444.000)	(295,298)	(83,422)	-
	Transfer Out - Budget Offset	-	(115,000)	(24,141)	-
	Transfer Out - Emergency		(300,000)		
	Transfer Out - Stabilization		(30,000)	(20,000)	(20,000)
	Transfer Out - OPEB		(53.761)	(2,000)	(2,000)
	End Year	1,178,575	300,944	397,888	563,978
	R.E. as % of Budget	95%	23%	27%	36%
	Debt Service Coverage Ratio (Goal -1.0) 6	1.24	2.57	0.37	1.47
	Free Cash needed for DSCR	-	-	24,141	-
	Stabilization Account				
	Begin Year		30,000	8,000	20,043
	Transfer In			20,000	20,000
	Media Replacement		(22,000)	(7.957)	(17,266)
	Other				
	End Year		8,000	20,043	22,777

Notes:

- 1. Direct revenue sources. User charges for FY2025 on are calculated from usage/ customer counts, no collection factor or liens & penalties applied.
- 2. Rate Increase: Uniform percentage increase applied to each component of the rate structure for a given year to meet revenue needs and free cash target.
- 3. Net Revenue= Total Water Revenue Budgeted operating expenses.
- 4. Retained Earnings (Free Cash)
 - A. Begin Year: FY24 value taken from MADOR, FY25 Revised value from Auditor.
 - B. Transfer In Net Revenue: Positive Net revenues are assumed to close out to free cash in the same year see E. for negative net revenues.
 - C. Transfer In Turnbacks (Op_Ex): Total current year unexpended operating budget
 - D. Transfer In Capital: Annual budget item
 - E. Transfer In Reserves: Annual budget item
 - F. Transfer In Other: FY26 value represents reimbursement for LSL inventory
 - G. Transfer In Turnbacks (Cap_Ex): Total current year unexpended capital budget
 - H. Transfer Out Capital Exp.: Approved non-debt capital improvements
 - I. Transfer Out Budget Offset.: FY25 value from budget, FY26 on equal negative net revenues which represent use of free cash to stabilize rates.
 - J. Transfer Out Emergency: Transmission Line
 - K. Transfer Out Stabilization: Account established for Grindstone to pay for media, etc. See below for projected balances.
 - L. Transfer Out OPEB: Annual contribution to OPEB reserve
 - M. End Year Free Cash end year balance. Rate increases are based on meeting the Districts current target value of \$500,000 which represents ~35% of the FY26 budget, setting the target value based upon a percentage of revenue is a recommended best practice that will allow the free cash reserve to keep pace with inflation.
- 5. Debt Service Coverage Ratio. The DSCR is an indicator that indicates that the District has sufficient resources to pay its debt obligations. DSCR equals Net Revenue divided by total debt service, the goal is 1.0 or more, for years with a DSCR <1 the value below under Free Cash needed for DSCR represents the amount of free cash that would have to be transferred out to meet the target value. DSCR is shown for informational purposes and should be revised based upon discussion with banks or other funding agencies.
- 6. Stabilization Account: Account established in FY2025 for medial replacement and other expenses at Grindstone WTP. Media replacement cost annualized based upon 18 mo. replacement cycle, escalated annually at 8.5%.



3. Proforma: Alternative A – Existing Rate Structure

		FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035
	Revenue Rate Increase			10.0%	8.0 %	8.0 %	8.0 %	10.0%	12.5%	6.0 %	8.0 %	8.0 %	8.0%
	User Charges	1,197,000	1,317,436	1,450,170	1,567,609	1,694,173	1,830,954	2,014,964	2,268.377	2,406,116	2,600,372	2,810,310	3.031,700
	Liens	10,094											
0)	SBA Rental	21,293	25,000	25.750	26,523	27.318	28,138	28,982	29,851	30.747	31,669	32,619	33.598
JI.	Solar	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000
ž	Real Estate Taxes	3.791	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800
n	Miscellaneous	268	3.500	3.500	3.500	3.500	3.500	3.500	3.500	3.500	3.500	3.500	3.500
Alt A - Existing Rate Structure	Total Water Revenues	1,250,447	1,367,736	1,501,220	1,619,432	1,746,791	1,884,391	2,069,245	2,323,529	2,462,163	2,657,341	2,868,229	3,090,598
()	Net Revenue	8,421	54,206	2,226	71,535	(1,706)	(48,512)	(123,989)	(57,380)	33,422	(5,929)	(135,940)	(262,073)
tte	Retained Earnings (Free Cash)	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035
20	Begin Year	651,887	927.791	300,944	504,722	672.982	770.345	823.381	744.500	537.151	616,385	690,161	660,485
6	Transfer In - Net Revenue	8,421	54,206	2,226	71.535	-	-	-	-	33.422	-	-	-
č	Transfer In - Turnbacks (Op_Ex)	135.904	43.006	46.506	48,725	51,070	53.547	56,167	58,938	61,871	64.975	68,264	71,749
st	Transfer IN - Capital	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
X	Transfer IN - Reserves	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Ц	Transfer IN - Other			110,000									
	Transfer IN - Turnbacks (Cap_Ex)	63.550	-	-	-	-	-	-	-	-	-	-	-
	Transfer Out - Capital Exp.	(444.000)	(295,298)	(2,954)	-	-	-	(59,058)	(256,908)	(59.058)	(23,270)	-	-
	Transfer Out - Budget Offset	-	(115,000)	-	-	(1,706)	(48.512)	(123.989)	(57.380)	-	(5,929)	(135.940)	(262.073)
	Transfer Out - Emergency		(300,000)										
	Transfer Out - Stabilization		(30,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(25,000)	(30,000)	(30,000)	(30,000)
	Transfer Out - OPEB		(53.761)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)
	End Year	1,178,575	300,944	504,722	672,982	770,345	823,381	744,500	537,151	616,385	690,161	660,485	508,160
	R.E. as % of Budget	95%	23%	34%	43%	44%	43%	34%	23%	25%	26%	22%	15%
	Debt Service Coverage Ratio (Goal -1.0)	1.24	2.57	1.06	1.49	0.99	0.89	0.80	0.92	1.04	0.99	0.89	0.82
	Free Cash needed for DSCR	-	-	-	-	1,706	48.512	123.989	57.380	-	5.929	135.940	262,073
	Stabilization Account												
	Begin Year		30,000	8,000	20,043	22,777	24.044	23.718	21,664	17.736	16.774	18,605	18,042
	Transfer In			20,000	20,000	20,000	20,000	20,000	20,000	25.000	30.000	30,000	30.000
	Media Replacement		(22,000)	(7.957)	(17,266)	(18,734)	(20,326)	(22,054)	(23.928)	(25.962)	(28,169)	(30,563)	(33,161)
	Other												
	End Year		8,000	20,043	22,777	24,044	23,718	21,664	17,736	16,774	18,605	18,042	14,881
	\$4.0												
	Transfer from Free Cash												
	\$3.0												
	Total Revenue (W/ Rate							_	<u> </u>	-	7.5%	10.0%	7.5%
	Increases) \$2.0							10.0%	10.0%	6.0%	7.5%		
	Free Orch (% of Budget)			7.5%	7.5%	7.5%	10.0%	10.0%					
	Free Cash (% of Budget) \$1.0												
	Total Expenses \$0.0	95%	23%	34%	43%	44%	43%	34%	23%	25%	26%	22%	15%
	30.0	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035
		F12024	12025	112020	12027	F12020	12029	F12030	12031	12032	F12033	F12034	112033



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3. Proforma: Alternative B – Modified Rate Structure

		FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035
	Revenue Rate Increase			7.5%	7.5%	7.5%	10.0%	10.0%	10.0%	6.0%	7.5%	10.0%	7.5%
	User Charges	1,197,000	1,317,436	1,455.544	1,568,315	1,689,069	1,861,420	2,050,448	2,259,660	2.399,656	2.584.378	2,848,039	3,050,145
	Liens	10,094	-	=	-	-	-	-					
	SBA Rental	21,293	25,000	25.750	26,523	27.318	28,138	28,982	29,851	30.747	31,669	32,619	33.598
	Solar	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000
	Real Estate Taxes	3.791	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800
	Miscellaneous	268	3.500	3.500	3.500	3.500	3.500	3.500	3.500	3.500	3.500	3.500	3.500
Sa	Total Water Revenues	1,250,447	1,367,736	1,506,594	1,620,138	1,741,687	1,914,858	2,104,730	2,314,811	2,455,703	2,641,348	2,905,958	3,109,043
at	Net Revenue	8,421	54,206	7,600	72,241	(6,810)	(18,046)	(88,505)	(66,097)	26,962	(21,923)	(98,211)	(243,628)
Alt B - Modified Rates	Retained Earnings (Free Cash)	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035
80	Begin Year	651,887	927.791	325,890	531.542	698,289	788,204	869,228	823,212	604.374	674.215	728,894	733.658
Į.	Transfer In - Net Revenue	8,421	54.206	7.600	72,241	-	-	-	-	26,962	-	-	-
ğ	Transfer In - Turnbacks (Op_Ex)	87.273	67.952	43.006	46.506	48,725	51.070	53-547	56,167	58,938	61,871	64.975	68,264
2	Transfer IN - Capital	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
<	Transfer IN - Reserves	50,000	50,000	50,000	50,000	50,000	50,000	50.000	50,000	50,000	50,000	50,000	50,000
m	Transfer IN - Other	-	-	110,000									
t I	Transfer IN - Cap Ex_ Turnbacks	63.550	-										
Al	Transfer Out - Capital Exp.	(444.000)	(295,298)	(2,954)	-	-	-	(59,058)	(256,908)	(59,058)	(23,270)	-	-
	Transfer Out - Budget Offset	-	(115,000)	-	-	(6,810)	(18,046)	(88,505)	(66,097)	-	(21,923)	(98,211)	(243,628)
	Transfer Out - Emergency	-	(300,000)										
	Transfer Out - Stabilization		(30,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(25,000)	(30,000)	(30,000)	(30,000)
	Transfer Out - OPEB		(53.761)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)
	End Year	1,178,575	325,890	531,542	698,289	788,204	869,228	823,212	604.374	674,215	728,894	733,658	596,294
	R.E. as % of Budget	95%	25%	35%	45%	45%	45%	38%	25%	28%	27%	24%	18%
	Debt Service Coverage Ratio (Goal -1.0)	1.24	2.57	1.20	1.50	0.98	0.96	0.86	0.91	1.04	0.98	0.92	0.83
	Free Cash needed for DSCR			-	-	6,810	18,046	88,505	66.097	-	21,923	98,211	243,628
	Stabilization Account												
	Begin Year		30,000	8,000	20,043	22,777	24.044	23.718	21,664	17.736	16,774	18,605	18,042
	Transfer In			20,000	20,000	20,000	20,000	20,000	20,000	25,000	30,000	30,000	30,000
	Media Replacement		(22,000)	(7.957)	(17,266)	(18,734)	(20,326)	(22,054)	(23.928)	(25.962)	(28,169)	(30,563)	(33,161)
	Other												
	End Year		8,000	20,043	22,777	24,044	23,718	21,664	17.736	16,774	18,605	18,042	14,881
	\$4.0												
	Transfer from Free Cash \$3.0											<u>alaa</u>	
	Total Revenue (W/Rate									-	8.0%	8.0%	8.0%
	Increases) \$2.0		-			_		10.0%	12.5%	6.0%	0.0%		
	Erec Cach (% of Budget)		- Contraction	10.0%	8.0%	8.0%	8.0%	10.078					
	s10												
	← Total Expenses \$0.0	95%	25%	35%	45%	45%	45%	38%	25%	28%	27%	24%	18%
	\$0.0	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035
					,								



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3. Proforma: Alternative C – Modified Rate Structure

		FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035
	Revenue Rate Increase			6.0%	7.5%	8.0%	12.0%	12.0%	12.0%	5.0%	8.0%	8.0%	10.0%
ſ	User Charges	1,197,000	1,317,436	1,383,304	1,491,496	1,614,877	1,813,210	2.033.759	2,282,168	2,400,851	2.597,860	2,811,025	3,080,108
	Liens	10,094	-	-	-	-	-	-	-	-	-	-	-
	SBA Rental	21,293	25,000	25.750	26,523	27.318	28,138	28,982	29,851	30.747	31,669	32,619	33.598
	Solar	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000
	Real Estate Taxes	3.791	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3.800
	Miscellaneous	268	3.500	3.500	3.500	3.500	3.500	3.500	3.500	3.500	3.500	3.500	3.500
S	Total Water Revenues	1,250,447	1,367,736	1,383,304	1,543,318	1,667,495	1,866,648	2,088,041	2,337,319	2,456,898	2,654,829	2,868,944	3,139,006
ite	Net Revenue	8,421	54.206	(115,690)	(4.579)	(81,002)	(66,256)	(105,194)	(43,589)	28,157	(8,441)	(135,225)	(213,665)
Alt C - Modified Rates	Retained Earnings (Free Cash)	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035
0a	Begin Year	651,887	927.791	300,944	500,460	560,194	606,237	595,292	543.491	549.512	616,477	672,269	567.480
fi.	Transfer In - Net Revenue	8,421	54,206	-	-	-	-	-	-	28,157	-	-	-
ğ	Transfer In - Turnbacks (Op_Ex)	135.904	43.006	155,206	14.313	77.046	5.310	3.392	(389)	(6,192)	24.234	(9.564)	(12,521)
9	Transfer IN - Capital	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
<	Transfer IN - Reserves	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50.000
Ġ	Transfer IN - Other	-	-	110,000									
t (Transfer IN - Cap Ex_ Turnbacks	63.550	-										
Al	Transfer Out - Capital Exp.	(444.000)	(295,298)	=	-	-	-	-	-	-	-	-	-
	Transfer Out - Budget Offset	-	(115,000)	(115,690)	(4.579)	(81,002)	(66,256)	(105,194)	(43.589)	-	(8,441)	(135,225)	(213,665)
	Transfer Out - Emergency	-	(300,000)										
	Transfer Out - Stabilization	-	(30,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(25,000)	(30,000)	(30,000)	(30,000)
	Transfer Out - OPEB	-	(53.761)	-	-	-	-	-	-	-	-	-	-
	End Year	1,178,575	300,944	500,460	560,194	606,237	595.292	543.491	549,512	616,477	672,269	567,480	381,294
	R.E. as % of Budget	95%	23%	33%	36%	35%	31%	25%	23%	25%	25%	19%	11%
	Debt Service Coverage Ratio (Goal -1.0)	1.24	2.57	(2.03)	0.97	0.73	0.84	0.83	0.94	1.04	0.99	0.89	0.85
	Free Cash needed for DSCR			115,690	4.579	81,002	66,256	105,194	43.589	-	8,441	135,225	213,665
	Stabilization Account												
	Begin Year		30,000	8,000	20,043	22,777	24,044	23,718	21,664	17.736	16,774	18,605	18,042
	Transfer In Media Replacement		(22,000)	20,000 (7.957)	20,000 (17,266)	20,000 (18,734)	20,000 (20,326)	20,000 (22,054)	20,000 (23,928)	25.000 (25.962)	30,000 (28,169)	30.000 (30.563)	30.000 (33.161)
	Other												
	End Year		8,000	20,043	22,777	24,044	23,718	21,664	17,736	16,774	18,605	18,042	14,881
	•												
	\$4.0												
	Transfer from Free Cash \$3.0												
									•	_			
	Total Revenue (W / Rate Increases) \$2.0							-			_	_	_
	Free Cock (% of Budech)												
	Free Cash (% of Budget) \$1.0												
	Total Expenses \$0.0	95%	23%	34%	43%	44%	43%	34%	23%	25%	26%	22%	15%
	Total Expenses \$0.0	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035
		1.170.54	1 12023	112020		1.12020		1.2030	112032	112035	112033	112034	112035



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3. Proforma Development: Projected Rates

RATES: ALT A - EXISTING RATE STRUCTURE

				8.0 %	8.0 %	10.0%	10.0%	12.5%	12.5%	8.0 %	3.0%	5.0%	3.0%
Description	Units	Rate Factor	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35
Base	Each	12	\$25.00	\$27.00	\$29.16	\$32.08	\$35.28	\$39.69	\$44.66	\$48.23	\$49.68	\$52.16	\$53.72
Tier 1	1,000 CF/MO	1.00 X	\$0.1064	\$0.1149	\$0.1241	\$0.1365	\$0.1502	\$0.1689	\$0.1901	\$0.2053	\$0.2114	\$0.2220	\$0.2286
Tier 2	1,001 - 1,500 CF/MO.	1.32 X	\$0.1408	\$0.1521	\$0.1642	\$0.1807	\$0.1987	\$0.2236	\$0.2515	\$0.2716	\$0.2798	\$0.2938	\$0.3026
Tier 3	1,501 - 2,000 CF/MO.	1.53 X	\$0.1632	\$0.1763	\$0.1904	\$0.2094	\$0.2303	\$0.2591	\$0.2915	\$0.3148	\$0.3243	\$0.3405	\$0.3507
Tier 4	>2,000 CF/MO	1.77 X	\$0.1884	\$0.2035	\$0.2197	\$0.2417	\$0.2659	\$0.2991	\$0.3365	\$0.3634	\$0.3744	\$0.3931	\$0.4049
Fire Suppression	Monthly / Account	12	\$25.00	\$27.00	\$29.16	\$32.08	\$35.28	\$39.69	\$44.66	\$48.23	\$49.68	\$52.16	\$53.72
RATES: ALT B - MO	DIFIED BASE AN												
NATES. ALL D - MO			, e Increase	7.5%	7.5%	7.5%	10.0%	10.0%	10.0%	6.0%	7.5%	10.0%	7.5%
Description	Units	Rate Factor	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35
Base_RES	Monthly Base Charge		\$15.00	\$16.13	\$17.33	\$18.63	\$20.50	\$22.55	\$24.80	\$26.29	\$28.26	\$31.09	\$33.42
ALTBC_RES_Tier 1	500 CF/MO	1.00 X	\$0.1224	\$0.1316	\$0.1414	\$0.1521	\$0.1673	\$0.1840	\$0.2024	\$0.2145	\$0.2306	\$0.2537	\$0.2727
ALTBC_RES_Tier 2	500- 1,000 CF/MO.	1.50 X	\$0.1835	\$0.1973	\$0.2121	\$0.2280	\$0.2508	\$0.2758	\$0.3034	\$0.3216	\$0.3457	\$0.3803	\$0.4088
ALTBC_RES_Tier 3	1,000 - 1,500 CF/MO.	1.75 X	\$0.2141	\$0.2302	\$0.2474	\$0.2660	\$0.2926	\$0.3218	\$0.3540	\$0.3753	\$0.4034	\$0.4437	\$0.4770
ALTBC_RES_Tier 4	>1,500 CF/MO	2.00 X	\$0.2447	\$0.2631	\$0.2828	\$0.3040	\$0.3344	\$0.3678	\$0.4046	\$0.4289	\$0.4611	\$0.5072	\$0.5452
Base_NON_RES	Monthly Base Charge		\$35.00	\$37.63	\$40.45	\$43.48	\$47.83	\$52.61	\$57.87	\$61.34	\$65.95	\$72.54	\$77.98
ALTBC_NON_RES_Tier 1	500 CF/MO	1.00 X	\$0.1436	\$0.1544	\$0.1659	\$0.1784	\$0.1962	\$0.2159	\$0.2374	\$0.2517	\$0.2706	\$0.2976	\$0.3199
ALTBC_NON_RES_Tier 2	500- 1,000 CF/MO.	1.00 X	\$0.1436	\$0.1544	\$0.1659	\$0.1784	\$0.1962	\$0.2159	\$0.2374	\$0.2517	\$0.2706	\$0.2976	\$0.3199
ALTBC_NON_RES_Tier 3	1,000 - 1,500 CF/MO.	1.00 X	\$0.1436	\$0.1544	\$0.1659	\$0.1784	\$0.1962	\$0.2159	\$0.2374	\$0.2517	\$0.2706	\$0.2976	\$0.3199
ALTBC_NON_RES_Tier 4	>1,500 CF/MO	1.00 X	\$0.1436	\$0.1544	\$0.1659	\$0.1784	\$0.1962	\$0.2159	\$0.2374	\$0.2517	\$0.2706	\$0.2976	\$0.3199
Fire Suppression 2 in	Monthly Charge	8.0 X	\$50.00	\$53.75	\$57.78	\$62.11	\$68.33	\$75.16	\$82.67	\$87.64	\$94.21	\$103.63	\$111.40
Fire Suppression 4 in	Monthly Charge	25.0 X	\$50.00	\$53.75	\$57.78	\$62.11	\$68.33	\$75.16	\$82.67	\$87.64	\$94.21	\$103.63	\$111.40
Fire Suppression 6 in	Monthly Charge	50.0 X	\$50.00	\$53.75	\$57.78	\$62.11	\$68.33	\$75.16	\$82.67	\$87.64	\$94.21	\$103.63	\$111.40
Fire Suppression 8 in	Monthly Charge	80.0 X	\$80.00	\$86.00	\$92.45	\$99.38	\$109.32	\$120.25	\$132.28	\$140.22	\$150.73	\$165.81	\$178.24
Fire Suppression 10 in	Monthly Charge	115.0 X	\$50.00	\$53.75	\$57.78	\$62.11	\$68.33	\$75.16	\$82.67	\$87.64	\$94.21	\$103.63	\$111.40



3. Proforma Development: Projected Rates

RATES: ALT C - MODIFIED BASE AND TIERS

		Rat	e Increase	7.5%	7.5%	7.5%	10.0%	12.0%	12.0%	7.5%	7.5%	7.5%	5.0%
Description	Units	Rate Factor	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35
Base_RES	Monthly Base Charge		\$15.00	\$16.13	\$17.33	\$18.63	\$20.50	\$22.96	\$25.71	\$27.64	\$29.71	\$31.94	\$33.54
ALTBC_RES_Tier 1	500 CF/MO	1.00 X	\$0.0958	\$0.1029	\$0.1107	\$0.1190	\$0.1309	\$0.1466	\$0.1641	\$0.1765	\$0.1897	\$0.2039	\$0.2141
ALTBC_RES_Tier 2	500- 1,000 CF/MO.	1.75 X	\$0.1676	\$0.1801	\$0.1937	\$0.2082	\$0.2290	\$0.2565	\$0.2873	\$0.3088	\$0.3320	\$0.3569	\$0.3747
ALTBC_RES_Tier 3	1,000 - 1,500 CF/MO.	2.00 X	\$0.1915	\$0.2059	\$0.2213	\$0.2379	\$0.2617	\$0.2931	\$0.3283	\$0.3529	\$0.3794	\$0.4078	\$0.4282
ALTBC_RES_Tier 4	>1,500 CF/MO	2.50 X	\$0.2394	\$0.2574	\$0.2767	\$0.2974	\$0.3271	\$0.3664	\$0.4104	\$0.4412	\$0.4742	\$0.5098	\$0.5353
Base_NON_RES	Monthly Base Charge		\$50.00	\$53.75	\$57.78	\$62.11	\$68.33	\$76.53	\$85.71	\$92.14	\$99.05	\$106.48	\$111.80
ALTBC_NON_RES_Tier 1	500 CF/MO	1.00 X	\$0.1819	\$0.1956	\$0.2103	\$0.2260	\$0.2486	\$0.2785	\$0.3119	\$0.3353	\$0.3604	\$0.3875	\$0.4068
ALTBC_NON_RES_Tier 2	500- 1,000 CF/MO.	1.00 X	\$0.1819	\$0.1956	\$0.2103	\$0.2260	\$0.2486	\$0.2785	\$0.3119	\$0.3353	\$0.3604	\$0.3875	\$0.4068
ALTBC_NON_RES_Tier 3	1,000 - 1,500 CF/MO.	1.00 X	\$0.1819	\$0.1956	\$0.2103	\$0.2260	\$0.2486	\$0.2785	\$0.3119	\$0.3353	\$0.3604	\$0.3875	\$0.4068
ALTBC_NON_RES_Tier 4	>1,500 CF/MO	1.00 X	\$0.1819	\$0.1956	\$0.2103	\$0.2260	\$0.2486	\$0.2785	\$0.3119	\$0.3353	\$0.3604	\$0.3875	\$0.4068
Fire Suppression 2 in	Monthly Charge	8.0 X	\$50.00	\$53.75	\$57.78	\$62.11	\$68.33	\$76.53	\$85.71	\$92.14	\$99.05	\$106.48	\$111.80
Fire Suppression 4 in	Monthly Charge	25.0 X	\$50.00	\$53.75	\$57.78	\$62.11	\$68.33	\$76.53	\$85.71	\$92.14	\$99.05	\$106.48	\$111.80
Fire Suppression 6 in	Monthly Charge	50.0 X	\$50.00	\$53.75	\$57.78	\$62.11	\$68.33	\$76.53	\$85.71	\$92.14	\$99.05	\$106.48	\$111.80
Fire Suppression 8 in	Monthly Charge	80.0 X	\$80.00	\$86.00	\$92.45	\$99.38	\$109.32	\$122.44	\$137.13	\$147.42	\$158.48	\$170.36	\$178.88
Fire Suppression 10 in	Monthly Charge	115.0 X	\$115.00	\$123.63	\$132.90	\$142.86	\$157.15	\$176.01	\$197.13	\$211.91	\$227.81	\$244.89	\$257.14

Notes:

1. Starting point for Alt B & Alt C is FY24 usage and were designed to achieve the same user charge revenue. Rates for FY25 are same as FY24.



3. Proforma Evaluation: Customer Impacts





Notes:

- 1. Annual Costs are based upon FY25 rates (same as FY24 rates) which was used as a starting point for alternative rate design.
- 2. Usage based upon the month of June 2024 (peak usage)
- 3. Cursory review of high usage accounts show combination of single-family homes with irrigation and pools and multi-unit residential



High usage – 200 GPD ~ 90% use same or less

Typ. usage – 100 GPD ~50% use same or less

Low usage – 50 GPD 20% use same or less



3. Proforma Evaluation: Customer Impacts



THE MEADOWS

621,181	FY24 Total
51,765	CF/ Mo. (Avg.)
12,907	GPD (Avg.)
1	No. Accounts

VANGARDEN CANNABIS

455,201	FY24 Total
37,933	CF/ Mo. (Avg.)
9,458	GPD (Avg.)
2	No. Accounts

ELLER'S RESTAURANT 64,313 FY24 Total 5,359 CF/ Mo. (Avg.) 1,336 GPD (Avg.) 1 No. Accounts

YOU INC.

53,570	FY24 Total
4,464	CF/ Mo. (Avg.)
1,113	GPD (Avg.)
1	No. Accounts

BP LEICESTER FEE OWNER

43,651	FY24 Total
3,638	CF/ Mo. (Avg.)
907	GPD (Avg.)
2	No. Accounts

Notes:

- 1. Usages based upon total metered usage for FY24
- 2. The Meadows usage is ~15 X BP Leicester's usage which supports the application of a flat usage charge versus tiered.



3. Proforma Evaluation: Customer Impacts

FY25	Rates	Customers where Alt A is the least										
Custo	omer Class	Avg. Usage	Max. Usage	Total No. Accts.	No. Accts.	As % of Total	1	Max Bill		Avg Bill	Tot	al Revenue Alt A
1	RESIDENTIAL	435	4,507	1,157	156	13 <mark>%</mark>	\$	756	\$	72	\$	83,802
2	COMMERCIAL	7.635	74.749	10	9	90%	\$	13,989	\$	1,438	\$	14,384
9	DAY CARE	705	1,357	2	2	100%	\$	182	\$	106	\$	212
10	MUNICIPAL	13	50	9	9	100%	\$	30	\$	26	\$	237
14	SERVICE STATION	170	208	2	2	100%	\$	47	\$	43	\$	86
15	RETAIL	375	2,938	49	48	98%	\$	460	\$	69	\$	3.405
16	RESTAURANT	2,216	6,156	3	2	67%	\$	1,066	\$	390	\$	1,169
18	RESIDENTAL INST.	17,224	29.785	2	0	0%	\$	5.518	\$	3,152	\$	6,303
19	RECREATIONAL	662	1,307	3	3	100%	\$	175	\$	99	\$	297
Grand	Total			1,237	231							109,896

FY25 Rates					Customers where Alt B is the least								
Customer Class		Avg. Usage	Max. Usage	Total No. Accts.	No. Accts.	As % of Total	Max Bill		Avg Bill		Total Revenue Alt B		
1	RESIDENTIAL	435	4.507	1,157	24	2%	\$	843	\$	70	\$	87,282	
2	COMMERCIAL	7.635	74.749	10	1	10%	\$	11,940	\$	1,255	\$	11,314	
9	DAY CARE	705	1,357	2	0	0%	\$	256	\$	152	\$	272	
10	MUNICIPAL	13	50	9	0	0%	\$	48	\$	42	\$	331	
14	SERVICE STATION	170	208	2	0	0%	\$	73	\$	67	\$	119	
15	RETAIL	375	2,938	49	1	2%	\$	508	\$	100	\$	4,353	
16	RESTAURANT	2,216	6,156	3	1	33%	\$	1,020	\$	393	\$	1,060	
18	RESIDENTAL INST.	17,224	29.785	2	2	100%	\$	4.782	\$	2,782	\$	5.017	
19	RECREATIONAL	662	1,307	3	0	0%	\$	248	\$	145	\$	390	
Grand Total 1,237				29	2%					\$	110,137		

FY25	Rates	Customers where Alt C is the least										
Customer Class		Avg. Usage	Max. Usage	Total No. Accts.	No. Accts.	As % of Total	Max Bill		Avg Bill		Total Revenue Alt C	
1	RESIDENTIAL	435	4,507	1,157	1,001	87%	\$	962	\$	75	\$	75,130
2	COMMERCIAL	7.635	74.749	10	0	0%	\$	13,650	\$	1,131	\$	14,391
9	DAY CARE	705	1,357	2	0	0%	\$	297	\$	136	\$	356
10	MUNICIPAL	13	50	9	0	0%	\$	59	\$	37	\$	471
14	SERVICE STATION	170	208	2	0	0%	\$	88	\$	59	\$	162
15	RETAIL	375	2,938	49	0	0%	\$	585	\$	89	\$	5.792
16	RESTAURANT	2,216	6,156	3	0	0%	\$	1,170	\$	353	\$	1,360
18	RESIDENTAL INST.	17,224	29.785	2	0	0%	\$	5.469	\$	2,508	\$	6,367
19	RECREATIONAL	662	1,307	3	0	0%	\$	288	\$	130	\$	512
Grand Total 1,237					1,001	81%					\$	104,541

Notes:

- 1. Usages based upon total metered usage for month of June 2024
- 2. Least cost based upon selecting which alternative is the least cost for each bill in the month. Averages based upon **ALL** customers bill for each alternative.



1/16/2025