

**STATE OF INDIANA**

**INDIANA UTILITY REGULATORY COMMISSION**

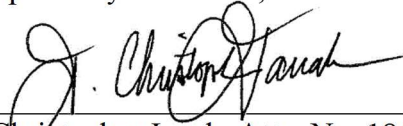
**PETITION OF THE CITY OF ANDERSON, )  
INDIANA, FOR (1) AUTHORITY ADJUST ITS )  
RATES AND CHARGES THROUGH A FIVE- )  
STEP RATE IMPLEMENTATION; AND (2) )  
FOR AUTHORITY TO ISSUE LONG-TERM )  
DEBT TO FINANCE WATER SYSTEM )  
IMPROVEMENTS )**

**CAUSE NO. 46171**

**PREFILED DIRECT TESTIMONY AND EXHIBITS  
OF MARK C. BEAUCHAMP**

Direct Testimony of Mark C. Beauchamp	<u>Petitioner’s Exhibit 4</u>
Business Experience and Professional Qualifications of Mark C. Beauchamp	<u>Attachment MCB-1</u>
Cost of Service Study	<u>Attachment MCB-2</u>
Schedules in Support of Cost of Service Study	<u>Attachment MCB-3</u>
Proposed Tariff	<u>Attachment MCB-4</u>

Respectfully submitted,



J. Christopher Janak, Atty. No. 18499-49  
Nikki G. Shoultz, Atty. No. 16509-41  
Jacob T. Antrim, Atty. No. 36762-49  
BOSE MCKINNEY & EVANS LLP  
111 Monument Circle, Suite 2700  
Indianapolis, IN 46204  
(317) 684-5000 | (317) 684-5173 FAX  
[cjanak@boselaw.com](mailto:cjanak@boselaw.com)  
[nshoultz@boselaw.com](mailto:nshoultz@boselaw.com)  
[jantrim@boselaw.com](mailto:jantrim@boselaw.com)

Timothy S. Lanane, Atty. No. 8664-48  
Paul Podlejski, Atty. No. 30809-48  
City of Anderson, Indiana

22 W. 8th Street  
Anderson, IN 46016  
ph. (765) 610-8415  
[tlanane@cityofanderson.com](mailto:tlanane@cityofanderson.com)  
[ppodlejski@cityofanderson.com](mailto:ppodlejski@cityofanderson.com)  
*Counsel for the City of Anderson*

# **Exhibit 4**

**STATE OF INDIANA**

**INDIANA UTILITY REGULATORY COMMISSION**

**PETITION OF THE CITY OF ANDERSON, )  
INDIANA, FOR (1) AUTHORITY ADJUST ITS )  
RATES AND CHARGES THROUGH A FIVE- )  
STEP RATE IMPLEMENTATION; AND (2) )  
FOR AUTHORITY TO ISSUE LONG-TERM )  
DEBT TO FINANCE WATER SYSTEM )  
IMPROVEMENTS )**

**CAUSE NO. \_\_\_\_\_**

**PREFILED DIRECT TESTIMONY OF**

**MARK C. BEAUCHAMP**

**ON BEHALF OF  
CITY OF ANDERSON, INDIANA**

1  
2  
3  
**I.**  
**Introduction**

4 **1. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

5 A. My name is Mark C. Beauchamp. My business address is 185 Sun Meadow Ct., Holland,  
6 Michigan 49424.

7 **2. WHAT IS YOUR OCCUPATION?**

8 A. I am the owner and President of Utility Financial Solutions, LLC, a consulting firm that provides  
9 electric, water, wastewater, gas, and refuse cost of service studies primarily for municipal and  
10 Cooperative Utilities in over 40 states, as well as in Canada, Barbados, Bermuda, Cayman Islands,  
11 and Guam. I have been engaged by the City of Anderson, Indiana ("Petitioner" or "Anderson"), to  
12 prepare a cost of service study and recommend a rate design for its water rates and charges.

13 **3. WHAT IS YOUR EDUCATIONAL BACKGROUND?**

14 A. In 1981, I graduated with an AAS in Water Purification Technology from Bay De Noc Community  
15 College. In 1988, I graduated from Grand Valley State University with a Bachelor of Arts in  
16 Accounting. In 1997, I graduated from Grand Valley State University with a Master of Business  
17 Administration.

18 **4. PLEASE DESCRIBE YOUR BUSINESS EXPERIENCE.**

19 A. My business experience and qualifications are set forth in Attachment MCB-1. I am a  
20 member of the American Water Works Association ("AWWA"). UFS personnel are on the  
21 Rates and Charges Committee for the AWWA, which is the Committee that is responsible  
22 for updating the AWWA Water Rates Manual M1, "Principles of Water Rates, Fees, and

1 Charges.” I am the instructor for the American Public Power Associations Advanced cost  
2 of service and rate design courses and a frequent speaker at conferences around the United  
3 States on cost of service related issues. I have testified in court on rate disputes, provided  
4 depositions and testimony in multiple court cases, and delivered written testimony before  
5 public service commissions in Wisconsin, Guam, West Virginia, and Indiana.

6 **5. WHAT IS THE PURPOSE OF YOUR ENGAGEMENT AND TESTIMONY IN**  
7 **THIS PROCEEDING?**

8 A. I was engaged by Anderson to prepare a cost of service and rate design study to use as a  
9 guide in developing schedules of rates and charges for water service. UFS completed cost  
10 of service and rate design studies for Anderson’s revenue requirements considering a test  
11 year between January 1, 2023, and December 31, 2023. The planned rate design  
12 implementation is in five (5) phases as more particularly described by Ms. Jennifer Wilson  
13 in her prefiled testimony and exhibits.

14 **6. PLEASE DISCUSS HOW YOUR TESTIMONY IS ORGANIZED?**

15 A. My testimony is organized into the following sections:

16 I. Introduction

17 II. Overview of Testimony

18 III. Cost of Service Study

19 IV. Proposed Water Rates and Charges

20 **7. WHAT ATTACHMENTS ARE YOU SPONSORING IN THIS PROCEEDING?**

21 A. I am sponsoring the following attachments, some of which have multiple parts:

22 Attachment MCB-1 Business Experience and Qualifications of Mark C. Beauchamp

1 Attachment MCB-2 Anderson Water Cost of Service Report

2 Attachment MCB-3 Phase Cost of Service Detailed Schedules

3 Attachment MCB-4 Proposed Tariff

4 **8. PLEASE DESCRIBE THE GENERAL ARRANGEMENT OF THESE**

5 **ATTACHMENTS.**

6 A. Attachment MCB-1 presents Mark Beauchamp's business experience and qualifications.

7 B. Attachment MCB-2 presents the cost of service report as issued to Anderson and

8 describes the process and results of the cost of service study for Phases 1 to 5.

9 Attachment MCB-3 presents the detailed schedules that produced each phase of the cost  
10 of service results.

11 Attachment MCB-4 presents the proposed phases 1 through 5 rate designs

12

13 **COST OF SERVICE STUDY**

14

15

**A. GENERAL METHODOLOGY**

16 **9. PLEASE DESCRIBE THE PURPOSE OF A COST OF SERVICE STUDY.**

17 A. The basic premise in establishing fair and equitable rates is that rates should reflect the  
18 cost of providing service to each customer class. A cost of service study is the tool used  
19 to determine the cost of providing service to each customer class. Rates are then designed  
20 to the extent practicable to recover revenues from each customer class that match the cost  
21 of providing service to that particular customer class. Because usage patterns change over  
22 time and reflect customers' reactions to the price signals sent by the rates charged for  
23 service, a cost of service study is best seen as a snapshot in time of the costs of using the

1 system and should be periodically reviewed. The purpose of the cost of service study is  
2 to allocate the total cost of service (*i.e.*, the total revenue requirement) to each customer  
3 class. The cost of service includes debt service, extensions and replacements, operation  
4 and maintenance expenses, and taxes. In the cost of service study, the total costs are  
5 allocated based on the usage patterns of customers using water within each meter size  
6 from 5/8<sup>th</sup> inch through 10 inches. And the cost for private and public fire service for  
7 customer's within meter sizes of 5/8<sup>th</sup> inch through 10 inch. The cost of service  
8 allocation results in indications of the relative cost responsibility of each customer class.

9 **10. WHERE DID YOU OBTAIN THE DATA USED TO PERFORM THE COST OF**  
10 **SERVICE STUDY?**

11 A. The information used to develop the cost of service study was obtained from Anderson  
12 and from Crowe, LLP, which formed the basis for the revenue requirement schedules  
13 shown in Attachments MCB-2 and -3 sponsored by the Petitioner's witness, Jennifer  
14 Wilson. Investment cost data was taken from Anderson's fixed asset system. Data used to  
15 derive the functional allocation factors came from operating statistics for the test year and  
16 prior years, which were Attachment MCB-2 obtained from Anderson's records. Test year  
17 billing analysis information was furnished by Anderson.

18 **11. WHAT WAS THE TEST YEAR USED IN THE STUDY?**

19 A. The test year is the period from January 1, 2023, and December 31, 2023, adjusted as  
20 described in Ms. Wilson's testimony.

21 **12. PLEASE DESCRIBE THE COST OF SERVICE METHODOLOGY THAT YOU**  
22 **EMPLOYED IN THE DEVELOPMENT OF THE RATES AND CHARGES FOR**



1           **ANDERSON?**

2           A. The AWWA “base-extra capacity” (“BEC”) method was used to allocate costs based on the  
3           usage patterns of customers within each meter size. The BEC method has been widely  
4           utilized and is an accepted methodology used by public service commissions and water  
5           systems throughout the United States. The BEC method is a way to allocate water utility  
6           costs that recognizes two primary types of costs:

7           A. Base Costs: These are the fixed or fundamental costs that are incurred to meet the basic  
8           demand for water service. These costs do not vary much with fluctuations in usage.

9           Examples would include a portion of infrastructure like pipelines, treatment facilities, and  
10          customer service.

11          B. Extra Capacity Costs: These are the costs associated with providing additional capacity  
12          or peak demands, such as the infrastructure needed to handle the highest water demand  
13          periods. These costs are incurred to serve customers during periods of high usage or peak  
14          consumption, such as summer months or during emergencies.

15          Under the BEC method, Anderson’s costs (*i.e.*, revenue requirements) are first  
16          functionalized to the following cost functions according to the design and operation of the  
17          water system: base, extra capacity, customer, and direct public fire protection costs. The  
18          functionalized costs are then allocated to each meter size according to their usage and  
19          demand characteristics and other factors which establish the cost responsibility for each  
20          meter size.

21       **13. PLEASE DESCRIBE THE BASE, EXTRA CAPACITY, CUSTOMER, AND**  
22       **DIRECT PUBLIC FIRE PROTECTION COST FUNCTIONS TO WHICH COSTS**

1           **WILL BE FUNCTIONALIZED.**

2       A.   **Base Costs** are costs such as chemicals that vary directly with the total quantity of water  
3           used and capacity costs associated with serving customers under average load conditions.

4           **Extra Capacity Costs** include operating and capital costs incurred due to demands in  
5           **excess** of average load conditions and include two components: 1) Maximum day extra  
6           capacity costs incurred in meeting demands in excess of average day requirements; and  
7           2) Maximum hour extra capacity costs are incurred in meeting hourly demands in excess  
8           of maximum day demands.

9           **Customer Costs** are defined as costs that tend to vary in proportion to the number of  
10          customers connected to the system. Customer costs are further differentiated between  
11          billing-related costs, meter-related costs, or service related costs.

12          **Direct Public Fire Protection Costs** include the direct costs for maintaining and  
13          flushing public fire hydrants and the capital costs associated with those public hydrants.

14       **14. PLEASE DESCRIBE HOW THESE COST FUNCTIONS WILL BE USED TO**  
15       **ULTIMATELY ALLOCATE COSTS TO THE CUSTOMER CLASSES.**

16       A.   Certain facilities are designed and operated to meet average day demands. Costs  
17           associated with these facilities are assigned to the base cost function. In addition, variable  
18           costs such as chemicals and electricity are assigned to the base cost function. The total  
19           base costs are then allocated to customer classes based on each customer class' average  
20           day demand compared to the total average day demand of all customer classes.

21           Other facilities are designed and operated to meet peak day demands. Costs associated  
22           with these facilities are assigned to the maximum day cost function. The total maximum

1 day extra capacity costs are then allocated to customer classes based on each customer  
2 class' maximum day extra capacity demand compared to the total maximum day extra  
3 capacity demand of all customer classes.

4 Some facilities are designed and operated to meet peak hour demands. Costs associated  
5 with these facilities are assigned to the maximum hour cost function. The total maximum  
6 hour extra capacity costs are then allocated to customer classes based on each customer  
7 class' maximum hour extra capacity demand compared to the total maximum hour extra  
8 capacity demand of all customer classes.

9 Customer (Facilities) costs are directly assigned to their respective cost functions – either  
10 billing-related, meters, or services-related. Meter related costs are allocated based on the  
11 cost of a typical meter installation for each size of service. Billing meter reading and  
12 services-related customer costs are allocated to each meter size based on each meter sizes  
13 number of equivalent meters compared to the total number of equivalent meters of all  
14 customer classes. Equivalent meters are determined by relating the cost of various size  
15 meters and services to the cost for a 5/8-inch meter and service.

16 **B. FUNCTIONALIZATION OF COSTS TO COST FUNCTION**

17 **15. PLEASE EXPLAIN HOW COSTS ARE FUNCTIONALIZED AND CLASSIFIED**  
18 **TO THE VARIOUS COST FUNCTIONS.**

- 19 A. Functionalization is the process of grouping or organizing the costs associated with  
20 providing water service based on its function or purpose. In this process, the utility's  
21 costs are categorized by the specific functions they serve (e.g., treatment, pumping,  
22 distribution. etc.

1 Classification refers to dividing the costs further based on how they are associated with  
2 different types of customer demands, particularly focusing on volume and demand  
3 patterns. For the BEC method, the classification is typically broken down into several  
4 categories and example is listed below:

- 5 a. Base Demand – Average Daily Demand
- 6 b. Extra Capacity Demand: Max Day – Maximum Days Demand
- 7 c. Extra Capacity Demand: Max Hour – Maximum Hours Demand

8 Other classifications include meter related costs, public fire protection, and private fire  
9 protection costs.

10 **16. PLEASE EXPLAIN THE BASIS OF YOUR ALLOCATION TO THESE COST**  
11 **FUNCTIONS.**

- 12 A. The water system is comprised of various facilities, each designed and operated to fulfill  
13 a given function. In order to provide adequate service to its customers at all times, the  
14 system must be capable of providing not only the average annual amount of water used  
15 but also supplying water at maximum daily and hourly rates of demand. The capacities of  
16 some facilities, such as water treatment, are designed to meet maximum day system  
17 demands. Other facilities, such as water storage reservoirs (elevated and ground-level  
18 storage tanks) and distribution mains are designed to meet maximum hour system  
19 demands.

20 **17. PLEASE DESCRIBE HOW YOU DEVELOPED THE MAXIMUM DAY AND**

1           **MAXIMUM HOUR COINCIDENT PEAK DEMAND RATIOS.**

2       A.    The maximum day and maximum hour demand ratios were determined from an analysis  
3           of historical recorded average day, maximum day, and maximum hour rates of water  
4           deliveries to the system. A summary of these ratios are included in Schedule 4 of  
5           Attachment MCB-3.

6       **18. PLEASE DESCRIBE ATTACHMENT MCB-3 (i.e., THE COST OF SERVICE**  
7           **DETAILED SCHEDULES)**

8       A.    Attachments MCB-2 and -3 present the cost of service study results and summarizes the  
9           cost of service results for each of the five (5) different phases. These exhibits are  
10          comprised of the cost of service report and 14 schedules representing the various steps in  
11          the cost of service study process. Each step and schedule will be further discussed in the  
12          following testimony.

13       **19. PLEASE EXPLAIN ATTACHMENT MCB-3.**

14       A.    Attachment MCB-3 consists of 14 schedules. (Schedules 5 – 12 include only the phase  
15          five revenue requirements) Schedule 1 presents the information from the water treatment  
16          plant and identifies the date and month of annual water production.

17          Schedule 2 identifies the total feet of pipe listed by size and the classification of  
18          distribution lines and transmission lines and is used to identify distribution, transmission,  
19          and fire protection costs.

20          Schedule 3 identifies the test year usages and number of customers.

1 Schedule 4 calculates each classes max hour and max day factor used to allocate costs to  
2 each class of customers.

3 Schedule 5 separates the existing debt service payments using historical asset investments  
4 in the system, new debt service payments, renewals, and replacements allocated based on  
5 Anderson's capital improvement plan.

6 Schedule 6 classifies debt service payments.

7 Schedule 7 presents the classification of expenses.

8 Schedule 8 sets forth the development of the allocation factors used to separate costs to  
9 each customer class.

10 Schedule 9 provides the development of allocation factors used to separate customer-  
11 related costs such as meter reading and billing to each customer class.

12 Schedule 10 identifies the unit costs allocated to each customer class by cost component.

13 Schedule 11 identifies the allocation and cost development for private and public fire  
14 protection.

15 Schedule 12 provides the summary of costs allocated to each customer class and  
16 compares the costs with the projected revenues from each class to identify the rate  
17 adjustment necessary to meet cost of service requirements.

18 Schedule 13 provides the rate design summary that identifies the proposed rates over the  
19 next five phases.

20 Schedule 14 provides the average meter size impacts for each phase.

1     **20. WHAT RATE ADJUSTMENTS WERE IDENTIFIED IN THE COST OF SERVICE**  
2     **STUDY?**

3     A. The cost of service study identified an overall rate increase of 121.5% with a phase one  
4     rate adjustment of 23.95%; phase two of 5.2%, phase three 24.5%, phase four 19.3% and  
5     phase five of 14.3%.

6                                    **PROPOSED WATER RATES AND CHARGES**

7                                    **Existing Rates and Charges**

8     **21. PLEASE BRIEFLY DESCRIBE ANDERSON'S PRESENT WATER RATES AND**  
9     **CHARGES?**

10    A. Anderson currently uses a minimum charge based on 4 CCF's of water and a declining  
11    block rate starting at \$4.17 per CCF and decreasing to \$1.54 per CCF. The volumetric  
12    rates is listed in the table below:

<b>Commodity</b>		
First 5 hundred cubic feet Rate	\$	4.17
Next 40 hundred cubic feet Rate		2.36
Next 255 hundred cubic feet Rate		2.04
Next 700 hundred cubic feet Rate		1.77
Over 1,000 hundred cubic feet Rate		1.54

13  
14    **22. PLEASE DESCRIBE THE GUIDANCE USED TO MOVE RATES TOWARD THE**  
15    **COST OF SERVICE RATES?**

16    A. The cost of service study indicated increases were needed in all rate classes (meter sizes).  
17    For presentation purposes, the study results are summarized based on assumptions of

1 type of customers within each meter size. These results are as follows:

Customer Class	Cost of Service (\$)	Projected Revenues (\$)	% Change
Residential Sales	\$ 12,721,059	\$ 6,880,755	84.9%
Commercial Sales	5,680,791	2,240,259	153.6%
Industrial Sales	5,356,074	1,486,316	260.4%
Private Fire Protection	327,271	266,129	23.0%
<b>Total</b>	<b>\$ 24,085,196</b>	<b>\$ 10,873,460</b>	<b>121.5%</b>

2  
 3 *\*Assumption on customer classes residential ¾ inch meter to 1 inch, commercial 1.5 inch*  
 4 *meter to 6 inch, industrial 8 inch meter to 10 inch.*

5 The cost of service study was used as guidance, along with discussions with Petitioner's  
 6 staff, to change the Petitioner's current rate structure as follows: 1) the minimum bill  
 7 would be replaced by a fixed monthly customer charge; and 2) the declining block rate  
 8 structure would be eliminated over the five phases and replaced with a flat rate per CCF.

9 In addition, the impact on each meter size would be phased in over the five phase period.

10 The table below identifies the estimated impact of the proposed rate designs on  
 11 customers in each meter size.



Meter Size	Rate Design Changes				
	Year One Adjustment	Year Two Adjustment	Year Three Adjustment	Year Four Adjustment	Year Five Adjustment
5/8" Meter	18.1%	3.1%	17.0%	15.5%	11.8%
3/4" Meter	2.7%	6.0%	17.9%	18.3%	13.6%
1" Meter	2.0%	3.2%	14.7%	15.4%	11.9%
1.5" Meter	-4.4%	6.4%	22.2%	18.4%	13.8%
2" Meter	19.2%	7.4%	24.1%	20.5%	15.1%
3" Meter	41.2%	9.3%	35.3%	19.4%	14.4%
4" Meter	35.7%	9.6%	25.1%	19.4%	14.4%
6" Meter	39.9%	8.5%	28.5%	24.0%	17.1%
8" Meter	42.2%	8.8%	30.9%	25.2%	17.8%
10" Meter	49.6%	8.8%	47.7%	29.3%	19.9%
Private Fire Protection	19.1%	3.4%	19.3%	15.3%	12.1%
Total	24.0%	5.2%	24.5%	19.3%	14.3%

1  
2  
3  
4  
5  
6

**23. WHY WERE SOME OF THE METER SIZE IMPACTS DIFFERENT THAN THE AVERAGE IMPACT**

A. The differences in meter size impacts stem from the cost of service study findings, which identified significant variations in the average cost to service each meter size. The study did not support the declining block rate structure, as shown in the table below.

Customer Class	Cost of Service Commodity by Class	Current Commodity Charge
5/8" Meter	\$ 5.65	\$ 3.52
3/4" Meter	6.41	2.78
1" Meter	5.81	2.75
1.5" Meter	6.49	2.35
2" Meter	5.65	2.19
3" Meter	5.73	2.03
4" Meter	5.65	2.01
6" Meter	5.64	1.86
8" Meter	5.75	1.78
10" Meter	5.54	1.54

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13

This structure led to discrepancies between the current average rates and the cost-based rates. For instance, the 10” meter currently incurs an average rate of \$1.54 per CCF, whereas the COS study indicates a cost-based rate of \$5.54 per CCF. Across all meter sizes, the cost per CCF ranged from \$5.54 to \$6.49.

The proposed rate design under Phase Five moves toward aligning rates with the COS results. Prior to the implementation of Phase Five the cost of service based rates will not be fully implemented. This is due to considerations such as gradual implementation to avoid customer rate shock. As a result, the variation between meter size impacts and the average impact reflects both the inherent differences in service costs and the phased approach to rate adjustment.

**24. WHY WAS THE MINIMUM BILL REPLACED WITH THE FIXED MONTHLY CHARGE**

1 A. Replacing a minimum bill with a fixed monthly charge in a water utility's rate structure is  
2 often done to better align cost recovery and to promote fairness and transparency to  
3 customers by separating the fixed and variable component of the rate.

4 A fixed monthly charge improves cost recovery by ensuring the utility recovers a portion  
5 of their fixed costs (e.g., infrastructure maintenance, meter reading, billing systems)  
6 regardless of water usage. These costs are incurred even if a customer uses no water.

7 Where a minimum bill is often tied to a small level of water consumption. Customers  
8 who use less than the minimum threshold might not pay enough to cover the fixed costs  
9 of providing service.

10 A minimum bill can be perceived as inequitable because customers who consume less  
11 water are effectively paying for water they didn't use, just to meet the minimum charge.

12 A fixed charge, by contrast, decouples fixed costs from usage, ensuring all customers  
13 contribute equitably to the infrastructure they rely on.

14 A fixed monthly charge is simpler for customers to understand. It clearly delineates the  
15 cost of having access to the water system, independent of consumption.

16 A minimum bill can be confusing, as customers might not realize they are being charged  
17 for a set amount of usage even if they don't consume that amount.

18 **25. DID YOU PREPARE SCHEDULES THAT COMPARE THE PROPOSED RATES**  
19 **TO THE PRESENT RATES?**

20 A. Yes. Attachment MCB-3, Schedule 13 presents a comparison of the current individual

1 unit rates and charges to the proposed unit rates and charges. A discussion on the  
 2 proposed rate changes are below:

3 The minimum bill will be replaced by a fixed monthly meter charge. The meter charges  
 4 will be phased in over the five phase period.

5 The rate design moves each meter size closer to cost of service. The maximum increases  
 6 tended to occur with customers with high water consumption due to the elimination of the  
 7 declining block rate structure with the largest increase in the 10 inch meter grouping.

8 Private fire protection rates are increasing at a rate less than other rate classes but will be  
 9 above cost of service after phase five. This was needed to minimize increases and rate  
 10 shock to other customers.

11 A summary comparison between projected revenues after phase five and cost of service is  
 12 listed in the table below.

Customer Class	Projected Revenues (\$)	Cost of Service (\$)	% Change
Residential Sales	\$ 12,560,114	\$ 12,721,059	1.3%
Commercial Sales	5,470,097	\$ 5,680,791	3.9%
Industrial Sales	5,524,865	\$ 5,356,074	-3.1%
Private Fire Protection	504,953	\$ 327,271	-35.2%
<b>Total</b>	<b>\$ 24,060,029</b>	<b>\$ 24,085,196</b>	<b>0.1%</b>

13  
 14 \*Assumption on customer classes residential ¾ inch meter to 1 inch, commercial 1.5 inch  
 15 meter to 6 inch, industrial 8 inch meter to 10 inch.

16 The proposed rate changes aim to improve cost recovery, promote fairness across customer

1 classes, and encourage water conservation. By phasing in these adjustments, the utility  
2 minimizes the impact on customers while aligning rates with the cost of service and  
3 achieving long-term financial stability.

4 **26. HAVE YOU PREPARED A PROPOSED TARIFF FOR THE SCHEDULE OF**  
5 **RATES AND CHARGES AS PROPOSED BY ANDERSON?**

6 A. Yes. Attachment MCB-4 is the proposed tariff setting forth the five phases of the rates  
7 and charges proposed by Anderson in this proceeding

8 **III.**  
9 **Conclusion**

10 **27. DOES THIS CONCLUDE YOUR TESTIMONY?**

11 A. Yes, it does.

**VERIFICATION**

I affirm under the penalties for perjury that the foregoing testimony is true to the best of my knowledge, information, and belief.

DocuSigned by:  
*Mark Beauchamp* 12/4/2024  
90B9A9A408554A7...


---

Mark C. Beauchamp

**CERTIFICATE OF SERVICE**

I certify that a copy of the foregoing document was served upon the following by electronic mail this 5th day of December, 2024:

William I. Fine  
Daniel M. LeVay  
Indiana Office of Utility Consumer Counselor  
[wfine@oucc.in.gov](mailto:wfine@oucc.in.gov)  
[dlevay@oucc.in.gov](mailto:dlevay@oucc.in.gov)  
[infomgt@oucc.in.gov](mailto:infomgt@oucc.in.gov)



---

Christopher Janak

Bose McKinney & Evans LLP  
111 Monument Circle, Suite 2700  
Indianapolis, IN 46204  
(317) 684-5000

4887679.3

# **Attachment MCB-1**



## **Mark Beauchamp, CPA, CMA, MBA Resume**

Mark is the owner and current President of Utility Financial Solutions, a financial services firm that provides services to electric, water, wastewater and gas utilities. Mark has provided these services internationally, Over 40 US states, Canada, Guam, Barbados, Bermuda and Cayman Islands. He is the instructor and developed the series of courses on utility financial planning and cost of service primarily focused on Municipally owned utilities. Mark taught courses through the Camp NARUC program offered by Michigan State University and is a frequent speaker at utility conferences around the United States. Mark started Utility Financial Solutions, LLC in 2001 after developing the national consulting practice at Baker Tilly and working for a large municipal utility for 17 years. Marks background and experience is summarized below:

### **Education:**

- AAS Water Purification Technology
- ABA Business Administration
- BBA Accounting
- MBA Masters Degree in Business

### **License and Qualifications:**

- Class "A" license in sanitary sewer treatment State of Michigan – Allowed license to lapse
- Class F-4 license in water treatment from State of Michigan – Allowed license to lapse
- Certified Public Accountant in Wisconsin - Allowed to license to lapse
- Certified Management Accountant – Institute Certified Management Accountants Active

### **Cost of Service & Financial Planning Course Instructor:**

#### **American Public Power Association**

- Advanced Cost of Service Course

- Intermediate Cost of Service
- Basic Cost of Service
- Financial Planning for Municipal Utilities
- Financial Planning for Board & Councils

#### **Michigan State University**

- Advanced Issues in Cost Allocation
- Retail Costing and Pricing of Electricity
- Wholesale Costing and Pricing of Electricity

#### **Southwest American Water Works Association**

- Water & Wastewater Cost of Service & Financial Planning

#### **Nebraska Rural Electric Association**

- Financial Planning and Rate Design for Electric Utilities

#### **American Municipal Power (AMP)**

- Financial Planning and Rate Designs for Electric Utilities

#### **American Public Gas Association (AGPA) (Webinar)**

- Financial Planning and Key Financial Targets
- Cost of Service Basics

#### **Expert Witness**

- Detroit Edison vs. Ameritech – Provided expert witness services for Detroit Edison on development of Pole Attachment Rates for Ameritech
- Dayton Power & Light – Provided expert witness services on pole attachment rates. Case was resolved prior to
- Coldwater Board of Public Works – Provide expert witness services on rate challenge by large industrial customer
- Westland Michigan – Allocation of city provided services to water and wastewater departments
- Mackinaw Michigan – Expert witness on rate disputes with hotels
- Highland Park, Michigan – Expert witness in rate dispute with Great Lakes Water Authority

- Kalamazoo Regional Authority – Expert witness services to Authority on methodology used to set water and wastewater rates by the City of Kalamazoo
- Smethport PA – Provided deposition and responses to Pennsylvania Public Service Commission on Rate Filing for Smethport
- Bloomington Indian – Provided testimony and exhibits for the City on water rate study to the Indiana Public Service Commission

### **Mediation Services**

- Lyon Township Michigan – Mediation for wastewater charges between Lyon Township & Lyon Wastewater
- Big Rapids Michigan – Mediation for wastewater charges between City of Big Rapids and Two area Townships
- Alpena, Mi – Mediation on water rates and charges between City of Alpena and Alpena Township
- St. Joe and Lincoln Township Michigan – Mediation services on wastewater charges from the St. Joe Wastewater Treatment Facility

### **Cost of Service & Financial Planning Studies:**

Mark has been involved in the presentation, evaluation or updates of over 500 cost of service studies. Prior to starting his own consulting practice, he held a number of positions with one of the largest municipal systems in Michigan and a national consulting firm. Brief overviews of his responsibilities are listed below:

- Completed over 500 Cost of Service and Rate Design studies for Water, Wastewater, Electric, Gas and Telecommunication Utilities.
- Served as expert witness before regulatory agencies, governing bodies of municipal utilities and State Legislators
- Served as expert witness for investor-owned utility on pole attachments

**Mark has the following industry involvement:**

- Member of the American Public Power Association
- Member of the American Water Works Association
- Member of the Institute of Management Accountants
- Speaker at national conferences on Financial Planning for Municipal Utilities, Pricing for Water Utilities, Pricing Fiber Optic backbone systems, Unbundling Electric Rates, and Ways to Attract and Retain Customers
- Author of articles appearing in national magazines and newsletters regarding pricing fiber optics, unbundling electric rates, and designing water rates
- Served on the Pricing and Market Analysis Committee, Task Force on Competitive Rate Designs, and Task Force on Open-Access Transmission Tariffs through the American Public Power Association

The clients listed in the Table below were studies completed by UFS under the supervision of Mark and included a cost of service and rate design as part of the study.

### Sample of UFS List of Electric Clients

Electric Financial Services					
1	Ainsworth NE - KBR Rural Public Power Dst	57	Harbor Springs MI	113	Orrville OH
2	Albemarle NC	58	Haskins OH	114	Owatonna MN
3	Algona IA	59	Heber City UT	115	Painesville OH
4	AMP - American Municipal Power, Inc. OH	60	Hertford NC	116	Paw Paw Village MI
5	Apex NC	61	Highland IL	117	Perennial Power District NE
6	APPA	62	Holland BPW MI	118	Petoskey MI
7	Ashland OR	63	Hope AR	119	Philippi WV
8	Austin Energy TX	64	Hope Enterprise Corporation	120	Plainview NE
9	Austin MN	65	Howard Greeley NE	121	Platte River CO
10	Ayden NC	66	Hubbard OH	122	Polk County Public Power District NE
11	Barbados	67	Hudson OH	123	Poplar Bluff MO
12	Battle River REA - Camrose AB Canada	68	Huntersville NC	124	Rancho Cucamonga CA
13	Bay City MI	69	Hurricane UT	125	Rantoul IL
14	Bedford VA	70	Hutchinson MN	126	Richmond IN
15	Belmont MA	71	Imperial CA - IID	127	Riverside CA
16	Benton AR	72	Indiana Municipal Power Agency	128	Rochelle IL
17	Bermuda	73	Jasper IN	129	Rochester MN
18	Blanding UT	74	Kennett MO	130	Rock Falls IL
19	Boulder CO	75	Kerrville TX	131	Roseville CA
20	Brainerd MN	76	Keys Energy Services FL	132	Santee Cooper SC
21	Bryan OH	77	Knoxville TN	133	Scotland Neck NC
22	Burt County Public Power District NE	78	Lake Worth FL	134	Selma NC
23	Butler Public Power District NE	79	Lansing MI	135	Seville OH
24	Cedar Falls IA	80	Lewes DE	136	Shasta Lake CA
25	Cedar- Knox NE	81	Lexington NC	137	Shelby NC
26	Charlevoix MI	82	Lincoln NE - MEAN - NMPP	138	Shelby OH
27	Chaska MN	83	Linden IN - Tipmont REMC	139	Sikeston MO
28	Clallam County WA	84	Lodi OH	140	Sitka AK
29	Cleveland Public Power OH	85	Los Alamos NM	141	Smithfield NC
30	CMEEC	86	Louisburg NC	142	Smyrna DE
31	Coffeyville KS	87	Loup Valleys NE	143	South Bend Hydro
32	Coldwater MI	88	Loveland CO	144	South River NJ
33	Colorado Springs CO	89	Lowell MI	145	South San Joaquin Irrigation District CA
34	Columbia MO	90	Manassas VA	146	Southern Public Power District NE
35	Columbia TN	91	Marquette MI	147	St. Louis MI
36	Conway AR	92	Martinsville VA	148	Stanton NE
37	Cornhusker NE	93	Mascoutah IL	149	Stillwater OK
38	Custer Public Power District NE	94	McMinnville OR	150	Sturgis MI
39	Cuyahoga Falls OH	95	Merced Irrigation District CA	151	Tahlequah OK
40	Danville VA	96	Milford DE	152	Traverse City MI
41	East Norwalk CT	97	Milltown NJ	153	Turlock CA
42	Easton MD	98	Mishawaka IN	154	Twin Valleys NE
43	Elkhorn NE	99	Missouri River Energy Services SD	155	UAMPS
44	Energy Northwest - Richland WA	100	Murfreesboro TN	156	UPPCO MI
45	Farmville NC	101	Naperville IL	157	Wadsworth OH
46	Fort Collins CO	102	Nashville TN	158	Wagoner OK
47	Front Royal VA	103	New Carlisle IN	159	Walkerton IN
48	Fulton County REMC - Rochester IN	104	New Castle DE	160	Washington City NC
49	Gastonia NC	105	Newberry SC	161	Washington City UT
50	Georgetown Utility Systems TX	106	Newton Falls OH	162	Watertown SD
51	Grand Haven MI	107	Niles MI	163	Waverly IA
52	GRDA - Grand River Dam Authority OK	108	Niles OH	164	Westerville OH
53	Groton CT	109	Niobrara Valley NE	165	Westfield MA
54	Guam	110	North Attleborough MA	166	Winnetka IL
55	Hamilton NC	111	North Central Public Power District NE	167	WPPI Energy
56	Hannibal MO	112	North Little Rock AR	168	Zeeland BPW MI

### UFS List of Water and Wastewater Clients past Five Years

Wastewater		Water	
1	Albion MI	1	Austin MN
2	Baldwin MI	2	Bay City MI
3	Bay City MI	3	Beaverton MI
4	Beaverton MI	4	Belding MI
5	Bedford Charter Twp MI	5	Benton AR
6	Belding MI	6	Brainerd MN
7	Benton AR	7	Bruce Township MI
8	Big Rapids MI	8	Cedar Falls IA
9	Brainerd City MN	9	Charlevoix MI
10	Brainerd MN	10	Chaska MN
11	Bruce Township MI	11	Clarksburg WV
12	Cadillac MI	12	Coldwater MI
13	Charlevoix MI	13	Coloma MI
14	Chaska MN	14	Columbia MO
15	Coldwater MI	15	Columbia TN
16	Commerce Township MI	16	Commerce Township MI
17	Covert Township MI	17	Danville VA
18	Danville VA	18	Emmett Township MI
19	Grand Haven Township MI	19	Frankenmuth Township MI
20	Groton CT	20	Grand Haven Township MI
21	Harbor Springs MI	21	Grand Traverse County MI
22	Harrison MI	22	Hannibal MO
23	Haskins OH	23	Harbor Springs MI
24	Holland BPW MI	24	Harrison OH
25	Holland Township MI	25	Holland BPW MI
26	Hopkins MI	26	Holland Township MI
27	Howell MI	27	Hope AR
28	Kalamazoo MI	28	Howell MI
29	Kennett MO	29	Imperial CA - IID
30	Lewes DE	30	Kalamazoo MI
31	Lincoln Charter Township MI	31	Kennett MO
32	Ludington MI	32	Lewes DE
33	Lyon Township MI	33	Ludington MI
34	Macomb County MI	34	Macomb Township MI
35	Manassas VA	35	Manassas VA
36	Milwaukie OR	36	McMinnville OR
37	Muskegon MI	37	Milwaukie OR
38	Newberry SC	38	New Castle DE
39	Niles MI	39	Newberry SC
40	Niles OH	40	Niles MI
41	Northville Township MI	41	Niles OH
42	Paw Paw Township MI	42	North Muskegon MI
43	Pentwater MI	43	Northville Township MI
44	Poplar Bluff MO	44	Oakland Township MI
45	Rantoul IL	45	Owatonna MN
46	Ray Township MI	46	Pentwater MI
47	Rock Falls IL	47	Poplar Bluff MO
48	Saranac MI	48	Rantoul IL
49	Sikeston MO	49	Rochester MN
50	Smyrna DE	50	Rock Falls IL
51	Sturgis MI	51	Sikeston MO
52	Union City MI	52	Smyrna DE
53	Wagoner OK	53	Sturgis MI
54	Washington Township MI	54	Wagoner OK
55	Westland MI	55	Washington Township MI
56	Wixom MI	56	Watertown SD
57	York NE	57	Westland MI
58	Zeeland City of MI	58	Wixom MI
		59	York NE
		60	Zeeland City of MI

# **Attachment MCB-2**



**City of Anderson**  
**Water Cost of Service and**  
**Rate Design Study Report**  
December 2024



Corporate location:  
Utility Financial Solutions, LLC  
185 Sun Meadow Court  
Holland, MI USA 49424  
(616) 393-9722  
Fax (888) 566-4430

Submitted Respectfully by:  
Mark Beauchamp, CPA, CMA, MBA  
President, Utility Financial Solutions, LLC  
mbeauchamp@ufsweb.com  
(616) 393-9722





December 2024

Douglas A Whitham  
Controller  
City of Anderson Water Department  
120 E. Eighth St.  
Anderson, IN 46016

Dear Contact Name:

We are pleased to present the Report for the water cost of service study for the City of Anderson Water Department (Water Department). This report was prepared to provide the Water Department with a comprehensive examination of its existing rate structure by an outside party.

The specific purposes of this rate study are:

- Determine water utility's revenue requirements for fiscal year 2024
- Identify cross-subsidies that may exist between rate classes
- Determine rate adjustments needed to meet targeted revenue requirements
- Identify the appropriate monthly customer charge for each customer class

This report includes results of the water cost of service study and considerations on future rate designs.

This report is intended for information and use by the utility and management for the purposes stated above and is not intended to be used by anyone except the specified parties.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Beauchamp", is written over a horizontal line.

Utility Financial Solutions, LLC  
Mark Beauchamp, CPA, MBA, CMA  
185 Sun Meadow Ct  
Holland, MI 49424

**TABLE OF CONTENTS**

1. Introduction .....1

2. Revenue Requirements .....2

3. Cost of Service Summary .....3

    Cost of Service Components .....5

    Combined Cost Summary .....7

    Customer Costs (Fixed) Breakdown .....8

    Commodity Costs (Variable) Breakdown .....10

4. Classification Process .....11

    Allocation Development .....12

5. Significant Allocation Factors Used in Study .....15

Appendix A – Rate Design ..... i

**LIST OF TABLES**

Table 1 – Revenue Requirements by Phase (Crowe LLP).....2

Table 2 – Cost of Service Summaries by Phase .....3

Table 3 – Comparison of Current Customer Costs (Fixed) with Cost of Service .....6

Table 4 – Comparison of Current Commodity Costs (Variable) with Cost of Service .....7

Table 5 – Total Costs by Customer Class .....7

Table 6 – Monthly Component Charges .....8

Table 7 – Meter Capacity Factors .....9

Table 8 – Commodity Charge Breakdown .....10

Table 9 – Unbundled Breakdown by Expense Type .....11

Table 10 – Classification of Costs .....11

Table 11 – Max Day Factor .....13

Table 12 – Max Day Calculation .....14

Table 13 – Max Hour Calculation .....14

Table 14 – Allocation Factors for Treatment, Distribution, and Transmission Costs .....15

---

Table 15 – Revenue Summary of Proposed Rates ..... ii

Table 16 – Proposed Monthly Charge (Customer Charges)..... ii

Table 17 – Proposed Commodity Rates ..... ii

Table 18 – Proposed Public and Private Fire Protection..... iii

Table 19 – Customer Impact by Meter Size ..... iii

## 1. Introduction

This report was prepared to provide the City of Anderson Water Department (Water Department) with a water cost of service study and a comprehensive examination of its existing rate structure by an outside party.

The specific purposes of the study are identified below:

1. **Identify cross-subsidies that may exist between rate classes.** Cross-subsidies exist when certain customer classes subsidize the water costs of other customers. The rate study identifies if cross-subsidies exist and practical ways to reduce the subsidies. The cost of service study was completed using 2024 projected revenues and expenses. The financial projections are for the period from 2024 – 2028.
2. **Identify rate adjustments needed to meet targeted revenue requirements.** The primary purpose of this study is to identify appropriate revenue requirements, and the rate adjustments needed to meet targeted revenue requirements. The report includes a long-term rate track for the Water Department to help ensure the financial stability of the utility in future years.
3. **Unbundled water rates.** The cost of providing water to customers consists of several components, including distribution, customer services, and transfers to the general fund. Water unbundling identifies the cost of each component to assist the utility in preparing for water restructuring and understanding its cost structure.
4. **Identify the appropriate monthly customer charge for each customer class.** The monthly customer charge consists of fixed costs to service customers.

## 2. Revenue Requirements

The revenue requirements were defined using a phased in approach by Crowe LLP. Revenue requirements were identified on a cash basis and include operation and maintenance expenses, taxes, leases, annual debt service payments, anticipated debt service, and extensions and replacements. The percentage rate increase needed to meet targeted revenue requirements for each phase is provided in Table 1.

**Table 1 – Revenue Requirements by Phase (Crowe LLP)**

	2025 Phase I	January 2026 Phase II	January 2027 Phase III	January 2028 Phase IV	January 2029 Phase V
Adjusted Operation and Maintenance Expenses	\$ 10,327,225	\$ 10,327,225	\$ 10,327,225	\$ 10,327,225	\$ 10,327,225
Adjusted Taxes Other Than Income Taxes	908,049	908,049	908,049	908,049	908,049
Current Annual Lease Payment	150,000	73,826			
Combined Current Annual Debt Service	1,306,190	1,315,090	937,680	940,890	937,140
2025 Bonds Estimated Annual Debt Service		1,000	1,166,150	2,910,250	2,911,250
2026 Bonds Estimated Annual Debt Service			2,138,063	1,973,650	3,122,550
2027 Bonds Estimated Annual Debt Service				1,485,167	1,691,950
2025 Bonds Debt Service Reserve Annual Funding		582,950	582,950	582,950	582,950
2026 Bonds Debt Service Reserve Annual Funding			624,600	624,600	624,600
2027 Bonds Debt Service Reserve Annual Funding				338,490	338,490
Operating Fund Balance Build Up		185,126	185,126	185,126	
Extensions and Replacements	1,000,000	1,000,000	1,000,000	1,000,000	2,842,400
Total Revenue Requirements	13,691,464	14,393,266	17,869,843	21,276,397	24,286,604
Less: Adjusted Operating Revenues	(11,074,869)	(13,695,373)	(14,397,059)	(17,874,993)	(21,268,321)
Deficit	2,616,595	697,893	3,472,784	3,401,404	3,018,283
Divide by: Adjustable Operating Revenues	10,873,460	13,493,964	14,195,650	17,673,584	21,066,912
Percentage Rate Increase Required	24.1%	5.2%	24.5%	19.2%	14.3%
Compounded Rate Increase	24.1%	30.5%	62.5%	93.8%	121.5%

### 3. Cost of Service Summary

Using the revenue requirements identified in Table 1, a cost of service study was completed for each phase to determine the cost of providing service to each class of customers and to assist in design of water rates for customers. A cost of service study consists of the following general steps:

1. Functionalize utility expenses into common cost pools.

Source of Supply	Distribution	Customer
Treatment	Transmission	Administrative
Reservoirs	Fire Protection	Hydrants

2. Classify within cost pools.

Variable	Fixed
Base Commodity	Capacity
Max Day Commodity	Customer
Max Hour Commodity	Fire Protection

3. Allocate costs to customer classes based on the class’s contribution to utility expenses – Class usage patterns were analyzed and compared to system use to develop peaking factors used in allocating the variable components of the rate (Base, Max Day, Max Hour). Number of meters, meter costs, meter size, and meter equivalent ratios were used to allocate the fixed components of the rate (Capacity Fixed, Customer, Fire Protection).
4. Compare revenues received from each class to the cost of service. The cost of service provides guidance for the direction of the rate design.

The cost of service summary is included as Table 2 which compares the projected cost to serve each class (fixed and variable) with the revenue received from each class. The “% change” column is the revenue adjustment necessary to meet projected cost of service requirements. The Water Department is requesting rates over the next five years and cost of service by class is shown below for Phase 1 through Phase 5. ***The remainder of the report discusses the cost based charges under Phase 5.***

**Table 2 – Cost of Service Summaries by Phase**

Customer Class	TOTAL COST OF SERVICE (by defined group)		Phase 1	
	Cost of Service (\$)	Projected Revenues (\$)	% Change	
Residential Sales	\$ 7,000,540	\$ 6,880,755	1.7%	
Commercial Sales	3,100,304	2,240,259	38.4%	
Industrial Sales	3,234,330	1,486,316	117.6%	
Private Fire Protection	154,881	266,129	-41.8%	
<b>Total</b>	<b>\$ 13,490,056</b>	<b>\$ 10,873,460</b>	<b>24.1%</b>	

<b>TOTAL COST OF SERVICE (by defined group)</b>				<b>Phase 2</b>
Customer Class	Cost of Service (\$)	Projected Revenues (\$)		% Change
Residential Sales	\$ 7,379,389	\$ 6,880,755		7.2%
Commercial Sales	3,286,312	2,240,259		46.7%
Industrial Sales	3,359,062	1,486,316		126.0%
Private Fire Protection	167,094	266,129		-37.2%
<b>Total</b>	<b>\$ 14,191,858</b>	<b>\$ 10,873,460</b>		<b>30.5%</b>

<b>TOTAL COST OF SERVICE (by defined group)</b>				<b>Phase 3</b>
Customer Class	Cost of Service (\$)	Projected Revenues (\$)		% Change
Residential Sales	\$ 9,234,709	\$ 6,880,755		34.2%
Commercial Sales	4,175,152	2,240,259		86.4%
Industrial Sales	4,028,123	1,486,316		171.0%
Private Fire Protection	230,450	266,129		-13.4%
<b>Total</b>	<b>\$ 17,668,435</b>	<b>\$ 10,873,460</b>		<b>62.5%</b>

<b>TOTAL COST OF SERVICE (by defined group)</b>				<b>Phase 4</b>
Customer Class	Cost of Service (\$)	Projected Revenues (\$)		% Change
Residential Sales	\$ 11,070,363	\$ 6,880,755		60.9%
Commercial Sales	5,000,208	2,240,259		123.2%
Industrial Sales	4,717,993	1,486,316		217.4%
Private Fire Protection	286,424	266,129		7.6%
<b>Total</b>	<b>\$ 21,074,989</b>	<b>\$ 10,873,460</b>		<b>93.8%</b>

<b>TOTAL COST OF SERVICE (by defined group)</b>				<b>Phase 5</b>
Customer Class	Cost of Service (\$)	Projected Revenues (\$)		% Change
Residential Sales	\$ 12,721,059	\$ 6,880,755		84.9%
Commercial Sales	5,680,791	2,240,259		153.6%
Industrial Sales	5,356,074	1,486,316		260.4%
Private Fire Protection	327,271	266,129		23.0%
<b>Total</b>	<b>\$ 24,085,196</b>	<b>\$ 10,873,460</b>		<b>121.5%</b>

## Cost of Service Components

### Summary of Rate Components

The cost of service study is a critical tool in utility finance and management. It ensures that rates are set based on actual costs, and it helps to distribute those costs fairly among customers, based on how they use the service. It provides guidance for setting rates that support the utility's financial health and its capacity to provide reliable service in the long term. The purpose of the study is to allocate costs between flow (commodity costs, variable) and customer service costs (customer costs, fixed). The cost of service study was based on recognized procedures from the American Water Works Association.

**Customer Costs (Fixed)** – These are fixed costs, associated with serving customers regardless of how much water they use. They include the costs of operation and maintenance related to meters, services, meter reading, billing, customer service, and a base amount of distribution. Because these costs are largely fixed, they are typically recovered through a fixed ‘customer charge’ that customers pay regardless of their water use. This portion of the rate ensures that the utility can cover its basic operating costs, even if water use fluctuates significantly. Allocating these costs based on the relative cost of meters, services, and the number of customers ensures that each customer is paying their fair share of these basic operating costs.

**Commodity Costs (Variable)** – These are the variable costs associated with the actual production and delivery of water. They can include costs related to water supply, water treatment, pumping (energy costs), and distribution infrastructure. Because these costs tend to vary with the amount of water used, they are typically recovered through a variable ‘commodity charge’ that is based on the volume of water consumed.

For water utilities, the cost of service study is based on Long Term Marginal Costs (LTMC). LTMC is considered the best practice as it sends accurate price signals to consumers based on the full cost of providing additional units of service, including the cost of infrastructure investments that will be needed in the future. This promotes efficient use of water and ensures that the utility collects sufficient revenue to sustain its operations over the long term. This differs from Short-Term Marginal Cost (STMC) which refers to the cost associated with producing one additional unit of output (e.g., one more cubic meter of water treated and delivered) in the short term.



Table 3 details the current minimum bill charges and compares them with the cost of service monthly customer charges. The City of Anderson currently applies a minimum charge to help recover a portion of fixed costs from each customer, while also including a small water usage allowance within the minimum bill.

The cost of service study identifies the appropriate portion of fixed costs that should be recovered from customers regardless of water consumption. The table below highlights the key differences between a facilities charge and a minimum bill charge, illustrating their distinct purposes and applications.

Aspect	Water Facilities Charge	Water Minimum Bill Charge
<b>Basis</b>	Infrastructure and fixed costs	Minimum revenue per customer
<b>Applicability</b>	Charged separately as a fixed fee	Covers all or part of the bill
<b>Relationship to Usage</b>	Independent of water usage	May include a small usage allowance

The rates outlined below are not the proposed rates but serve as a guide for transitioning toward cost of service alignment over time. Customer classes currently charging at or above cost of service levels may still experience an increase to meet overall revenue requirements; however, such increases are likely to be below the average.

**Table 3 – Comparison of Current Customer Costs (Fixed) with Cost of Service**

Customer Class	Customers/ Meters (Monthly)	Cost of Service Meter \$/Month	Current Minimum Charges
5/8" Meter	21,598	\$ 14.14	\$ 16.66
3/4" Meter	78	20.30	32.19
1" Meter	350	36.85	60.64
1.5" Meter	91	62.04	119.22
2" Meter	249	95.57	145.06
3" Meter	141	189.50	229.20
4" Meter	83	292.59	288.42
6" Meter	27	552.17	596.72
8" Meter	4	845.13	897.33
10" Meter	1	1,218.34	-

Table 4 provides a comparison between the cost of service (COS) commodity rates and the current commodity charges. The Water Department currently utilizes a declining block rate structure. The table below compares the average commodity charge per CCF (hundred cubic feet) by meter size with the corresponding cost of service commodity charge per CCF.

It is important to note that the rates presented below are not the proposed rates. Instead, they serve as a reference to gradually transition toward cost of service alignment over time.

**Table 4 – Comparison of Current Commodity Costs (Variable) with Cost of Service**

Customer Class	Service Commodity by Class	Current Commodity Charge	Variance
5/8" Meter	\$ 5.65	\$ 3.52	61%
3/4" Meter	6.41	2.78	130%
1" Meter	5.81	2.75	112%
1.5" Meter	6.49	2.35	177%
2" Meter	5.65	2.19	159%
3" Meter	5.73	2.03	182%
4" Meter	5.65	2.01	182%
6" Meter	5.64	1.86	204%
8" Meter	5.75	1.78	223%
10" Meter	5.54	1.54	259%

## Combined Cost Summary

Table 5 compares the cost of service (COS) rates for each customer class with the current rates. Implementing these rates would ensure that the charges directly align with the cost of providing service to each customer class, as shown below.

**Table 5 – Total Costs by Customer Class**

Customer Class	Commodity Units	Meters	Cost of Service Commodity Charge	Cost of Service Meter Charge	Total
5/8" Meter	1,322,866	259,172	\$ 5.65	\$ 14.14	\$ 11,141,079
3/4" Meter	10,207	939	6.41	20.30	84,460
1" Meter	56,201	4,200	5.81	30.77	455,754
1.5" Meter	39,140	1,092	6.49	62.04	321,728
2" Meter	235,885	2,988	5.65	95.57	1,618,580
3" Meter	205,462	1,692	5.73	189.50	1,497,839
4" Meter	121,706	996	5.65	292.59	979,133
6" Meter	142,578	324	5.64	552.17	983,724
8" Meter	47,396	48	5.75	845.13	313,263
10" Meter	907,986	12	5.54	1,218.34	5,042,811

## Customer Costs (Fixed) Breakdown

The customer charge consists of expenses related to, 1) servicing a meter on the customer's premises; 2) costs to maintain the line between the water main and the customer's facility, and 3) costs for billing and collections. Together they reflect the cost for availability of service. The methodology used in this study is a method consistent with practices used by AWWA.

Table 6 below identifies the monthly component cost for each component and the cost based monthly customer charge.

**Table 6 – Monthly Component Charges**

Rate Class - Unit Costs	Meter Charge			Monthly Meter Unit Cost
	Meters	Services	Billing	
5/8" Meter	\$ 4.64	\$ 8.73	\$ 0.77	\$ 14.14
3/4" Meter	6.05	13.10	1.15	20.30
1" Meter	7.02	21.83	1.92	30.77
1.5" Meter	14.53	43.66	3.85	62.04
2" Meter	19.57	69.85	6.16	95.57
3" Meter	46.98	130.97	11.55	189.50
4" Meter	55.07	218.28	19.25	292.59
6" Meter	77.12	436.56	38.49	552.17
8" Meter	85.05	698.49	61.59	845.13
10" Meter	125.72	1,004.08	88.53	1,218.34

## Customer Charge Allocations

<b>Meters</b>	Installation, operation, and maintenance costs of meter based on number of meters and meter cost
<b>Services</b>	Installation, operation, and maintenance cost of service drop based on number of meters and capacity ratio
<b>Billing and Customer Service</b>	Personnel cost, billing, and collection cost to service accounts based on number of meters and meter size

Often, larger meters require additional time in processing and vetting the bills and answering customer service questions. Because of this, a weighting factor is assigned based on the size of the meter.

### **Determination of Meter Equivalent**

A meter equivalent is the maximum capacity of the utility's smallest meter size relative to the maximum capacity of larger meters. The meter equivalent ratios are standardized factors established by the American Water Works Association (AWWA).

**Table 7 – Meter Capacity Factors**

Meter Size	Meter Capacity Ratios	
	5/8"	
0.63	1.00	
0.75	1.50	
1.00	2.50	
1.50	5.00	
2.00	8.00	
3.00	15.00	
4.00	25.00	
6.00	50.00	
8.00	80.00	
10.00	115.00	
12.00	215.00	

The table of capacity factors was calculated using theoretical volume capacity of each meter size. The table can be interpreted as a 2-inch meter has 8 times more potential capacity than a 5/8-inch meter.

## Commodity Costs (Variable) Breakdown

The commodity charges are generated by functionalizing the general ledger for the test year into common cost pools. The costs are then classified into fixed and variable components prior to allocation to each meter size based on the usage pattern of each class. The cost based commodity rates are broken down by meter size and listed in Table 8 below.

**Table 8 – Commodity Charge Breakdown**

Rate Class - Unit Costs	Extra Capacity - Treatment		Extra Capacity - Distribution			Extra Capacity - Transmission			Usage: Unit Cost	Usage: Current Average Rate
	Treatment Base	Treatment MD	Distribution Base	Distribution MD	Distribution MH	Transmission Base	Transmission MD	Transmission MH		
5/8" Meter	\$ 2.39	\$ 0.29	\$ 1.00	\$ 0.14	\$ 0.16	\$ 1.31	\$ 0.19	\$ 0.17	\$ 5.65	\$ 3.52
3/4" Meter	2.39	0.62	1.00	0.29	0.19	1.31	0.40	0.20	6.41	2.78
1" Meter	2.39	0.36	1.00	0.17	0.17	1.31	0.23	0.18	5.81	2.75
1.5" Meter	2.39	0.66	1.00	0.31	0.19	1.31	0.43	0.20	6.49	2.35
2" Meter	2.39	0.29	1.00	0.14	0.16	1.31	0.19	0.17	5.65	2.19
3" Meter	2.39	0.33	1.00	0.15	0.16	1.31	0.21	0.17	5.73	2.03
4" Meter	2.39	0.29	1.00	0.14	0.16	1.31	0.19	0.17	5.65	2.01
6" Meter	2.39	0.29	1.00	0.14	0.16	1.31	0.19	0.17	5.64	1.86
8" Meter	2.39	0.34	1.00	0.16	0.16	1.31	0.22	0.17	5.75	1.78
10" Meter	2.39	0.31	1.00	0.14	0.09	1.31	0.20	0.10	5.54	1.54

## Commodity Allocation Factors

<b>Treatment Base</b>	Cost related to the average day production and treatment of water
<b>Treatment MD</b>	Cost above the average day treatment of water, determined by the ratio of average day consumption in the maximum month to the annual average-day consumption
<b>Distribution Base</b>	Cost associated with the average day use of the distribution facilities
<b>Distribution MD</b>	Cost above the average day consumption, determined by the ratio of maximum month to the annual average-day consumption
<b>Distribution MH</b>	Cost associated with the maximum hour of consumption, determined by the ratio of the max hour factor to annual average day consumption
<b>Transmission Base</b>	Average-day cost to transport between the treatment plant and local distribution lines
<b>Transmission MD</b>	Cost above the average day transmission of water, determined by the ratio of average day consumption in the maximum month to the annual average-day consumption
<b>Transmission MH</b>	Cost associated with the maximum hour of consumption, determined by the ratio of the max hour factor to annual average day consumption.

#### 4. Classification Process

The cost of treatment, distribution, transmission, facilities charges, and fire protection are identified as part of the classification process and are the first step in determining charges to customers. The total fiscal year 2024 revenue requirements of \$24.09M are separated into the five categories identified in Table 9.

**Table 9 – Unbundled Breakdown by Expense Type**

Expense Type	Amount	Percent
Treatment	\$ 8,330,025	35%
Distribution	3,963,179	16%
Transmission	5,132,002	21%
Facilities Charges	5,013,165	21%
Fire Protection and Hydrants	1,646,824	7%
<b>Total</b>	<b>\$24,085,196</b>	<b>100%</b>

Classification identifies how costs for treatment, distribution, transmission, and reservoirs should be allocated. This apportionment is based on actual water production data provided by the water department. The table below is the classification of costs in percent.

**Table 10 – Classification of Costs**

	Treatment	Distribution	Transmission	Reservoirs
Max Hour	0.0%	7.9%	7.9%	18.4%
Max Day	11.4%	10.5%	10.5%	0.0%
Average Day (Base)	88.6%	62.9%	69.4%	62.9%
Fire Protection	0.0%	18.7%	12.2%	18.7%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

### Allocation Development

The cost of service study was completed on non-coincident peak demands based on the usage pattern of customers within each meter size.

#### Average Day and Max Day Ratio in a Water Cost of Service Study

In a water cost of service study, the average day and max day ratios are used to allocate costs between different customer classes based on their usage patterns and demands on the water system. These ratios help ensure that costs are distributed equitably based on how customers contribute to system capacity needs.

Meter Size	Unit Sales	Average Daily Consumption	Max Month Usage	Average Day Max Month	MM/AD Ratio
5/8" Meter	1,322,866	3,624	119,203	3,845	1.06
3/4" Meter	10,207	28	1,294	42	1.49
1" Meter	56,201	154	5,927	198	1.28
1.5" Meter	39,140	107	5,700	184	1.71
2" Meter	235,885	646	23,687	764	1.18
3" Meter	205,462	563	20,809	694	1.23
4" Meter	121,706	333	12,218	394	1.18
6" Meter	142,578	391	14,269	460	1.18
8" Meter	47,396	130	5,021	162	1.25
10" Meter	907,986	2,488	92,840	2,995	1.20

**Average Daily Consumption** represents the average water demand over a typical day during the year. It is calculated by dividing the total annual water usage by 365 days.

**Average Day Max Month** refers to the highest single day of water demand during the year. It accounts for peak system usage, which often occurs during extreme weather, high irrigation periods, or unusual events. The Water Department uses AMI meters with reads being stored monthly. The max day ratio was calculated using the max months usage divided by the number of days within the month.

**MM/AD Ratio** is calculated using the average day during the max month divided by the average day consumption.

**Max Day Factor**

The Max Day Factor is critical for allocating costs of extra capacity, such as oversized pipes, pumps, and storage, to customers or customer classes responsible for peak demands.

- A Max Day Factor of 1 means that the system’s demand is consistent every day (no peaks).
- A Max Day Factor greater than 1 indicates the degree of variability, with higher values signifying larger peak demands. For example: A factor of 2.5 means the peak day's demand is 2.5 times the average daily demand.

**Table 11 – Max Day Factor**

<b>Meter Size</b>	<b>MM/AD Ratio</b>	<b>System MD/MM Ratio</b>	<b>Concentrated Usage</b>	<b>Estimated Max Day Factor</b>
5/8" Meter	1.06	1.32	1.11	1.57
3/4" Meter	1.49	1.32	1.11	2.20
1" Meter	1.28	1.32	1.00	1.70
1.5" Meter	1.71	1.32	1.00	2.27
2" Meter	1.18	1.32	1.00	1.57
3" Meter	1.23	1.32	1.00	1.63
4" Meter	1.18	1.32	1.00	1.57
6" Meter	1.18	1.32	1.00	1.56
8" Meter	1.25	1.32	1.00	1.65
10" Meter	1.20	1.32	1.00	1.59

Concentrated usage is assessed by evaluating the consistency of water consumption throughout the day. In this study, it is assumed that commercial and industrial customers exhibit more consistent daily usage patterns compared to residential customers.

The concentrated usage ratio can be refined in future studies if the following conditions are met:

- Hourly Usage Data Transmission: Customers' hourly water usage data is transmitted to the Water Department.
- Data Management System: Implementation of a database or meter data management system capable of storing and retrieving large volumes of data.



**Table 12 – Max Day Calculation**

Meter Size	System			Estimated Max Day Factor	Calculated Max Day
	MM/AD Ratio	MD/MM Ratio	Concentrated Usage		
5/8" Meter	1.06	1.32	1.11	1.57	5,677
3/4" Meter	1.49	1.32	1.11	2.20	62
1" Meter	1.28	1.32	1.00	1.70	262
1.5" Meter	1.71	1.32	1.00	2.27	244
2" Meter	1.18	1.32	1.00	1.57	1,012
3" Meter	1.23	1.32	1.00	1.63	919
4" Meter	1.18	1.32	1.00	1.57	522
6" Meter	1.18	1.32	1.00	1.56	610
8" Meter	1.25	1.32	1.00	1.65	215
10" Meter	1.20	1.32	1.00	1.59	3,967
<b>Total</b>					<b>13,488</b>
Average of Actual Max Day 2018 - 2023					11,961
<b>Ratio</b>					<b>1.13</b>

**Max Hour Ratio**

The Max Hour Ratio is a metric that compares the system's peak hourly water demand to its average hourly demand. This ratio helps utilities understand the extent of fluctuations in water usage, which is essential for designing the distribution, transmission, and reservoirs. Table 13 below is the calculated max hour for each meter size.

**Table 13 – Max Hour Calculation**

Meter Size	Estimated Max Day Factor	Hourly Usage Adjustment	Concentrated Usage Hours	Estimated Max Hour Factor	Calculated Max Hour
3/4" Meter	2.20	1.50	16.00	3.30	92
1" Meter	1.70	1.50	16.00	2.55	393
1.5" Meter	2.27	1.50	16.00	3.41	365
2" Meter	1.57	1.50	16.00	2.35	1,518
3" Meter	1.63	1.50	16.00	2.45	1,378
4" Meter	1.57	1.50	16.00	2.35	783
6" Meter	1.56	1.50	16.00	2.34	915
8" Meter	1.65	1.50	16.00	2.48	322
10" Meter	1.59	1.00	24.00	1.59	3,967
<b>Total</b>					<b>18,249</b>
Average of Actual Max Hour 2018 - 2023					12,982
<b>Ratio</b>					<b>1.41</b>

## 5. Significant Allocation Factors Used in Study

**Table 14 – Allocation Factors for Treatment, Distribution, and Transmission Costs**

	Treatment			Distribution			Transmission		
	Treatment Base	Treatment MD	Treatment MH	Distribution Base	Distribution MD	Distribution MH	Transmission Base	Transmission MD	Transmission MH
5/8" Meter	42.8%	40.9%	48.9%	42.8%	40.9%	48.9%	42.8%	40.9%	48.9%
3/4" Meter	0.3%	0.7%	0.4%	0.3%	0.7%	0.4%	0.3%	0.7%	0.4%
1" Meter	1.8%	2.1%	2.2%	1.8%	2.1%	2.2%	1.8%	2.1%	2.2%
1.5" Meter	1.3%	2.7%	1.7%	1.3%	2.7%	1.7%	1.3%	2.7%	1.7%
2" Meter	7.6%	7.3%	8.7%	7.6%	7.3%	8.7%	7.6%	7.3%	8.7%
3" Meter	6.7%	7.1%	7.7%	6.7%	7.1%	7.7%	6.7%	7.1%	7.7%
4" Meter	3.9%	3.8%	4.5%	3.9%	3.8%	4.5%	3.9%	3.8%	4.5%
6" Meter	4.6%	4.4%	5.3%	4.6%	4.4%	5.3%	4.6%	4.4%	5.3%
8" Meter	1.5%	1.7%	1.8%	1.5%	1.7%	1.8%	1.5%	1.7%	1.8%
9" Meter	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
10" Meter	29.4%	29.5%	18.8%	29.4%	29.5%	18.8%	29.4%	29.5%	18.8%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

## Appendix A – Rate Design

**Table 15 – Revenue Summary of Proposed Rates**

Rate Category	Current Rates	Phase 1 Rate Design	Phase 2 Rate Design	Phase 3 Rate Design	Phase 4 Rate Design	Phase 5 Rate Design
Fixed Revenue	\$ 3,019,517	\$ 5,179,882	\$ 5,269,447	\$ 6,225,280	\$ 6,288,044	\$ 6,347,594
Variable Revenue	7,853,943	8,302,074	8,911,407	11,428,155	14,774,945	17,725,602
Non-Adjustable Revenue	201,409	201,409	201,409	201,409	201,409	201,409
Total Revenue	\$ 11,074,869	\$ 13,683,365	\$ 14,382,263	\$ 17,854,844	\$ 21,264,398	\$ 24,274,605
<b>Total Adjustable Revenue</b>	<b>\$ 10,873,460</b>	<b>\$ 13,481,956</b>	<b>\$ 14,180,854</b>	<b>\$ 17,653,435</b>	<b>\$ 21,062,989</b>	<b>\$ 24,073,196</b>
Total Revenue Annual Change		23.99%	5.2%	24.5%	19.3%	14.3%
Total Revenue Cummulative Change		24.0%	30.4%	62.4%	93.7%	121.4%

**Table 16 – Proposed Monthly Charge (Customer Charges)**

Rate Category	Current Rates	Phase 1 Rate Design	Phase 2 Rate Design	Phase 3 Rate Design	Phase 4 Rate Design	Phase 5 Rate Design
	<b>Minimum Charge</b>	<b>Customer Charge</b>				
5/8" Meter	\$ 16.66	\$ 11.60	\$ 11.60	\$ 14.00	\$ 14.00	\$ 14.00
3/4" Meter	32.19	16.00	17.00	20.00	20.00	20.00
1" Meter	60.64	33.00	33.00	37.00	37.00	37.00
1.5" Meter	119.22	47.00	50.00	62.00	62.00	62.00
2" Meter	145.06	70.00	76.00	95.00	95.00	95.00
3" Meter	229.20	100.00	115.00	189.00	189.00	189.00
4" Meter	288.42	110.00	130.00	162.50	162.50	162.50
6" Meter	596.72	130.00	150.00	187.50	187.50	187.50
8" Meter	897.33	150.00	190.00	237.50	237.50	237.50
10" Meter	-	325.00	583.00	850.00	1,100.00	1,200.00

**Table 17 – Proposed Commodity Rates**

Rate Category	Current Rates	Phase 1 Rate Design	Phase 2 Rate Design	Phase 3 Rate Design	Phase 4 Rate Design	Phase 5 Rate Design
<b>Commodity</b>						
First 5 hundred cubic feet Rate	\$ 4.17	\$ 2.99	\$ 3.16	\$ 3.70	\$ 4.78	\$ 5.74
Next 40 hundred cubic feet Rate	2.36	2.99	3.16	3.70	4.78	5.74
Next 255 hundred cubic feet Rate	2.04	2.58	2.82	3.70	4.78	5.74
Next 700 hundred cubic feet Rate	1.77	2.58	2.82	3.70	4.78	5.74
Over 1,000 hundred cubic feet Rate	1.54	2.30	2.50	3.70	4.78	5.74
<b>Thousand Gallons Rate</b>						
First 5 hundred cubic feet Rate	\$ 5.57	\$ 3.99	\$ 4.23	\$ 4.95	\$ 6.39	\$ 7.67
Next 40 hundred cubic feet Rate	3.16	3.99	4.23	4.95	6.39	7.67
Next 255 hundred cubic feet Rate	2.73	3.45	3.77	4.95	6.39	7.67
Next 700 hundred cubic feet Rate	2.36	3.45	3.77	4.95	6.39	7.67
Over 1,000 hundred cubic feet Rate	2.06	3.07	3.34	4.95	6.39	7.67

**Table 18 – Proposed Public and Private Fire Protection**

Rate Category	Current Rates	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
		Rate Design	Rate Design	Rate Design	Rate Design	Rate Design
<b>Private Fire Protection</b>						
2" Private Fire Protection	\$ 2.66	\$ 2.90	\$ 2.90	\$ 3.10	\$ 3.30	\$ 3.50
2.5" Private Fire Protection	4.86	5.30	5.30	5.70	6.00	6.30
3" Private Fire Protection	7.74	8.50	8.50	9.20	9.70	10.20
4" Private Fire Protection	16.53	18.20	18.20	19.70	20.70	21.70
6" Private Fire Protection	47.97	52.80	52.80	57.00	59.90	62.90
8" Private Fire Protection	102.22	112.40	112.40	121.40	127.50	133.90
10" Private Fire Protection	183.83	202.20	202.20	218.40	229.30	240.80
12" Private Fire Protection	296.94	326.60	326.60	352.70	370.30	388.80
Private Fire Hydrant	47.97	60.70	64.20	81.50	98.80	114.30
<b>Public Fire Protection</b>						
5/8" Public Fire Protection	\$ 2.67	\$ 2.90	\$ 2.90	\$ 2.90	\$ 2.90	\$ 2.90
3/4" Public Fire Protection	3.87	4.20	4.20	4.30	4.30	4.30
1" Public Fire Protection	6.86	7.40	7.40	7.50	7.50	7.60
1.5" Public Fire Protection	15.46	16.70	16.70	17.00	17.00	17.20
2" Public Fire Protection	27.47	29.70	29.70	30.20	30.20	30.50
3" Public Fire Protection	61.81	66.80	66.80	67.90	67.90	68.60
4" Public Fire Protection	109.88	118.70	118.70	120.70	120.70	121.90
6" Public Fire Protection	247.22	267.00	267.00	271.50	271.50	274.20
8" Public Fire Protection	439.54	474.70	474.70	482.80	482.80	487.60
10" Public Fire Protection	696.52	752.20	752.20	765.00	765.00	772.70
12" Public Fire Protection	988.97	1,068.10	1,068.10	1,086.30	1,086.30	1,097.20

**Table 19 – Customer Impact by Meter Size**

Meter Size	Rate Design Changes				
	Year One Adjustment	Year Two Adjustment	Year Three Adjustment	Year Four Adjustment	Year Five Adjustment
5/8" Meter	18.1%	3.1%	17.0%	15.5%	11.8%
3/4" Meter	2.7%	6.0%	17.9%	18.3%	13.6%
1" Meter	2.0%	3.2%	14.7%	15.4%	11.9%
1.5" Meter	-4.4%	6.4%	22.2%	18.4%	13.8%
2" Meter	19.2%	7.4%	24.1%	20.5%	15.1%
3" Meter	41.2%	9.3%	35.3%	19.4%	14.4%
4" Meter	35.7%	9.6%	25.1%	19.4%	14.4%
6" Meter	39.9%	8.5%	28.5%	24.0%	17.1%
8" Meter	42.2%	8.8%	30.9%	25.2%	17.8%
10" Meter	49.6%	8.8%	47.7%	29.3%	19.9%
Private Fire Protection	19.1%	3.4%	19.3%	15.3%	12.1%
<b>Total</b>	<b>24.0%</b>	<b>5.2%</b>	<b>24.5%</b>	<b>19.3%</b>	<b>14.3%</b>

# **Attachment MCB-3**

Anderson City Water Department  
 Water Cost of Service Study FY2024  
 Schedule 1 Plant Data Inputs

Water Plant Production	Average	2023	2022	2021	2020	2019	2018
Plant Capacity (Normal)	12.00	12.00	12.00	12.00	12	12	12
Total Production Year End 5/21	3,867	3,980,506,833	4,137,237,864	3,965,015,758	3,651,360,000	3,734,739,000	3,732,685,972
Max Day Year End 5/21	11.96	12,374,617	12,645,372	12,023,467	11406795	11,664,234	11,653,374
Max Hour Year End 5/21	540,917	548,916	565,142	557,780	510069	527,379	536,214
Max Month Year End 5/21		356,213,662	381,096,903	364,081,862	325821450	341,222,319	330,899,956
Max Hour		6/9/2023	6/29/2022	8/25/2021	5/26/2020 hour 13	7/1/2019 hour 19	6/6/2019 hour 18
Max Day		6/7/2023	7/5/2022	2/24/2021	44027	43,647	43,634
Max Month		January	July	August	August	August	July

Water Pumping from Treatment Plant							
Month	2018	2019	2020	2021	2022	2023	Total
January	330,101,646	314,625,000	304,788,000	338,043,723	340,716,885	356,213,662	2,299,150,450
February	287,731,211	303,367,000	285,493,000	318,590,197	293,296,555	318,074,733	2,091,446,052
March	310,794,896	317,497,000	312,876,000	348,496,202	307,858,063	352,045,968	2,256,694,924
April	304,657,324	310,540,000	290,673,000	343,096,160	330,776,670	347,363,229	2,217,224,469
May	319,815,351	313,957,000	309,730,000	347,079,523	345,060,544	325,838,653	2,268,441,484
June	325,841,254	305,932,000	318,848,000	325,099,842	353,427,002	340,892,543	2,276,285,816
July	331,796,950	327,504,000	301,139,000	320,357,252	381,096,903	335,096,477	2,299,819,269
August	315,633,449	330,697,000	319,690,000	364,081,862	368,112,308	345,075,091	2,350,679,573
September	306,131,884	306,093,000	308,534,000	337,880,132	361,155,633	321,051,416	2,238,499,556
October	307,652,337	306,980,000	305,050,000	320,732,389	361,257,537	319,027,352	2,211,844,583
November	292,882,028	296,564,000	295,740,000	294,373,917	336,633,285	304,918,876	2,098,804,739
December	299,647,642	300,983,000	298,799,000	307,184,560	357,846,479	314,908,833	2,166,837,392
<b>Annual Production</b>	<b>3,732,685,972</b>	<b>3,734,739,000</b>	<b>3,651,360,000</b>	<b>3,965,015,758</b>	<b>4,137,237,864</b>	<b>3,980,506,833</b>	<b>26,775,728,306</b>
<b>Sales - Gallons</b>	<b>2,275,024,789</b>	<b>2,378,991,000</b>	<b>2,335,104,000</b>	<b>2,331,626,352</b>	<b>2,324,000,926</b>	<b>2,190,593,047</b>	<b>16,105,015,615</b>
	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>Total</b>
Unbilled Revenues	1,457,661,183	1,355,748,000	1,316,256,000	1,633,389,407	1,813,236,938	1,789,913,786	10,670,712,691
Authorized Consumption	313,953,393	100,279,000	34,607,000	-	140,972,000	-	1,075,217,180
Water Loss	1,143,707,790	1,255,469,000	1,281,649,000	1,633,389,407	1,672,264,938	1,789,913,786	9,595,495,511
System water Loss - % of adjus	33.5%	34.5%	35.4%	41.2%	41.8%	45.0%	42.7%
System water loss - % of sales	50.3%	52.8%	54.9%	70.1%	72.0%	81.7%	74.6%

**Anderson City Water Department**  
**Water Cost of Service Study FY2024**  
*Schedule 2 - T&D Inputs*

**Mains - Plant (Installed)**

		Water (In) Installed		Water (Out) Installed			
Pipe Size (inch)	Classification of Type	Linear Feet	\$/LF	Linear Feet	\$/LF	Inch Foot - Inside System	Inch Foot - Outside System
0.5	Service Drops					-	-
0.75	Service Drops	27,000		450		20,250	338
1	Service Drops	6,100				6,100	-
1.25	Service Drops	2,408				3,010	-
1.5	Service Drops	12,238				18,357	-
2	Distribution	320,257		19,885		640,514	39,770
3	Distribution					-	-
4	Distribution					-	-
6	Distribution	807,969		65,660		4,847,814	393,960
8	Distribution	178,651		10,228		1,429,208	81,824
10	Distribution	1,545		6,480		15,450	64,800
12	Distribution	202,067		54,834		2,424,804	658,008
14	Distribution	2,697				37,758	-
16	Transmission	36,289		11,676		580,624	186,816
18	Transmission	32,433		20,432		583,794	367,776
20	Transmission	38,813		2,415		776,260	48,300
24	Transmission	43,785		5,449		1,050,840	130,776
30	Transmission	29,160		3,674		874,800	110,220
30	Transmission					-	-
36	Transmission					-	-
42	Transmission					-	-
48	Transmission					-	-
54	Transmission					-	-
<b>TOTAL</b>		<b>1,741,412</b>		<b>201,183</b>		<b>13,309,583</b>	<b>2,082,588</b>

**Classification of Linear Feet**

	Inside City	Outside City	System
Service Drops	47,746	450	48,196
Distribution	1,513,186	157,087	1,670,273
Transmission	180,480	43,646	224,126
<b>Total</b>	<b>1,741,412</b>	<b>201,183</b>	<b>1,942,595</b>

**Classification of Inch-Foot**

	Inside City	Outside City	System
Service Drops	47,717	338	48,055
Distribution	9,395,548	1,238,362	10,633,910
Transmission	3,866,318	843,888	4,710,206
<b>Total</b>	<b>13,309,583</b>	<b>2,082,588</b>	<b>15,392,171</b>

**Determination of Percent of Distribution to Allocate to Fire Protection**

Inch-Foot 2 - 6 inch	680,284	Small distribution
Linear Feet above 6 inches	1,327,434	Large distribution
6 inch factor		6 Factor
Equivalent for 8 - 12	7,964,604	Inch-Foot
Total Distribution Inch-Foot	10,633,910	
Capacity Percent	81.3%	(1+4-5)/6
Total Percent before Fire Protection	81.3%	7+8
<b>Fire Protection 1 - Percent</b>	<b>18.7%</b>	1-9



Anderson City Water Department  
 Water Cost of Service Study FY2024  
 Schedule 3 - Revenue Rec / Test Year Loads

Summary	Average Customer Charge	Average Commodity Charge Test Year	Historic Customers	Test Year Customers	Historic Volume	Test Year Volume	Period Volume Variance	Volume-Summer-Historic	Volume-Winter-Historic	Volume-Summer-Test Year	Volume-Winter-Test Year	Historic Revenue	Test Year Revenue	Average Rate per CCU
5/8" Meter	\$ -	\$ 3.52	21,598	21,598	1,326,956	1,322,866	0%	472,687	854,269	471,230	851,636	\$ 5,826,417	\$ 5,815,543	4.40
3/4" Meter	\$ -	\$ 2.78	78	78	10,244	10,207	0%	3,470	6,774	3,459	6,748	\$ 43,631	\$ 43,533	4.26
1" Meter	\$ -	\$ 2.75	350	350	56,393	56,201	0%	21,106	35,287	20,861	35,340	\$ 298,660	\$ 298,160	5.31
1.5" Meter	\$ -	\$ 2.35	91	91	39,183	39,140	0%	15,871	23,312	15,688	23,451	\$ 168,999	\$ 168,933	4.32
2" Meter	\$ -	\$ 2.19	249	249	236,974	235,885	0%	90,208	146,766	89,389	146,496	\$ 705,689	\$ 703,323	2.98
3" Meter	\$ -	\$ 2.03	141	141	205,959	205,462	0%	69,842	136,117	69,283	136,179	\$ 488,831	\$ 487,824	2.37
4" Meter	\$ -	\$ 2.01	83	83	122,082	121,706	0%	41,920	80,162	41,791	79,915	\$ 304,474	\$ 303,719	2.50
6" Meter	\$ -	\$ 1.86	27	27	143,019	142,578	0%	53,474	89,545	53,309	89,269	\$ 280,083	\$ 279,265	1.96
8" Meter	\$ -	\$ 1.78	4	4	47,543	47,396	0%	19,259	28,284	19,200	28,197	\$ 85,177	\$ 84,916	1.79
9" Meter	\$ -	\$ -	-	-	-	-	0%	-	-	-	-	\$ -	\$ -	-
10" Meter	\$ -	\$ 1.54	1	1	910,793	907,986	0%	285,113	625,680	284,234	623,752	\$ 1,405,733	\$ 1,401,400	1.54
2" Private Fire Protection	\$ 2.66	\$ -	9.0	9.0	-	-	0%	-	-	-	-	\$ 287	\$ 287	-
2.5" Private Fire Protection	\$ -	\$ -	-	-	-	-	0%	-	-	-	-	\$ -	\$ -	-
3" Private Fire Protection	\$ 7.74	\$ -	18	18	-	-	0%	-	-	-	-	\$ 1,695	\$ 1,672	-
4" Private Fire Protection	\$ 16.53	\$ -	39	39	-	-	0%	-	-	-	-	\$ 7,686	\$ 7,736	-
6" Private Fire Protection	\$ 47.97	\$ -	90	90	-	-	0%	-	-	-	-	\$ 52,047	\$ 51,808	-
8" Private Fire Protection	\$ 102.22	\$ -	29	29	-	-	0%	-	-	-	-	\$ 35,266	\$ 35,573	-
10" Private Fire Protection	\$ 183.83	\$ -	9	9	-	-	0%	-	-	-	-	\$ 19,854	\$ 19,854	-
12" Private Fire Protection	\$ 296.94	\$ -	1	1	-	-	0%	-	-	-	-	\$ 3,563	\$ 3,563	-
Private Fire Hydrant	\$ 47.97	\$ -	253	253	-	-	0%	-	-	-	-	\$ 145,637	\$ 145,637	-
5/8" Public Fire Protection	\$ 2.67	\$ -	21,572	21,572	-	-	0%	-	-	-	-	\$ 691,170	\$ 691,167	691,167
3/4" Public Fire Protection	\$ 3.87	\$ -	78	78	-	-	0%	-	-	-	-	\$ 3,626	\$ 3,622	3,622
1" Public Fire Protection	\$ 6.86	\$ -	349	349	-	-	0%	-	-	-	-	\$ 28,695	\$ 28,730	28,730
1.5" Public Fire Protection	\$ 15.46	\$ -	91	91	-	-	0%	-	-	-	-	\$ 16,820	\$ 16,882	16,882
2" Public Fire Protection	\$ 27.47	\$ -	247	247	-	-	0%	-	-	-	-	\$ 81,558	\$ 81,421	81,421
3" Public Fire Protection	\$ 61.81	\$ -	84	84	-	-	0%	-	-	-	-	\$ 62,306	\$ 62,304	62,304
4" Public Fire Protection	\$ 109.88	\$ -	47	47	-	-	0%	-	-	-	-	\$ 61,862	\$ 61,972	61,972
6" Public Fire Protection	\$ 247.22	\$ -	17	17	-	-	0%	-	-	-	-	\$ 49,691	\$ 50,433	50,433
8" Public Fire Protection	\$ 439.54	\$ -	3	3	-	-	0%	-	-	-	-	\$ 15,823	\$ 15,823	15,823
10" Public Fire Protection	\$ 696.52	\$ -	1	1	-	-	0%	-	-	-	-	\$ 8,358	\$ 8,358	8,358
12" Public Fire Protection	\$ -	\$ -	-	-	-	-	0%	-	-	-	-	\$ -	\$ -	-

Anderson City Water Department  
 Water Cost of Service Study FY2024  
 Schedule 3 - Revenue Rec / Test Year Loads

Volume Only:

5/8" Meter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>Reconciliation:</b>													
Bills	21,565	21,594	21,592	21,576	21,569	21,543	21,577	21,625	21,621	21,639	21,603	21,668	259,172
Usage Block 1	72,592	71,435	68,348	68,479	70,094	72,266	73,593	73,554	73,466	72,301	71,391	71,289	858,806
Usage Block 2	35,126	33,219	28,220	27,685	29,777	36,476	41,519	40,633	41,375	37,909	31,507	30,076	413,522
Usage Block 3	4,664	4,056	3,555	3,768	4,016	5,303	4,424	4,235	4,208	4,661	3,175	3,265	49,330
Usage Block 4	158	217	-	91	142	1,387	36	190	22	700	-	700	3,643
Usage Block 5	-	-	-	-	-	-	-	-	-	880	-	-	774
Total Volume	112,540	108,927	100,123	100,023	104,029	115,432	119,572	118,612	119,071	116,451	106,073	106,104	1,326,956
Average Usage	5.2	5.0	4.6	4.6	4.8	5.4	5.5	5.5	5.5	5.4	4.9	4.9	5.1
PCA Units	112,540	108,927	100,123	100,023	104,029	115,432	119,572	118,612	119,071	116,451	106,073	106,104	1,326,956
Minimum Bill Difference	92,947	96,313	105,250	104,694	100,292	93,917	91,135	91,837	92,126	96,009	97,186	98,236	1,159,942
Other 2	-	-	-	-	-	-	-	-	-	-	-	-	-
Other 3	-	-	-	-	-	-	-	-	-	-	-	-	-
Bills Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Usage Block 1 Rate	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17
Usage Block 2 Rate	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36
Usage Block 3 Rate	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04
Usage Block 4 Rate	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77
Usage Block 5 Rate	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54
PCA Units Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Minimum Bill Difference Rate	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00
Other 2 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other 3 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Test Year:</b>													
Customer Growth	0.0%												
Volume Growth	-0.3%												
Other Growth	0.0%												
Bills	21,598	21,598	21,598	21,598	21,598	21,598	21,598	21,598	21,598	21,598	21,598	21,598	259,172
Usage Block 1	72,368	71,214	68,137	68,268	69,878	72,043	73,366	73,327	73,239	72,078	71,171	71,069	856,159
Usage Block 2	35,018	33,117	28,133	27,600	29,685	36,364	41,391	40,508	41,248	37,792	31,410	29,983	412,248
Usage Block 3	4,650	4,043	3,544	3,756	4,004	5,287	4,410	4,222	4,195	4,647	3,165	3,255	49,178
Usage Block 4	158	216	-	91	142	1,383	36	189	22	698	-	698	3,632
Usage Block 5	-	-	-	-	-	-	-	-	-	877	-	-	772
Total Volume	112,193	108,591	99,814	99,715	103,708	115,076	119,203	118,247	118,704	116,092	105,747	105,777	1,322,866
PCA Units	112,193	108,591	99,814	99,715	103,708	115,076	119,203	118,247	118,704	116,092	105,747	105,777	1,322,866
Minimum Bill Difference	92,947	96,313	105,250	104,694	100,292	93,917	91,135	91,837	92,126	96,009	97,186	101,745	1,163,451
Other 2	-	-	-	-	-	-	-	-	-	-	-	-	-
Other 3	-	-	-	-	-	-	-	-	-	-	-	-	-
Bills	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Usage Block 1	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17
Usage Block 2	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36
Usage Block 3	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04
Usage Block 4	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77
Usage Block 5	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54
PCA Units Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Minimum Bill Difference Rate	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00
Other 2 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other 3 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Summary:

	Average Customer Charge	Historic Customers	Test Year Customers	Volume-Summer-Historic	Volume-Winter-Historic	Average Commodity Charge Test Year	Volume-Summer-Test Year	Volume-Winter-Test Year	Historic Revenue	Test Year Revenue
5/8" Meter Summary	\$ -	21,598	21,598	472,687	854,269	\$ 3.52	471,230	851,636	\$ 5,826,417	\$ 5,815,543

Anderson City Water Department  
 Water Cost of Service Study FY2024  
 Schedule 3 - Revenue Rec / Test Year Loads

3/4" Meter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
<b>Historic:</b>														
Bills	79	79	78	77	78	78	78	78	79	79	78	78	939	
Usage Block 1	236	245	236	242	233	231	230	239	235	235	248	230	2,840	
Usage Block 2	419	348	328	417	423	420	463	469	459	457	400	370	4,973	
Usage Block 3	385	130	139	141	125	148	177	183	216	189	160	168	2,161	
Usage Block 4	270	-	-	-	-	-	-	-	-	-	-	-	270	
Usage Block 5	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total Volume	1,310	723	703	800	781	799	870	891	910	881	808	768	10,244	
Average Usage	16.6	9.2	9.0	10.4	10.0	10.2	11.2	11.4	11.5	11.2	10.4	9.8	11	
PCA Units	1,310	723	703	800	781	799	870	891	910	881	808	768	10,244	
Other 1	1,296	1,244	1,273	1,189	1,272	1,224	1,260	1,258	1,299	1,294	1,224	1,315	15,148	
Other 2	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other 3	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bills Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Usage Block 1 Rate	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 11,837	
Usage Block 2 Rate	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 11,751	
Usage Block 3 Rate	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 4,417	
Usage Block 4 Rate	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 477	
Usage Block 5 Rate	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ -	
PCA Units Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other 1 Rate	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 15,148	
Other 2 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other 3 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>Test Year:</b>														
Customer Growth	0.0%													
Volume Growth	-0.3%													
Other Growth	0.0%													
Bills	78	78	78	78	78	78	78	78	78	78	78	78	939	
Usage Block 1	233	242	236	245	233	231	230	239	232	232	248	230	2,831	
Usage Block 2	414	344	328	422	423	420	463	469	453	451	400	370	4,958	
Usage Block 3	380	128	139	143	125	148	177	183	213	187	160	168	2,151	
Usage Block 4	267	-	-	-	-	-	-	-	-	-	-	-	267	
Usage Block 5	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total Volume	1,294	714	703	810	781	799	870	891	899	870	808	768	10,207	
PCA Units	1,294	714	703	810	781	799	870	891	899	870	808	768	10,207	
Other 1	1,296	1,244	1,273	1,189	1,272	1,224	1,260	1,258	1,299	1,294	1,224	1,315	15,148	
Other 2	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other 3	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bills Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Usage Block 1 Rate	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 11,801	
Usage Block 2 Rate	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 11,715	
Usage Block 3 Rate	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 4,398	
Usage Block 4 Rate	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 471	
Usage Block 5 Rate	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ -	
PCA Units Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other 1 Rate	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 15,148	
Other 2 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other 3 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>Summary:</b>														
	Average Customer Charge	Historic Customers	Test Year Customers	Volume-Summer-Historic	Volume-Winter-Historic	Average Commodity Charge Test Year	Volume-Summer-Test Year	Volume-Winter-Test Year	Historic Revenue	Test Year Revenue				
3/4" Meter Summary	\$ -	78	78	3,470	6,774	\$ 2.78	3,459	6,748	\$ 43,631	\$ 43,533	\$ -	\$ -	\$ -	

Anderson City Water Department  
 Water Cost of Service Study FY2024  
 Schedule 3 - Revenue Rec / Test Year Loads

1" Meter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
<b>Historic:</b>														
Bills	348	346	345	344	347	349	354	354	354	351	353	351	4,196	
First 5 hundred cubic feet	1,123	1,156	931	1,108	1,178	1,063	1,267	1,133	1,246	1,234	1,182	1,085	13,706	
Next 40 hundred cubic feet	2,511	2,554	2,305	2,261	2,421	2,523	3,206	3,308	3,388	3,246	2,698	2,452	32,873	
Next 255 hundred cubic feet	830	777	464	362	573	482	939	1,172	1,379	1,269	988	505	9,740	
Next 700 hundred cubic feet	-	-	-	-	-	-	-	-	-	-	74	-	74	
Over 1,000 hundred cubic feet	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total Volume	4,464	4,487	3,700	3,731	4,172	4,068	5,412	5,613	6,013	5,749	4,942	4,042	56,393	
Average Usage	13	13	11	11	12	12	15	16	17	16	14	12	13	
PCA Units	4,464	4,487	3,700	3,731	4,172	4,068	5,412	5,613	6,013	5,749	4,942	4,042	56,393	
Other 1	12,529	12,103	12,659	12,365	12,102	12,261	11,227	11,477	11,338	11,284	12,259	12,210	143,815	
Other 2	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other 3	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bills Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
First 5 hundred cubic feet Rate	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 57,127	
Next 40 hundred cubic feet Rate	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 77,679	
Next 255 hundred cubic feet Rate	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 19,909	
Next 700 hundred cubic feet Rate	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 131	
Over 1,000 hundred cubic feet Rate	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ -	
PCA Units Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other 1 Rate	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 143,815	
Other 2 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other 3 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>Test Year:</b>														
Customer Growth	0.0%													
Volume Growth	-0.3%													
Other Growth	0.0%													
Bills	350	350	350	350	350	350	350	350	350	350	350	350	4,200	
First 5 hundred cubic feet	1,126	1,166	942	1,124	1,185	1,063	1,249	1,117	1,228	1,227	1,168	1,079	13,672	
Next 40 hundred cubic feet	2,518	2,576	2,331	2,293	2,434	2,522	3,160	3,261	3,339	3,227	2,667	2,437	32,766	
Next 255 hundred cubic feet	832	784	469	367	576	482	926	1,155	1,359	1,261	977	502	9,690	
Next 700 hundred cubic feet	-	-	-	-	-	-	-	-	-	-	73	-	73	
Over 1,000 hundred cubic feet	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total Volume	4,476	4,525	3,742	3,784	4,195	4,067	5,334	5,532	5,927	5,715	4,885	4,018	56,201	
PCA Units	4,476	4,525	3,742	3,784	4,195	4,067	5,334	5,532	5,927	5,715	4,885	4,018	56,201	
Other 1	12,529	12,103	12,659	12,365	12,102	12,261	11,227	11,477	11,338	11,284	12,259	12,210	143,815	
Other 2	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other 3	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bills Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
First 5 hundred cubic feet Rate	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 56,984	
Next 40 hundred cubic feet Rate	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 77,425	
Next 255 hundred cubic feet Rate	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 19,807	
Next 700 hundred cubic feet Rate	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 129	
Over 1,000 hundred cubic feet Rate	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ -	
PCA Units Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other 1 Rate	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 143,815	
Other 2 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other 3 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>Summary:</b>														
	Average Customer Charge	Historic Customers	Test Year Customers	Volume-Summer-Historic	Volume-Winter-Historic	Average Commodity Charge Test Year	Volume-Summer-Test Year	Volume-Winter-Test Year	Historic Revenue	Test Year Revenue				
1" Meter Summary	\$ -	350	350	21,106	35,287	\$ 2.75	20,861	35,340	\$ 298,660	\$ 298,160	\$ -	\$ -	\$ -	

Anderson City Water Department  
 Water Cost of Service Study FY2024  
 Schedule 3 - Revenue Rec / Test Year Loads

1.5" Meter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
<b>Historic:</b>														
Bills	91	90	90	90	90	90	92	93	93	93	87	92	1,091	
First 5 hundred cubic feet	333	331	319	316	338	342	225	369	355	356	332	327	3,943	
Next 40 hundred cubic feet	1,251	1,183	1,155	1,123	1,190	1,282	1,374	1,415	1,318	1,258	1,064	1,161	14,774	
Next 255 hundred cubic feet	1,497	1,459	1,315	1,537	1,277	1,305	1,641	1,676	1,771	1,365	936	1,402	17,181	
Next 700 hundred cubic feet	-	10	-	45	36	60	742	159	56	74	58	264	1,504	
Over 1,000 hundred cubic feet	-	-	-	-	-	-	1,781	-	-	-	-	-	1,781	
Total Volume	3,081	2,983	2,789	3,021	2,841	2,989	5,763	3,619	3,500	3,053	2,390	3,154	39,183	
Average Usage	34	33	31	34	32	33	63	39	38	33	27	34	36	
PCA Units	3,081	2,983	2,789	3,021	2,841	2,989	5,763	3,619	3,500	3,053	2,390	3,154	39,183	
Other 1	6,324	6,479	6,605	6,690	6,441	6,206	6,295	6,129	6,416	6,560	6,424	6,567	77,136	
Other 2	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other 3	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bills Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
First 5 hundred cubic feet Rate	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 16,434	
Next 40 hundred cubic feet Rate	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 34,911	
Next 255 hundred cubic feet Rate	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 35,118	
Next 700 hundred cubic feet Rate	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 2,659	
Over 1,000 hundred cubic feet Rate	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 2,741	
PCA Units Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other 1 Rate	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 77,136	
Other 2 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other 3 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>Test Year:</b>														
Customer Growth	0.0%													
Volume Growth	0.0%													
Other Growth	0.0%													
Bills	91	91	91	91	91	91	91	91	91	91	91	91	1,092	
First 5 hundred cubic feet	333	335	323	320	342	346	223	361	347	348	347	323	3,947	
Next 40 hundred cubic feet	1,251	1,196	1,168	1,135	1,203	1,296	1,359	1,385	1,290	1,231	1,113	1,148	14,775	
Next 255 hundred cubic feet	1,497	1,475	1,330	1,554	1,291	1,320	1,623	1,640	1,733	1,336	979	1,387	17,164	
Next 700 hundred cubic feet	-	10	-	46	36	61	734	156	55	72	61	261	1,491	
Over 1,000 hundred cubic feet	-	-	-	-	-	-	1,762	-	-	-	-	-	1,762	
Total Volume	3,081	3,016	2,820	3,055	2,873	3,022	5,700	3,541	3,425	2,987	2,500	3,120	39,140	
PCA Units	3,081	3,016	2,820	3,055	2,873	3,022	5,700	3,541	3,425	2,987	2,500	3,120	39,140	
Other 1	6,324	6,479	6,605	6,690	6,441	6,206	6,295	6,129	6,416	6,560	6,424	6,567	77,136	
Other 2	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other 3	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bills Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
First 5 hundred cubic feet Rate	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 16,452	
Next 40 hundred cubic feet Rate	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 34,914	
Next 255 hundred cubic feet Rate	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 35,083	
Next 700 hundred cubic feet Rate	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 2,636	
Over 1,000 hundred cubic feet Rate	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 2,711	
PCA Units Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other 1 Rate	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 77,136	
Other 2 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other 3 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>Summary:</b>														
Average Customer Charge														
Historic Customers	91													
Test Year Customers	91													
Volume-Summer-Historic	15,871													
Volume-Winter-Historic	23,312													
Average Commodity Charge Test Year	\$ 2.35													
Volume-Summer-Test Year	15,688													
Volume-Winter-Test Year	23,451													
Historic Revenue	\$ 168,999													
Test Year Revenue	\$ 168,933													
1.5" Meter Summary	\$ -	91	91	15,871	23,312	\$ 2.35	15,688	23,451	-	-	\$ 168,999	\$ 168,933	\$ -	

Anderson City Water Department  
 Water Cost of Service Study FY2024  
 Schedule 3 - Revenue Rec / Test Year Loads

2" Meter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
<b>Historic:</b>														
Bills	246	245	246	249	250	250	251	251	250	251	250	252	2,991	
First 5 hundred cubic feet	1,012	974	1,018	1,055	1,068	1,103	1,061	1,033	1,106	1,082	1,076	1,035	12,623	
Next 40 hundred cubic feet	5,252	5,376	5,333	5,371	5,586	5,879	5,587	5,880	5,786	5,829	5,475	5,326	66,680	
Next 255 hundred cubic feet	8,098	8,113	7,407	7,890	8,611	10,643	10,595	11,793	11,338	10,767	8,938	8,542	112,735	
Next 700 hundred cubic feet	2,577	2,748	2,217	1,649	1,853	2,690	2,808	4,475	4,885	2,894	2,778	3,692	35,266	
Over 1,000 hundred cubic feet	549	671	1,537	1,821	601	387	1,717	770	672	778	150	17	9,670	
Total Volume	17,488	17,882	17,512	17,786	17,719	20,702	21,768	23,951	23,787	21,350	18,417	18,612	236,974	
Average Usage	71	73	71	71	71	83	87	95	95	85	74	74	79	
PCA Units	17,488	17,882	17,512	17,786	17,719	20,702	21,768	23,951	23,787	21,350	18,417	18,612	236,974	
Other 1	16,371	15,829	16,208	16,261	15,652	14,797	15,675	14,788	14,883	14,793	16,000	16,592	187,849	
Other 2	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other 3	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bills Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
First 5 hundred cubic feet Rate	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 52,613	
Next 40 hundred cubic feet Rate	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 157,565	
Next 255 hundred cubic feet Rate	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 230,430	
Next 700 hundred cubic feet Rate	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 62,350	
Over 1,000 hundred cubic feet Rate	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 14,882	
PCA Units Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other 1 Rate	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 187,849	
Other 2 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other 3 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>Test Year:</b>														
Customer Growth	0.0%													
Volume Growth	-0.3%													
Other Growth	0.0%													
Bills	249	249	249	249	249	249	249	249	249	249	249	249	2,988	
First 5 hundred cubic feet	1,021	987	1,027	1,052	1,060	1,095	1,049	1,022	1,098	1,070	1,068	1,020	12,570	
Next 40 hundred cubic feet	5,300	5,447	5,381	5,354	5,547	5,837	5,525	5,815	5,745	5,765	5,436	5,246	66,399	
Next 255 hundred cubic feet	8,171	8,220	7,474	7,866	8,550	10,568	10,478	11,663	11,258	10,648	8,875	8,414	112,186	
Next 700 hundred cubic feet	2,600	2,784	2,237	1,644	1,840	2,671	2,777	4,426	4,850	2,862	2,758	3,637	35,087	
Over 1,000 hundred cubic feet	554	680	1,551	1,815	597	384	1,698	762	667	769	149	17	9,643	
Total Volume	17,647	18,118	17,671	17,731	17,594	20,556	21,528	23,687	23,619	21,115	18,287	18,334	235,885	
PCA Units	17,647	18,118	17,671	17,731	17,594	20,556	21,528	23,687	23,619	21,115	18,287	18,334	235,885	
Other 1	16,371	15,829	16,208	16,261	15,652	14,797	15,675	14,788	14,883	14,793	16,000	16,592	187,849	
Other 2	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other 3	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bills Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
First 5 hundred cubic feet Rate	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 52,391	
Next 40 hundred cubic feet Rate	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 156,902	
Next 255 hundred cubic feet Rate	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 229,308	
Next 700 hundred cubic feet Rate	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 62,034	
Over 1,000 hundred cubic feet Rate	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 14,841	
PCA Units Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other 1 Rate	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 187,849	
Other 2 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other 3 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>Summary:</b>														
Average Customer Charge	\$ -													
Historic Customers	249													
Test Year Customers	249													
Volume-Summer-Historic	90,208													
Volume-Winter-Historic	146,766													
Average Commodity Charge Test Year	\$ 2.19													
Volume-Summer-Test Year	89,389													
Volume-Winter-Test Year	146,496													
Historic Revenue	\$ 705,689													
Test Year Revenue	\$ 703,323													
2" Meter Summary	\$ -	249	249	90,208	146,766	\$ 2.19	-	89,389	146,496	-	-	\$ 705,689	\$ 703,323	\$ -

Anderson City Water Department  
 Water Cost of Service Study FY2024  
 Schedule 3 - Revenue Rec / Test Year Loads

3" Meter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
<b>Historic:</b>														
Bills	140	140	140	142	142	142	142	142	141	140	141	139	1,691	
First 5 hundred cubic feet	360	178	355	163	356	366	344	358	358	353	357	325	3,873	
Next 40 hundred cubic feet	2,584	2,638	2,589	2,597	2,570	2,629	2,553	2,669	2,609	2,643	2,602	2,527	31,210	
Next 255 hundred cubic feet	9,130	8,259	8,735	8,390	8,639	9,510	8,685	8,026	9,092	9,868	9,448	8,855	106,637	
Next 700 hundred cubic feet	5,249	4,624	2,680	3,500	4,177	4,737	3,504	4,325	4,072	4,666	3,687	3,722	48,943	
Over 1,000 hundred cubic feet	1,105	1,305	187	151	3,528	413	397	453	4,742	1,906	778	331	15,296	
Total Volume	18,428	17,004	14,546	14,801	19,270	17,655	15,483	15,831	20,873	19,436	16,872	15,760	205,959	
Average Usage	132	121	104	104	136	124	109	111	148	139	120	113	122	
PCA Units	18,428	17,004	14,546	14,801	19,270	17,655	15,483	15,831	20,873	19,436	16,872	15,760	205,959	
Other 1	5,675	5,713	5,793	6,380	5,977	5,599	6,342	6,867	5,919	5,379	5,774	5,483	70,901	
Other 2	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other 3	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bills Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
First 5 hundred cubic feet Rate	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 16,143	
Next 40 hundred cubic feet Rate	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 73,749	
Next 255 hundred cubic feet Rate	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 217,966	
Next 700 hundred cubic feet Rate	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 86,531	
Over 1,000 hundred cubic feet Rate	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 23,541	
PCA Units Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other 1 Rate	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 70,901	
Other 2 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other 3 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>Test Year:</b>														
Customer Growth	0.0%													
Volume Growth	-0.3%													
Other Growth	0.0%													
Bills	141	141	141	141	141	141	141	141	141	141	141	141	1,692	
First 5 hundred cubic feet	361	179	356	161	352	362	341	354	357	354	356	329	3,863	
Next 40 hundred cubic feet	2,594	2,649	2,599	2,571	2,544	2,602	2,527	2,642	2,601	2,654	2,594	2,555	31,133	
Next 255 hundred cubic feet	9,167	8,292	8,770	8,305	8,552	9,414	8,597	7,945	9,064	9,908	9,419	8,955	106,388	
Next 700 hundred cubic feet	5,270	4,643	2,691	3,465	4,135	4,689	3,469	4,281	4,059	4,685	3,676	3,764	48,826	
Over 1,000 hundred cubic feet	1,109	1,310	188	149	3,492	409	393	448	4,727	1,914	776	335	15,251	
Total Volume	18,502	17,073	14,605	14,651	19,075	17,477	15,327	15,671	20,809	19,514	16,820	15,937	205,462	
PCA Units	18,502	17,073	14,605	14,651	19,075	17,477	15,327	15,671	20,809	19,514	16,820	15,937	205,462	
Other 1	5,675	5,713	5,793	6,380	5,977	5,599	6,342	6,867	5,919	5,379	5,774	5,483	70,901	
Other 2	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other 3	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bills Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
First 5 hundred cubic feet Rate	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 16,103	
Next 40 hundred cubic feet Rate	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 73,568	
Next 255 hundred cubic feet Rate	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 217,457	
Next 700 hundred cubic feet Rate	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 86,324	
Over 1,000 hundred cubic feet Rate	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 23,471	
PCA Units Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other 1 Rate	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 70,901	
Other 2 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other 3 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>Summary:</b>														
	Average Customer Charge	Historic Customers	Test Year Customers	Volume-Summer-Historic	Volume-Winter-Historic	Average Commodity Charge Test Year	Volume-Summer-Test Year	Volume-Winter-Test Year	Historic Revenue	Test Year Revenue				
3" Meter Summary	\$ -	141	141	69,842	136,117	\$ 2.03	69,283	136,179	\$ 488,831	\$ 487,824	\$ -	\$ -	\$ -	

Anderson City Water Department  
 Water Cost of Service Study FY2024  
 Schedule 3 - Revenue Rec / Test Year Loads

4" Meter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>Historic:</b>													
Bills		83	83	83	83	83	83	83	83	83	83	83	996
First 5 hundred cubic feet	230	231	230	226	225	230	216	222	(35)	235	231	230	2,471
Next 40 hundred cubic feet	1,509	1,560	1,542	1,560	1,564	1,533	1,315	1,498	1,600	1,675	1,567	1,598	18,521
Next 255 hundred cubic feet	4,063	4,192	4,046	3,990	4,245	4,187	3,996	4,790	4,997	5,288	4,619	4,560	52,973
Next 700 hundred cubic feet	3,558	1,925	2,994	3,394	2,512	3,264	2,777	2,753	3,942	4,260	3,782	2,561	37,722
Over 1,000 hundred cubic feet	980	437	353	547	1,459	2,669	615	500	851	798	888	298	10,395
Total Volume	10,340	8,345	9,165	9,717	10,005	11,883	8,919	9,763	11,355	12,256	11,087	9,247	122,082
Average Usage	125	101	110	117	121	143	107	118	137	148	134	111	123
PCA Units	10,340	8,345	9,165	9,717	10,005	11,883	8,919	9,763	11,355	12,256	11,087	9,247	122,082
Other 1	5,139	4,929	5,005	5,133	4,922	5,272	5,934	4,780	4,559	3,935	5,201	4,634	59,443
Other 2	-	-	-	-	-	-	-	-	-	-	-	-	-
Other 3	-	-	-	-	-	-	-	-	-	-	-	-	-
Bills Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
First 5 hundred cubic feet Rate	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 10,299
Next 40 hundred cubic feet Rate	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 43,765
Next 255 hundred cubic feet Rate	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 108,277
Next 700 hundred cubic feet Rate	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 66,692
Over 1,000 hundred cubic feet Rate	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 15,998
PCA Units Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other 1 Rate	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 59,443
Other 2 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other 3 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Test Year:</b>													
Customer Growth	0.0%												
Volume Growth	-0.3%												
Other Growth	0.0%												
Bills		83	83	83	83	83	83	83	83	83	83	83	996
First 5 hundred cubic feet	229	230	229	225	224	229	215	221	(35)	234	230	229	2,463
Next 40 hundred cubic feet	1,504	1,555	1,537	1,555	1,559	1,528	1,311	1,493	1,595	1,670	1,562	1,593	18,464
Next 255 hundred cubic feet	4,050	4,179	4,034	3,978	4,232	4,174	3,984	4,775	4,982	5,272	4,605	4,546	52,810
Next 700 hundred cubic feet	3,547	1,919	2,985	3,384	2,504	3,254	2,768	2,745	3,930	4,247	3,770	2,553	37,606
Over 1,000 hundred cubic feet	977	436	352	545	1,455	2,661	613	498	848	796	885	297	10,363
Total Volume	10,308	8,319	9,137	9,687	9,974	11,846	8,892	9,733	11,320	12,218	11,053	9,218	121,706
PCA Units	10,308	8,319	9,137	9,687	9,974	11,846	8,892	9,733	11,320	12,218	11,053	9,218	121,706
Other 1	5,139	4,929	5,005	5,133	4,922	5,272	5,934	4,780	4,559	3,935	5,201	4,634	59,443
Other 2	-	-	-	-	-	-	-	-	-	-	-	-	-
Other 3	-	-	-	-	-	-	-	-	-	-	-	-	-
Bills Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
First 5 hundred cubic feet Rate	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 10,267
Next 40 hundred cubic feet Rate	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 43,630
Next 255 hundred cubic feet Rate	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 107,943
Next 700 hundred cubic feet Rate	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 66,487
Over 1,000 hundred cubic feet Rate	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 15,949
PCA Units Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other 1 Rate	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 59,443
Other 2 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other 3 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Summary:</b>													
Average Customer Charge	\$ -												
Historic Customers		83											
Test Year Customers		83											
Volume-Summer-Historic				41,920									
Volume-Winter-Historic				80,162									
Average Commodity Charge Test Year					\$ 2.01								
Volume-Summer-Test Year							41,791						
Volume-Winter-Test Year							79,915						
Historic Revenue										\$ 304,474			
Test Year Revenue											\$ 303,719		
4" Meter Summary	\$ -												\$ -



Anderson City Water Department  
 Water Cost of Service Study FY2024  
 Schedule 3 - Revenue Rec / Test Year Loads

6" Meter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
<b>Historic:</b>														
Bills	27	27	27	27	27	27	27	27	27	27	27	27	324	
First 5 hundred cubic feet	80	80	80	(279)	80	85	85	85	85	85	85	85	636	
Next 40 hundred cubic feet	601	640	636	600	640	646	680	680	680	680	680	680	7,843	
Next 255 hundred cubic feet	3,448	3,708	3,362	3,263	3,406	3,413	3,698	3,758	3,857	3,796	3,834	3,877	43,420	
Next 700 hundred cubic feet	5,699	5,631	5,225	4,776	5,591	5,519	6,259	6,381	6,677	5,857	4,940	5,342	67,897	
Over 1,000 hundred cubic feet	1,417	1,378	1,352	1,259	2,016	2,409	2,552	3,409	2,516	1,540	1,700	1,675	23,223	
Total Volume	11,245	11,437	10,655	9,619	11,733	12,072	13,274	14,313	13,815	11,958	11,239	11,659	143,019	
Average Usage	416	424	395	356	435	447	492	530	512	443	416	432	441	
PCA Units	11,245	11,437	10,655	9,619	11,733	12,072	13,274	14,313	13,815	11,958	11,239	11,659	143,019	
Other 1	1,185	601	1,278	2,329	1,775	1,726	1,103	980	819	916	840	817	14,367	
Other 2	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other 3	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bills Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
First 5 hundred cubic feet Rate	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 2,651	
Next 40 hundred cubic feet Rate	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 18,533	
Next 255 hundred cubic feet Rate	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 88,750	
Next 700 hundred cubic feet Rate	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 120,042	
Over 1,000 hundred cubic feet Rate	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 35,740	
PCA Units Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other 1 Rate	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 14,367	
Other 2 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other 3 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>Test Year:</b>														
Customer Growth	0.0%													
Volume Growth	-0.3%													
Other Growth	0.0%													
Bills	27	27	27	27	27	27	27	27	27	27	27	27	324	
First 5 hundred cubic feet	80	80	80	(278)	80	85	85	85	85	85	85	85	634	
Next 40 hundred cubic feet	599	638	634	598	638	644	678	678	678	678	678	678	7,819	
Next 255 hundred cubic feet	3,437	3,697	3,352	3,253	3,396	3,402	3,687	3,746	3,845	3,784	3,822	3,865	43,286	
Next 700 hundred cubic feet	5,681	5,614	5,209	4,761	5,574	5,502	6,240	6,361	6,656	5,839	4,925	5,326	67,688	
Over 1,000 hundred cubic feet	1,413	1,374	1,348	1,255	2,010	2,402	2,544	3,398	2,508	1,535	1,695	1,670	23,151	
Total Volume	11,210	11,402	10,622	9,589	11,697	12,035	13,233	14,269	13,772	11,921	11,204	11,623	142,578	
PCA Units	11,210	11,402	10,622	9,589	11,697	12,035	13,233	14,269	13,772	11,921	11,204	11,623	142,578	
Other 1	1,185	601	1,278	2,329	1,775	1,726	1,103	980	819	916	840	817	14,367	
Other 2	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other 3	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bills Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
First 5 hundred cubic feet Rate	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 2,643	
Next 40 hundred cubic feet Rate	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 18,476	
Next 255 hundred cubic feet Rate	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 88,477	
Next 700 hundred cubic feet Rate	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 119,672	
Over 1,000 hundred cubic feet Rate	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 35,630	
PCA Units Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other 1 Rate	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 14,367	
Other 2 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other 3 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	

6" Meter Summary	Average Customer Charge	Historic Customers	Test Year Customers	Volume-Summer-Historic	Volume-Winter-Historic	Average Commodity Charge Test Year	Volume-Summer-Test Year	Volume-Winter-Test Year	Historic Revenue	Test Year Revenue
6" Meter Summary	\$ -	27	27	53,474	89,545	\$ 1.86	53,309	89,269	\$ 280,083	\$ 279,265

Anderson City Water Department  
 Water Cost of Service Study FY2024  
 Schedule 3 - Revenue Rec / Test Year Loads

8" Meter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>Historic:</b>													
Bills		4	4	4	4	4	4	4	4	4	4	4	48
First 5 hundred cubic feet	15	15	15	15	15	15	15	15	15	15	15	15	180
Next 40 hundred cubic feet	120	120	120	120	120	120	120	120	120	120	120	120	1,440
Next 255 hundred cubic feet	765	765	616	765	765	765	765	765	765	765	765	765	9,031
Next 700 hundred cubic feet	1,614	1,850	1,001	1,749	1,930	2,100	2,100	2,100	2,100	2,100	2,100	2,060	22,804
Over 1,000 hundred cubic feet	113	919	159	918	1,050	1,347	1,970	2,037	1,905	1,748	1,326	596	14,088
Total Volume	2,627	3,669	1,911	3,567	3,880	4,347	4,970	5,037	4,905	4,748	4,326	3,556	47,543
Average Usage	657	917	478	892	970	1,087	1,243	1,259	1,226	1,187	1,082	889	990
PCA Units	2,627	3,669	1,911	3,567	3,880	4,347	4,970	5,037	4,905	4,748	4,326	3,556	47,543
Other 1	0	0	565	0	0	0	0	0	0	0	0	0	565
Other 2	-	-	-	-	-	-	-	-	-	-	-	-	-
Other 3	-	-	-	-	-	-	-	-	-	-	-	-	-
Bills Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
First 5 hundred cubic feet Rate	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 750
Next 40 hundred cubic feet Rate	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 3,403
Next 255 hundred cubic feet Rate	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 18,459
Next 700 hundred cubic feet Rate	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 40,317
Over 1,000 hundred cubic feet Rate	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 21,681
PCA Units Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other 1 Rate	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 565
Other 2 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other 3 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Test Year:</b>													
Customer Growth	0.0%												
Volume Growth	-0.3%												
Other Growth	0.0%												
Bills	4	4	4	4	4	4	4	4	4	4	4	4	48
First 5 hundred cubic feet	15	15	15	15	15	15	15	15	15	15	15	15	179
Next 40 hundred cubic feet	120	120	120	120	120	120	120	120	120	120	120	120	1,436
Next 255 hundred cubic feet	763	763	614	763	763	763	763	763	763	763	763	763	9,003
Next 700 hundred cubic feet	1,609	1,844	998	1,744	1,924	2,094	2,094	2,094	2,094	2,094	2,094	2,054	22,734
Over 1,000 hundred cubic feet	113	916	159	915	1,047	1,343	1,964	2,031	1,899	1,743	1,322	594	14,045
Total Volume	2,619	3,658	1,905	3,556	3,868	4,334	4,955	5,021	4,890	4,733	4,313	3,545	47,396
PCA Units	2,619	3,658	1,905	3,556	3,868	4,334	4,955	5,021	4,890	4,733	4,313	3,545	47,396
Other 1	0	0	565	0	0	0	0	0	0	0	0	0	565
Other 2	-	-	-	-	-	-	-	-	-	-	-	-	-
Other 3	-	-	-	-	-	-	-	-	-	-	-	-	-
Bills Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
First 5 hundred cubic feet Rate	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 748
Next 40 hundred cubic feet Rate	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 3,392
Next 255 hundred cubic feet Rate	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 18,402
Next 700 hundred cubic feet Rate	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 40,193
Over 1,000 hundred cubic feet Rate	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 21,615
PCA Units Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other 1 Rate	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 565
Other 2 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other 3 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Summary:</b>													
	Average Customer Charge	Historic Customers	Test Year Customers	Volume-Summer-Historic	Volume-Winter-Historic	Average Commodity Charge Test Year	Volume-Summer-Test Year	Volume-Winter-Test Year	Historic Revenue	Test Year Revenue			
8" Meter Summary	\$ -	4	4	19,259	28,284	\$ 1.78	19,200	28,197	\$ 85,177	\$ 84,916	\$ -		

Anderson City Water Department  
 Water Cost of Service Study FY2024  
 Schedule 3 - Revenue Rec / Test Year Loads

10" Meter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>Historic:</b>													
Bills	1	1	1	1	1	1	1	1	1	1	1	1	12
First 5 hundred cubic feet	5	5	5	5	5	5	5	5	5	5	5	5	60
Next 40 hundred cubic feet	40	40	40	40	40	40	40	40	40	40	40	40	480
Next 255 hundred cubic feet	255	255	255	255	255	255	255	255	255	255	255	255	3,060
Next 700 hundred cubic feet	700	700	700	700	700	700	700	700	700	700	700	700	8,400
Over 1,000 hundred cubic feet	79,075	78,703	80,634	77,574	92,127	44,341	81,065	70,300	85,407	71,048	68,939	69,580	898,793
Total Volume	80,075	79,703	81,634	78,574	93,127	45,341	82,065	71,300	86,407	72,048	69,939	70,580	910,793
Average Usage	80,075	79,703	81,634	78,574	93,127	45,341	82,065	71,300	86,407	72,048	69,939	70,580	75,899
PCA Units	80,075	79,703	81,634	78,574	93,127	45,341	82,065	71,300	86,407	72,048	69,939	70,580	910,793
Other 1	0	0	0	0	-	0	0	-	-	-	-	-	0
Other 2	-	-	-	-	-	-	-	-	-	-	-	-	-
Other 3	-	-	-	-	-	-	-	-	-	-	-	-	-
Bills Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
First 5 hundred cubic feet Rate	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 250
Next 40 hundred cubic feet Rate	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 1,134
Next 255 hundred cubic feet Rate	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 6,255
Next 700 hundred cubic feet Rate	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 14,851
Over 1,000 hundred cubic feet Rate	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1,383,242
PCA Units Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other 1 Rate	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 0
Other 2 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other 3 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Test Year:</b>													
Customer Growth	0.0%												
Volume Growth	-0.3%												
Other Growth	0.0%												
Bills	1	1	1	1	1	1	1	1	1	1	1	1	12
First 5 hundred cubic feet	5	5	5	5	5	5	5	5	5	5	5	5	60
Next 40 hundred cubic feet	40	40	40	40	40	40	40	40	40	40	40	40	479
Next 255 hundred cubic feet	254	254	254	254	254	254	254	254	254	254	254	254	3,051
Next 700 hundred cubic feet	698	698	698	698	698	698	698	698	698	698	698	698	8,374
Over 1,000 hundred cubic feet	78,831	78,460	80,385	77,335	91,843	44,204	80,815	70,083	85,144	70,829	68,727	69,366	896,023
Total Volume	79,828	79,457	81,382	78,332	92,840	45,201	81,812	71,080	86,141	71,826	69,723	70,362	907,986
PCA Units	79,828	79,457	81,382	78,332	92,840	45,201	81,812	71,080	86,141	71,826	69,723	70,362	907,986
Other 1	0	0	0	0	-	0	0	-	-	-	-	-	0
Other 2	-	-	-	-	-	-	-	-	-	-	-	-	-
Other 3	-	-	-	-	-	-	-	-	-	-	-	-	-
Bills Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
First 5 hundred cubic feet Rate	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 4.17	\$ 249
Next 40 hundred cubic feet Rate	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 2.36	\$ 1,131
Next 255 hundred cubic feet Rate	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 2.04	\$ 6,235
Next 700 hundred cubic feet Rate	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 1.77	\$ 14,805
Over 1,000 hundred cubic feet Rate	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1.54	\$ 1,378,979
PCA Units Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other 1 Rate	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 0
Other 2 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other 3 Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Summary:</b>													
Average Customer Charge	\$ -												
Historic Customers	1												
Test Year Customers	1												
Volume-Summer-Historic			285,113										
Volume-Winter-Historic				625,680									
Average Commodity Charge Test Year					1.54								
Volume-Summer-Test Year						284,234							
Volume-Winter-Test Year							623,752						
Historic Revenue										1,405,733			
Test Year Revenue											1,401,400		
10" Meter Summary	\$ -												

Anderson City Water Department  
 Water Cost of Service Study FY2024  
 Schedule 4 - Summary Class Ratio's

Billed Usage											
From Projected Usages	5/8" Meter	3/4" Meter	1" Meter	1.5" Meter	2" Meter	3" Meter	4" Meter	6" Meter	8" Meter	10" Meter	Total
Jan	112,193	1,294	4,476	3,081	17,647	18,502	10,308	11,210	2,619	79,828	261,158
Feb	108,591	714	4,525	3,016	18,118	17,073	8,319	11,402	3,658	79,457	254,872
Mar	99,814	703	3,742	2,820	17,671	14,605	9,137	10,622	1,905	81,382	242,402
Apr	99,715	810	3,784	3,055	17,731	14,651	9,687	9,589	3,556	78,332	240,911
May	103,708	781	4,195	2,873	17,594	19,075	9,974	11,697	3,868	92,840	266,605
Jun	115,076	799	4,067	3,022	20,556	17,477	11,846	12,035	4,334	45,201	234,413
Jul	119,203	870	5,334	5,700	21,528	15,327	8,892	13,233	4,955	81,812	276,854
Aug	118,247	891	5,532	3,541	23,687	15,671	9,733	14,269	5,021	71,080	267,673
Sep	118,704	899	5,927	3,425	23,619	20,809	11,320	13,772	4,890	86,141	289,505
Oct	116,092	870	5,715	2,987	21,115	19,514	12,218	11,921	4,733	71,826	266,992
Nov	105,747	808	4,885	2,500	18,287	16,820	11,053	11,204	4,313	69,723	245,340
Dec	105,777	768	4,018	3,120	18,334	15,937	9,218	11,623	3,545	70,362	242,703
<b>Total</b>	<b>1,322,866</b>	<b>10,207</b>	<b>56,201</b>	<b>39,140</b>	<b>235,885</b>	<b>205,462</b>	<b>121,706</b>	<b>142,578</b>	<b>47,396</b>	<b>907,986</b>	<b>3,089,426</b>
Distribution Losses	43%	43%	43%	43%	43%	43%	43%	43%	43%	43%	43%
Water Production	1,887,323	14,562	80,181	55,840	336,535	293,130	173,637	203,415	67,620	1,295,416	4,407,661

Statistics	5/8" Meter	3/4" Meter	1" Meter	1.5" Meter	2" Meter	3" Meter	4" Meter	6" Meter	8" Meter	10" Meter	Total
Average Day	5,171	40	220	153	922	803	476	557	185	3,549	12,076
Max Month Usage	119,203	1,294	5,927	5,700	23,687	20,809	12,218	14,269	5,021	92,840	289,505
Max Month	July	Jan	Sep	Jul	Aug	Sep	Oct	Aug	Aug	May	Sep
Days of Max Month	31.00	31.00	30.00	31.00	31.00	30.00	31.00	31.00	31.00	31.00	30
Average Day Max Month	3,845	42	198	184	764	694	394	460	162	2,995	9,650
Water Losses	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Units Sales	1,322,866	10,207	56,201	39,140	235,885	205,462	121,706	142,578	47,396	907,986	3,089,426
<b>Average Day</b>	<b>5,171</b>	<b>40</b>	<b>220</b>	<b>153</b>	<b>922</b>	<b>803</b>	<b>476</b>	<b>557</b>	<b>185</b>	<b>3,549</b>	<b>12,076</b>
Average Day Usage Max Month	3,845	42	198	184	764	694	394	460	162	2,995	9,737
MM/AD Ratio	0.74	1.05	0.90	1.20	0.83	0.86	0.83	0.83	0.87	0.84	
System MD/MM Ratio	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	
Weekly Usage Adjustment	1.11	1.11	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Max Day	5,677	62	262	244	1,012	919	522	610	215	3,967	13,488
MD Factor	1.57	2.20	1.70	2.27	1.57	1.63	1.57	1.56	1.65	1.59	
Max Hour Ratio	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.00	
Max Hour Usage	8,515	92	393	365	1,518	1,378	783	915	322	3,967	18,249
MH Factor	2.35	3.30	2.55	3.41	2.35	2.45	2.35	2.34	2.48	1.59	

**Anderson City Water Department**  
**Water Cost of Service Study FY2024**  
*Schedule 4 - Summary Class Ratio's*

Meter Size	Units Sales	Average Daily Consumption	Max Month Usage	Average Day Max Month	MM/AD Ratio
5/8" Meter	1,322,866	3,624	119,203	3,845	1.06
3/4" Meter	10,207	28	1,294	42	1.49
1" Meter	56,201	154	5,927	198	1.28
1.5" Meter	39,140	107	5,700	184	1.71
2" Meter	235,885	646	23,687	764	1.18
3" Meter	205,462	563	20,809	694	1.23
4" Meter	121,706	333	12,218	394	1.18
6" Meter	142,578	391	14,269	460	1.18
8" Meter	47,396	130	5,021	162	1.25
10" Meter	907,986	2,488	92,840	2,995	1.20

Meter Size	MM/AD Ratio	System MD/MM Ratio	Concentrated Usage	Estimated Max Day Factor	Calculated Max Day
5/8" Meter	1.06	1.32	1.11	1.57	5,677
3/4" Meter	1.49	1.32	1.11	2.20	62
1" Meter	1.28	1.32	1.00	1.70	262
1.5" Meter	1.71	1.32	1.00	2.27	244
2" Meter	1.18	1.32	1.00	1.57	1,012
3" Meter	1.23	1.32	1.00	1.63	919
4" Meter	1.18	1.32	1.00	1.57	522
6" Meter	1.18	1.32	1.00	1.56	610
8" Meter	1.25	1.32	1.00	1.65	215
10" Meter	1.20	1.32	1.00	1.59	3,967
<b>Total</b>					<b>13,488</b>
Average of Actual Max Day 2018 - 2023					11,961
<b>Ratio</b>					<b>1.13</b>

Meter Size	Estimated Max Day Factor	Hourly Usage Adjustment	Concentrated Usage Hours	Estimated Max Hour Factor	Calculated Max Hour
5/8" Meter	1.57	1.50	16.00	2.35	8,515
3/4" Meter	2.20	1.50	16.00	3.30	92
1" Meter	1.70	1.50	16.00	2.55	393
1.5" Meter	2.27	1.50	16.00	3.41	365
2" Meter	1.57	1.50	16.00	2.35	1,518
3" Meter	1.63	1.50	16.00	2.45	1,378
4" Meter	1.57	1.50	16.00	2.35	783
6" Meter	1.56	1.50	16.00	2.34	915
8" Meter	1.65	1.50	16.00	2.48	322
10" Meter	1.59	1.00	24.00	1.59	3,967
<b>Total</b>					<b>18,249</b>
Average of Actual Max Hour 2018 - 2023					12,982
<b>Ratio</b>					<b>1.41</b>

**Anderson City Water Department**  
**Water Cost of Service Study FY2024**  
*Schedule 5 - Functionalization of Assets and Debt Service and Replacements*

Account	Net Rate Base	CIP	Existing Debt	New Debt	Replacements
			937,140	9,271,790	2,842,400
<b>Source of Supply</b>					
300.00 Land & Land Rights SOS	\$ 456,905	\$ -	\$ 6,732	\$ -	\$ 20,420
301.00 Structures and Improvements SOS	775,098	-	11,421	-	34,640
302.00 Collecting and Impounding Reservoirs	-	-	-	-	-
303.00 Lake, River and Other Intakes	-	-	-	-	-
304.00 Wells and Springs	2,837,268	4,392,330	41,806	324,663	126,800
305.00 Infiltration Galleries and Tunnels	-	-	-	-	-
306.00 Source of Supply 1	-	-	-	-	-
307.00 Source of Supply 2	-	-	-	-	-
<b>Pumping</b>					
310.00 Land & Land Rights Pumping	\$ -	\$ -	\$ -	\$ -	\$ -
311.00 Structures and Improvements Pumping	17,278	-	255	-	772
312.00 Electrical Pumping Equipment	943,913	-	13,908	-	42,184
313.00 Other Pumping Equipment	-	-	-	-	-
314.00 Other Pumping 1	-	-	-	-	-
315.00 Other Pumping 2	-	-	-	-	-
316.00 Other Pumping 3	-	-	-	-	-
<b>Treatment</b>					
320.00 Land & Land Rights Treatment	\$ 64,058	\$ -	\$ 944	\$ -	\$ 2,863
321.00 Treatment Plant	5,143,576	31,451,300	75,789	2,324,750	229,872
322.00 Treatment Equipment	7,932,581	-	116,884	-	354,515
323.00 Other Treatment 1	-	-	-	-	-
324.00 Other Treatment 2	-	-	-	-	-
<b>Transmission Plant</b>					
330.00 Land & Land Rights Transmission	\$ 5,414	\$ -	\$ 80	\$ -	\$ 242
331.00 Transmission Mains City	18,814,775	21,152,109	277,229	1,563,477	840,852
332.00 Transmission Mains Outside City	-	-	-	-	-
333.00 Reservoirs & Standpipes	8,379,217	-	123,465	-	374,476
334.00 Other Transmission 1	-	-	-	-	-
<b>Distribution Plant</b>					
340.00 Land & Land Rights Distribution	\$ -	\$ -	\$ -	\$ -	\$ -
341.00 Structures & Improvements Distribution	874,270	-	12,882	-	39,072
342.00 Distribution Storage	-	-	-	-	-
343.00 Distribution Mains	-	35,046,336	-	2,590,481	-
344.00 Services	822,418	29,644,987	12,118	2,191,235	36,755
345.00 Meters	12,692,534	3,750,000	187,020	277,185	567,242
346.00 Hydrants	962,175	-	14,177	-	43,001
347.00 Backflow Prevention Devices	-	-	-	-	-
348.00 Min System Inside	-	-	-	-	-
349.00 Min System Outside	-	-	-	-	-
350.00 Distribution Mains Inside	-	-	-	-	-
351.00 Distribution Mains Outside	-	-	-	-	-
352.00 Fire Hydrant	-	-	-	-	-
353.00 Other Distribution 1	-	-	-	-	-
<b>General Plant</b>					
360.00 Land & Land Rights General	\$ -	\$ -	\$ -	\$ -	\$ -
361.00 Structures and Improvements General	79,571	-	1,172	-	3,556
362.00 Office Furniture and Equipment	210,102	-	3,096	-	9,390
363.00 Transportation Equipment	1,620,671	-	23,880	-	72,429
364.00 Stores Equipment	-	-	-	-	-
365.00 Tools, Shop and Garage Equipment	87,892	-	1,295	-	3,928
366.00 Laboratory Equipment	-	-	-	-	-
367.00 Power Operated Equipment	646,300	-	9,523	-	28,884
368.00 Communication Equipment	206,768	-	3,047	-	9,241
369.00 Miscellaneous Equipment	28,358	-	418	-	1,267
370.00 Software	-	-	-	-	-
<b>Working Capital</b>					
47.00 Construction work in process	\$ -	\$ -	\$ -	\$ -	\$ -
48.00 Working Capital	-	-	-	-	-
<b>Total</b>	<b>63,601,141</b>	<b>125,437,062</b>	<b>937,140</b>	<b>9,271,790</b>	<b>2,842,400</b>

Anderson City Water Department  
 Water Cost of Service Study FY2024  
 Schedule 6 - Allocation of Debt Service Payments

	Treatment Base	Treatment MD	Distribution Base	Distribution MD	Distribution MH	Transmission Base	Transmission MD	Transmission MH	Meters	Services	Cust. Serv.	Fire Prot.	Hydrants
<b>Intangible Plant</b>													
(301) Organization	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>Source of Supply</b>	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
(300) Land & Land Rights SOS	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
(301) Structures and Improvements SOS	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
(302) Collecting and Impounding Reservoirs	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
(303) Lake, River and Other Intakes	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
(304) Wells and Springs	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
(305) Infiltration Galleries and Tunnels	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
(306) Source of Supply 1	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
(307) Source of Supply 2	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>Pumping</b>	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
(310) Land & Land Rights Pumping	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
(311) Structures and Improvements Pumping	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
(312) Electrical Pumping Equipment	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
(313) Other Pumping Equipment	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
(314) Other Pumping 1	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
(315) Other Pumping 2	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
(316) Other Pumping 3	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>Treatment</b>	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
(320) Land & Land Rights Treatment	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
(321) Treatment Plant	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
(322) Treatment Equipment	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
(323) Other Treatment 1	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
(324) Other Treatment 2	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>Transmission Plant</b>	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
(330) Land & Land Rights Transmission	0%	0%	0%	0%	0%	69%	11%	8%	0%	0%	0%	12%	0%
(331) Transmission Mains City	0%	0%	0%	0%	0%	69%	11%	8%	0%	0%	0%	12%	0%
(332) Transmission Mains Outside City	0%	0%	0%	0%	0%	69%	11%	8%	0%	0%	0%	12%	0%
(333) Reservoirs & Standpipes	0%	0%	0%	0%	0%	69%	11%	8%	0%	0%	0%	12%	0%
(334) Other Transmission 1	0%	0%	0%	0%	0%	69%	11%	8%	0%	0%	0%	12%	0%
<b>Distribution Plant</b>													
(340) Land & Land Rights Distribution	0%	0%	63%	11%	8%	0%	0%	0%	0%	0%	0%	19%	0%
(341) Structures & Improvements Distribution	0%	0%	63%	11%	8%	0%	0%	0%	0%	0%	0%	19%	0%
(342) Distribution Storage	0%	0%	69%	0%	15%	0%	0%	0%	0%	0%	0%	16%	0%
(343) Distribution Mains	0%	0%	63%	11%	8%	0%	0%	0%	0%	0%	0%	19%	0%
(344) Services	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%
(345) Meters	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
(346) Hydrants	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
(347) Backflow Prevention Devices	0%	0%	63%	11%	8%	0%	0%	0%	0%	0%	0%	19%	0%
(348) Min System Inside	0%	0%	63%	11%	8%	0%	0%	0%	0%	0%	0%	19%	0%
(349) Min System Outside	0%	0%	63%	11%	8%	0%	0%	0%	0%	0%	0%	19%	0%
(350) Distribution Mains Inside	0%	0%	63%	11%	8%	0%	0%	0%	0%	0%	0%	19%	0%
(351) Distribution Mains Outside	0%	0%	63%	11%	8%	0%	0%	0%	0%	0%	0%	19%	0%
(352) Fire Hydrant	0%	0%	63%	11%	8%	0%	0%	0%	0%	0%	0%	19%	0%
(353) Other Distribution 1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%

Anderson City Water Department  
 Water Cost of Service Study FY2024  
 Schedule 6 - Allocation of Debt Service Payments

	Treatment Base	Treatment MD	Distribution Base	Distribution MD	Distribution MH	Transmission Base	Transmission MD	Transmission MH	Meters	Services	Cust. Serv.	Fire Prot.	Hydrants
Source of Supply	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(300) Land & Land Rights SOS	24,049	3,103	-	-	-	-	-	-	-	-	-	-	-
(301) Structures and Improvements SOS	40,797	5,264	-	-	-	-	-	-	-	-	-	-	-
(302) Collecting and Impounding Reservoirs	-	-	-	-	-	-	-	-	-	-	-	-	-
(303) Lake, River and Other Intakes	-	-	-	-	-	-	-	-	-	-	-	-	-
(304) Wells and Springs	436,896	56,373	-	-	-	-	-	-	-	-	-	-	-
(305) Infiltration Galleries and Tunnels	-	-	-	-	-	-	-	-	-	-	-	-	-
(306) Source of Supply 1	-	-	-	-	-	-	-	-	-	-	-	-	-
(307) Source of Supply 2	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumping	-	-	-	-	-	-	-	-	-	-	-	-	-
(310) Land & Land Rights Pumping	-	-	-	-	-	-	-	-	-	-	-	-	-
(311) Structures and Improvements Pumping	909	117	-	-	-	-	-	-	-	-	-	-	-
(312) Electrical Pumping Equipment	49,682	6,411	-	-	-	-	-	-	-	-	-	-	-
(313) Other Pumping Equipment	-	-	-	-	-	-	-	-	-	-	-	-	-
(314) Other Pumping 1	-	-	-	-	-	-	-	-	-	-	-	-	-
(315) Other Pumping 2	-	-	-	-	-	-	-	-	-	-	-	-	-
(316) Other Pumping 3	-	-	-	-	-	-	-	-	-	-	-	-	-
Treatment	-	-	-	-	-	-	-	-	-	-	-	-	-
(320) Land & Land Rights Treatment	3,372	435	-	-	-	-	-	-	-	-	-	-	-
(321) Treatment Plant	2,329,795	300,616	-	-	-	-	-	-	-	-	-	-	-
(322) Treatment Equipment	417,525	53,874	-	-	-	-	-	-	-	-	-	-	-
(323) Other Treatment 1	-	-	-	-	-	-	-	-	-	-	-	-	-
(324) Other Treatment 2	-	-	-	-	-	-	-	-	-	-	-	-	-
Transmission Plant	-	-	-	-	-	-	-	-	-	-	-	-	-
(330) Land & Land Rights Transmission	-	-	-	-	-	223	34	25	-	-	-	-	39
(331) Transmission Mains City	-	-	-	-	-	1,860,080	282,366	210,833	-	-	-	-	328,277
(332) Transmission Mains Outside City	-	-	-	-	-	-	-	-	-	-	-	-	-
(333) Reservoirs & Standpipes	-	-	-	-	-	345,400	52,433	39,150	-	-	-	-	60,958
(334) Other Transmission 1	-	-	-	-	-	-	-	-	-	-	-	-	-
Distribution Plant	-	-	-	-	-	-	-	-	-	-	-	-	-
(340) Land & Land Rights Distribution	-	-	-	-	-	-	-	-	-	-	-	-	-
(341) Structures & Improvements Distribution	-	-	32,681	5,471	4,085	-	-	-	-	-	-	-	9,718
(342) Distribution Storage	-	-	-	-	-	-	-	-	-	-	-	-	-
(343) Distribution Mains	-	-	1,629,495	272,776	203,673	-	-	-	-	-	-	-	484,537
(344) Services	-	-	-	-	-	-	-	-	-	2,240,108	-	-	-
(345) Meters	-	-	-	-	-	-	-	-	1,031,447	-	-	-	-
(346) Hydrants	-	-	-	-	-	-	-	-	-	-	-	-	57,178
(347) Backflow Prevention Devices	-	-	-	-	-	-	-	-	-	-	-	-	-
(348) Min System Inside	-	-	-	-	-	-	-	-	-	-	-	-	-
(349) Min System Outside	-	-	-	-	-	-	-	-	-	-	-	-	-
(350) Distribution Mains Inside	-	-	-	-	-	-	-	-	-	-	-	-	-
(351) Distribution Mains Outside	-	-	-	-	-	-	-	-	-	-	-	-	-
(352) Fire Hydrant	-	-	-	-	-	-	-	-	-	-	-	-	-
(353) Other Distribution 1	-	-	-	-	-	-	-	-	-	-	-	-	-
SubTotal	\$ 3,303,025	\$ 426,193	\$ 1,662,176	\$ 278,247	\$ 207,757	\$ 2,205,703	\$ 334,833	\$ 250,008	\$ 1,031,447	\$ 2,240,108	\$ -	\$ 883,529	\$ 57,178
<b>Ratebase Subtotal Percent</b>	<b>26%</b>	<b>3%</b>	<b>13%</b>	<b>2%</b>	<b>2%</b>	<b>17%</b>	<b>3%</b>	<b>2%</b>	<b>8%</b>	<b>17%</b>	<b>0%</b>	<b>7%</b>	<b>0%</b>
<b>T&amp;D Subtotal</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,629,495</b>	<b>\$ 272,776</b>	<b>\$ 203,673</b>	<b>\$ 1,860,080</b>	<b>\$ 282,366</b>	<b>\$ 210,833</b>	<b>\$ -</b>	<b>\$ 2,240,108</b>	<b>\$ -</b>	<b>\$ 812,814</b>	<b>\$ 57,178</b>
<b>T&amp;D Allocator</b>	<b>0%</b>	<b>0%</b>	<b>22%</b>	<b>4%</b>	<b>3%</b>	<b>25%</b>	<b>4%</b>	<b>3%</b>	<b>0%</b>	<b>30%</b>	<b>0%</b>	<b>11%</b>	<b>1%</b>
(360) Land & Land Rights General	Ratebase Subtotal Percent	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(361) Structures and Improvements General	Ratebase Subtotal Percent	1,213	156	610	102	76	810	123	92	379	822	-	324
(362) Office Furniture and Equipment	Ratebase Subtotal Percent	3,202	413	1,611	270	201	2,138	325	242	1,000	2,171	-	856
(363) Transportation Equipment	T&D Allocator	-	-	20,733	3,471	2,591	23,667	3,593	2,683	-	28,502	-	10,342
(364) Stores Equipment	Ratebase Subtotal Percent	-	-	-	-	-	-	-	-	-	-	-	-
(365) Tools, Shop and Garage Equipment	Ratebase Subtotal Percent	1,339	173	674	113	84	894	136	101	418	908	-	358
(366) Laboratory Equipment	Ratebase Subtotal Percent	-	-	-	-	-	-	-	-	-	-	-	-
(367) Power Operated Equipment	Ratebase Subtotal Percent	9,849	1,271	4,956	830	620	6,577	998	745	3,076	6,680	-	2,635
(368) Communication Equipment	Ratebase Subtotal Percent	3,151	407	1,586	265	198	2,104	319	239	984	2,137	-	843
(369) Miscellaneous Equipment	Ratebase Subtotal Percent	432	56	217	36	27	289	44	33	135	293	-	116
(370) Software	Ratebase Subtotal Percent	-	-	-	-	-	-	-	-	-	-	-	-
Total Plant In Service	\$ 3,322,211	\$ 428,669	\$ 1,692,564	\$ 283,334	\$ 211,556	\$ 2,242,182	\$ 340,371	\$ 254,143	\$ 1,037,438	\$ 2,281,622	\$ -	\$ 899,004	\$ 58,238
<b>Total Rate Base Percent</b>	<b>25.5%</b>	<b>3.3%</b>	<b>13.0%</b>	<b>2.2%</b>	<b>1.6%</b>	<b>17.2%</b>	<b>2.6%</b>	<b>1.9%</b>	<b>7.9%</b>	<b>17.5%</b>	<b>0.0%</b>	<b>6.9%</b>	<b>0.4%</b>



Anderson City Water Department  
 Water Cost of Service Study FY2024  
 Schedule 7 - Expense Classification

Check # 0	Extra Capacity - Treatment		Extra Capacity - Distribution			Extra Capacity - Transmission			Meters	Services	Fire Prot.	Hydrants	Billing
	Treatment Base	Treatment MD	Distribution Base	Distribution MD	Distribution MH	Transmission Base	Transmission MD	Transmission MH					
(1) Contractual Services Other - Operations	-	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
(2) Miscellaneous - Maintenance	-	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
(3) Treatment Salaries, Wages, and Benefits	-	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
(4) Repairs and Maintenance Treatment	-	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
(5) Power & Chemicals	-	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
(6) Loadings	-	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
(7) Treatment	-	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
(8) Utilities	-	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
(9) Other Treatment 1	-	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
(10) Other Treatment 2	-	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
(11) Other Treatment 3	-	89%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
(12) T&D Salaries, Wages, and Benefits	-	0%	0%	0%	0%	0%	69%	11%	8%	0%	0%	12%	0%
(13) Repairs and Maintenance T&D	-	0%	0%	0%	0%	0%	69%	11%	8%	0%	0%	12%	0%
(14) System Pumping	-	0%	0%	0%	0%	0%	69%	11%	8%	0%	0%	12%	0%
(15) Transmission Mains City	-	0%	0%	0%	0%	0%	69%	11%	8%	0%	0%	12%	0%
(16) Transmission Mains Outside City	-	0%	0%	0%	0%	0%	69%	11%	8%	0%	0%	12%	0%
(17) Transmission Mains Common to All	-	0%	0%	0%	0%	0%	69%	11%	8%	0%	0%	12%	0%
(18) Distribution Storage	-	0%	0%	82%	0%	18%	0%	0%	0%	0%	0%	0%	0%
(19) Services	-	0%	0%	63%	11%	8%	0%	0%	0%	0%	0%	19%	0%
(20) Meters	-	0%	0%	63%	11%	8%	0%	0%	0%	0%	0%	19%	0%
(21) Min System Inside	-	0%	0%	63%	11%	8%	0%	0%	0%	0%	0%	19%	0%
(22) Min System Outside	-	0%	0%	63%	11%	8%	0%	0%	0%	0%	0%	19%	0%
(23) Distribution Mains Inside	-	0%	0%	63%	11%	8%	0%	0%	0%	0%	0%	19%	0%
(24) Distribution Mains Outside	-	0%	0%	63%	11%	8%	0%	0%	0%	0%	0%	19%	0%
(25) Hydrants	-	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%
(26) Materials and Supplies - Operations	-	0%	0%	63%	11%	8%	0%	0%	0%	0%	0%	19%	0%
(27) Transportation Equipment - Operations	-	0%	0%	63%	11%	8%	0%	0%	0%	0%	0%	19%	0%
(28) Meter Reading	-	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
(29) Billing	-	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
(30) Bad Debt	-	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
(31) Miscellaneous	-	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
(32) Customer Rec & Collection	-	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
(33) Salaries and Wages	-	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
<b>Expense Amount</b>													
(1) Contractual Services Other - Operations	\$ 601,486	532,745	68,741	-	-	-	-	-	-	-	-	-	-
(2) Miscellaneous - Maintenance	82,883	73,411	9,472	-	-	-	-	-	-	-	-	-	-
(3) Treatment Salaries, Wages, and Benefits	897,706	795,112	102,594	-	-	-	-	-	-	-	-	-	-
(4) Repairs and Maintenance Treatment	-	-	-	-	-	-	-	-	-	-	-	-	-
(5) Power & Chemicals	406,009	359,608	46,401	-	-	-	-	-	-	-	-	-	-
(6) Loadings	-	-	-	-	-	-	-	-	-	-	-	-	-
(7) Treatment	100,317	88,852	11,465	-	-	-	-	-	-	-	-	-	-
(8) Utilities	900,000	797,144	102,856	-	-	-	-	-	-	-	-	-	-
(9) Other Treatment 1	-	-	-	-	-	-	-	-	-	-	-	-	-
(10) Other Treatment 2	-	-	-	-	-	-	-	-	-	-	-	-	-
(11) Other Treatment 3	-	-	-	-	-	-	-	-	-	-	-	-	-
(12) T&D Salaries, Wages, and Benefits	-	-	-	-	-	-	-	-	-	-	-	-	-
(13) Repairs and Maintenance T&D	-	-	-	-	-	-	-	-	-	-	-	-	-
(14) System Pumping	-	-	-	-	-	-	-	-	-	-	-	-	-
(15) Transmission Mains City	-	-	-	-	-	-	-	-	-	-	-	-	-
(16) Transmission Mains Outside City	-	-	-	-	-	-	-	-	-	-	-	-	-
(17) Transmission Mains Common to All	1,244,634	-	-	-	-	-	863,349	131,059	97,857	-	-	152,369	-
(18) Distribution Storage	554,142	-	-	452,223	-	101,919	-	-	-	-	-	-	-
(19) Services	54,389	-	-	34,212	5,727	4,276	-	-	-	-	-	10,173	-
(20) Meters	-	-	-	-	-	-	-	-	-	-	-	-	-
(21) Min System Inside	-	-	-	-	-	-	-	-	-	-	-	-	-
(22) Min System Outside	-	-	-	-	-	-	-	-	-	-	-	-	-
(23) Distribution Mains Inside	57,818	-	-	36,369	6,088	4,546	-	-	-	-	-	10,815	-
(24) Distribution Mains Outside	-	-	-	-	-	-	-	-	-	-	-	-	-
(25) Hydrants	63,631	-	-	-	-	-	-	-	-	-	-	-	63,631
(26) Materials and Supplies - Operations	-	-	-	-	-	-	-	-	-	-	-	-	-
(27) Transportation Equipment - Operations	249,298	-	-	156,816	26,251	19,601	-	-	-	-	-	46,630	-
(28) Meter Reading	-	-	-	-	-	-	-	-	-	-	-	-	-
(29) Billing	100,000	-	-	-	-	-	-	-	-	-	-	-	100,000
(30) Bad Debt	110,435	-	-	-	-	-	-	-	-	-	-	-	110,435
(31) Miscellaneous	31,393	-	-	-	-	-	-	-	-	-	-	-	31,393
(32) Customer Rec & Collection	-	-	-	-	-	-	-	-	-	-	-	-	-
(33) Salaries and Wages	44,667	-	-	-	-	-	-	-	-	-	-	-	44,667
Operation and Maintenance	\$ 5,498,809	2,646,872	341,529	679,621	38,066	130,342	863,349	131,059	97,857	-	-	219,986	63,631 286,495
Administrative Percent	100%	48%	6%	12%	1%	2%	16%	2%	0%	0%	4%	1%	5%
Rate Base Percent	100%	25%	3%	13%	2%	2%	17%	3%	2%	8%	17%	7%	0%
(34) Admin and General	-	-	-	-	-	-	-	-	-	-	-	-	-
(35) A&G Salaries, Wages, and Benefits	1,989,817	506,507	65,355	258,050	43,197	32,254	341,845	51,893	38,747	158,169	347,858	137,063	8,879
(36) Office Expense	419,744	106,846	13,786	54,435	9,112	6,804	72,111	10,947	8,174	33,365	73,379	28,913	1,873
(37) Insurance, Audit, Professional Services	2,267,610	577,219	74,479	294,075	49,228	36,757	389,569	59,138	44,156	180,250	396,422	156,198	10,119
(38) Transportation Expense	-	-	-	-	-	-	-	-	-	-	-	-	-
(39) Training Expense	-	-	-	-	-	-	-	-	-	-	-	-	-
(40) Rents	127,116	32,357	4,175	16,485	2,760	2,060	21,838	3,315	2,475	10,104	22,222	8,756	567
(41) Miscellaneous Admin	24,130	6,142	793	3,129	524	391	4,145	629	470	1,918	4,218	1,662	108
(42) Adjusted Taxes other than income tax	908,049	231,143	29,825	117,760	19,713	14,719	156,000	23,681	17,682	72,180	158,744	62,548	4,052
(43) Other Revenues	(201,409)	(51,269)	(6,615)	(26,120)	(4,372)	(3,265)	(34,602)	(5,253)	(3,922)	(16,010)	(35,210)	(13,873)	(899)
(44) Other Expense	-	-	-	-	-	-	-	-	-	-	-	-	-
(45) Direct - Franchise Fee/PILOT	-	-	-	-	-	-	-	-	-	-	-	-	-
(46) Inflationary Return	-	-	-	-	-	-	-	-	-	-	-	-	-
(47) Inflationary Return Outside City	-	-	-	-	-	-	-	-	-	-	-	-	-
Administrative Total	\$ 5,535,057	2,664,320	343,780	684,101	38,317	131,201	869,040	131,923	98,503	-	-	221,437	64,051 288,384
<b>Total Operation &amp; Maintenance Expenses</b>	<b>\$ 11,033,866</b>	<b>4,055,818</b>	<b>523,327</b>	<b>1,397,436</b>	<b>158,228</b>	<b>220,063</b>	<b>1,814,256</b>	<b>275,410</b>	<b>205,639</b>	<b>439,976</b>	<b>967,634</b>	<b>601,253</b>	<b>88,330 286,495</b>
<b>Total Debt Service &amp; Replacements</b>	<b>\$ 13,051,330</b>	<b>3,322,211</b>	<b>428,669</b>	<b>1,692,564</b>	<b>283,234</b>	<b>211,556</b>	<b>2,242,182</b>	<b>340,371</b>	<b>254,143</b>	<b>1,037,438</b>	<b>2,281,622</b>	<b>899,004</b>	<b>58,238</b>
<b>Total Revenue Requirements</b>	<b>\$ 24,085,196</b>	<b>7,378,029</b>	<b>951,996</b>	<b>3,089,999</b>	<b>441,562</b>	<b>431,618</b>	<b>4,056,439</b>	<b>615,781</b>	<b>459,783</b>	<b>1,477,415</b>	<b>3,249,256</b>	<b>1,500,256</b>	<b>146,567 286,495</b>
<b>Units of Service</b>		<b>8,464</b>	<b>5,024</b>	<b>8,464</b>	<b>5,024</b>	<b>13,225</b>	<b>8,464</b>	<b>5,024</b>	<b>13,225</b>	<b>5,802,248</b>	<b>31,012</b>	<b>1</b>	<b>1 31,012</b>
<b>Unit Costs</b>		<b>871.68</b>	<b>189.48</b>	<b>365.07</b>	<b>87.89</b>	<b>32.64</b>	<b>479.25</b>	<b>122.56</b>	<b>34.77</b>	<b>0.25</b>	<b>104.77</b>	<b>1,500,256.45</b>	<b>146,567.46 9.24</b>

Anderson City Water Department  
 Water Cost of Service Study FY2024  
 Schedule 8 - Allocation Summary

Customer Class	Treatment			Distribution			Transmission			Meters	Services	Fire Prot.	Hydrants	Billing
	Base - A	MD - A	MH - A	Base - D	MD - D	MH - D	Base - T	MD - T	MH - T					
5/8" Meter	3,624.29	2,052.44	6,462.65	3,624.29	2,052.44	6,462.65	3,624.29	2,052.44	6,462.65	4,724,489.58	21,597.67	-	-	21,598
3/4" Meter	28	34	59	28	34	59	28	34	59	22,294	117	-	-	117
1" Meter	154	108	285	154	108	285	154	108	285	115,819	875	-	-	875
1.5" Meter	107	136	229	107	136	229	107	136	229	62,334	455	-	-	455
2" Meter	646	366	1,152	646	366	1,152	646	366	1,152	229,610	1,992	-	-	1,992
3" Meter	563	356	1,022	563	356	1,022	563	356	1,022	312,211	2,115	-	-	2,115
4" Meter	333	189	594	333	189	594	333	189	594	215,407	2,075	-	-	2,075
6" Meter	391	219	695	391	219	695	391	219	695	98,127	1,350	-	-	1,350
8" Meter	130	85	237	130	85	237	130	85	237	16,032	320	-	-	320
9" Meter	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10" Meter	2,488	1,480	2,488	2,488	1,480	2,488	2,488	1,480	2,488	5,925	115	-	-	115
FireProtection	-	-	-	-	-	-	-	-	-	-	-	1.00	-	-
Hydrants	-	-	-	-	-	-	-	-	-	-	-	-	1.00	-
<b>Total</b>	<b>8,464</b>	<b>5,024</b>	<b>13,225</b>	<b>8,464</b>	<b>5,024</b>	<b>13,225</b>	<b>8,464</b>	<b>5,024</b>	<b>13,225</b>	<b>5,802,248</b>	<b>31,012</b>	<b>1.00</b>	<b>1.00</b>	<b>31,012</b>

Customer Class	Base - A	MD - A	MH - A	Base - D	MD - D	MH - D	Base - T	MD - T	MH - T	Meters	Services	Fire Prot.	Hydrants	Billing
5/8" Meter	42.8%	40.9%	48.9%	42.8%	40.9%	48.9%	42.8%	40.9%	48.9%	81.4%	69.6%	0.0%	0.0%	69.6%
3/4" Meter	0.3%	0.7%	0.4%	0.3%	0.7%	0.4%	0.3%	0.7%	0.4%	0.4%	0.4%	0.0%	0.0%	0.4%
1" Meter	1.8%	2.1%	2.2%	1.8%	2.1%	2.2%	1.8%	2.1%	2.2%	2.0%	2.8%	0.0%	0.0%	2.8%
1.5" Meter	1.3%	2.7%	1.7%	1.3%	2.7%	1.7%	1.3%	2.7%	1.7%	1.1%	1.5%	0.0%	0.0%	1.5%
2" Meter	7.6%	7.3%	8.7%	7.6%	7.3%	8.7%	7.6%	7.3%	8.7%	4.0%	6.4%	0.0%	0.0%	6.4%
3" Meter	6.7%	7.1%	7.7%	6.7%	7.1%	7.7%	6.7%	7.1%	7.7%	5.4%	6.8%	0.0%	0.0%	6.8%
4" Meter	3.9%	3.8%	4.5%	3.9%	3.8%	4.5%	3.9%	3.8%	4.5%	3.7%	6.7%	0.0%	0.0%	6.7%
6" Meter	4.6%	4.4%	5.3%	4.6%	4.4%	5.3%	4.6%	4.4%	5.3%	1.7%	4.4%	0.0%	0.0%	4.4%
8" Meter	1.5%	1.7%	1.8%	1.5%	1.7%	1.8%	1.5%	1.7%	1.8%	0.3%	1.0%	0.0%	0.0%	1.0%
9" Meter	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
10" Meter	29.4%	29.5%	18.8%	29.4%	29.5%	18.8%	29.4%	29.5%	18.8%	0.1%	0.4%	0.0%	0.0%	0.4%
FireProtection	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
Hydrants	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**Anderson City Water Department**  
**Water Cost of Service Study FY2024**  
*Schedule 9 - Customer-related & meter cost inputs.*

Customer Class	Number of Meters	Meter Costs	Meter Size	Billing Weighting Factor	Capacity Ratio	Meter Equivalent Ratio (based on 5/8)
5/8" Meter	21,598	\$ 219	0.63	0.6	1.0	1.00
3/4" Meter	78.3	285	0.75	0.8	1.5	1.50
1" Meter	350.0	331	1.00	1.0	2.5	2.50
1.5" Meter	91.0	685	1.50	1.5	5.0	5.00
2" Meter	249.0	922	2.00	2.0	8.0	8.00
3" Meter	141.0	2,214	3.00	3.0	15.0	15.00
4" Meter	83.0	2,595	4.00	4.0	25.0	25.00
6" Meter	27.0	3,634	6.00	6.0	50.0	50.00
8" Meter	4.0	4,008	8.00	8.0	80.0	80.00
10" Meter	1.0	5,925	12.00	12.0	115.0	115.00

Anderson City Water Department  
 Water Cost of Service Study FY2024  
 Schedule 10 - Unit cost by meter size

Rate Class - Units	Extra Capacity - Treatment		Extra Capacity - Distribution			Extra Capacity - Transmission			Meter Charge				
	Treatment Base	Treatment MD	Distribution Base	Distribution MD	Distribution MH	Transmission Base	Transmission MD	Transmission MH	Meters	Services	Fire Prot.	Hydrants	Billing
	5/8" Meter	3,624.29	2,052.44	3,624.29	2,052.44	6,462.65	3,624.29	2,052.44	6,462.65	4,724,490	21,598	-	-
3/4" Meter	27.96	33.64	27.96	33.64	58.77	27.96	33.64	58.77	22,294	117	-	-	117
1" Meter	153.97	107.73	153.97	107.73	284.83	153.97	107.73	284.83	115,819	875	-	-	875
1.5" Meter	107.23	136.36	107.23	136.36	229.03	107.23	136.36	229.03	62,334	455	-	-	455
2" Meter	646.26	365.94	646.26	365.94	1,152.36	646.26	365.94	1,152.36	229,610	1,992	-	-	1,992
3" Meter	562.91	355.94	562.91	355.94	1,022.33	562.91	355.94	1,022.33	312,211	2,115	-	-	2,115
4" Meter	333.44	188.67	333.44	188.67	594.50	333.44	188.67	594.50	215,407	2,075	-	-	2,075
6" Meter	390.63	219.12	390.63	219.12	695.50	390.63	219.12	695.50	98,127	1,350	-	-	1,350
8" Meter	129.85	84.73	129.85	84.73	237.14	129.85	84.73	237.14	16,032	320	-	-	320
10" Meter	2,487.63	1,479.65	2,487.63	1,479.65	2,487.63	2,487.63	1,479.65	2,487.63	5,925	115	-	-	115
<b>Total</b>	<b>8,464</b>	<b>5,024</b>	<b>8,464</b>	<b>5,024</b>	<b>13,225</b>	<b>8,464</b>	<b>5,024</b>	<b>13,225</b>	<b>5,802,248</b>	<b>31,012</b>	<b>1</b>	<b>1</b>	<b>31,012</b>

Rate Class - Revenue Requirements	Extra Capacity - Treatment		Extra Capacity - Distribution			Extra Capacity - Transmission			Meter Charge				
	Treatment Base	Treatment MD	Distribution Base	Distribution MD	Distribution MH	Transmission Base	Transmission MD	Transmission MH	Meters	Services	Fire Prot.	Hydrants	Billing
	5/8" Meter	\$ 3,159,209	\$ 388,899	\$ 1,323,111	\$ 180,382	\$ 210,923	\$ 1,736,932	\$ 251,552	\$ 224,686	\$ 1,202,987	\$ 2,262,874	\$ -	\$ -
3/4" Meter	24,376	6,374	10,209	2,956	1,918	13,402	4,123	2,043	5,677	12,298	-	-	1,084
1" Meter	134,216	20,413	56,211	9,468	9,296	73,792	13,204	9,903	29,491	91,677	-	-	8,083
1.5" Meter	93,472	25,837	39,147	11,984	7,475	51,391	16,712	7,963	15,872	47,672	-	-	4,203
2" Meter	563,330	69,339	235,929	32,161	37,610	309,719	44,851	40,064	58,465	208,710	-	-	18,402
3" Meter	490,674	67,444	205,500	31,282	33,366	269,772	43,625	35,543	79,498	221,597	-	-	19,539
4" Meter	290,652	35,750	121,728	16,582	19,403	159,800	23,124	20,669	54,849	217,406	-	-	19,169
6" Meter	340,499	41,519	142,605	19,258	22,699	187,206	26,856	24,180	24,986	141,445	-	-	12,472
8" Meter	113,190	16,054	47,405	7,446	7,740	62,232	10,384	8,245	4,082	33,528	-	-	2,956
9" Meter	-	-	-	-	-	-	-	-	-	-	-	-	-
10" Meter	2,168,411	280,366	908,154	130,041	81,189	1,192,192	181,350	86,487	1,509	12,049	-	-	1,062
FireProtection	-	-	-	-	-	-	-	-	-	-	1,500,256	-	-
Hydrants	-	-	-	-	-	-	-	-	-	-	-	146,567	-
<b>Total</b>	<b>\$ 7,378,029</b>	<b>\$ 951,996</b>	<b>\$ 3,089,999</b>	<b>\$ 441,562</b>	<b>\$ 431,618</b>	<b>\$ 4,056,439</b>	<b>\$ 615,781</b>	<b>\$ 459,783</b>	<b>\$ 1,477,415</b>	<b>\$ 3,249,256</b>	<b>\$ 1,500,256</b>	<b>\$ 146,567</b>	<b>\$ 286,495</b>

Rate Class - Unit Costs	Extra Capacity - Treatment		Extra Capacity - Distribution			Extra Capacity - Transmission			Meter Charge				
	Treatment Base	Treatment MD	Distribution Base	Distribution MD	Distribution MH	Transmission Base	Transmission MD	Transmission MH	Meters	Services	Fire Prot.	Hydrants	Billing
	5/8" Meter	\$ 2.39	\$ 0.29	\$ 1.00	\$ 0.14	\$ 0.16	\$ 1.31	\$ 0.19	\$ 0.17	\$ 4.64	\$ 8.73	\$ -	\$ -
3/4" Meter	2.39	0.62	1.00	0.29	0.19	1.31	0.40	0.20	6.05	13.10	-	-	1.15
1" Meter	2.39	0.36	1.00	0.17	0.17	1.31	0.23	0.18	7.02	21.83	-	-	1.92
1.5" Meter	2.39	0.66	1.00	0.31	0.19	1.31	0.43	0.20	14.53	43.66	-	-	3.85
2" Meter	2.39	0.29	1.00	0.14	0.16	1.31	0.19	0.17	19.57	69.85	-	-	6.16
3" Meter	2.39	0.33	1.00	0.15	0.16	1.31	0.21	0.17	46.98	130.97	-	-	11.55
4" Meter	2.39	0.29	1.00	0.14	0.16	1.31	0.19	0.17	55.07	218.28	-	-	19.25
6" Meter	2.39	0.29	1.00	0.14	0.16	1.31	0.19	0.17	77.12	436.56	-	-	38.49
8" Meter	2.39	0.34	1.00	0.16	0.16	1.31	0.22	0.17	85.05	698.49	-	-	61.59
10" Meter	2.39	0.31	1.00	0.14	0.09	1.31	0.20	0.10	125.72	1,004.08	-	-	88.53

**Anderson City Water Department  
Water Cost of Service Study FY2024**

*Schedule 11: Fire Protection*

**Allocation of Costs to Public and Private Fire Service**

Allocated Fire Protection Costs	\$ 1,500,256	<b>Size of Hydrant Inches</b>	<b>6</b>
Direct Fire Protection	146,567		
<b>Total Fire Protection Costs</b>	<b>\$ 1,646,824</b>		

Item	Number of Services	Demand Factor*	Equivalent Connections	Percentage Allocation	Allocation	Total Fire Protection Costs
Inside City	1657					
Outside City	0					
<b>Total Public Hydrants</b>	<b>1657</b>	<b>111.31</b>	<b>184,442</b>	<b>78%</b>	<b>1,172,985</b>	<b>1,172,985</b>
Public Hydrants Direct						146,567
<b>Total Public Fire Protection</b>						<b>\$ 1,319,552</b>
2	9	6.19	56			
2.5	0	11.13	-			
3	18	17.98	324			
4	39	38.32	1,494			
6	90	111.31	10,018			
8	29	237.21	6,879			
10	9	426.58	3,839			
12	1	689.04	689			
6	253	111.31	28,162			
<b>Private Fire Protection</b>			<b>51,461</b>	<b>22%</b>	<b>327,271</b>	<b>\$ 327,271</b>
<b>Total</b>			<b>235,903</b>			<b>\$ 1,646,824</b>

\*Line Size (inches) to the power of 2.63

**Allocation of Private Fire Protection**

<b>Private Fire Service Allocation</b>	327,271
Fire Service Equivalent Units	51,461
Charge per Equivalent Unit	6.36

Private Fire Meter Size (Inches)	Number of Services	Demand Factor	Equivalent Connections	Annual Charge	Monthly Rate	Cost of Service Meter \$/Month	Current Meter \$/Month
2	9	6.19	56	\$ 354	\$ 3.28	\$ 3.28	\$ 2.66
3	18	17.98	324	2,058	9.53	9.53	7.74
4	39	38.32	1,494	9,504	20.31	20.31	16.53
6	90	111.31	10,018	63,711	58.99	58.99	47.97
8	29	237.21	6,879	43,748	125.71	125.71	102.22
10	9	426.58	3,839	24,416	226.07	226.07	183.83
12	1	689.04	689	4,382	365.17	365.17	296.94
6	253	111.31	28,162	179,098	58.99	58.99	47.97
0	-						

**Allocation of Public Fire Protection to City Customers**

Fire Protection	\$ 1,172,985
Hydrants	146,567
<b>Total</b>	<b>\$ 1,319,552</b>
Equivalent Meters	28,633
<b>Annual Rate - EQ</b>	<b>\$ 46.09</b>

Meter Size	Number of Customers	Factor	Equivalent Meters	Fire Protection Costs	Cost of Service Meter \$/Month	Current Meter \$/Month
5/8" Public Fire Protection	21,572	1.00	21,572	\$ 994,163	\$ 3.84	\$ 2.67
3/4" Public Fire Protection	78	1.50	117	5,392.04	5.76	3.87
1" Public Fire Protection	349	2.50	873	40,209.88	9.60	6.86
1.5" Public Fire Protection	91	5.00	455	20,969.05	19.20	15.46
2" Public Fire Protection	247	8.00	1,976	91,065.60	30.72	27.47
3" Public Fire Protection	84	15.00	1,260	58,068.14	57.61	61.81
4" Public Fire Protection	47	25.00	1,175	54,150.85	96.01	109.88
6" Public Fire Protection	17	50.00	850	39,172.95	192.02	247.22
8" Public Fire Protection	3	80.00	240	11,060.60	307.24	439.54
10" Public Fire Protection	1	115.00	115	5,299.87	441.66	696.52
<b>Total</b>	<b>22,489</b>		<b>28,633</b>	<b>\$ 1,319,552</b>		

**Anderson City Water Department**  
**Water Cost of Service Study FY2024**  
*Schedule 12 - Cost of Service Summary*

Phase 5

**TOTAL COST OF SERVICE (by customer class)**

Customer Class	Cost of Service (\$)	Projected Revenues (\$)	% Change	Group By Meter Size
5/8" Meter	\$ 11,141,079	\$ 5,815,543	91.6%	Residential Sales
3/4" Meter	84,460	43,533	94.0%	Residential Sales
1" Meter	455,754	298,160	52.9%	Residential Sales
1.5" Meter	321,728	168,933	90.4%	Commercial Sales
2" Meter	1,618,580	703,323	130.1%	Commercial Sales
3" Meter	1,497,839	487,824	207.0%	Commercial Sales
4" Meter	979,133	303,719	222.4%	Commercial Sales
6" Meter	983,724	279,265	252.3%	Commercial Sales
8" Meter	313,263	84,916	268.9%	Industrial Sales
10" Meter	5,042,811	1,401,400	259.8%	Industrial Sales
2" Private Fire Protection	354	287	23.3%	Private Fire Protection
3" Private Fire Protection	2,058	1,672	23.1%	Private Fire Protection
4" Private Fire Protection	9,504	7,736	22.9%	Private Fire Protection
6" Private Fire Protection	63,711	51,808	23.0%	Private Fire Protection
8" Private Fire Protection	43,748	35,573	23.0%	Private Fire Protection
10" Private Fire Protection	24,416	19,854	23.0%	Private Fire Protection
12" Private Fire Protection	4,382	3,563	23.0%	Private Fire Protection
Private Fire Hydrant	179,098	145,637	23.0%	Private Fire Protection
5/8" Public Fire Protection	994,163	691,167	43.8%	Residential Sales
3/4" Public Fire Protection	5,392	3,622	48.9%	Residential Sales
1" Public Fire Protection	40,210	28,730	40.0%	Residential Sales
1.5" Public Fire Protection	20,969	16,882	24.2%	Commercial Sales
2" Public Fire Protection	91,066	81,421	11.8%	Commercial Sales
3" Public Fire Protection	58,068	62,304	-6.8%	Commercial Sales
4" Public Fire Protection	54,151	61,972	-12.6%	Commercial Sales
6" Public Fire Protection	39,173	50,433	-22.3%	Commercial Sales
8" Public Fire Protection	11,061	15,823	-30.1%	Commercial Sales
10" Public Fire Protection	5,300	8,358	-36.6%	Commercial Sales
<b>Total</b>	<b>\$ 24,085,196</b>	<b>\$ 10,873,460</b>	<b>121.5%</b>	

**TOTAL COST OF SERVICE (by defined group)**

Phase 5

Customer Class	Cost of Service (\$)	Projected Revenues (\$)	% Change
Residential Sales	\$ 12,721,059	\$ 6,880,755	84.9%
Commercial Sales	5,680,791	2,240,259	153.6%
Industrial Sales	5,356,074	1,486,316	260.4%
Private Fire Protection	327,271	266,129	23.0%
<b>Total</b>	<b>\$ 24,085,196</b>	<b>\$ 10,873,460</b>	<b>121.5%</b>

Anderson Water Cost of Service Study  
 Rate Design  
 Schedule 13 - Proposed Rate Design and Units

Rate Category	Current Rates	Phase 1 Rate Design	Phase 2 Rate Design	Phase 3 Rate Design	Phase 4 Rate Design	Phase 5 Rate Design	COS Phase 5 - COS	Units - 2023 - Current	Units 2023 Adjusted
	<b>Minimum Charge</b>	<b>Customer Charge</b>						<b>Min Bill Units</b>	<b>Number of Meters</b>
5/8" Meter	\$ 16.66	\$ 11.60	\$ 11.60	\$ 14.00	\$ 14.00	\$ 14.00	\$ 14.14	69,835	259,172
3/4" Meter	32.19	16.00	17.00	20.00	20.00	20.00	20.30	471	939
1" Meter	60.64	33.00	33.00	37.00	37.00	37.00	30.77	2,372	4,200
1.5" Meter	119.22	47.00	50.00	62.00	62.00	62.00	62.04	647	1,092
2" Meter	145.06	70.00	76.00	95.00	95.00	95.00	95.57	1,295	2,988
3" Meter	229.20	100.00	115.00	189.00	189.00	189.00	189.50	309	1,692
4" Meter	288.42	110.00	130.00	162.50	162.50	162.50	292.59	206	996
6" Meter	596.72	130.00	150.00	187.50	187.50	187.50	552.17	24	324
8" Meter	897.33	150.00	190.00	237.50	237.50	237.50	845.13	1	48
10" Meter	1,217.10	325.00	583.00	850.00	1,100.00	1,200.00	1,218.34	-	12
<b>Private Fire Protection</b>									
2" Private Fire Protection	\$ 2.66	\$ 2.90	\$ 2.90	\$ 3.10	\$ 3.30	\$ 3.50	\$ 3.28	108	108
2.5" Private Fire Protection	4.86	5.30	5.30	5.70	6.00	6.30	-	-	-
3" Private Fire Protection	7.74	8.50	8.50	9.20	9.70	10.20	9.53	216	216
4" Private Fire Protection	16.53	18.20	18.20	19.70	20.70	21.70	20.31	468	468
6" Private Fire Protection	47.97	52.80	52.80	57.00	59.90	62.90	58.99	1,080	1,080
8" Private Fire Protection	102.22	112.40	112.40	121.40	127.50	133.90	125.71	348	348
10" Private Fire Protection	183.83	202.20	202.20	218.40	229.30	240.80	226.07	108	108
12" Private Fire Protection	296.94	326.60	326.60	352.70	370.30	388.80	365.17	12	12
Private Fire Hydrant	47.97	60.70	64.20	81.50	98.80	114.30	58.99	3,036	3,036
<b>Public Fire Protection</b>									
5/8" Public Fire Protection	\$ 2.67	\$ 2.90	\$ 2.90	\$ 2.90	\$ 2.90	\$ 2.90	\$ 3.84	258,864	258,864
3/4" Public Fire Protection	3.87	4.20	4.20	4.30	4.30	4.30	5.76	936	936
1" Public Fire Protection	6.86	7.40	7.40	7.50	7.50	7.60	9.60	4,188	4,188
1.5" Public Fire Protection	15.46	16.70	16.70	17.00	17.00	17.20	19.20	1,092	1,092
2" Public Fire Protection	27.47	29.70	29.70	30.20	30.20	30.50	30.72	2,964	2,964
3" Public Fire Protection	61.81	66.80	66.80	67.90	67.90	68.60	57.61	1,008	1,008
4" Public Fire Protection	109.88	118.70	118.70	120.70	120.70	121.90	96.01	564	564
6" Public Fire Protection	247.22	267.00	267.00	271.50	271.50	274.20	192.02	204	204
8" Public Fire Protection	439.54	474.70	474.70	482.80	482.80	487.60	307.24	36	36
10" Public Fire Protection	696.52	752.20	752.20	765.00	765.00	772.70	441.66	12	12
12" Public Fire Protection	-	-	-	-	-	-	-	-	-
<b>Commodity</b>									
First 5 hundred cubic feet Rate	\$ 4.17	\$ 2.99	\$ 3.16	\$ 3.70	\$ 4.78	\$ 5.74	\$ 5.65	896,380	896,380
Next 40 hundred cubic feet Rate	2.36	2.99	3.16	3.70	4.78	5.74	6.41	590,476	590,476
Next 255 hundred cubic feet Rate	2.04	2.58	2.82	3.70	4.78	5.74	5.81	404,907	404,907
Next 700 hundred cubic feet Rate	1.77	2.58	2.82	3.70	4.78	5.74	6.49	225,777	225,777
Over 1,000 hundred cubic feet Rate	1.54	2.30	2.50	3.70	4.78	5.74	5.65	971,886	971,886
<b>Thousand Gallons Rate</b>									
First 5 hundred cubic feet Rate	\$ 5.57	\$ 3.99	\$ 4.23	\$ 4.95	\$ 6.39	\$ 7.67			
Next 40 hundred cubic feet Rate	3.16	3.99	4.23	4.95	6.39	7.67			
Next 255 hundred cubic feet Rate	2.73	3.45	3.77	4.95	6.39	7.67			
Next 700 hundred cubic feet Rate	2.36	3.45	3.77	4.95	6.39	7.67			
Over 1,000 hundred cubic feet Rate	2.06	3.07	3.34	4.95	6.39	7.67			
Fixed Revenue	\$ 3,019,517	\$ 5,176,091	\$ 5,265,656	\$ 6,221,424	\$ 6,284,188	\$ 6,343,700			
Variable Revenue	7,853,943	8,302,074	8,911,407	11,428,155	14,774,945	17,725,602			
Non-Adjustable Revenue	201,409	201,409	201,409	201,409	201,409	201,409			
Total Revenue	\$ 11,074,869	\$ 13,679,574	\$ 14,378,472	\$ 17,850,988	\$ 21,260,542	\$ 24,270,711			
<b>Total Adjustable Revenue</b>	<b>\$ 10,873,460</b>	<b>\$ 13,478,165</b>	<b>\$ 14,177,063</b>	<b>\$ 17,649,579</b>	<b>\$ 21,059,133</b>	<b>\$ 24,069,302</b>			
Total Revenue Annual Change		23.95%	5.2%	24.5%	19.3%	14.3%			
Total Revenue Cummulative Change		24.0%	30.4%	62.3%	93.7%	121.4%			

Anderson Water Cost of Service Study  
 Rate Design  
 Schedule 14 - Customer Impacts by Meter Size

	5/8" Meter	3/4" Meter	1" Meter	1.5" Meter	2" Meter	3" Meter	4" Meter	6" Meter	8" Meter	10" Meter	Private Fire Protection
First 5 hundred cubic feet Rate	856,159	2,831	13,672	3,947	12,570	3,863	2,463	634	179	60	
Next 40 hundred cubic feet Rate	412,248	4,958	32,766	14,775	66,399	31,133	18,464	7,819	1,436	479	
Next 255 hundred cubic feet Rate	49,178	2,151	9,690	17,164	112,186	106,388	52,810	43,286	9,003	3,051	
Next 700 hundred cubic feet Rate	3,632	267	73	1,491	35,087	48,826	37,606	67,688	22,734	8,374	
Over 1,000 hundred cubic feet Rate	1,649	-	-	1,762	9,643	15,251	10,363	23,151	14,045	896,023	
Customer Charge Units	259,172	939	4,200	1,092	2,988	1,692	996	324	48	12	
Public Fire Protection Units	258,864	936	4,188	1,092	2,964	1,008	564	204	36	-	
Private Fire											
First 5 hundred cubic feet Rate	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	
Next 40 hundred cubic feet Rate	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	
Next 255 hundred cubic feet Rate	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	
Next 700 hundred cubic feet Rate	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	
Over 1,000 hundred cubic feet Rate	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	
Customer Charge Units	11.60	16.00	33.00	47.00	70.00	100.00	110.00	130.00	150.00	325.00	
Public Fire Charge	2.90	4.20	7.40	16.70	29.70	66.80	118.70	267.00	474.70	752.20	
Private Fire											
First 5 hundred cubic feet Rate	2,556,387	8,454	40,822	11,786	37,532	11,536	7,355	1,893	536	179	
Next 40 hundred cubic feet Rate	1,230,922	14,803	97,834	44,118	198,261	92,960	55,131	23,346	4,286	1,429	
Next 255 hundred cubic feet Rate	126,879	5,551	25,001	44,283	289,439	274,481	136,249	111,678	23,228	7,870	
Next 700 hundred cubic feet Rate	9,370	688	189	3,847	90,524	125,971	97,023	174,634	58,653	21,605	
Over 1,000 hundred cubic feet Rate	3,792	-	-	4,052	22,179	35,077	23,835	53,248	32,303	2,060,852	
Customer Charge Units	3,006,395	15,024	138,600	51,324	209,160	169,200	109,560	42,120	7,200	3,900	
Private Fire Protection											316,848
Public Fire Charge	750,706	3,931	30,991	18,236	88,031	67,334	66,947	54,468	17,089	-	
Phase 1 Rate Design Revenue Recovery	\$ 7,684,452	\$ 48,451	\$ 333,437	\$ 177,647	\$ 935,126	\$ 776,559	\$ 496,100	\$ 461,388	\$ 143,295	\$ 2,095,836	\$ 316,848
Current Revenue Recovery	\$ 6,506,710	\$ 47,156	\$ 326,890	\$ 185,816	\$ 784,744	\$ 550,129	\$ 365,692	\$ 329,697	\$ 100,739	\$ 1,401,400	\$ 266,129
<b>Percent Increase Year One</b>	<b>18%</b>	<b>3%</b>	<b>2%</b>	<b>-4%</b>	<b>19%</b>	<b>41%</b>	<b>36%</b>	<b>40%</b>	<b>42%</b>	<b>50%</b>	<b>19.1%</b>
Meter Size Increase as Percent of Average Increase	76%	12%	8%	-18%	80%	172%	149%	167%	177%	208%	80%



**Anderson Water Cost of Service Study**  
**Rate Design**  
**Schedule 14 - Customer Impacts by Meter Size**

	5/8" Meter	3/4" Meter	1" Meter	1.5" Meter	2" Meter	3" Meter	4" Meter	6" Meter	8" Meter	10" Meter	Private Fire Protection
First 5 hundred cubic feet Rate	856,159	2,831	13,672	3,947	12,570	3,863	2,463	634	179	60	
Next 40 hundred cubic feet Rate	412,248	4,958	32,766	14,775	66,399	31,133	18,464	7,819	1,436	479	
Next 255 hundred cubic feet Rate	49,178	2,151	9,690	17,164	112,186	106,388	52,810	43,286	9,003	3,051	
Next 700 hundred cubic feet Rate	3,632	267	73	1,491	35,087	48,826	37,606	67,688	22,734	8,374	
Over 1,000 hundred cubic feet Rate	1,649	-	-	1,762	9,643	15,251	10,363	23,151	14,045	896,023	
Customer Charge Units	259,172	939	4,200	1,092	2,988	1,692	996	324	48	12	
Public Fire Protection Units	258,864	936	4,188	1,092	2,964	1,008	564	204	36	-	
Private Fire	-	-	-	-	3	9	18	53	112	202	-
First 5 hundred cubic feet Rate	3.16	3.16	3.16	3.16	3.16	3.16	3.16	3.16	3.16	3.16	
Next 40 hundred cubic feet Rate	3.16	3.16	3.16	3.16	3.16	3.16	3.16	3.16	3.16	3.16	
Next 255 hundred cubic feet Rate	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	
Next 700 hundred cubic feet Rate	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	
Over 1,000 hundred cubic feet Rate	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	
Customer Charge Units	11.60	17.00	33.00	50.00	76.00	115.00	130.00	150.00	190.00	583.00	
Public Fire Charge	2.90	4.20	7.40	16.70	29.70	66.80	118.70	267.00	474.70	752.20	
Private Fire											
First 5 hundred cubic feet Rate	2,708,168	8,956	43,246	12,486	39,760	12,221	7,792	2,006	568	189	
Next 40 hundred cubic feet Rate	1,304,005	15,682	103,643	46,737	210,032	98,479	58,404	24,732	4,541	1,514	
Next 255 hundred cubic feet Rate	138,682	6,067	27,327	48,403	316,364	300,014	148,923	122,067	25,389	8,603	
Next 700 hundred cubic feet Rate	10,242	752	206	4,205	98,945	137,689	106,048	190,879	64,109	23,615	
Over 1,000 hundred cubic feet Rate	4,122	-	-	4,404	24,108	38,127	25,907	57,879	35,111	2,240,057	
Customer Charge Units	3,006,395	15,963	138,600	54,600	227,088	194,580	129,480	48,600	9,120	6,996	
Public Fire Charge	750,706	3,931	30,991	18,236	88,031	67,334	66,947	54,468	17,089	-	
Private Fire Charge											327,474
Phase 2 Rate Design Revenue Recovery	\$ 7,922,320	\$ 51,351	\$ 344,013	\$ 189,071	\$ 1,004,328	\$ 848,445	\$ 543,502	\$ 500,631	\$ 155,927	\$ 2,280,973	\$ 327,474
Current Revenue Recovery	\$ 7,684,452	\$ 48,451	\$ 333,437	\$ 177,647	\$ 935,126	\$ 776,559	\$ 496,100	\$ 461,388	\$ 143,295	\$ 2,095,836	\$ 316,848
<b>Percent Increase Year Two</b>	<b>3%</b>	<b>6%</b>	<b>3%</b>	<b>6%</b>	<b>7%</b>	<b>9%</b>	<b>10%</b>	<b>9%</b>	<b>9%</b>	<b>9%</b>	<b>3%</b>
Meter Size increase as Percent of Average Increase	60%	115%	61%	124%	143%	179%	184%	164%	170%	170%	

Anderson Water Cost of Service Study  
 Rate Design  
 Schedule 14 - Customer Impacts by Meter Size

	5/8" Meter	3/4" Meter	1" Meter	1.5" Meter	2" Meter	3" Meter	4" Meter	6" Meter	8" Meter	10" Meter	Private Fire Protection
First 5 hundred cubic feet Rate	856,159	2,831	13,672	3,947	12,570	3,863	2,463	634	179	60	
Next 40 hundred cubic feet Rate	412,248	4,958	32,766	14,775	66,399	31,133	18,464	7,819	1,436	479	
Next 255 hundred cubic feet Rate	49,178	2,151	9,690	17,164	112,186	106,388	52,810	43,286	9,003	3,051	
Next 700 hundred cubic feet Rate	3,632	267	73	1,491	35,087	48,826	37,606	67,688	22,734	8,374	
Over 1,000 hundred cubic feet Rate	1,649	-	-	1,762	9,643	15,251	10,363	23,151	14,045	896,023	
Customer Charge Units	259,172	939	4,200	1,092	2,988	1,692	996	324	48	12	
Public Fire Protection Units	258,864	936	4,188	1,092	2,964	1,008	564	204	36	-	
Private Fire	-	-	-	-	3	9	20	57	121	218	
First 5 hundred cubic feet Rate	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	
Next 40 hundred cubic feet Rate	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	
Next 255 hundred cubic feet Rate	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	
Next 700 hundred cubic feet Rate	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	
Over 1,000 hundred cubic feet Rate	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	
Customer Charge Units	14.00	20.00	37.00	62.00	95.00	189.00	162.50	187.50	237.50	850.00	
Public Fire Charge	2.90	4.30	7.50	17.00	30.20	67.90	120.70	271.50	482.80	765.00	
Private Fire											
First 5 hundred cubic feet Rate	3,167,035	10,474	50,573	14,602	46,497	14,291	9,112	2,345	664	221	
Next 40 hundred cubic feet Rate	1,524,954	18,339	121,204	54,656	245,619	115,165	68,300	28,923	5,310	1,770	
Next 255 hundred cubic feet Rate	181,915	7,958	35,846	63,492	414,988	393,542	195,349	160,121	33,304	11,284	
Next 700 hundred cubic feet Rate	13,434	986	271	5,516	129,791	180,613	139,108	250,385	84,095	30,977	
Over 1,000 hundred cubic feet Rate	6,099	-	-	6,517	35,671	56,415	38,334	85,640	51,953	3,314,495	
Customer Charge Units	3,628,408	18,780	155,400	67,704	283,860	319,788	161,850	60,750	11,400	10,200	
Public Fire Charge	750,706	4,025	31,410	18,564	89,513	68,443	68,075	55,386	17,381	-	
Private Fire Charge											390,602
Phase 3 Rate Design Revenue Recovery	\$ 9,272,551	\$ 60,562	\$ 394,703	\$ 231,050	\$ 1,245,939	\$ 1,148,258	\$ 680,129	\$ 643,550	\$ 204,106	\$ 3,368,947	\$ 390,602
Current Revenue Recovery	\$ 7,922,320	\$ 51,351	\$ 344,013	\$ 189,071	\$ 1,004,328	\$ 848,445	\$ 543,502	\$ 500,631	\$ 155,927	\$ 2,280,973	\$ 327,474
<b>Percent Increase Year Three</b>	<b>17%</b>	<b>18%</b>	<b>15%</b>	<b>22%</b>	<b>24%</b>	<b>35%</b>	<b>25%</b>	<b>29%</b>	<b>31%</b>	<b>48%</b>	<b>19%</b>
Meter Size increase as Percent of Average Increase	70%	73%	60%	91%	98%	144%	103%	116%	126%	195%	

**Anderson Water Cost of Service Study**  
**Rate Design**  
**Schedule 14 - Customer Impacts by Meter Size**

	5/8" Meter	3/4" Meter	1" Meter	1.5" Meter	2" Meter	3" Meter	4" Meter	6" Meter	8" Meter	10" Meter	Private Fire Protection
First 5 hundred cubic feet Rate	856,159	2,831	13,672	3,947	12,570	3,863	2,463	634	179	60	
Next 40 hundred cubic feet Rate	412,248	4,958	32,766	14,775	66,399	31,133	18,464	7,819	1,436	479	
Next 255 hundred cubic feet Rate	49,178	2,151	9,690	17,164	112,186	106,388	52,810	43,286	9,003	3,051	
Next 700 hundred cubic feet Rate	3,632	267	73	1,491	35,087	48,826	37,606	67,688	22,734	8,374	
Over 1,000 hundred cubic feet Rate	1,649	-	-	1,762	9,643	15,251	10,363	23,151	14,045	896,023	
Customer Charge Units	259,172	939	4,200	1,092	2,988	1,692	996	324	48	12	
Public Fire Protection Units	258,864	936	4,188	1,092	2,964	1,008	564	204	36	-	
Private Fire	-	-	-	-	-	-	-	-	-	-	
First 5 hundred cubic feet Rate	4.78	4.78	4.78	4.78	4.78	4.78	4.78	4.78	4.78	4.78	
Next 40 hundred cubic feet Rate	4.78	4.78	4.78	4.78	4.78	4.78	4.78	4.78	4.78	4.78	
Next 255 hundred cubic feet Rate	4.78	4.78	4.78	4.78	4.78	4.78	4.78	4.78	4.78	4.78	
Next 700 hundred cubic feet Rate	4.78	4.78	4.78	4.78	4.78	4.78	4.78	4.78	4.78	4.78	
Over 1,000 hundred cubic feet Rate	4.78	4.78	4.78	4.78	4.78	4.78	4.78	4.78	4.78	4.78	
Customer Charge Units	14.00	20.00	37.00	62.00	95.00	189.00	162.50	187.50	237.50	1,100.00	
Public Fire Charge	2.90	4.30	7.50	17.00	30.20	67.90	120.70	271.50	482.80	765.00	
Private Fire											
First 5 hundred cubic feet Rate	4,094,517	13,541	65,384	18,878	60,114	18,477	11,781	3,032	858	286	
Next 40 hundred cubic feet Rate	1,971,544	23,710	156,699	70,663	317,550	148,892	88,302	37,393	6,865	2,288	
Next 255 hundred cubic feet Rate	235,190	10,289	46,343	82,086	536,520	508,792	252,558	207,013	43,057	14,589	
Next 700 hundred cubic feet Rate	17,369	1,275	350	7,132	167,801	233,507	179,847	323,711	108,722	40,049	
Over 1,000 hundred cubic feet Rate	7,886	-	-	8,425	46,117	72,937	49,560	110,720	67,167	4,285,161	
Customer Charge Units	3,628,408	18,780	155,400	67,704	283,860	319,788	161,850	60,750	11,400	13,200	
Public Fire Charge	750,706	4,025	31,410	18,564	89,513	68,443	68,075	55,386	17,381	-	
Private Fire Charge											450,366
Phase 4 Rate Design Revenue Recovery	\$ 10,705,618	\$ 71,620	\$ 455,586	\$ 273,451	\$ 1,501,475	\$ 1,370,835	\$ 811,973	\$ 798,005	\$ 255,451	\$ 4,355,573	\$ 450,366
Current Revenue Recovery	\$ 9,272,551	\$ 60,562	\$ 394,703	\$ 231,050	\$ 1,245,939	\$ 1,148,258	\$ 680,129	\$ 643,550	\$ 204,106	\$ 3,368,947	\$ 390,602
<b>Percent Increase Year Four</b>	<b>15%</b>	<b>18%</b>	<b>15%</b>	<b>18%</b>	<b>21%</b>	<b>19%</b>	<b>19%</b>	<b>24%</b>	<b>25%</b>	<b>29%</b>	<b>15%</b>
<b>Meter Size increase as Percent of Average Increase</b>	<b>80%</b>	<b>94%</b>	<b>80%</b>	<b>95%</b>	<b>106%</b>	<b>100%</b>	<b>100%</b>	<b>124%</b>	<b>130%</b>	<b>152%</b>	

**Anderson Water Cost of Service Study**  
**Rate Design**  
**Schedule 14 - Customer Impacts by Meter Size**

	5/8" Meter	3/4" Meter	1" Meter	1.5" Meter	2" Meter	3" Meter	4" Meter	6" Meter	8" Meter	10" Meter	Private Fire Protection
First 5 hundred cubic feet Rate	856,159	2,831	13,672	3,947	12,570	3,863	2,463	634	179	60	
Next 40 hundred cubic feet Rate	412,248	4,958	32,766	14,775	66,399	31,133	18,464	7,819	1,436	479	
Next 255 hundred cubic feet Rate	49,178	2,151	9,690	17,164	112,186	106,388	52,810	43,286	9,003	3,051	
Next 700 hundred cubic feet Rate	3,632	267	73	1,491	35,087	48,826	37,606	67,688	22,734	8,374	
Over 1,000 hundred cubic feet Rate	1,649	-	-	1,762	9,643	15,251	10,363	23,151	14,045	896,023	
Customer Charge Units	259,172	939	4,200	1,092	2,988	1,692	996	324	48	12	
Public Fire Protection Units	258,864	936	4,188	1,092	2,964	1,008	564	204	36	-	
Private Fire	-	-	-	-	-	-	-	-	-	-	
First 5 hundred cubic feet Rate	5.74	5.74	5.74	5.74	5.74	5.74	5.74	5.74	5.74	5.74	
Next 40 hundred cubic feet Rate	5.74	5.74	5.74	5.74	5.74	5.74	5.74	5.74	5.74	5.74	
Next 255 hundred cubic feet Rate	5.74	5.74	5.74	5.74	5.74	5.74	5.74	5.74	5.74	5.74	
Next 700 hundred cubic feet Rate	5.74	5.74	5.74	5.74	5.74	5.74	5.74	5.74	5.74	5.74	
Over 1,000 hundred cubic feet Rate	5.74	5.74	5.74	5.74	5.74	5.74	5.74	5.74	5.74	5.74	
Customer Charge Units	14.00	20.00	37.00	62.00	95.00	189.00	162.50	187.50	237.50	1,200.00	
Public Fire Charge	2.90	4.30	7.60	17.20	30.50	68.60	121.90	274.20	487.60	772.70	
Private Fire											
First 5 hundred cubic feet Rate	4,912,220	16,245	78,442	22,648	72,119	22,167	14,134	3,638	1,030	343	
Next 40 hundred cubic feet Rate	2,365,274	28,445	187,993	84,774	380,967	178,626	105,937	44,861	8,237	2,746	
Next 255 hundred cubic feet Rate	282,159	12,344	55,598	98,479	643,666	610,402	302,996	248,355	51,656	17,503	
Next 700 hundred cubic feet Rate	20,837	1,530	420	8,556	201,312	280,140	215,763	388,359	130,435	48,047	
Over 1,000 hundred cubic feet Rate	9,461	-	-	10,107	55,327	87,503	59,458	132,831	80,581	5,140,936	
Customer Charge Units	3,628,408	18,780	155,400	67,704	283,860	319,788	161,850	60,750	11,400	14,400	
Public Fire Charge	750,706	4,025	31,829	18,782	90,402	69,149	68,752	55,937	17,554	-	
Private Fire Charge											504,953
Phase 5 Rate Design Revenue Recovery	\$ 11,969,065	\$ 81,368	\$ 509,681	\$ 311,051	\$ 1,727,654	\$ 1,567,774	\$ 928,889	\$ 934,730	\$ 300,891	\$ 5,223,974	\$ 504,953
Current Revenue Recovery	\$ 10,705,618	\$ 71,620	\$ 455,586	\$ 273,451	\$ 1,501,475	\$ 1,370,835	\$ 811,973	\$ 798,005	\$ 255,451	\$ 4,355,573	\$ 450,366
<b>Percent Increase Year Five</b>	<b>12%</b>	<b>14%</b>	<b>12%</b>	<b>14%</b>	<b>15%</b>	<b>14%</b>	<b>14%</b>	<b>17%</b>	<b>18%</b>	<b>20%</b>	<b>12%</b>
Meter Size increase as Percent of Average Increase	83%	95%	83%	96%	105%	100%	101%	120%	124%	139%	

**Anderson City Water Department**  
**Water Cost of Service Study FY2024**  
*Schedule 14 - Customer Impacts by Meter Size*

Meter Size	Rate Design Changes				
	Year One Adjustment	Year Two Adjustment	Year Three Adjustment	Year Four Adjustment	Year Five Adjustment
5/8" Meter	18.1%	3.1%	17.0%	15.5%	11.8%
3/4" Meter	2.7%	6.0%	17.9%	18.3%	13.6%
1" Meter	2.0%	3.2%	14.7%	15.4%	11.9%
1.5" Meter	-4.4%	6.4%	22.2%	18.4%	13.8%
2" Meter	19.2%	7.4%	24.1%	20.5%	15.1%
3" Meter	41.2%	9.3%	35.3%	19.4%	14.4%
4" Meter	35.7%	9.6%	25.1%	19.4%	14.4%
6" Meter	39.9%	8.5%	28.5%	24.0%	17.1%
8" Meter	42.2%	8.8%	30.9%	25.2%	17.8%
10" Meter	49.6%	8.8%	47.7%	29.3%	19.9%
Private Fire Protection	19.1%	3.4%	19.3%	15.3%	12.1%
<b>Total</b>	<b>24.0%</b>	<b>5.2%</b>	<b>24.5%</b>	<b>19.3%</b>	<b>14.3%</b>

**Comparison to Average Increase**

5/8" Meter	-24%	-40%	-30%	-20%	-17%
3/4" Meter	-89%	15%	-27%	-5%	-5%
1" Meter	-92%	-39%	-40%	-20%	-17%
1.5" Meter	-118%	24%	-9%	-5%	-4%
2" Meter	-20%	43%	-2%	6%	5%
3" Meter	72%	79%	44%	0%	1%
4" Meter	49%	84%	3%	0%	1%
6" Meter	67%	64%	17%	24%	20%
8" Meter	76%	70%	26%	30%	24%
10" Meter	107%	70%	95%	52%	39%

# **Attachment MCB-4**

**Anderson Water Cost of Service Study**  
**Rate Design**  
**Exhibit 4 - Proposed Rate Design**

Rate Category	Current Rates	Phase 1 Rate	Phase 2 Rate	Phase 3 Rate	Phase 4 Rate	Phase 5 Rate	COS Phase 5 - COS	Units - 2023 - Current	Units 2023 Adjusted	
		Design	Design	Design	Design	Design				
	<b>Minimum Charge</b>	<b>Customer Charge</b>							<b>Min Bill Units</b>	<b>Number of Meters</b>
5/8" Meter	\$ 16.66	\$ 11.60	\$ 11.60	\$ 14.00	\$ 14.00	\$ 14.00	\$ 14.14	69,835	259,172	
3/4" Meter	32.19	16.00	17.00	20.00	20.00	20.00	20.30	471	939	
1" Meter	60.64	33.00	33.00	37.00	37.00	37.00	30.77	2,372	4,200	
1.5" Meter	119.22	47.00	50.00	62.00	62.00	62.00	62.04	647	1,092	
2" Meter	145.06	70.00	76.00	95.00	95.00	95.00	95.57	1,295	2,988	
3" Meter	229.20	100.00	115.00	189.00	189.00	189.00	189.50	309	1,692	
4" Meter	288.42	110.00	130.00	162.50	162.50	162.50	292.59	206	996	
6" Meter	596.72	130.00	150.00	187.50	187.50	187.50	552.17	24	324	
8" Meter	897.33	150.00	190.00	237.50	237.50	237.50	845.13	1	48	
10" Meter	1,217.10	325.00	583.00	850.00	1,100.00	1,200.00	1,218.34	-	12	
<b>Private Fire Protection</b>										
2" Private Fire Protection	\$ 2.66	\$ 2.90	\$ 2.90	\$ 3.10	\$ 3.30	\$ 3.50	\$ 3.28	108	108	
2.5" Private Fire Protection	4.86	5.30	5.30	5.70	6.00	6.30	-	-	-	
3" Private Fire Protection	7.74	8.50	8.50	9.20	9.70	10.20	9.53	216	216	
4" Private Fire Protection	16.53	18.20	18.20	19.70	20.70	21.70	20.31	468	468	
6" Private Fire Protection	47.97	52.80	52.80	57.00	59.90	62.90	58.99	1,080	1,080	
8" Private Fire Protection	102.22	112.40	112.40	121.40	127.50	133.90	125.71	348	348	
10" Private Fire Protection	183.83	202.20	202.20	218.40	229.30	240.80	226.07	108	108	
12" Private Fire Protection	296.94	326.60	326.60	352.70	370.30	388.80	365.17	12	12	
Private Fire Hydrant	47.97	60.70	64.20	81.50	98.80	114.30	58.99	3,036	3,036	
<b>Public Fire Protection</b>										
5/8" Public Fire Protection	\$ 2.67	\$ 2.90	\$ 2.90	\$ 2.90	\$ 2.90	\$ 2.90	\$ 3.84	258,864	258,864	
3/4" Public Fire Protection	3.87	4.20	4.20	4.30	4.30	4.30	5.76	936	936	
1" Public Fire Protection	6.86	7.40	7.40	7.50	7.50	7.60	9.60	4,188	4,188	
1.5" Public Fire Protection	15.46	16.70	16.70	17.00	17.00	17.20	19.20	1,092	1,092	
2" Public Fire Protection	27.47	29.70	29.70	30.20	30.20	30.50	30.72	2,964	2,964	
3" Public Fire Protection	61.81	66.80	66.80	67.90	67.90	68.60	57.61	1,008	1,008	
4" Public Fire Protection	109.88	118.70	118.70	120.70	120.70	121.90	96.01	564	564	
6" Public Fire Protection	247.22	267.00	267.00	271.50	271.50	274.20	192.02	204	204	
8" Public Fire Protection	439.54	474.70	474.70	482.80	482.80	487.60	307.24	36	36	
10" Public Fire Protection	696.52	752.20	752.20	765.00	765.00	772.70	441.66	12	12	
12" Public Fire Protection	-	-	-	-	-	-	-	-	-	
<b>Commodity</b>								All Units		
First 5 hundred cubic feet Rate	\$ 4.17	\$ 2.99	\$ 3.16	\$ 3.70	\$ 4.78	\$ 5.74	\$ 5.65	896,380	896,380	
Next 40 hundred cubic feet Rate	2.36	2.99	3.16	3.70	4.78	5.74	6.41	590,476	590,476	
Next 255 hundred cubic feet Rate	2.04	2.58	2.82	3.70	4.78	5.74	5.81	404,907	404,907	
Next 700 hundred cubic feet Rate	1.77	2.58	2.82	3.70	4.78	5.74	6.49	225,777	225,777	
Over 1,000 hundred cubic feet Rate	1.54	2.30	2.50	3.70	4.78	5.74	5.65	971,886	971,886	
<b>Thousand Gallons Rate</b>										
First 5 hundred cubic feet Rate	\$ 5.57	\$ 3.99	\$ 4.23	\$ 4.95	\$ 6.39	\$ 7.67				
Next 40 hundred cubic feet Rate	3.16	3.99	4.23	4.95	6.39	7.67				
Next 255 hundred cubic feet Rate	2.73	3.45	3.77	4.95	6.39	7.67				
Next 700 hundred cubic feet Rate	2.36	3.45	3.77	4.95	6.39	7.67				
Over 1,000 hundred cubic feet Rate	2.06	3.07	3.34	4.95	6.39	7.67				
Fixed Revenue	\$ 3,019,517	\$ 5,176,091	\$ 5,265,656	\$ 6,221,424	\$ 6,284,188	\$ 6,343,700				
Variable Revenue	7,853,943	8,302,074	8,911,407	11,428,155	14,774,945	17,725,602				
Non-Adjustable Revenue	201,409	201,409	201,409	201,409	201,409	201,409				
Total Revenue	\$ 11,074,869	\$ 13,679,574	\$ 14,378,472	\$ 17,850,988	\$ 21,260,542	\$ 24,270,711				
<b>Total Adjustable Revenue</b>	<b>\$ 10,873,460</b>	<b>\$ 13,478,165</b>	<b>\$ 14,177,063</b>	<b>\$ 17,649,579</b>	<b>\$ 21,059,133</b>	<b>\$ 24,069,302</b>				
Total Revenue Annual Change		23.95%	5.2%	24.5%	19.3%	14.3%				
Total Revenue Cummulative Change		24.0%	30.4%	62.3%	93.7%	121.4%				