

Town of

Firestone

**Water Financial Plan, Cost of Service,
Rate and Fee Study**

Final Report / October 13, 2023

This page was intentionally left blank.



October 13, 2023

AJ Krieger
Town Manager
Town of Firestone
9950 Park Ave
Firestone, CO 80504

Subject: Updated Water Financial Plan, Cost of Service, Rate and Fee Study

Dear Mr. Krieger,

Raftelis is pleased to provide this executive summary report highlighting the key findings of the water financial plan, cost of service, and rate study Raftelis has completed for the Town of Firestone (Town).

The primary purpose of this study was to ensure the financial sustainability of the water utility and ensure that rates and fees recovered costs proportionately across all customer classes. This study includes the following for the water utility:

- 10-year financial plan cash analysis to determine the level of revenues to meet annual expenditures
- Cost of service analysis to allocate costs proportionately to customer classes
- Rate design based on the pricing objectives identified by Board of Trustees

It has been a pleasure working with you, and we thank you and the Town staff for the support provided during this study.

Sincerely,

A handwritten signature in black ink that reads 'Todd Cristiano'.

Todd Cristiano
Senior Manager

Table of Contents

Introduction.....	5
Assumptions.....	5
Study Findings and Recommendations.....	6
<i>Financial Plan</i>	6
<i>Cost of Service Analysis</i>	8
Typical Monthly Bills.....	11
Reliance on Town Provided Data.....	12

List of Tables

Table 1: Water Operating Fund Summary	7
Table 2: Comparison of Test Year Water Cost of Service to Revenue Under Existing Rates	9
Table 3: Comparison of Test Year Water Cost of Service to Revenue Under Existing Rates	10
Table 4: Comparison of Test Year 2024 Water Rates Under the Recommended Rate Structure Alternative to Existing Rates	10

List of Figures

Figure 1: CWCWD Pass-Through Increase Projections.....	8
Figure 2: Water Cost of Service Process.....	8
Figure 3: Typical Monthly Residential Water Bills Under Proposed Rates.....	11

List of Appendices

Appendix A: Water Utility Financial Plan, Cost of Service, and Rate Design Analysis

Introduction

The Town of Firestone (Town) provides service to approximately 4,400 water customers. The Town is financially self-sufficient, with funding for capital and operating requirements derived primarily from rate revenues and system development fees. The Town authorized this study to ensure that an adequate level of income from water rates is maintained to finance daily operations, tap fees are sufficient to fund growth-related capital, and that rates are fair and aligned with the Town’s goals and community values. This study included the development of:

- A water financial plan for the 10-year study period, 2023 through 2032.
- A cost of service analysis to determine the cost to provide service to each customer class
- Rate design to reflect the pricing objectives identified by the Board of Trustees

Raftelis used industry standard methodologies supported by the American Water Works Association (AWWA) *Principles of Water Rates, Fees, and Charges* M1 manual.

Appendix A details the development of the water financial plan, cost of service analysis, and rate design.

Assumptions

This study is based on numerous assumptions. Changes in these assumptions could materially affect the study findings. Raftelis incorporated the following key assumptions into the study:

- The test year, or the year new rates will be in effect, is 2024
- The study period forecast is for 2024 through 2032¹
- The Town provided growth projections for the study period based on the anticipated number of new building permits
 - 2024: 585
 - 2025: 955
 - 2026: 1,030
 - 2027: 1,055
 - 2028: 1,054
- Usage per account will be constant based on historical data. Residential water usage per account is approximately 9,500 gallons per month. Residential customers represent a majority of the utilities’ customers
- Costs will change as follows:
 - Capital costs provided by the Town include an inflation allowance, and sufficient contingency has been included for most projects
 - Most operation and maintenance (O&M) expenses will increase by 4% through 2025 and 3.5% from 2026 to 2032.
 - Central Weld Conservation Water District (CWCWD) anticipates rate increases of 8% throughout the study period
- Proposed minimum reserve levels are as follows²:
 - Operating fund: 90 days annual O&M

¹ The cash flow tables include 2023 as the base year, or the year in which the model was developed, and is based on a combination of budgetary information and estimated values. The study forecast is for 2024 through 2032

² The Town’s current reserve policy is 25% of General Fund operating expenditures. The Water Fund does not have a specific reserve policy. Raftelis proposes an operating reserve and a capital reserve.

- Capital fund: equal to 1-year depreciation expense, plus additional reserve for the Saint Vrain Water Treatment Plant (SVWTP) when it comes online in 2027
- Debt service
 - Coverage requirement is 1.25x debt service
 - Bond terms: 4.25% interest rate, 30-year term, January 1 issue date

Study Findings and Recommendations

FINANCIAL PLAN

Water Action Plan Fund

The Water Action Plan fund³ tracks financial activities associated with funding growth-related capital projects, water rights purchases, and payments on proposed debt service. Revenue from tap fees, cash in lieu water sales, native water credit fees, carry-over reserves, projected loans, and as-needed transfers from the operating fund provide sufficient funding for the growth-related capital improvement program and payments on proposed debt service. The growth-related capital improvement program totals \$130.9 million. It is funded by \$76.8 million in proposed loans in throughout the study period, and the remainder financed by tap fees, other growth related funds, transfers from the operating fund, and capital reserves.

Operating Fund

The operating fund tracks activities associated with operating and maintaining the water utility on a daily basis. Operating revenues primarily consist of rate revenue, with a small portion from miscellaneous sources. Revenue from existing rates is projected to increase from \$6.6 million in 2023 to \$12.6 million in 2032 based on the growth in customer accounts. In addition, the Town collects pass-through revenue that is associated with CWCWD costs for both CWCWD tap fees and CWCWD treated water purchase rate increases. More detail on CWCWD pass-through charges is detailed in the “Projected CWCWD Revenue Adjustments” section below.

Expenditures include operation and maintenance expenses (O&M) which consist of administrative, collection, and distribution costs to run the utility and payments to CWCWD for treated water purchases. O&M is projected to increase from \$6.9 million in 2023 to \$11.6 million in 2032. Most of this increase is anticipated from increasing water treatment costs from CWCWD and O&M associated with SVWTP. Capital repair and replacement projects are necessary for maintaining the current level of service in the system and are not associated with meeting growth-related requirements. Capital R&R costs average \$2.0 annually. Two large Capital R&R projects, the CWCWD Flow Control/Meter Vaults and Non-Potable Irrigation System Infrastructure require borrowing \$4.4 million from the Water Action Plan fund balance. However, this amount is paid back in following years, as transfers to the Water Action Plan fund must meet any intermittent cash flow deficiencies. No transfers to the Water Action Plan fund to maintain a positive cash flow balance are anticipated until 2027.

Reserves

The Town’s current reserve policy is specific to the General Fund and requires a minimum fund balance of 25% of annual General Fund operating expenditures. There is no reserve target specific to the Water Fund. Raftelis proposes an operating reserve balance equal to 90 days of O&M. This reserve tracks and adjusts based on changes in O&M. The primary goal of the operating reserve is to absorb cash flow fluctuations due to the variability in monthly expenditures and the inflow of revenues. Raftelis proposes transitioning to a target operating reserve over ten years from \$1.4 million in 2023 to \$1.8 million in 2032.

³ Capital repair and replacement projects are funded through rates in the operating fund.

In addition, Raftelis recommends the Town maintain a capital reserve equal to 1-years' depreciation expense that tracks and adjusts based on changes in annual depreciation on capital assets. Like the operating reserve, the capital reserve is to be used to offset fluctuations in the capital program due to unanticipated cost increases or emergencies. Raftelis proposes transitioning to a target capital reserve over ten years from \$820,000 in 2023 to \$1.9 million in 2032. Combined, these reserves strengthen the utility's financial health and ability to weather unexpected operating costs or capital interruptions. Maintaining adequate funds also prevents the utility from reactively having to adjust rates in response to unforeseen events.

Indicated Revenue Adjustments

Projected water sales revenue under existing rates is insufficient to meet annual operation and maintenance expense (O&M), payments on existing debt service, capital repair and replacement costs, proposed target operating reserves, and debt service coverage targets. Annual revenue adjustments of 5% are required to meet the expenditures of the operating fund, satisfy reserves and meet debt service coverage requirements. Appendix A contains the detailed financial plan cash flow analysis tables. Table 1 below summarizes the operating fund results.

Table 1: Water Operating Fund Summary⁴

Description	Budget	Projected								
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Beginning Fund Balance	\$3.69	\$3.20	\$2.79	\$4.39	\$7.17	\$7.24	\$9.17	\$12.42	\$16.03	\$20.73
Sources of Funds	7.66	13.67	10.33	12.07	14.10	15.69	17.63	18.63	20.39	22.26
Uses of Funds	8.15	14.08	8.74	9.29	14.03	13.76	14.38	15.02	15.69	16.41
<i>Annual Surplus/(Deficiency)</i>	<i>(0.49)</i>	<i>(0.41)</i>	<i>1.60</i>	<i>2.78</i>	<i>0.07</i>	<i>1.93</i>	<i>3.26</i>	<i>3.61</i>	<i>4.70</i>	<i>5.85</i>
Ending Fund Balance	3.20	2.79	4.39	7.17	7.24	9.17	12.42	16.03	20.73	26.58
Target Reserve (Op + Capital)	2.20	2.37	2.35	2.42	3.19	3.23	3.34	3.47	3.60	3.73
<i>Over/(Under) Target</i>	<i>(0.49)</i>	<i>(0.41)</i>	<i>1.60</i>	<i>2.78</i>	<i>0.07</i>	<i>1.93</i>	<i>3.26</i>	<i>3.61</i>	<i>4.70</i>	<i>5.85</i>
Annual Revenue Adjustment	-%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
DSC Including Growth Fees	3.95	1.31	2.02	1.75	1.64	1.83	1.61	1.27	1.29	1.33
DSC Excluding Growth Fees	0.20	0.31	0.40	0.50	0.57	0.72	0.86	0.89	0.99	1.09

Projected CWCWD Revenue Adjustments

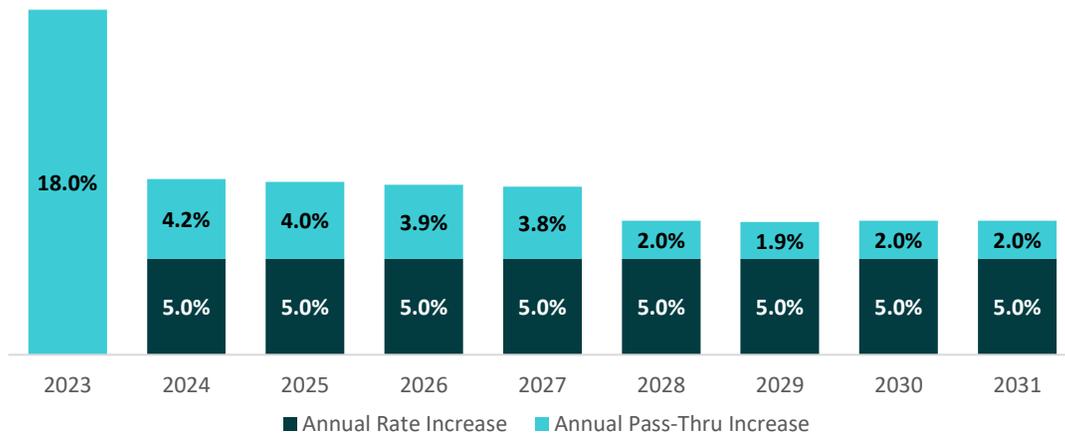
The Town adjusts rates to recover incremental increases from CWCWD. CWCWD anticipates significant increases during the study period. These increases are a result of the change in the rate structure used to assess charges and an overall increase in operating costs. These incremental annual changes are shown in Figure 1.

The Town purchases treated water from Central Weld Conservation Water District. In 2019, CWCWD notified the Town that water rates would be increasing, after remaining flat since 1991. Currently, the Town pays a wholesale base service charge that includes a basic water allotment per tap, and then a volumetric charge for every kilogallon above the systemwide allotment. CWCWD has indicated that the included water allotment will taper down from 4,000 gallons per tap equivalent in 2023 to 0 gallons per tap equivalent in 2027, effectively assessing all usage at the volumetric rate. Simultaneously, the rate of the monthly service charge and the volumetric rate charged per kilogallon will be increasing. Raftelis has projected both the service charge and volumetric charge increasing at 8% annually while the monthly allotment simultaneously decreases through 2027.

The Town will recover the increases in treatment costs from CWCWD through an additional pass-through rate increase. The projections are shown in Figure 1 below, but will be determined annually depending on the actual increases. The relative rate increase is lower than 8%, as it is spread as a percentage across Firestone's rate base, rather than as a percentage of CWCWD costs.

⁴ shown in \$ millions

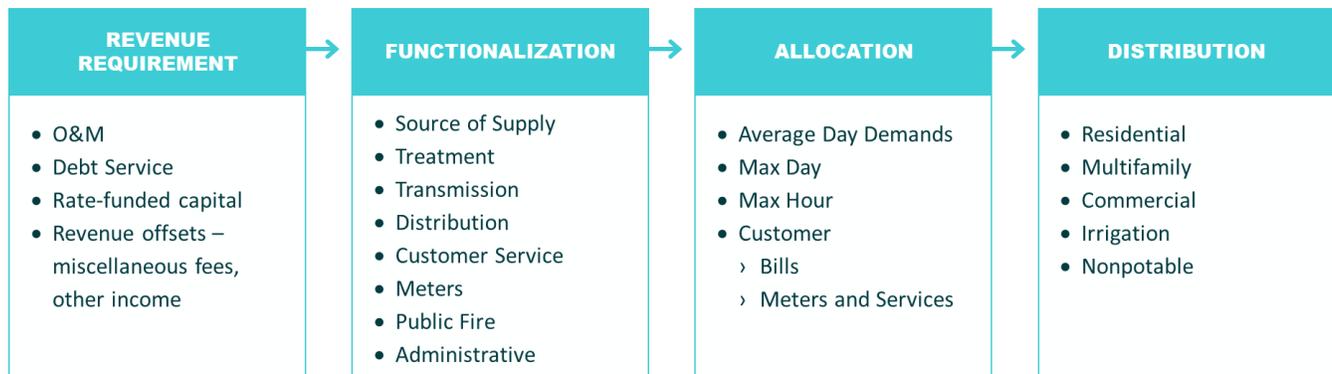
Figure 1: CWCWD Pass-Through Increase Projections



COST OF SERVICE ANALYSIS

Raftelis completed this comprehensive cost of service analysis by standard methods supported by the American Water Works Association (AWWA) in its M1 manual, *Principles of Water Rates, Fees, and Charges*. This analysis determines the cost of providing water service to each customer class and guides the design of the proposed rates. Figure 2 below illustrates the cost allocation process for the water utility.

Figure 2: Water Cost of Service Process



The cost of service process is described in further detail below.

1. **Revenue Requirement.** Determine the level of revenue required from rates. The revenue requirement includes expenditures in the operating fund: O&M, capital repair and replacement costs, reserves, and changes in fund balance.
2. **Cost functionalization.** Assign the detailed costs in the revenue requirements to functional areas in the system. Functional areas include water treatment, transmission and distribution, storage, source of supply, pump stations, meters and services, and billing and administrative costs. Costs are functionalized based on

the facility that has the most influence on that expense. For example, chemical costs are most influenced by treatment processes so those costs would be allocated to the water treatment category.

3. ***Demand parameters and customer characteristics.*** Functional costs can be allocated to demand parameters and customer characteristics. Demand parameters include average day demands and peak demands. Customer characteristics include the number of accounts by meter size and bills. Each facility is designed to meet specific design requirements in the system. Water treatment facilities are designed and operated to meet maximum day demands. As a result, a portion of water treatment costs would be allocated to the average day demand category and a portion to the peak demand category.
4. ***Units of service.*** The units of service capture the demand and customer characteristics for each customer class. These characteristics include average day demand, peak demand, number of accounts by meter size, and the number of bills.
5. ***Distribution of costs to customer classes.*** Because customer classes are defined by their demand parameters (average day and peak demands) and the account makeup (meters by meter sizes), the allocated costs can be proportionately distributed to each class based on their specific demand and customer characteristics. For example, if the residential customer class represents 50% of total peak day demands, they would be allocated 50% of the allocated peak day demand costs.

The cost of service tables are included in Appendix A. Table 2 compares the cost of service by customer class to revenue under existing rates.

Table 2: Comparison of Test Year Water Cost of Service to Revenue Under Existing Rates

Customer Class	2024 Cost of Service	2024 Revenue at Existing Rates	Change - \$
Residential	\$5,709,863	\$5,331,416	\$378,448
Commercial/Industrial	683,070	674,539	8,530
Mobile Home	296,118	304,185	(8,066)
Multifamily	199,461	271,006	(71,546)
Irrigation	560,967	513,596	47,371
Total System	\$7,449,480	\$7,094,743	\$354,737

Town staff provided direction that the cost of service for each class should be adjusted to keep cost recovery at least equal to existing rates. After this policy adjustment, the test year cost of service rates are shown below in Table 3.

Table 3: Comparison of Test Year Water Cost of Service to Revenue Under Existing Rates

Customer Class	2024 Cost	Policy	Revenue Under		
	of Service	Adjustment	Adjusted COS	Existing Rates	Change - \$
Residential	\$5,709,863	-\$79,612	\$5,630,252	\$5,331,416	\$298,836
Commercial/Industrial	683,070	-	683,070	674,539	8,530
Mobile Home	296,118	8,066	304,185	304,185	-
Multifamily	199,461	71,546	271,006	271,006	-
Irrigation	560,967	-	560,967	513,596	47,371
Total System	\$7,449,480	\$0	\$7,449,480	\$7,094,743	\$354,737

Rate Structure Development

Raftelis worked with Town Staff and the Board to develop several rate structures and alternatives, incorporating the results of the Cost of Service study.

Recommended 2024 Rates

The rate structure alternatives presented to the Board are based on the industry-accepted cost of service principles. This means that each rate structure developed below recovers the cost to provide service for each customer class. Each alternative is based on a monthly fixed charge and a volume rate. These two components are adjusted in each scenario to incorporate the pricing objectives identified by the Board. It is important to note that the selection of these rate structures involved quantitative analysis and qualitative review. In other words, there is no ‘silver bullet’ rate structure. The proposed structures include a monthly fixed fee (base rate) and a volume rate. The monthly base rate is assessed by meter size for all classes, and is held at the same rate as the 2023 service charge. The monthly base rate includes billing, meter and services costs, and the cost of the CWCWD service charge to be passed through to customers. Billing, meter and services costs recovers the cost to read meters, prepare bills, fund customer service and customer field service operations. The CWCWD service charge recovers the base rate charged by CWCWD for treated water purchases. For a 5/8” meter, the total service charge is \$39.40. These components increase as the size of the meter increases. Table 4 summarizes the recommended 2024 rates which include the necessary revenue adjustment required to meet the water enterprise financial goals.

Table 4: Comparison of Test Year 2024 Water Rates Under the Recommended Rate Structure Alternative to Existing Rates

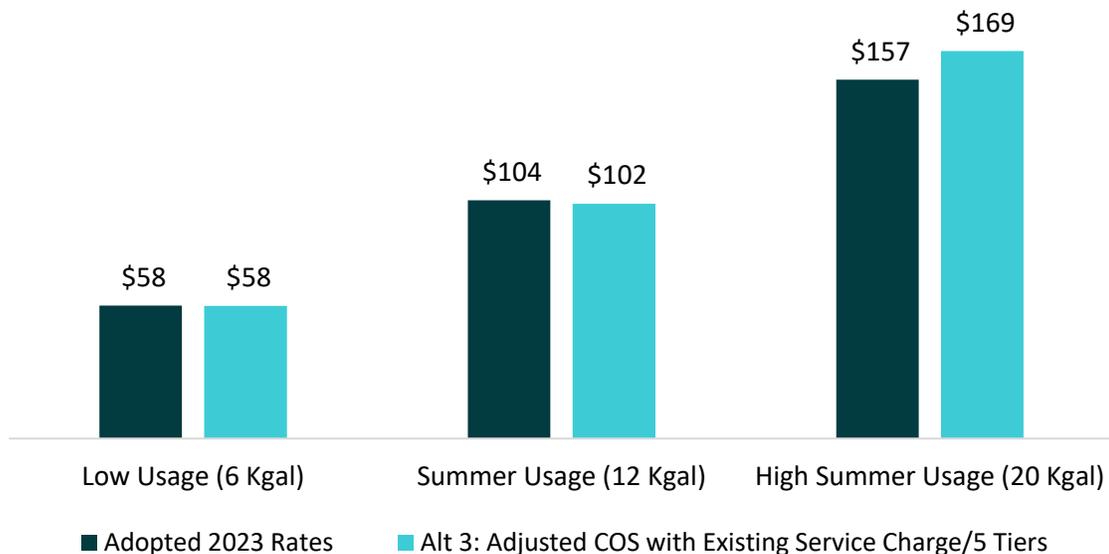
Meter Size	Service Charge		Change - \$
	Existing	Proposed	
5/8"	\$39.40	\$39.40	\$0.00
¾"	60.41	60.41	-
1"	99.78	99.78	-
1 ½"	196.92	196.92	-
2"	317.71	317.71	-
3"	593.40	593.40	-
6"	2,346.30	2,346.30	-

Volume Charge			
Existing		Proposed	
Threshold (gal)	\$ per kgal	Threshold (gal)	\$ per kgal
Residential		Residential	
0 – 5,000	\$3.73	0 – 5,000	\$3.71
5,000 – 20,000	\$6.57	5,000 – 10,000	\$5.56
20,001 - 40,000	\$10.52	10,001 - 20,000	\$8.34
Above 40,000	\$13.14	20,001 - 30,000	\$12.50
		>30,000	\$18.75
Comm & Ind	\$5.79	Comm & Ind	\$5.89
Mobile Home	\$7.09	Mobile Home	\$7.09
Irrigation	\$8.80	Irrigation	\$9.82
Multifamily	\$5.78	Multifamily	\$5.78

Typical Monthly Bills

Figure 3 shows a monthly bill for a typical residential customer under existing and proposed rate structure alternative. The proposed rates used in this comparison are based on 2024 cost of service rates. This chart compares a customer with essential water usage, average water usage, and high or summer water usage.

Figure 3: Typical Monthly Residential Water Bills Under Proposed Rates



Reliance on Town Provided Data

During this project, the Town (and/or its representatives) provided Raftelis with a variety of technical information, including cost and revenue data. Raftelis did not independently assess or test for the accuracy of such data – historic or projected. Raftelis has relied on this data in the formulation of our findings and subsequent recommendations, as well as in the preparation of this report. Raftelis also relied on cost allocation data provided by the Town needed to complete the cost-of-service analysis.

There are often differences between actual and projected data. Some of the assumptions used for projections in this report will not be realized, and unanticipated events and circumstances may occur. Therefore, there are likely to be differences between the data or results projected in this report and actual results achieved, and those differences may be material. As a result, Raftelis takes no responsibility for the accuracy of data or projections provided by or prepared on behalf of the Town, nor do we have any responsibility for updating this report for events occurring after the date of this report.

APPENDIX A:
**WATER UTILITY
FINANCIAL PLAN**

Line No.	Description		Actual	Budget	Projected								
			2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
			\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Sources of Funds													
Service Charge Revenue													
1	Total Revenue from Existing Water Rates	RateRev_Projected	5,637,946	6,626,829	7,094,743	7,927,340	8,811,946	9,678,856	10,580,017	11,285,261	11,756,989	12,174,093	12,568,477
2	Additional Water Sales Revenue from Rate Increases	CF_2	-	-	354,737	812,552	1,388,983	2,085,854	2,923,064	3,838,068	3,998,501	4,956,078	6,000,888
3	Total Water Rate Revenue		5,637,946	6,626,829	7,449,480	8,739,892	10,200,929	11,764,711	13,503,080	15,123,329	15,755,490	17,130,171	18,569,365
4	Tap Fees - CWCWD @\$15k	CF_1	1,126,400	710,400	1,184,000	592,000	444,000	444,000	15%	15%	12%	4%	9%
5	Hydrant Rentals	Misc_Rev	16,000	18,000	18,500	19,100	19,700	20,300	20,900	21,500	22,100	22,800	23,500
6	Reconnection and Service Fees	Misc_Rev	42,000	36,000	37,100	38,200	39,300	40,500	41,700	43,000	44,300	45,600	47,000
7	Water Leases	Misc_Rev	15,000	20,000	20,600	21,200	21,800	22,500	23,200	23,900	24,600	25,300	26,100
8	Meter and Yoke	Misc_Rev	85,000	199,500	205,500	211,700	218,100	224,600	231,300	238,200	245,300	252,700	260,300
9	Intergovernmental	Misc_Rev	20,000	22,000	22,700	23,400	24,100	24,800	25,500	26,300	27,100	27,900	28,700
10	Transfer from Water Action Plan Subfund	CF_2	-	-	4,400,000	-	-	-	-	-	-	-	-
11	Transfer from Expansion Subfund	CF_2	-	-	-	-	-	-	-	-	-	-	-
12	Revenue Bond Proceeds - R&R	Dashboard	-	-	-	-	-	-	-	-	-	-	-
13	Investment Income	CF_2	63,900	29,600	21,100	28,200	48,800	60,800	71,600	96,000	128,700	168,500	219,400
14	CWCWD Incremental Increase Pass Through	CF_2	-	-	310,389	661,278	1,056,046	1,499,757	1,770,199	2,062,295	2,377,778	2,718,521	3,086,546
15	Total Sources		7,006,246	7,662,329	13,669,368	10,334,970	12,072,775	14,101,967	15,687,479	17,634,524	18,625,368	20,391,492	22,260,910
Uses of Funds													
Operations and Maintenance													
17	Existing Operations and Maintenance	OM	4,718,658	6,121,131	6,642,024	7,195,222	7,772,770	8,405,535	8,859,791	9,342,446	9,855,480	10,401,025	10,981,370
18	CWCWD Pass Through - New Taps @ \$12k	CF_1	-	566,400	900,000	472,000	354,000	354,000	-	-	-	-	-
19	St. Vrain WTP O&M	OM	-	236,956	251,294	281,659	335,132	391,888	455,558	511,537	556,760	600,951	645,899
20	Total Operations and Maintenance		4,718,658	6,924,487	7,793,318	7,948,881	8,461,902	9,151,423	9,315,349	9,853,982	10,412,241	11,001,977	11,627,269
21	PAYGO Capital Projects	CIP	1,532,636	1,223,144	6,286,668	786,258	833,051	882,464	1,744,655	1,823,164	1,905,207	1,990,941	2,080,533
Debt Service													
22	Proposed - R&R Bonds	CF_2	-	-	-	-	-	-	-	-	-	-	-
23	Debt Service Reserve and Issuance Expense	CF_2	-	-	-	-	-	-	-	-	-	-	-
24	Total Debt Service		-	-	-	-	-	-	-	-	-	-	-
25	Transfer To Water Action Plan Subfund	CF_2	-	-	-	-	-	4,000,000	2,700,000	2,700,000	2,700,000	2,700,000	2,700,000
26	Transfer To Expansion Subfund	CF_2	-	-	-	-	-	-	-	-	-	-	-
27	Total Uses		6,251,294	8,147,631	14,079,986	8,735,139	9,294,954	14,033,887	13,760,004	14,377,146	15,017,447	15,692,918	16,407,802
28	Annual Surplus (Deficiency)		754,953	(485,302)	(410,618)	1,599,832	2,777,821	68,080	1,927,475	3,257,378	3,607,921	4,698,575	5,853,108
29	Beginning Balance		6,652,676	3,690,206	3,204,904	2,794,286	4,394,118	7,171,939	7,240,019	9,167,494	12,424,872	16,032,793	20,731,368
30	Ending Balance		7,407,629	3,204,904	2,794,286	4,394,118	7,171,939	7,240,019	9,167,494	12,424,872	16,032,793	20,731,368	26,584,476
Target Reserves													
31	Operating (25% of O&M)	Assumptions	1,180,000	1,380,000	1,530,000	1,480,000	1,520,000	1,590,000	1,580,000	1,640,000	1,720,000	1,800,000	1,880,000
32	Capital Reserve (1-year Depr Expense)	Assumptions	795,000	820,000	840,000	870,000	900,000	1,596,667	1,646,667	1,697,267	1,748,485	1,800,339	1,852,849
33	Total Target Reserves		1,975,000	2,200,000	2,370,000	2,350,000	2,420,000	3,186,667	3,226,667	3,337,267	3,468,485	3,600,339	3,732,849
34	Unrestricted Funds		5,432,629	1,004,904	424,286	2,044,118	4,751,939	4,053,353	5,940,828	9,087,606	12,564,309	17,131,029	22,851,627
35	Annual Water Service Revenue Increase			0.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
36	Cumulative Revenue Increase			0.0%	5.0%	10.3%	15.8%	21.6%	27.6%	34.0%	40.7%	47.7%	55.1%

Line No.	Description		Actual	Budget	Projected								
			2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Sources of Funds													
1	Transfer From Operating Subfund	Dashboard	-	-	-	-	-	4,000,000	2,700,000	2,700,000	2,700,000	2,700,000	2,700,000
2	System Development Fee (SVWA Taps)	CF_1	-	1,258,000	4,810,000	10,138,008	10,656,008	10,730,008	11,618,008	9,072,408	6,038,408	5,328,008	5,032,008
3	WAP - Cash In Lieu Water Rights	Misc_Rev	208,900	145,000	149,400	153,900	158,500	163,300	168,200	173,200	178,400	183,800	189,300
4	WAP - Native Water Credit Fee	Misc_Rev	8,387,500	18,000,000	-	-	-	-	-	-	-	-	-
5	WAP - Storage and Infrastructure Fees	Misc_Rev	8,799,000	-	-	-	-	-	-	-	-	-	-
6	WAP - Native Water Dedication/Legal Fees	Misc_Rev	420,000	-	-	-	-	-	-	-	-	-	-
7	Impact Fees	CF_1	160,452	852,879	1,151,368	1,588,549	1,731,764	1,814,677	1,698,598	1,446,842	1,215,061	1,100,490	836,674
8	Revenue Bond Proceeds - WAP	Dashboard	-	-	-	18,000,000	18,000,000	22,500,000	3,421,759	3,772,713	3,806,228	3,673,872	3,690,044
9	Investment Income	CF_2	146,600	297,700	196,700	144,200	104,600	49,400	82,100	136,700	158,900	158,700	149,400
10	Total Sources		18,122,452	20,553,579	6,307,468	30,024,657	30,650,871	39,257,385	19,688,665	17,301,863	14,096,997	13,144,869	12,597,425
Uses of Funds													
11	WAP - Capital Projects	CIP	21,946,756	22,373,848	9,780,134	19,327,924	32,205,355	28,843,172	3,421,759	3,772,713	3,806,228	3,673,872	3,690,044
12	EXP - Capital Projects												
13	Existing Debt Service - WAP	Existing Debt	1,937,600	5,184,539	5,320,255	5,320,430	5,315,576	5,320,750	5,315,256	5,319,344	5,317,321	5,314,185	5,319,743
14	Proposed Debt Service - WAP	CF_2	-	-	-	1,072,768	2,145,536	3,486,497	3,690,428	3,915,275	4,142,120	4,361,076	4,580,996
15	Debt Service Reserve and Issuance Expense	CF_2	-	-	-	1,611,000	1,611,000	2,013,700	306,200	337,700	340,600	328,800	330,300
16	Transfer To Operating Subfund	Dashboard	-	-	4,400,000	-	-	-	-	-	-	-	-
17	Total Uses		23,884,356	27,558,387	19,500,389	27,332,121	41,277,467	39,664,119	12,733,643	13,345,032	13,606,269	13,677,933	13,921,083
18	Annual Surplus (Deficiency)		(5,761,904)	(7,004,807)	(13,192,920)	2,692,535	(10,626,595)	(406,734)	6,955,022	3,956,831	490,728	(533,064)	(1,323,658)
19	Beginning Balance		17,538,205	33,275,794	26,270,987	13,078,066	15,770,602	5,144,006	4,737,273	11,692,295	15,649,126	16,139,854	15,606,790
20	Ending Balance		11,776,301	26,270,987	13,078,066	15,770,602	5,144,006	4,737,273	11,692,295	15,649,126	16,139,854	15,606,790	14,283,132

Town of Firestone
 Water Utility
 Historical & Projected Operation and Maintenance Expense

Table 3

Line No.	Fund	Account Description	Budget					Projected				
			2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
			\$	\$	\$	\$	\$	\$	\$	\$	\$	
1	80	Regular Wages	956,947	1,000,010	1,045,010	1,086,810	1,130,283	1,175,494	1,222,514	1,271,415	1,322,271	1,375,162
2	80	Seasonal/Temporary Wages	-	-	-	-	-	-	-	-	-	-
3	80	Overtime	19,053	19,910	20,806	21,639	22,504	23,404	24,340	25,314	26,327	27,380
4	80	Stipend	165	172	180	187	195	203	211	219	228	237
5	80	Medicare	13,877	14,501	15,154	15,760	16,391	17,046	17,728	18,437	19,175	19,942
6	80	Unemployment Insurance	2,670	2,790	2,916	3,032	3,154	3,280	3,411	3,547	3,689	3,837
7	80	Workers Compensation	-	-	-	-	-	-	-	-	-	-
8	80	Retirement Contributions	140,957	147,300	153,929	160,086	166,489	173,149	180,075	187,278	194,769	202,559
9	80	Medical Benefits	142,402	148,810	155,507	161,727	168,196	174,924	181,921	189,197	196,765	204,636
10	80	Life/Disability Benefits	7,440	7,775	8,125	8,450	8,788	9,139	9,505	9,885	10,280	10,692
11	80	Training/Registration	22,241	23,131	24,056	24,898	25,769	26,671	27,605	28,571	29,571	30,606
12	80	Dues/Fees	6,799	7,071	7,354	7,611	7,878	8,153	8,439	8,734	9,040	9,356
13	80	Employee Wellness	2,363	2,458	2,556	2,645	2,738	2,834	2,933	3,036	3,142	3,252
14	80	Mileage/Travel	1,289	1,341	1,394	1,443	1,493	1,546	1,600	1,656	1,714	1,774
15	80	Employee Recognition	6,656	6,956	7,269	7,559	7,862	8,176	8,503	8,843	9,197	9,565
16	80	Uniforms/Town Apparel	7,720	8,029	8,350	8,642	8,945	9,258	9,582	9,917	10,264	10,623
17	80	Professional Services	1,128,405	1,173,541	1,220,483	1,263,200	1,307,412	1,353,171	1,400,532	1,449,551	1,500,285	1,552,795
18	80	Legal Services	528,040	549,162	571,128	591,118	611,807	633,220	655,383	678,321	702,062	726,634
19	80	Consulting Services	8,625	8,970	9,329	9,655	9,993	10,343	10,705	11,080	11,467	11,869
20	80	Technical Services	116,091	120,735	125,564	129,959	134,507	139,215	144,088	149,131	154,350	159,753
21	80	Communication Services	36,721	38,190	39,717	41,108	42,546	44,035	45,577	47,172	48,823	50,532
22	80	General Services	521,684	542,551	564,253	584,002	604,442	625,598	647,494	670,156	693,612	717,888
23	80	Employment Screenings	4,663	4,850	5,044	5,220	5,403	5,592	5,788	5,990	6,200	6,417
24	80	Insurance Premiums	35,500	37,098	38,767	40,318	41,930	43,607	45,352	47,166	49,052	51,015
25	80	Utility Services	6,340	6,594	6,857	7,097	7,346	7,603	7,869	8,144	8,429	8,724
26	80	Office Supplies	4,805	4,997	5,197	5,379	5,567	5,762	5,964	6,173	6,389	6,612
27	80	Technology Equipment	22,600	23,504	24,444	25,300	26,185	27,102	28,050	29,032	30,048	31,100
28	80	Operating Supplies	57,075	59,358	61,732	63,893	66,129	68,444	70,839	73,319	75,885	78,541
29	80	Leases/Rentals	5,750	5,980	6,219	6,437	6,662	6,895	7,137	7,386	7,645	7,913
30	80	Repairs/Maintenance	110,000	114,400	118,976	123,140	127,450	131,911	136,528	141,306	146,252	151,371
31	80	Non-Capital Equipment	337,150	350,636	364,661	377,425	390,634	404,307	418,457	433,103	448,262	463,951
32	80	Fuel	26,110	27,154	28,241	29,229	30,252	31,311	32,407	33,541	34,715	35,930
33	80	Food and Related Services	3,084	3,207	3,336	3,452	3,573	3,698	3,828	3,962	4,100	4,244
34	80	Conservation Program	25,000	26,000	27,040	27,986	28,966	29,980	31,029	32,115	33,239	34,402
35	80	Sponsorships	-	-	-	-	-	-	-	-	-	-
36	80	Grants/Donations	-	-	-	-	-	-	-	-	-	-
37	80	Other	3,500	3,640	3,786	3,918	4,055	4,197	4,344	4,496	4,653	4,816
38	80	Water Treatment - CWCWD Volumetric Charge	1,397,202	1,697,933	2,023,889	2,387,366	2,796,046	3,019,730	3,261,308	3,522,213	3,803,990	4,108,309
39	80	Water Treatment - CWCWD Service Charge	412,207	453,272	493,954	537,079	583,945	630,794	681,404	736,075	795,135	858,935
40	Total Historic and Projected O&M		6,121,131	6,642,024	7,195,222	7,772,770	8,405,535	8,859,791	9,342,446	9,855,480	10,401,025	10,981,370

Town of Firestone
 Water Utility
 Water Capital Improvement Plan (Inflated)

Table 4

Annual Inflation	0.0%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%
Cumulative Inflation	0.0%	4.5%	9.2%	14.1%	19.3%	24.6%	30.2%	36.1%	42.2%	48.6%	

Line No.	Title	Estimated	Projected										10-Year Total
		2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
1	Gould Property Clean Up	15,000	-	-	-	-	-	-	-	-	-	-	-
2	Water Rights	2,200,000	-	-	-	-	-	-	-	-	-	-	-
3	Gould Well Field	526,819	131,705	-	-	-	-	-	-	-	-	-	131,705
4	Mountain Shadows Park Conversion	141,500	214,622	-	-	-	-	-	-	-	-	-	214,622
5	NISP Participation	617,500	787,020	836,000	1,477,440	3,210,635	3,252,707	3,421,759	3,772,713	3,806,228	3,673,872	3,690,044	27,928,419
6	Firestone Reservoir No. 1 Infrastructure Construction	1,882,450	-	-	-	-	-	-	-	-	-	-	-
7	Firestone Reservoir No. 1 Infrastructure CE & Geotech	202,862	-	-	-	-	-	-	-	-	-	-	-
8	Historic Firestone Water Line Replacements	780,006	700,000	741,950	786,258	833,051	882,464	922,175	963,672	1,007,038	1,052,354	1,099,710	8,988,673
9	St. Vrain Water Treatment Plant Construction and CE	5,610,406	46,403	-	-	-	-	-	-	-	-	-	46,403
10	St Vrain Water Treatment Plant FF&E	2,841,630	-	-	-	-	-	-	-	-	-	-	-
11	St. Vrain WTP Blend Pipeline and Pump Station	5,204,615	20,000	475,475	491,411	4,162,403	4,349,712	-	-	-	-	-	9,499,001
12	St Vrain WTP Injection Well	1,700,000	-	-	-	-	-	-	-	-	-	-	-
13	SCADA Upgrade	171,130	45,522	-	-	-	-	-	-	-	-	-	45,522
14	Firestone Reservoir No. 2	898,000	50,000	-	3,590,731	8,833,539	-	-	-	-	-	-	12,474,270
15	Non-Potable Irrigation System Infrastructure	-	-	2,342,890	-	-	-	-	-	-	-	-	2,342,890
16	Water Master Plan	-	-	-	-	-	-	-	-	-	-	-	-
17	Historic Firestone Water Line Design	375,000	-	-	-	-	-	-	-	-	-	-	-
18	Alluvial Well Field No. 2	232,474	230,000	438,900	6,650,432	-	-	-	-	-	-	-	7,319,332
19	Water Tank	-	-	-	110,841	3,867,412	4,041,446	-	-	-	-	-	8,019,698
20	Water Rate Study	50,000	-	-	-	-	-	-	-	-	-	-	-
21	Coal Ridge Ditch Lateral Supply Pipeline	30,000	-	5,270,458	-	-	-	-	-	-	-	-	5,270,458
22	Pipeline Transfer from NISP	-	30,000	127,490	367,193	-	4,522,031	-	-	-	-	-	5,046,714
23	Tank 2 Distribution Pipeline	-	-	666,188	1,097,485	6,339,567	6,624,847	-	-	-	-	-	14,728,087
24	CWCWD Flow Control/Meter Vaults	-	263,000	3,201,828	-	-	-	-	-	-	-	-	3,464,828
25	ST Vrain Water Treatment Plant Expansion to 5 MGD	-	634,500	663,053	5,542,391	5,791,798	6,052,430	-	-	-	-	-	18,684,171
26	Godding Ditch Diversion	-	102,820	589,986	-	-	-	-	-	-	-	-	692,806
27	Firestone Reservoir No. 3	-	20,000,000	-	-	-	-	-	-	-	-	-	20,000,000
28	Tier 2 Water Supply and Infrastructure	-	341,400	712,586	-	-	-	-	-	-	-	-	1,053,986
29	R&R Assumed CIP Placeholder	-	-	-	-	-	-	822,480	859,492	898,169	938,586	980,823	4,499,550
30	Total CIP Program - Inflated	23,479,392	23,596,992	16,066,802	20,114,182	33,038,406	29,725,636	5,166,414	5,595,877	5,711,435	5,664,813	5,770,577	150,451,134
CIP Summary													
31	Operating Fund - Repair and Replacement	1,532,636	1,223,144	6,286,668	786,258	833,051	882,464	1,744,655	1,823,164	1,905,207	1,990,941	2,080,533	19,556,084
32	Water Action Plan Fund - Growth	21,946,756	22,373,848	9,780,134	19,327,924	32,205,355	28,843,172	3,421,759	3,772,713	3,806,228	3,673,872	3,690,044	130,895,049
33	Total Capital Improvement Program	23,479,392	23,596,992	16,066,802	20,114,182	33,038,406	29,725,636	5,166,414	5,595,877	5,711,435	5,664,813	5,770,577	150,451,134

Town of Firestone
Water Utility
2024 Test Year Revenue Requirement

Table 5

Line No.	Description	Operating Expense	Capital Expense	Total
Revenue Requirements				
1	Operating & Maintenance Expense			-
2	Existing Operations and Maintenance	6,331,636		6,331,636
3	CWCWD Pass Through - New Taps @ \$12k		900,000	900,000
4	St. Vrain WTP O&M	251,294		251,294
5	PAYGO Capital Projects		6,286,668	6,286,668
6	CWCWD Rate Increase Pass Through	310,389	0	310,389
7	Total Revenue Requirements	6,893,318 49.0%	7,186,668 51.0%	14,079,986
Revenue Requirement Adjustments				
8	Miscellaneous Revenue			0
9	Tap Fees - CWCWD @\$15k	(284,000)	(900,000)	(1,184,000)
10	Hydrant Rentals	(18,500)		(18,500)
11	Reconnection and Service Fees	(37,100)		(37,100)
12	Water Leases		(20,600)	(20,600)
13	Meter and Yoke		(205,500)	(205,500)
14	Intergovernmental	(22,700)		(22,700)
15	Transfer from Water Action Plan Subfund		(4,400,000)	(4,400,000)
16	Interest Income	(21,100)		(21,100)
17	CWCWD Rate Increase Pass Through	(310,389)		(310,389)
17	Operating Reserve Increase (Decrease)	(410,618)		(410,618)
18	Total Adjustments	(1,104,407)	(5,526,100)	(6,630,507)
19	Subtotal	5,788,912	1,660,568	7,449,480
20	Net Revenue Requirement			7,449,480

Town of Firestone
 Water Utility
 Miscellaneous Revenue Functional Category Allocations

Table 6

Line No.	Description	Test Year	Volume			Customer Related				Not Used
			Base	Day Demand	Hour Demand	Meters & Services	Billing	Distribution Mains	CWCWD Meter Service Charge	
Other Miscellaneous Revenue										
1	Tap Fees - CWCWD @\$15k	CAP	(900,000)	13.9%	19.5%	16.7%			50.0%	
2	Tap Fees - CWCWD @\$15k	OP	(284,000)	13.9%	19.5%	16.7%			50.0%	
3	Hydrant Rentals	OP	(18,500)					100.0%		
4	Reconnection and Service Fees	OP	(37,100)					100.0%		
5	Water Leases	CAP	(20,600)	100.0%						
6	Meter and Yoke	CAP	(205,500)				100.0%			
7	Intergovernmental	OP	(22,700)					100.0%		
8	Transfer from Water Action Plan Subfun	CAP								
9	Interest Income	OP	(21,100)	51.0%	32.1%	1.4%	2.2%	3.0%	3.7%	6.6%
10	CWCWD Rate Increase Pass Through	OP	(310,389)	32.9%	46.1%					21.1%
11	Operating Reserve Increase (Decrease)	OP	(410,618)	51.0%	32.1%	1.4%	2.2%	3.0%	3.7%	6.6%
12	Not Used		0							
13	Not Used		0							
14	Not Used		0							
15	Not Used		0							
16	Subtotal Other Miscellaneous Revenue		(2,230,507)							
17	Non-Potable Offset	CAP	(1,771,393)	100.0%						
18	Meter Vault Offset	CAP	(2,628,607)						100.0%	
17	Operating Revenue Offsets									
19	Capital Revenue Offsets									

Town of Firestone
 Water Utility
 Allocation of Operating and Other Non-Rate Revenue
 Revenue

Table 7

Line No.	Description	Test Year	Volume		Customer Related				Not Used	Total		
			Maximum	Maximum	Meters & Services	Billing	Distribution	SC Specific to CWCWD Customers				
		2024	Base	Day Demand	Hour Demand			Mains				
Other Miscellaneous Revenue												
1	Tap Fees - CWCWD @\$15k	CAP	(900,000)	(124,884)	(175,116)	(150,000)	-	-	(450,000)	-	-	(900,000)
2	Tap Fees - CWCWD @\$15k	OP	(284,000)	(39,408)	(55,259)	(47,333)	-	-	(142,000)	-	-	(284,000)
3	Hydrant Rentals	OP	(18,500)	-	-	-	-	(18,500)	-	-	-	(18,500)
4	Reconnection and Service Fees	OP	(37,100)	-	-	-	-	(37,100)	-	-	-	(37,100)
5	Water Leases	CAP	(20,600)	(20,600)	-	-	-	-	-	-	-	(20,600)
6	Meter and Yoke	CAP	(205,500)	-	-	-	(205,500)	-	-	-	-	(205,500)
7	Intergovernmental	OP	(22,700)	-	-	-	-	(22,700)	-	-	-	(22,700)
8	Transfer from Water Action Plan Subfund	CAP	-	-	-	-	-	-	-	-	-	0
9	Interest Income	OP	(21,100)	(10,755)	(6,776)	(301)	(456)	(641)	(783)	(1,387)	-	(21,100)
10	CWCWD Rate Increase Pass Through	OP	(310,389)	(101,983)	(143,004)	-	-	-	-	(65,401)	-	(310,389)
11	Operating Reserve Increase (Decrease)	OP	(410,618)	(209,308)	(131,861)	(5,861)	(8,867)	(12,480)	(15,241)	(27,000)	-	(410,618)
12	Not Used		-	-	-	-	-	-	-	-	-	0
13	Not Used		-	-	-	-	-	-	-	-	-	0
14	Not Used		-	-	-	-	-	-	-	-	-	0
15	Total Miscellaneous Revenue	OK	(2,230,507)	(506,938)	(512,016)	(203,496)	(214,823)	(91,422)	(608,024)	(93,789)	0	(2,230,507)
16	Non-Potable Offset	CAP	(1,771,393)	(1,771,393)	0	0	0	0	0	0	0	(1,771,393)
17	Meter Vault Offset	CAP	(2,628,607)	0	0	0	0	0	(2,628,607)	0	0	(2,628,607)
18	Total CIP Offset		(4,400,000)	(1,771,393)	0	0	0	0	(2,628,607)	0	0	(4,400,000)
			(6,630,507)	(2,278,331)	(512,016)	(203,496)	(214,823)	(91,422)	(3,236,631)	(93,789)		
19	Operating Revenue Offsets	OP	(1,104,407)	(361,454)	(336,900)	(53,496)	(9,323)	(91,422)	(158,024)	(93,789)	0	(1,104,407)
20	Capital Revenue Offsets	CAP	(5,526,100)	(1,916,877)	(175,116)	(150,000)	(205,500)	0	(3,078,607)	0	0	(5,526,100)
21	Total Non-Rate Revenue		(6,630,507)	(2,278,331)	(512,016)	(203,496)	(214,823)	(91,422)	(3,236,631)	(93,789)	0	(6,630,507)

OK

Town of Firestone
 Water Utility
 Allocation of Water System Assets
 And Annual Capital Costs

Table 8

Line No.	Description	RCN	Volume			Customer Related					Total
			Base	Day Demand	Hour Demand	Meters & Services	Billing	Mains	CWCWD Customers	Indirect	
Water System Assets											
1	Land	5,606,403	100.0%								100.0%
2	Source of Supply	7,764,282	100.0%								100.0%
3	Wells / Treatment	356,122	41.6%	58.4%							100.0%
4	Pump Station	59,366	27.8%	38.9%	33.3%						100.0%
5	Treated Storage	3,573,291	27.8%	38.9%	33.3%						100.0%
6	Transmission Mains	6,194,064	41.6%	58.4%							100.0%
7	Distribution Mains	29,285,917	0.0%	0.0%	0.0%			100.0%			100.0%
8	Customer Billing	77,486					100.0%				100.0%
9	Meters & Services	6,162,724				100.0%					100.0%
10	Public Fire	-									0.0%
11	Common to Irrigation	-									0.0%
12	All Other Infrastructure	572,494	29.0%	8.9%	2.0%	10.4%	0.1%	49.6%	0.0%	0.0%	100.0%
13	All Other General	973,886	29.0%	8.9%	2.0%	10.4%	0.1%	49.6%	0.0%	0.0%	100.0%
14	CWCWD Meter Service Charges	-							100.0%		100.0%
15	Total	60,626,034									

Town of Firestone
 Water Utility
 Allocation of Water System Assets
 And Annual Capital Costs

Table 9

Line No.	Description	Net Book Value	Volume		Customer Related					Total
			Maximum	Maximum	Meters & Services	Billing	Distribution	SC Specific to	Not Used	
		Base	Day Demand	Hour Demand			Mains	CWCWD Customers		
Water System Assets										
1	Land	5,606,403	5,606,403	-	-	-	-	-	-	5,606,403
2	Source of Supply	7,764,282	7,764,282	-	-	-	-	-	-	7,764,282
3	Wells / Treatment	356,122	148,246	207,876	-	-	-	-	-	356,122
4	Pump Station	59,366	16,475	23,102	19,789	-	-	-	-	59,366
5	Treated Storage	3,573,291	991,658	1,390,536	1,191,097	-	-	-	-	3,573,291
6	Transmission Mains	6,194,064	2,578,461	3,615,603	-	-	-	-	-	6,194,064
7	Distribution Mains	29,285,917	-	-	-	-	29,285,917	-	-	29,285,917
8	Customer Billing	77,486	-	-	-	77,486	-	-	-	77,486
9	Meters & Services	6,162,724	-	-	-	6,162,724	-	-	-	6,162,724
10	Public Fire	-	-	-	-	-	-	-	-	0
11	Common to Irrigation	-	-	-	-	-	-	-	-	0
12	All Other Infrastructure	572,494	165,756	50,749	11,734	59,718	751	283,786	-	572,494
13	All Other General	973,886	281,972	86,330	19,961	101,588	1,277	482,757	-	973,886
14	CWCWD Meter Service Charges	-	-	-	-	-	-	-	-	0
15	Total Water System Assets	60,626,034	17,553,254	5,374,196	1,242,580	6,324,030	79,514	30,052,461	0	60,626,034
16	Percent of Total		29.0%	8.9%	2.0%	10.4%	0.1%	49.6%	0.0%	0.0%
17	Annual Capital Costs	7,186,668	2,080,779	637,062	147,297	749,657	9,426	3,562,447	0	0
18	Capital Revenue Offsets	(5,526,100)	(1,916,877)	(175,116)	(150,000)	(205,500)	0	(3,078,607)	0	0
19	Net Allocated Capital Costs	1,660,568	163,902	461,946	(2,703)	544,157	9,426	483,840	0	0

Town of Firestone
 Water Utility
 Operation and Maintenance Expense Functional Category Allocations

Table 10

Line No.		Test Year	Source of Supply	Wells Treatment	Pump Station	Treated Storage	Trans Dist	Customer / Billing	Meters & Services	All Other Infrastructure	All Other General	CWCWD Service Charge	Total
		2024											
		\$	%	%	%	%	%	%	%	%	%		
1	Regular Wages	1,000,010	15.33%	8.25%	8.25%	8.25%	17.29%	11.46%	4.67%	6.89%	19.62%		100.0%
2	Seasonal/Temporary Wages	0	15.33%	8.25%	8.25%	8.25%	17.29%	11.46%	4.67%	6.89%	19.62%		100.0%
3	Overtime	19,910	15.33%	8.25%	8.25%	8.25%	17.29%	11.46%	4.67%	6.89%	19.62%		100.0%
4	Stipend	172	15.33%	8.25%	8.25%	8.25%	17.29%	11.46%	4.67%	6.89%	19.62%		100.0%
5	Medicare	14,501	15.33%	8.25%	8.25%	8.25%	17.29%	11.46%	4.67%	6.89%	19.62%		100.0%
6	Unemployment Insurance	2,790	15.33%	8.25%	8.25%	8.25%	17.29%	11.46%	4.67%	6.89%	19.62%		100.0%
7	Workers Compensation	0	15.33%	8.25%	8.25%	8.25%	17.29%	11.46%	4.67%	6.89%	19.62%		100.0%
8	Retirement Contributions	147,300	15.33%	8.25%	8.25%	8.25%	17.29%	11.46%	4.67%	6.89%	19.62%		100.0%
9	Medical Benefits	148,810	15.33%	8.25%	8.25%	8.25%	17.29%	11.46%	4.67%	6.89%	19.62%		100.0%
10	Life/Disability Benefits	7,775	15.33%	8.25%	8.25%	8.25%	17.29%	11.46%	4.67%	6.89%	19.62%		100.0%
11	Training/Registration	23,131	15.33%	8.25%	8.25%	8.25%	17.29%	11.46%	4.67%	6.89%	19.62%		100.0%
12	Dues/Fees	7,071	15.33%	8.25%	8.25%	8.25%	17.29%	11.46%	4.67%	6.89%	19.62%		100.0%
13	Employee Wellness	2,458	15.33%	8.25%	8.25%	8.25%	17.29%	11.46%	4.67%	6.89%	19.62%		100.0%
14	Mileage/Travel	1,341	15.33%	8.25%	8.25%	8.25%	17.29%	11.46%	4.67%	6.89%	19.62%		100.0%
15	Employee Recognition	6,956	15.33%	8.25%	8.25%	8.25%	17.29%	11.46%	4.67%	6.89%	19.62%		100.0%
16	Uniforms/Town Apparel	8,029	15.33%	8.25%	8.25%	8.25%	17.29%	11.46%	4.67%	6.89%	19.62%		100.0%
17	Professional Services	1,173,541	57%							43%			100.0%
18	Legal Services	549,162	60.0%	40.0%	0.0%	0.0%	0.0%	-%	-%	-%	-%		100.0%
19	Consulting Services	8,970	-%	-%	-%	-%	-%	-%	-%	-%	100.0%		100.0%
20	Technical Services	120,735	16.8%	16.8%	16.8%	16.8%	18.9%	-%	9.3%	-%	4.8%		100.0%
21	Communication Services	38,190	13.9%	9.3%	-%	-%	-%	37.1%	-%	-%	39.8%		100.0%
22	General Services	542,551	52.5%	35.4%	1.2%	1.2%	1.2%	4.0%	0.7%	-%	3.7%		100.0%
23	Employment Screenings	4,850	-%	-%	-%	-%	-%	-%	-%	-%	100.0%		100.0%
24	Insurance Premiums	37,098	-%	-%	-%	-%	-%	-%	-%	-%	100.0%		100.0%
25	Utility Services	6,594	18.2%	18.0%	17.6%	17.6%	17.6%	-%	9.8%	-%	1.1%		100.0%
26	Office Supplies	4,997	7.7%	7.7%	7.7%	7.7%	12.4%	2.0%	4.2%	-%	50.4%		100.0%
27	Technology Equipment	23,504	17.3%	17.3%	17.3%	17.3%	20.7%	0.2%	9.6%	-%	0.2%		100.0%
28	Operating Supplies	59,358	17.5%	17.5%	17.5%	17.5%	17.7%	-%	9.7%	-%	2.4%		100.0%
29	Leases/Rentals	5,980	18.0%	18.0%	18.0%	18.0%	18.0%	-%	10.0%	-%	-%		100.0%
30	Repairs/Maintenance	114,400	18.0%	18.0%	18.0%	18.0%	18.0%	-%	10.0%	-%	-%		100.0%
31	Non-Capital Equipment	350,636	18.0%	18.0%	18.0%	18.0%	18.0%	-%	10.0%	-%	-%		100.0%
32	Fuel	27,154	17.5%	17.5%	17.5%	17.5%	17.8%	-%	9.7%	-%	2.7%		100.0%
33	Food and Related Services	3,207	11.2%	11.2%	11.2%	11.2%	13.3%	0.8%	6.2%	-%	35.0%		100.0%
34	Conservation Program	26,000	-%	-%	-%	-%	-%	-%	-%	-%	100.0%		100.0%
35	Sponsorships	0	-%	-%	-%	-%	-%	-%	-%	-%	-%		-%
36	Grants/Donations	0	-%	-%	-%	-%	-%	-%	-%	-%	-%		-%
37	Other	3,640	5.3%	5.3%	5.3%	5.3%	5.3%	-%	2.9%	-%	70.6%		100.0%
38	Water Treatment - CWCWD Volumetric Charge	1,697,933	78.9%	100%									100.0%
39	Water Treatment - CWCWD Service Charge	453,272	21.1%	0%								100%	100.0%
40	Total St Vrain Water Treatment O&M	251,294		100%									100.0%
41		6,893,318	1,623,219	2,605,554	247,600	247,600	377,408	195,169	138,662	605,303	399,531	453,272	6,893,318
			23.5%	37.8%	3.6%	3.6%	5.5%	2.8%	2.0%	8.8%	5.8%	6.6%	100.0%
42	Functionalized O&M Expense		1,623,219	2,605,554	247,600	247,600	377,408	195,169	138,662	605,303	399,531	453,272	6,893,318
43	Percent of Total - Infrastructure Related		32%	51%	5%	5%	7%						
44	Reallocation of Infrastructure Indirect		192,602	309,161	29,379	29,379	44,781			(605,303)			0
45	Percent of Total - All Other Indirect		30%	48%	5%	5%	7%	4%	3%				
46	Reallocation of All Other Indirect		119,320	191,529	18,201	18,201	27,742	14,346	10,193		(399,531)		0
47	Reallocated Functionalized O&M Expense		1,935,141	3,106,244	295,180	295,180	449,932	209,515	148,854	0	0	453,272	6,893,318
48	Percent of Total		28.1%	45.1%	4.3%	4.3%	6.5%	3.0%	2.2%	0.0%	0.0%	6.6%	100.0%

Line No.	Description	Total	Volume			Customer Related					Total
			Maximum	Maximum	Maximum	Meters & Services	Billing	Distribution	SC Specific to	Not Used	
			Base	Day Demand	Hour Demand			Mains	CWCWD Customers		
Functional O&M											
1	Source of Supply	1,935,141	100.0%								100.0%
2	Purchased Water/WTP Costs	3,106,244	41.6%	58.4%							100.0%
3	Pump Station	295,180	41.6%	58.4%							100.0%
4	Treated Storage	295,180	27.8%	38.9%	33.3%						100.0%
5	Transmission Mains	194,075	41.6%	58.4%							100.0%
6	Distribution Mains	255,857	0.0%	0.0%	0.0%			100.0%			100.0%
7	Customer Billing	209,515					100.0%				100.0%
8	Meters & Services	148,854				100.0%					100.0%
9	Public Fire	0							0.0%		0.0%
10	Common to Irrigation	0							0.0%	100.0%	100.0%
11	All Other Infrastructure	0	29.0%	8.9%	2.0%	10.4%	0.1%	49.6%	0.0%	0.0%	100.0%
12	All Other General	0	29.0%	8.9%	2.0%	10.4%	0.1%	49.6%	0.0%	0.0%	100.0%
13	CWCWD Meter Service Charges	453,272							100.0%		100.0%
14	Total Functional O&M	6,893,318									

Line No.	Description	Total	Volume		Customer Related					Not Used	Total
			Maximum	Maximum	Meters & Services	Billing	Distribution	SC Specific to			
	Functional O&M										
1	Source of Supply	1,935,141	1,935,141	-	-	-	-	-	-	-	1,935,141
2	Purchased Wtr/WTP Costs	3,106,244	1,293,065	1,813,179	-	-	-	-	-	-	3,106,244
3	Pump Station	295,180	122,877	172,303	-	-	-	-	-	-	295,180
4	Treated Storage	295,180	81,918	114,868	98,393	-	-	-	-	-	295,180
5	Transmission Mains	194,075	80,789	113,285	-	-	-	-	-	-	194,075
6	Distribution Mains	255,857	-	-	-	-	-	255,857	-	-	255,857
7	Customer Billing	209,515	-	-	-	209,515	-	-	-	-	209,515
8	Meters & Services	148,854	-	-	-	148,854	-	-	-	-	148,854
9	Public Fire	-	-	-	-	-	-	-	-	-	-
10	Common to Irrigation	-	-	-	-	-	-	-	-	-	-
11	All Other Infrastructure	-	-	-	-	-	-	-	-	-	-
12	All Other General	-	-	-	-	-	-	-	-	-	-
13	CWCWD Meter Service Charge	453,272	-	-	-	-	-	-	453,272	-	453,272
14	Total Functional O&M	6,893,318	3,513,791	2,213,635	98,393	148,854	209,515	255,857	453,272	0	6,893,318
15	Percent of Total		51.0%	32.1%	1.4%	2.2%	3.0%	3.7%	6.6%	0.0%	
16	Miscellaneous Revenue Offsets	(1,104,407)	(361,454)	(336,900)	(53,496)	(9,323)	(91,422)	(158,024)	(93,789)	0	(1,104,407)
16	Net O&M Revenue Requirement	5,788,912	3,152,337	1,876,736	44,898	139,532	118,093	97,833	359,484	0	5,788,912

Line No.	Customer Class	% Vol Billed	Water Use		Maximum Day Demand			Maximum Hour Demand			Bills	Equivalent 5/8" Meter	
			Annual 1,000 gal	Average Day 1,000 gal	Demand Factor	Total Demand	Extra Demand	Demand Factor	Total Demand	Extra Demand		CWCWD Equivalency	Meter Cost Equivalency
1	Residential	By Account Calc	533,406	1,461	267%	3,902	2,441	401%	5,853	4,391	56,148	56,175	56,155
2	Commercial/Industrial		85,413	234	216%	505	271	324%	758	524	1,171	4,541	2,844
3	Mobile Home		34,961	96	265%	254	158	398%	381	285	24	1,200	500
4	Multifamily		25,894	71	125%	89	18	188%	133	62	1,203	3,075	2,109
5	Irrigation		46,434	127	418%	532	405	627%	798	670	809	2,644	1,688
6	Total		726,108	1,989		5,282	3,292		7,922	5,933	59,355	67,635	63,297
					2,654968226						4,920		
											410		

Town of Firestone
 Water Utility
 Unit Costs of Service

Table 14

Line	Description	Total	Volume		Customer Related				
			Base	Day Demand	Hour Demand	Meters & Services	Billing	Distribution	SC Specific to CWCWD Customers
Cost of Service									
1	Operation and Maintenance Expense	5,788,912	3,152,337	1,876,736	44,898	139,532	118,093	97,833	359,484
2	Capital Cost	1,660,568	163,902	461,946	(2,703)	544,157	9,426	483,840	0
3									
4	Total Cost of Service	7,449,480	3,316,239	2,338,682	42,194	683,688	127,519	581,673	359,484
5	Percent of Total	100.0%	44.5%	31.4%	0.6%	9.2%	1.7%	7.8%	4.8%
Units of Service									
	Units		<u>1,000 gal</u>	<u>gpd</u>	<u>gpd</u>	<u>Equivalent Meter Cost</u>	<u># Bills</u>	<u>Equivalent Meter Capacity</u>	<u>Equivalent Meter Capacity</u>
6	Total Units of Service		726,108	3,292	5,933	63,297	59,355	67,635	67,635
7	Unit Costs		\$4.57	\$710.35	\$7.11	\$10.80	\$2.15	\$8.60	\$5.32

Town of Firestone
 Water Utility
 Customer Class Cost of Service

Table 15

Line No.	Description	Total	Volume		Customer Related				
			Base	Maximum Day Demand	Maximum Hour Demand	Meters & Services	Billing	Distribution Mains	CWCWD Meter Service Charge
1	Unit Costs of Service - \$/unit		\$4.57	\$710.35	\$7.11	\$10.80	\$2.15	\$8.60	\$5.32
	Customer Class								
	Residential								
2	Units		533,406	2,441	4,391	56,155	56,148	56,175	56,175
3	Cost of Service - \$	\$5,709,863	\$2,436,141	\$1,733,622	\$31,231	\$606,552	\$120,628	\$483,115	\$298,573
	Commercial/Industrial								
4	Units		85,413	271	524	2,844	1,171	4,541	4,541
5	Cost of Service - \$	\$683,070	\$390,095	\$192,825	\$3,728	\$30,716	\$2,517	\$39,054	\$24,136
	Mobile Home								
6	Units		34,961	158	285	500	24	1,200	1,200
7	Cost of Service - \$	\$296,118	\$159,672	\$112,266	\$2,027	\$5,404	\$52	\$10,320	\$6,378
	Multifamily								
8	Units		25,894	18	62	2,109	1,203	3,075	3,075
9	Cost of Service - \$	\$199,461	\$118,262	\$12,599	\$441	\$22,785	\$2,585	\$26,445	\$16,344
	Irrigation								
10	Units		46,434	405	670	1,688	809	2,644	2,644
11	Cost of Service - \$	\$560,967	\$212,069	\$287,370	\$4,768	\$18,231	\$1,738	\$22,739	\$14,053
12	Total Cost of Service	\$7,449,480	\$3,316,239	\$2,338,682	\$42,194	\$683,688	\$127,519	\$581,673	\$359,484

Town of Firestone
 Water Utility
 Comparison of Cost of Service With Revenues Under Existing Rates

Table 16

Line No.	Customer Class	2024 Cost of Service	Revenue Under Existing Rates	Change - \$	Change - %
1	Residential	5,709,863	5,331,416	378,448	7.1%
2	Commercial/Industrial	683,070	674,539	8,530	1.3%
3	Mobile Home	296,118	304,185	(8,066)	-2.7%
4	Multifamily	199,461	271,006	(71,546)	-26.4%
5	Irrigation	560,967	513,596	47,371	9.2%
6	Total System	7,449,480	7,094,743	354,737	5.0%

Town of Firestone
 Water Utility
 Comparison of **Adjusted** Cost of Service With Revenues Under Existing Rates

Table 17

Line No.	Customer Class	Cost of Service	COS Adjustments	COS Adjustments	Adjusted COS	Revenue Under Existing Rates	Change - \$	Change - %
	Residential	5,709,863	0	(79,612)	5,630,252	5,331,416	298,836	5.6%
	Commercial/Industrial	683,070	0	0	683,070	674,539	8,530	1.3%
	Mobile Home	296,118	8,066	0	304,185	304,185	0	0.0%
	Multifamily	199,461	71,546	0	271,006	271,006	0	0.0%
	Irrigation	560,967	0	0	560,967	513,596	47,371	9.2%
	Total System	7,449,480	79,612	(79,612)	7,449,480	7,094,743	354,737	5.0%

Town of Firestone
Water Utility
Residential Rates

Table 18

Residential Cost of Service				\$5,630,252			
Meter Size Inches	Bills	S.C.	Revenue				
5/8 inch	56,121	\$39.40	\$2,211,163				
3/4 inch	14	\$60.41	\$819				
1 inch	14	\$99.78	\$1,353				
1.5 inch	0	\$196.92	\$0				
2 inch	0	\$317.71	\$0				
3 inch	0	\$593.40	\$0				
4 inch	0	\$0.00	\$0				
6 inch	0	\$2,346.30	\$0				
Total Service Charge Revenue			\$2,213,335				
Volume Rate Revenue Required			\$3,416,917				
Threshold	% Vol	Ratio	Volume	Rate	Revenue		
5	41.8%	1.00	222,712	3.70	824,747		
10	23.5%	1.50	125,479	5.55	697,010		
20	23.8%	2.25	127,006	8.33	1,058,239		
30	7.6%	3.38	40,701	12.50	508,699		
9999	3.3%	5.06	17,508	18.75	328,222		
Total			533,406	6.41	3,416,917		
				Rounded			
				222,712	3.71	826,262	
				125,479	5.56	697,663	
				127,006	8.34	1,059,230	
				40,701	12.50	508,769	
				17,508	18.75	328,267	
				533,406		3,420,190	
				Over/Under Recovery		3,273	

Town of Firestone
Water Utility
Irrigation Rates

Table 21

Irrigation				\$560,967			
Meter Size Inches	Bills	S.C.	Revenue				
5/8 inch	73	\$39.40	\$2,876				
3/4 inch	181	\$60.41	\$10,934				
1 inch	291	\$99.78	\$29,036				
1.5 inch	180	\$196.92	\$35,446				
2 inch	84	\$317.71	\$26,688				
3 inch	0	\$593.40	\$0				
4 inch	0	\$0.00	\$0				
6 inch	0	\$2,346.30	\$0				
Total Service Charge Revenue			\$104,980				
Volume Rate Revenue Required			\$455,988				
Threshold	% Vol	Ratio	Volume	Rate	Revenue		
All Usage	100.0%	1.00	46,434	9.82	455,988		
20		1.00		9.82	-		
40		1.00		9.82	-		
9999		1.00		9.82	-		
Total			46,434	9.82	455,988		
				Rounded			
				46,434	9.82	455,979	
				0	9.82	-	
				0	9.82	-	
				0	9.82	-	
				46,434		455,979	
				Over/Under Recovery		(9)	

Town of Firestone
Water Utility
Commercial Rates

Table 19

Commercial Cost of Service				\$683,070			
Meter Size Inches	Bills	S.C.	Revenue				
5/8 inch	232	\$39.40	\$9,151				
3/4 inch	121	\$60.41	\$7,320				
1 inch	353	\$99.78	\$35,265				
1.5 inch	271	\$196.92	\$53,291				
2 inch	145	\$317.71	\$46,198				
3 inch	48	\$593.40	\$28,762				
4 inch	0	\$0.00	\$0				
6 inch	0	\$2,346.30	\$0				
Total Service Charge Revenue			\$179,988				
Volume Rate Revenue Required			\$503,082				
Threshold	% Vol	Ratio	Volume	Rate	Revenue		
All Usage	100.0%	1.00	533,406	5.89	3,141,745		
20		1.00	0	5.89	-		
40		1.00	0	5.89	-		
9999		1.00	0	5.89	-		
Total			85,413	36.78	3,141,745		
				Rounded			
				533,406	5.89	3,141,761	
				0	5.89	-	
				0	5.89	-	
				0	5.89	-	
				533,406		3,141,761	
				Over/Under Recovery		16	

Town of Firestone
Water Utility
Multifamily Rates

Table 22

Multifamily				\$271,006			
Meter Size Inches	Bills	S.C.	Revenue				
5/8 inch	603	\$39.40	\$23,758				
3/4 inch	108	\$60.41	\$6,524				
1 inch	60	\$99.78	\$5,987				
1.5 inch	432	\$196.92	\$85,069				
2 inch	0	\$317.71	\$0				
3 inch	0	\$593.40	\$0				
4 inch	0	\$0.00	\$0				
6 inch	0	\$2,346.30	\$0				
Total Service Charge Revenue			\$121,339				
Volume Rate Revenue Required			\$149,668				
Threshold	% Vol	Ratio	Volume	Rate	Revenue		
All Usage	100.0%	1.00	25,894	5.78	149,668		
20		1.00		5.78	-		
40		1.00		5.78	-		
9999		1.00		5.78	-		
Total			25,894	5.78	149,668		
				Rounded			
				25,894	5.78	149,668	
				0	5.78	-	
				0	5.78	-	
				0	5.78	-	
				25,894		149,668	
				Over/Under Recovery		-	

Town of Firestone
Water Utility
Mobile Home Rates

Table 20

Mobile Home				\$304,185			
Meter Size Inches	Bills	S.C.	Revenue				
5/8 inch	0	\$39.40	\$0				
3/4 inch	0	\$60.41	\$0				
1 inch	0	\$99.78	\$0				
1.5 inch	0	\$196.92	\$0				
2 inch	0	\$317.71	\$0				
3 inch	0	\$593.40	\$0				
4 inch	0	\$0.00	\$0				
6 inch	24	\$2,346.30	\$56,311				
Total Service Charge Revenue			\$56,311				
Volume Rate Revenue Required			\$247,873				
Threshold	% Vol	Ratio	Volume	Rate	Revenue		
All Usage	100.0%	1.00	34,961	7.09	247,873		
20		1.00		7.09	-		
40		1.00		7.09	-		
9999		1.00		7.09	-		
Total			34,961	7.09	247,873		
				Rounded			
				34,961	7.09	247,873	
				0	7.09	-	
				0	7.09	-	
				0	7.09	-	
				34,961		247,873	
				Over/Under Recovery		-	