

Exhibit No.:
Issues: Class Cost of Service Study, Rate Design, Total Sales and System Delivery, Declining Usage, and Total Revenues
Witness: Max W. McClellan
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Sponsoring Party: Missouri-American Water Company
Case No.: WR-2024-0320
SR-2024-0321
Date: July 1, 2024

MISSOURI PUBLIC SERVICE COMMISSION

**CASE NO. WR-2024-0320
CASE NO. SR-2024-0321**

DIRECT TESTIMONY

OF

MAX W. MCCLELLAN

ON BEHALF OF

MISSOURI-AMERICAN WATER COMPANY

AFFIDAVIT

I, Max McClellan, under penalty of perjury, and pursuant to Section 509.030, RSMo, state that I am a Principal Regulatory Analyst for American Water Works Service Company, that the accompanying testimony has been prepared by me or under my direction and supervision; that if inquiries were made as to the facts in said testimony, I would respond as therein set forth; and that the aforesaid testimony is true and correct to the best of my knowledge and belief.

Max McClellan

Max McClellan

July 1, 2024

Dated

**DIRECT TESTIMONY
MAX W. MCCLELLAN
MISSOURI-AMERICAN WATER COMPANY
CASE NO. WR-2024-0320
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DIRECT TESTIMONY

MAX W. MCCLELLAN

I. INTRODUCTION

1 **Q. Please state your name and business address.**

2 A. My name is Max W. McClellan. My business address is 1 Water Street, Camden, NJ
3 08102.

4 **Q. By whom are you employed and in what capacity?**

5 A. I am employed by the American Water Works Service Company, Inc. (“AWWSC”) as a
6 Principal Regulatory Analyst.

7 **Q. Please summarize your educational background and business experience.**

8 A. I received a Bachelor of Science degree in Mathematical Decision Sciences from the
9 University of North Carolina at Chapel Hill in 2013.

10 I have been employed by AWWSC since March 2024 in my role as Principal
11 Regulatory Analyst. Prior to my employment with AWWSC, I was employed by Duke
12 Energy from October 2018 through March 2024. In my most recent position at Duke
13 Energy, I was a Principal Load Forecasting Analyst. In that position, I had responsibility
14 for planning, evaluation, and operational management of Duke Energy’s long-term load
15 forecasts in Ohio and Kentucky, as well as direct responsibility for electric and natural gas
16 sales forecasting, electric peak demand forecasting, and customer count forecasting. I have
17 more than five years of utility experience covering a wide range of issues including
18 integrated resource planning, electric load forecasting, gas volumes forecasting, electric
19 load research, rates, tariff administration, and energy efficiency. I also have more than five
20 years of experience in the retail pricing and structuring of electric and natural gas products.

1 **Q. What are your current employment responsibilities?**

2 A. In my role as Principal Regulatory Analyst, I am responsible for the development and
3 preparation of cost of service studies, rate design analyses and filings for AWWSC's
4 operating company affiliates, including Missouri American Water Company ("MAWC" or
5 the "Company"), as well as rate design proposals to our internal and external stakeholders.
6 I am also responsible for projections of revenues for rate case purposes.

7 **Q. Have you previously testified before a regulatory body?**

8 A. Yes. I provided testimony regarding electric load forecasting before the Kentucky Public
9 Service Commission on behalf of Duke Energy Kentucky in Case 2022-00372.

10 **Q. What is the purpose of your Direct Testimony in this proceeding?**

11 A. The purpose of my Direct Testimony is to sponsor MAWC's cost of service studies, rate
12 design proposals, and revenue projections including adjustments to MAWC's historical
13 billing determinants. Specifically, I will address the following issues:

- 14 - Cost of Service
- 15 - Rate Design
- 16 - Analysis of MAWC Water Consumption
- 17 - Revenue Calculations

18 **Q. Please identify the schedules you will be sponsoring and for which you will be
19 providing testimony.**

20 A. I am sponsoring the following Company Schedules attached to my Direct Testimony:

- 21 - Schedule MWM-1: St. Louis County – Water Cost of Service Study
- 22 - Schedule MWM-2: Outside St. Louis County – Water Cost of Service Study
- 23 - Schedule MWM-3: Wastewater Cost of Service Study

- 1 - Schedule MWM-4: Water Rate Design
- 2 - Schedule MWM-5: Wastewater Rate Design
- 3 - Schedule MWM-6: Residential Usage Analysis
- 4 - Schedule MWM-7: Commercial Usage Analysis
- 5 - Schedule MWM-8: Public Authority Usage Analysis

6 **II. COST OF SERVICE**
7 **A. Water Cost of Service Studies**

8 **Q. What is a cost of service study?**

9 A. A cost of service study is an analysis that calculates a utility’s total investment and
10 operating costs incurred to provide service to various customer groups, or service classes,
11 for the purpose of establishing cost-based rates. The resulting cost determination process
12 based on the allocation of costs to defined customer groups is called a cost of service study.
13 Because this analysis is done by customer class, the study is often referred to as a “class
14 cost of service study.”

15 **Q. Does the American Water Works Association (“AWWA”) provide guidance on the
16 appropriate methods to be used in conducting water cost of service studies?**

17 A. Yes. The AWWA M1 Manual, titled “Principles of Water Rates, Fees, and Charges”,
18 provides guidance on the appropriate allocation methodologies to use in allocating different
19 types of costs to customer classes.

20 **Q. Have you relied on the recommendations made in the AWWA M1 Manual in
21 conducting the water cost of service studies submitted in this case?**

22 A. Yes. Specifically, the AWWA M1 Manual outlines the use of the Base/Extra capacity
23 method to allocate production and distribution costs to customer classes. The Company
24 uses this Base/Extra capacity method in its class cost of service study as I describe later in

1 my Direct Testimony.

2 **Q. Please describe the cost of service studies performed for the Company's water**
3 **operations.**

4 A. The Company's cost of service analysis allocates the total revenue requirement for MAWC
5 water operations to various cost categories as I describe later in my Direct Testimony. The
6 revenue requirement for each of these cost categories is then allocated to the various
7 customer classes MAWC serves, with different cost categories allocated to customer
8 classes using a class allocation factor that differs depending on the nature of the costs. The
9 Company has submitted with this case separate water cost of service studies for its St. Louis
10 County service territory and its territory outside of St. Louis County, per the Stipulation
11 and Agreement approved by the Missouri Public Service Commission ("Commission") in
12 Case No. WR-2020-0344. Within these studies, the Company's cost of water service was
13 allocated to the following customer classifications:

- 14 - Residential
- 15 - Nonresidential
- 16 - Sales for Resale
- 17 - Contract Rates
- 18 - Private Fire
- 19 - Public Fire

20 These studies were performed in accordance with generally accepted principles and
21 procedures and results in the relative cost responsibilities of each class of customers.

22 **Q. How are the Company's water cost of service studies organized?**

23 A. The Company's water cost of service studies attached hereto as Schedule MWM-1 and

1 Schedule MWM-2 are organized into six different tabs, or sections:

2 - The “Summary” tab allocates the revenue requirement for each cost category to
3 customer class and summarizes the results of the cost allocations by customer class
4 and business function to get a total revenue requirement by class and business
5 function. The “Summary” tab also compares the revenue requirements by customer
6 class to pro-forma revenues under current rates;

7 - The “Account Detail” tab contains rate base, depreciation, and operations and
8 maintenance (“O&M”) balances by account and allocates each account to cost
9 category;

10 - The “One Step” tab contains rate base, depreciation, and operations and
11 maintenance (“O&M”) balances by account and allocates each account to cost
12 category using a one-step allocation. I will expand upon the one-step allocation
13 later in my testimony;

14 - The “Usage Statistics” tab contains usage information by customer class and other
15 information necessary to calculate class allocation factors for the “Account Detail”
16 tab;

17 - The “Class Allocators” tab provides detailed calculations of all class allocation
18 factors used in the cost-of-service study; and

19 - The “Allocation Summary” tab provides a summary of the class allocation factors.

20 **Q. What are the various cost categories that the Company uses to group individual**
21 **accounts?**

22 A. The cost categories that the Company assigns to specific accounts are as follows:

- 23 • Variable Cost

- 1 • Capacity Cost
- 2 o Source of Supply
- 3 o Water Pumping
- 4 o Water Treatment
- 5 o Transmission Mains
- 6 o Distribution Mains
- 7 • Storage Facility Costs
- 8 • Metering Cost
- 9 • Service Line Costs
- 10 • Customer Service Costs
- 11 • Fire Hydrants

12 **Q. Please describe how the individual accounts that make up the Company’s revenue**
13 **requirement are assigned to a cost element.**

14 A. Most of the accounts that make up the Company’s revenue requirement are directly
15 assigned to a single cost category. Examples of this include net plant for Collecting and
16 Impounding Reservoirs, Purchased Water for water pumping, and Water Treatment labor
17 expenses. Accounts not directly assignable to a single cost category are allocated among
18 cost elements based on appropriate allocation factors. Examples of this include general
19 and intangible plant, miscellaneous rate base deductions, administrative and general
20 (“A&G”) expenses, and payroll taxes. These accounts are allocated to cost categories
21 based on net plant, O&M, or labor dollars associated with each cost element depending on
22 the account.

23 **a. Variable Costs**

1 **Q. Please describe what variable costs are and how variable costs are allocated to**
2 **customer classes.**

3 A. Variable costs refer to purchased electric power, purchased water, treatment chemicals and
4 waste disposal costs. These are costs that tend to vary directly with the amount of water
5 produced and consumed and are allocated to customer classes in direct proportion to each
6 class's annual water consumption.

7 **b. Capacity Costs – General**

8 **Q. Please describe what capacity costs are and how capacity costs are allocated to**
9 **customer classes.**

10 A. Capacity costs refer to the cost of owning, operating, and maintaining the Company's water
11 production, pumping, and distribution system that do not vary directly with the amount of
12 water consumed. These costs are allocated to customer classes in a variety of ways as
13 described below.

c. Capacity Costs – Source of Supply

14 **Q. Please describe how source of supply costs are allocated to customer classes.**

15 A. Source of supply costs not included in the variable cost section described above are
16 allocated to customer classes using a methodology known as the Base/Extra capacity
17 method.

18 **Q. Please describe the Base/Extra capacity method.**

19 A. The Base/Extra capacity method is explained in detail in the AWWA M1 Manual. It is
20 generally accepted as a sound method for allocating the cost of water service and has been
21 used by the Company in previous cases. In short, the Base/Extra capacity methodology
22 relies upon a combination of the average water consumption across the year for each

1 customer class and each class's estimated maximum daily consumption for the year to
2 allocate the fixed costs of the water production and distribution system to customer classes.
3 The Base/Extra capacity allocator is a two-part allocator, the first part being the "Base"
4 component and the second part being the "Extra" component.

5 The "Base" component for each class is the average daily consumption for the year (total
6 annual sales divided by 365 days). For each class, the Base *allocation* component is each
7 class's average consumption divided by the total sum of average consumption for all
8 classes. The "Extra" component is the difference between the maximum daily consumption
9 for a given class and the average daily consumption for that class. For each class, the Extra
10 allocator is each class's extra demand value divided by the total sum of the extra demand
11 values for all customer groups.

12 For each class, the Base/Extra allocator is calculated as a weighted average of the Base and
13 Extra allocators. The Base component is weighted by the total system load factor expressed
14 as a percentage (average daily system production divided by maximum day production),
15 and the Extra component is weighted by one minus the system load factor.

16 **Q. Please describe how the maximum daily consumption values for each class were**
17 **estimated.**

18 A. Maximum daily consumption values for each customer class are estimated based on daily
19 and hourly consumption data collected via Advanced Metering Infrastructure ("AMI")
20 meter data. For Sales for Resale customer classes, maximum daily consumption values are
21 estimated based on AMI data collected for those customers where data exists, with
22 estimated data used for resale customers where AMI data is not available. For other classes,
23 maximum daily consumption is estimated based on samples of customers for which

1 MAWC has AMI data. These samples, which are selected by customer class and
2 subgroups within each class, are selected such that the customers in each customer class
3 sample have monthly usage characteristics that are nearly identical to monthly usage
4 characteristics for MAWC customers in total (all districts), thus providing consistency
5 between the usage characteristics of the customers in each sample and the usage
6 characteristics of MAWC customers in total.

7 **d. Capacity Costs – Water Pumping Costs**

8 **Q. Please describe how water pumping costs are allocated to customer classes.**

9 A. Water pumping costs not included in the variable cost section described above are allocated
10 to customer classes based on the Base/Extra capacity methodology.

11 **e. Capacity Costs – Water Treatment Costs**

12 **Q. Please describe how water treatment costs are allocated to customer classes.**

13 A. Water treatment costs not included in the variable cost section described above are
14 allocated to customer classes based on the Base/Extra capacity methodology.

15 **f. Capacity Costs – Transmission Mains**

16 **Q. Does the Company distinguish between transmission mains and distribution mains?**

17 A. Generally, for cost allocation purposes, mains with a diameter of 10 inches and larger are
18 classified as serving a transmission function and mains smaller than 10 inches are classified
19 as serving a distribution function.

20 **Q. Are transmission mains costs allocated to all customer groups?**

21 A. Yes. All customer groups are considered to take service from the Company's transmission
system and therefore transmission costs are allocated to all customer classes.

1 **Q. Please describe how costs associated with transmission mains are allocated to**
2 **customer classes.**

3 A. Costs associated with transmission mains are allocated to customer class based on the
4 Base/Extra capacity method.

g. Capacity Costs – Distribution Mains

5
6 **Q. Are distribution mains costs allocated to all customer groups?**

7 A. No. It is often the case that for large customers, service is taken directly from the
8 transmission system (10 inches and above) and therefore it would not be appropriate to
9 allocate costs related to the smaller diameter distribution system to these customers. For
10 each customer class, a calculation is done to estimate the percentage of water sales served
11 to that class directly from the transmission system. That portion of sales in each class is not
12 subject to an allocation of distribution costs. It is only the distribution-level sales in each
13 class that are allocated distribution-related costs, and that relative level of sales is
14 significantly different for different customer classes.

15 **Q. Please describe how costs associated with distribution mains are allocated to customer**
16 **classes.**

17 A. After removing usage served at the transmission level, costs associated with distribution
18 mains are allocated to customer classes based on the previously defined Base/Extra
19 capacity method, which is modified to include a component that recognizes maximum
20 hourly demand (at the distribution level) instead of maximum daily demand. The
21 Base/Extra allocator is calculated on usage only served at the distribution level so that
22 usage for large customer classes served at higher diameter mains is not allocated
23 distribution costs. Incorporation of the hourly demand component instead of the daily

1 demand component is appropriate because the transmission main system functions as a
2 conduit from production facilities to the distribution system and is sized to accommodate
3 varying water demands from customers that take service at the distribution level. Sizing at
4 the distribution level needs to accommodate higher demands for shorter periods of time. It
5 is therefore appropriate to consider hourly consumption requirements for distribution
6 mains allocation, as opposed to daily requirements.

7 **Q. Aside from the differences between maximum hourly consumption and maximum**
8 **daily consumption, does the Base/Extra allocator work the same way as you have**
9 **previously described?**

10 A. Yes. In this case, the Base component for each class is the average hourly consumption for
11 the year (total annual sales divided by 8,760 hours). The “Extra” component is calculated
12 as the difference between the maximum hourly consumption for a given class and the
13 average hourly consumption for that class. For each class, the Base/Extra allocator is
14 calculated as a weighted average of the Base and Extra allocators. The Base component is
15 weighted by the total system load factor expressed as a percentage defined this time as
16 average hourly system consumption divided by maximum hourly system consumption, and
17 the Extra component is weighted by one minus the system load factor.

18 **Q. Please describe how the maximum hourly consumption values are calculated.**

19 A. Similar to the process used to estimate maximum daily consumption values by customer
20 class, maximum hourly consumption values for each customer class are estimated either
21 through direct AMI metering of Sales for Resale customers or from samples of customers
22 for which the Company has AMI data. The samples used to estimate maximum hourly
23 consumption are the same samples used to estimate maximum daily consumption to ensure

1 that there is consistency in usage patterns.

2 **h. Capacity Costs – Storage Facility Costs**

3 **Q. Please describe how the Company allocates the revenue requirements associated with**
4 **storage costs to customer classes.**

5 A. Storage costs are allocated to customer classes based on the Base/Extra allocator using
6 hourly estimated peak demand for the extra component, like the allocator used to allocate
7 distribution mains costs. For the storage allocator, it is assumed that all fire service
8 capacity requirements are served first from the Company's storage capacity, and the
9 remaining capacity is allocated to non-fire service classes using the Base/Extra hourly
10 allocator. Therefore, the storage allocator is more heavily weighted toward fire service
11 than any of the other Base/Extra class allocators. I discuss the calculation of fire service
12 capacity requirements later in my Direct Testimony.

13 **i. Customer Related Costs – Metering Costs**

14 **Q. Please describe how the Company allocates the revenue requirements associated with**
15 **the metering cost component to customer classes.**

16 A. Metering costs are allocated to customer classes based on a weighted number of customers
17 calculation. Customer weights in each class are based on AWWA standard meter
18 equivalents by meter size.

19 **j. Customer Related Costs – Service Line Costs**

20 **Q. Please describe how the Company allocates the revenue requirements associated with**
21 **the service line cost component to customer classes.**

22 A. Service line costs are allocated to customer classes based on a weighted number of
23 customers calculation. The customer weights are the same as those used in the last MAWC

1 water service rate case.

2 **k. Customer Related Costs – Customer Service Costs**

3

3 **Q. Please describe how the Company allocates the revenue requirements associated with**
4 **the customer service cost component to customer classes.**

5 A. Customer service costs are allocated to customer classes based on the total number of
6 customers in each class.

7 **l. Fire Service**

8

8 **Q. How are fire service requirements considered in the Company’s cost of service**
9 **analysis?**

10 A. Fire service requirements are determined through a combination of information on
11 firefighting requirements provided by the American Insurance Association. This
12 information relates firefighting requirements in terms of maximum gallons per minute and
13 the duration of time those requirements are needed to general population levels. Given the
14 population of MAWC’s service territories, a firefighting demand of 20,000 gallons per
15 minute for ten hours was used in the cost of service analysis for St. Louis County and a
16 firefighting demand of 15,000 gallons per minute was used in the cost of service study for
17 the Company’s service territory outside of St. Louis County. This firefighting demand was
18 split between private fire and public fire customer groups based on the relative potential
19 water demand for each class, which is in turn based on the number and size of service lines
20 and hydrants in each class.

21 **Q. How is the revenue requirement for hydrants allocated to customer classes?**

22 A. Because MAWC does not charge separately for public fire service, the revenue
23 requirements for hydrants are allocated back to the residential, nonresidential, and Rate J

1 customer classes based on the relative Meter Cost class allocators for those classes.

2 **m. Other Allocation Factors**

3 **Q. How are administrative and general O&M costs and cash working capital costs**
4 **allocated to cost categories and customer classes?**

5 A. Administrative and general (“A&G”) O&M costs are generally allocated to cost categories
6 and customer classes on the same basis that direct costs are allocated, which, for most A&G
7 expenses, are the same way that non-A&G direct O&M costs are allocated. A&G costs that
8 are associated with employee costs, however, are allocated directly based on labor
9 expenses. Cash working capital is allocated based on total O&M expense.

10 **Q. How are depreciation costs allocated to cost categories and customer classes?**

11 A. Annual depreciation accruals are allocated based on the function of the facilities
12 represented by the depreciation expense for each depreciable plant account. The original
13 cost less depreciation of utility plant in service was similarly allocated for the purpose of
14 developing factors for allocating items such as income taxes and return. These factors are
15 based on the results of allocating other costs and are computed internally in the cost
16 allocation program.

17 **Q. How are income taxes and operating income requirements allocated to cost categories**
18 **and customer classes?**

19 A. Income taxes and operating income requirements are allocated to cost categories and
20 customer classes based on the amount of total rate base allocated to each customer class.

21 **Q. Please summarize the results of MAWCs water cost of service analysis.**

22 A. The following table (TABLE 1) provides a summary of the Company’s cost of service
23 analysis and shows total test year revenues, cost of service, and the difference between the

1 two by customer class.

2 **TABLE 1**

St. Louis County			
<u>Customer Class</u>	<u>Revenue at Present Rates</u>	<u>Cost of Service</u>	<u>Difference</u>
Residential	\$ 219,196,203	\$ 322,410,900	47.09%
Non-Residential	\$ 68,531,934	\$ 81,316,451	18.65%
Rate J	\$ 11,296,485	\$ 19,195,185	69.92%
Rate B	\$ 4,931,008	\$ 7,116,063	44.31%
Rate P	\$ 4,684,084	\$ 8,861,800	89.19%
Rate F (Private Fire)	\$ 4,998,343	\$ 8,349,932	67.05%
Public Fire			
Total	\$ 313,638,057	\$ 447,250,332	42.60%
Non-St. Louis County			
<u>Customer Class</u>	<u>Revenue at Present Rates</u>	<u>Cost of Service</u>	<u>Difference</u>
Residential	\$ 68,796,681	\$ 106,423,077	54.69%
Non-Residential	\$ 30,997,236	\$ 36,688,034	18.36%
Rate J	\$ 10,574,417	\$ 13,764,877	30.17%
Rate B	\$ 4,406,843	\$ 6,817,915	54.71%
Rate P	\$ 1,091,501	\$ 3,973,251	264.02%
Rate F (Private Fire)	\$ 1,926,258	\$ 5,702,475	196.04%
Public Fire			
Total	\$ 117,792,936	\$ 173,369,630	47.18%

3 **n. Two-Step vs. One-Step Modeling**

4 **Q. Did the Company use the two-step cost of service model you have outlined in your**
5 **testimony in the Company's last rate case?**

6 A. Yes. The Company used the methodology I have outlined above, where the Company
7 assigns total revenue requirement to various cost categories and the revenue requirement
8 for each of these cost categories is then allocated to the various customer classes MAWC
9 serves, in the cost of service analysis provided in the Direct Testimony of Wesley E.
10 Selinger in Case No. WR-2022-0303.

11 **Q. Has the Company utilized a one-step cost of service analysis in a prior rate case?**

1 A. Yes. The Company utilized a one-step cost of service analysis in Case No. WR-2017-0285.

2 **Q. Have you prepared a one-step methodology in this proceeding?**

3 A. Yes. Consistent with the terms of the settlement agreement for cost of service in the
4 Company’s last rate case, Case No. WR-2022-0303, I am providing a one-step cost of
5 service allocation for both St. Louis County and non-St. Louis County studies in this
6 proceeding, with a comparison of results between the two. Schedules MWM-1 and MWM-
7 2 contain the results of both the two-step process proposed by the Company in this case
8 and the one-step process utilized in Case No. WR-2017-0285. The one-step methodology
9 can be found within the ‘Summary’ and ‘One-Step’ tabs of Schedules MWM-1 and
10 Schedule MWM-2. The Summary includes the revenue requirement allocation by customer
11 class using a one-step methodology alongside the revenue requirement allocation by
12 customer class using a two-step methodology. The detailed analysis that accomplishes that
13 revenue requirement allocation is located in the ‘One Step’ tab of each schedule; each ‘One
14 Step’ tab has been prepared in a similar format as the ‘Account Detail’ tab though
15 employing the one-step methodology.

16 **Q. How do the results of these two analyses compare?**

17 A. The Tables below (TABLE 2, TABLE 3) show the revenue requirement allocation by
18 customer class for the Company’s proposed two-step methodology and the one-step
19 process previously ordered by the Commission in WR-2017-0285.

20 **TABLE 2**

<i>Comparison of St. Louis Cost of Service Results</i>	Two-Step	One-Step	Difference
<i>Residential</i>	\$296,953,327	\$296,953,327	\$0
<i>Non-Residential</i>	\$74,388,240	\$74,388,240	\$0

<i>Rate J</i>	\$18,597,182	\$18,597,182	\$0
<i>Rate B</i>	\$7,116,063	\$7,116,063	\$0
<i>Rate P</i>	\$8,861,800	\$8,861,800	\$0
<i>Private Fire</i>	\$8,349,932	\$8,349,932	\$0
<i>Public Fire</i>	\$32,983,787	\$32,983,787	\$0

1 **TABLE 3**

<i>Comparison of Non-St. Louis Cost of Service Results</i>	Two-Step	One-Step	Difference
<i>Residential</i>	\$90,475,916	\$90,475,916	\$0
<i>Non-Residential</i>	\$31,803,685	\$31,803,685	\$0
<i>Rate J</i>	\$13,392,880	\$13,392,880	\$0
<i>Rate B</i>	\$6,817,915	\$6,817,915	\$0
<i>Rate P</i>	\$3,973,251	\$3,973,251	\$0
<i>Private Fire</i>	\$5,702,475	\$5,702,475	\$0
<i>Public Fire</i>	\$21,203,508	\$21,203,508	\$0

2
3

4 **Q. What do these comparisons say about the relative accuracies of these two different**
5 **methodologies?**

6 A. These comparisons show that the two methodologies are identical in terms of their
7 allocation of revenue requirements to customer classes, which is to be expected as the
8 mathematics of the allocation process are identical. While the one-step methodology offers
9 a somewhat higher level of flexibility in terms of how individual account balances are
10 allocated to customer class, it lacks the transparency and additional functionality of
11 reporting revenue requirements by business function and customer class afforded with the
12 two-step methodology proposed by the Company. The Company continues to support its
13 proposed two-step methodology as the appropriate method for allocating revenue
14 requirements to customer classes.

15 **B. Wastewater Cost of Service Study**

16 **Q. Please describe the overall cost of service study prepared in this case for MAWC's**

1 **wastewater operations.**

2 A. In its most recent general rate case MAWC agreed to conduct a cost-of-service analysis for
3 its wastewater operations in its next general rate case. Similar to the water cost of service
4 studies performed in this case, the purpose of MAWC's wastewater cost-of-service study
5 is to allocate the total wastewater cost of service (i.e., revenue requirement), to the separate
6 customer classifications. In this case, the costs of wastewater service have been allocated
7 between Collection only and Collection and Treatment customers in accordance with
8 generally accepted cost of service principles.

9 **Q. Please describe the method of cost allocation that was used in MAWC's wastewater**
10 **cost of service study.**

11 A. In conducting the wastewater cost of service study, I relied generally on the guidance of
12 the functional cost allocation methodology as described in "Financing and Charges for
13 Wastewater Systems", Manual of Practice No. 27, published by the Water Environment
14 Federation. This method allocates the costs of providing wastewater service to customer
15 classifications in proportion to each classification's use of MAWC's facilities and services.
16 Costs are assigned to cost components using predominant operational purposes (i.e.,
17 functions) as cost-causative factors. The functional cost method is generally accepted as a
18 sound method for allocating the cost of wastewater service.

19 **Q. Please describe the cost-of-service study performed for the Company's wastewater**
20 **operations.**

21 A. The Company's cost of service analysis allocates the total revenue requirement for MAWC
22 wastewater operations to several cost categories described later in my Direct Testimony.
23 The revenue requirement for each of these cost categories is then allocated to the customer

1 classes MAWC serves, with different cost categories allocated to customer classes using a
2 class allocation factor that differs depending on the nature of the costs.

3 **Q. How is the Company's wastewater cost of service study organized?**

4 A. Similar to the water cost of service studies described above, the Company's wastewater
5 cost of service study attached hereto as Schedule MWM-3 is organized into several
6 different tabs, or sections:

- 7 - The "Summary" tab allocates the revenue requirement for each cost category to
8 customer class and summarizes the results of the cost allocations by customer class
9 and business function to get a total revenue requirement by class and business
10 function. The "Summary" tab also compares the revenue requirements by customer
11 class to pro-forma revenues under current rates;
- 12 - The "Account Detail" tab contains rate base, depreciation, and operations and
13 maintenance ("O&M") balances by account and allocates each account to cost
14 category;
- 15 - The "Class Allocators" tab provides detailed calculations of all class allocation
16 factors used in the cost-of-service study; and
- 17 - The "Allocation Summary" tab provides a summary of the class allocation factors.

18 **Q. What are the various cost categories that the Company uses to group individual**
19 **accounts?**

20 A. The cost categories that the Company assigns to specific accounts are as follows:

- 21 • Intangible
- 22 • Collection
- 23 • Pumping

1 • Treatment and Disposal

2 • General

3 **Q. What are the customer classifications included in the wastewater cost of service**
4 **study?**

5 A. The customer classifications included in the wastewater cost of service are as follows:

6 • Collection & Treatment

7 • Collection Only

8 **Q. Please describe how individual accounts that make up the Company's revenue**
9 **requirement are assigned to a cost element.**

10 A. Most of the accounts that make up the Company's revenue requirement are directly
11 assigned to a single cost category. Accounts not directly assignable to a single cost
12 category are allocated among cost elements based on appropriate allocation factors.
13 Examples of this include general and intangible plant, miscellaneous rate base deductions,
14 general expenses, and payroll taxes. These accounts are allocated to cost categories based
15 on net plant, O&M, or labor dollars associated with each cost element depending on the
16 account.

a. Variable Costs

17
18 **Q. Please describe what variable costs are and how variable costs are allocated to**
19 **customer classes.**

20 A. Variable costs refer to purchased fuel and electric power, treatment chemicals and waste
21 disposal costs. These are costs that tend to vary directly with the amount of wastewater
22 flows and are allocated to customer classes as such.

b. Fixed Costs

23

1 **Q. Please describe what fixed costs are and how fixed costs are allocated to customer**
2 **classes.**

3 A. Fixed costs refer to the costs of operating MAWC's wastewater facilities and providing
4 wastewater services that do not vary based on wastewater flows. Due to the homogeneous
5 nature of MAWC's wastewater customer base, which is overwhelmingly Residential and
6 Small Commercial, MAWC's fixed costs have been allocated among its customer classes
7 based on customer count.

8 **c. Other Allocation Factors**

9 **Q. How are A&G O&M costs and cash working capital costs allocated to cost categories**
10 **and customer classes?**

11 A. A&G O&M costs are generally allocated to cost categories and customer classes on the
12 same basis that direct costs are allocated, which for most A&G O&M expenses, are
13 allocated the same way that non-A&G direct O&M costs are allocated.

14 **Q. How are depreciation costs allocated to cost categories and customer classes?**

15 A. Annual depreciation accruals are allocated based on the function of the facilities
16 represented by the depreciation expense for each depreciable plant account. The original
17 cost less depreciation of utility plant in service was similarly allocated for the purpose of
18 developing factors for allocating items such as income taxes and return. These factors are
19 based on the results of allocating other costs and are computed internally in the cost
20 allocation program.

21 **Q. How are income taxes and operating income requirements allocated to cost categories**
22 **and customer classes?**

23 A. Income taxes and operating income requirements are allocated to cost categories and

1 customer classes based on the amount of total rate base allocated to each customer class.

2 **Q. Please summarize the results of MAWCs wastewater cost of service analysis.**

3 A. The following table (Table 4) provides a summary of the Company's cost of service
4 analysis and shows total test year revenues, cost of service, and the difference between the
5 two.

6 **TABLE 4**

Missouri American Wastewater COSS Results		
<u>Revenue at Present Rates</u>	<u>Cost of Service</u>	<u>Difference</u>
\$ 21,313,387	\$ 26,554,038	24.59%

7 **III. RATE DESIGN**

8 **Q. Please discuss some of the important guiding principles associated with sound rate
9 design.**

10 A. There are a number of important principles that pricing analysts and policymakers consider
11 when developing appropriate rate design mechanisms for retail water and wastewater
12 service:

13 - **Cost Basis:** An important goal of rate design is to develop prices for water service
14 to retail customers that are intended to recover the Company's approved revenue
15 requirement and that reflect the cost of providing service to retail customers. Cost
16 of service results inform pricing decisions and guide how rates should be set such
17 that each customer class contributes to the revenue requirement commensurate with
18 their cost to serve. I present the Company's cost of service studies in this case in
19 my testimony.

20 - **Revenue Stability:** Rates should be designed in a way that provides revenue
21 stability to the utility and that can be reasonably expected to recover the utility's

1 revenue requirement over the long run. Consistent recovery of the approved
2 revenue requirement through well-designed rates helps the utility to prudently
3 manage and invest in the water delivery system, while poor rate design decisions
4 can hamper the utility's ability to make investments, operate, and maintain the
5 water delivery system in a manner consistent with the long-term interest of its
6 customers.

7 - **Efficiency of Use:** Rates should be designed to encourage the efficient use of water
8 resources by customers. The volumetric charges for water service should
9 appropriately reflect the variable cost of providing water service while also
10 providing customers an appropriate incentive to conserve water and manage their
11 bills. Rates should communicate to customers the full cost of providing water
12 service.

13 - **Gradualism:** Changes in rate design should be made in a manner that avoids
14 inappropriate levels of rate shock. Rate shock can come both from general increases
15 in revenues that can affect all customers and from changes in rate designs that can
16 cause large increases to specific pockets of customers. Drastic changes in rates can
17 cause customer confusion and dissatisfaction and have adverse effects on the
18 utility's ability to provide quality customer service.

19 - **Avoidance of Discrimination:** Rates should not unduly discriminate between
20 particular customer groups or provide different price signals to similarly situated
21 customers taking similar services from the utility.

22 - **Simplicity and Feasibility:** Rate designs should be relatively simple and easy to
23 understand and easy to communicate, manage, and should result in bills that are

1 clear and understandable.

2 **Q. Please describe the Company's current rate design for water service.**

3 A. MAWC's current rate design for water service primarily consists of a two-part rate design
4 that features a flat volumetric rate (in most cases) with a monthly fixed charge that varies
5 with the size of the meter.

6 **Q. Does the Company have different pricing structures in different geographic
7 locations?**

8 A. Yes. Currently, rates are split into two primary pricing districts:

9 - St. Louis County

10 - Non-St. Louis County

11 **Q. Please describe the rate structures currently in place for St. Louis County and non-
12 St. Louis County customers.**

13 A. The Company offers the following rates to St. Louis County and non-St. Louis County
14 customers:

15 - **Rate A:** Rate A is a volumetric rate with fixed monthly charges for residential and
16 most non-residential customers.

17 - **Rate J:** Rate J is a volumetric rate with fixed monthly charges for certain customer
18 types defined as large water users. This rate applies to:

19 - customers using more than 450,000 gallons per month, where

20 - usage is fairly constant throughout the year (language per tariff), and

21 - usage is not for residential, irrigation, or construction use.

22 Every month, the amount of water billed to each Rate J customer is the maximum

1 of a) 450,000 gallons, b) the customer’s actual metered use for the month, or c)
 2 60% of the customer’s highest summer period monthly use in the twelve months
 3 before the current month’s billing. Customers are removed from the rate for a
 4 period of twelve months if their monthly metered usage falls below 450,000 gallons
 5 per month twice during a twelve-month period.

6 - **Rate B:** Rate B is a volumetric rate with fixed monthly charges for customers that
 7 are sales for resale customers.

8 For all the above rates, the monthly meter charges are the same for St. Louis County
 9 customers and non-St. Louis County customers. The volumetric charges for Rate A and
 10 Rate J are lower for St. Louis County customers than for non-St. Louis County customers,
 11 but are identical for Rate B. The Company’s volumetric rates for Rates A, B, and J are
 12 shown below, in Table 5.

13 **TABLE 5**

<i>Volumetric Rates</i>	St. Louis County	Non-St. Louis County
Rate A	\$0.77604	\$0.83781
Rate J	\$0.20012	\$0.29572
Rate B	\$0.27176	\$0.27176

14 **Q. Does the Company offer rates for fire protection service to St. Louis County and non-**
 15 **St. Louis County customers?**

16 **A.** Yes. The Company offers private fire protection service to all districts under Rate F. This
 17 rate provides for monthly service charges by size of service and provides for monthly
 18 charges for private fire hydrants. Monthly service fees and hydrant fees are the same for
 19 all customers. Volumetric charges for water used for private fire service are charged at the

1 applicable rate for Rate Schedule A. The Company does not charge separate rates for public
2 fire protection service. Public fire protection costs are reallocated back to general service
3 customer classes in the Company's water service rate design and are recovered through
4 general service rates.

5 **Q. Does MAWC have any customers on special contract rates?**

6 A. Yes. MAWC has two large industrial customers on special contract rates with separate
7 volumetric rates specific to those customers. In addition, there are four Sales for Resale
8 customers that take service under special contract rates. In total, these customers account
9 for approximately \$5.9 million in annual revenue.

10 **Q. Is MAWC anticipating any changes relating to the customers taking service under a
11 special contract?**

12 A. Yes. MAWC proposes moving one industrial special contract customer to Rate J, at a
13 lower level of usage, and moving one Sales for Resale special contract customer to Rate B,
14 at the conclusion of this rate case. Thus, for purposes of rate design and the annual revenue
15 calculation, I have assumed those customers are in Rate J and Rate B, respectively.

16 **Q. What changes is the Company proposing to make to its rate design for water service
17 in this case?**

18 A. For water service in this case, the Company is proposing to equalize volumetric rates for
19 Rate A between St. Louis County and non-St. Louis County customers and to move
20 volumetric rates for St. Louis County and non-St. Louis County customers closer together
21 in the Rate J offering. The Company is also proposing structural changes to its Rate J
22 offering's rate design which I will expand upon below.

23 **Q. Why is the Company proposing to equalize the volumetric rates for Rate A and to**

1 **move the volumetric rates for Rate J closer together for the St. Louis County and**
2 **non-St. Louis County groups?**

3 A. The Company is proposing to equalize the volumetric rates for Rate A between St. Louis
4 County and non-St. Louis County customers to complete the process of single tariff pricing
5 for those rates that the Commission has considered over the last four rate cases. It is
6 noteworthy that volumetric rates for these groups are nearly identical today, so moving
7 these rates to a single statewide rate does not impose significant additional rate increases
8 or rate shock for either of these groups of customers. The Company is also proposing to
9 move Rate J rates closer together by equalizing the volumetric rates for Rate J for all usage
10 less than and equal to 450,000 gallons. For all Rate J usage above 450,000 gallons, the
11 Company is proposing to increase the volumetric rate for St. Louis County customers by
12 150% of the increase for non-St. Louis County customers. This is also an attempt to move
13 closer to single tariff pricing for these customers while recognizing the significant
14 differences in those rates that currently exist.

15 **Q. In Case No. WR-2020-0344, the Company proposed significant changes to the Rate J**
16 **service offering, including proposing to create a new large user rate and a transitional**
17 **rate for customers that would not have been eligible for the new large user rate. Those**
18 **changes were not included in the settlement agreement concluding that case. Is the**
19 **Company proposing any changes to the Rate J in this case?**

20 A. Yes; however, the proposed changes in this case differ from those proposed in Case No.
21 WR-2020-0344. In this case, the Company is proposing to modify Rate J by incorporating
22 a declining block rate structure, where there would be one volumetric rate for all volumes
23 at or below 450,000 gallons a month and another, lower rate for all volumes at or above

1 450,000 gallons a month. The current Rate A and Rate J offerings result in a perverse
2 incentive for customers to qualify for Rate J (which has a substantially lower volumetric
3 rate than Rate A) by using or maintaining a monthly average usage above 450,000 gallons
4 a month. Incorporating a declining block rate satisfies the applicable principles of
5 appropriate rate design (cost basis, revenue stability, efficiency of use, gradualism,
6 avoidance of discrimination, simplicity and feasibility) by reducing the perverse incentive
7 to use sufficient water volumes to qualify for Rate J, facilitating proper cost causation for
8 those customers, reducing risk that customers will change rate classes either voluntarily or
9 non-voluntarily impacting revenue stability, and reducing the risk of unintended customer
10 discrimination.

11 **Q. Is the Company proposing to change the monthly meter charges in this case?**

12 A. Yes. Currently, Rate A and Rate B customers have the same monthly meter charges, based
13 on meter size, while Rate J and fire service customers have different monthly meter
14 charges. The Company is proposing to change the meter charges across Rates A, B, and J,
15 with the meter charges for all three rates being identical. For Rates A and B, the Company
16 is proposing to increase the 5/8" monthly meter charge from \$10.00 per month to \$21.34
17 per month, which is a 113% increase. Percentage increases for Rates A and B meter
18 charges for meters larger than 5/8" will vary between 57% and 167%.

19 For Rate J, the Company is proposing to decrease the 5/8" monthly meter charge
20 from \$24.53 per month to \$21.34 per month, which is a 13% decrease. Percentage changes
21 for Rate J meter charges for meters larger than 5/8" will vary between a 36% decrease and
22 a 9% increase.

1 Additionally for Rates A, B, and J, the Company is proposing to combine the 5/8”
2 and 3/4" monthly meter charges. Company Witness Carlson discusses the justification and
3 benefits to this in his Direct Testimony.

4 **Q. Are acquisitions included in the Company’s water rate design and how are they**
5 **treated?**

6 A. As explained in the Direct Testimony of Company witness Brian LaGrand, all acquisitions
7 completed by the Company since January 1, 2023 and approved by the Commission, as
8 well as one pending acquisition (i.e., City of DeKalb, Case No. WA-2024-0325, filed May
9 1, 2024) have been included in the Company’s water rate design. All water system
10 acquisitions are currently on MAWC rates, and would be combined with MAWC’s
11 consolidated water tariff group.

12 **Q. Please describe how the Company is proposing to allocate its proposed revenue**
13 **increase for water service to its customer classes.**

14 A. The Company is proposing to allocate its proposed increase in water service revenues
15 according to the following guidelines:

- 16 - Increases to St. Louis County Rate J customers for all usage above 450,000 gallons
17 are capped at 75% of the overall water revenue increase requested in this case.
18 Increases to Non-St. Louis County Rate J customers for all usage above 450,000
19 gallons are capped at approximately 50% of the overall revenue increase.
- 20 - Increases to Private Fire rates are capped at 125% of the overall water revenue
21 increase requested in this case to bring those customers gradually toward cost of
22 service.

- 1 - Rate B proposed revenues are set at cost of service with the volumetric rates for
2 Rate B for St. Louis County and non-St. Louis County being set equal to each other.
- 3 - The remaining revenue requirement, after calculation of specific contract rates, is
4 spread to Rate A and Rate J customers by increasing the volumetric rate for Rate A
5 service as well as the volumetric rate for Rate J service for all usage at or below
6 450,000 gallons. The volumetric rates for Rate A for St. Louis County and non-St.
7 Louis County are set equal to each other. The volumetric rates for Rate J for all
8 usage at or below 450,000 gallons for St. Louis County and non-St. Louis County
9 are set equal to each other at rates approximately 66.7% of the volumetric rate for
10 Rate A.

11 **Q. Do you have a schedule that provides the Company's complete proposed rate design**
12 **for water service in this case?**

13 A. Yes. Schedule MWM-4 provides the Company's proposed rate design for water service,
14 which is based on the current rate design as modified by the proposals discussed above.

15 **Q. Please describe the Company's current rate design for wastewater service.**

16 A. The Company currently offers wastewater service under three different rate schedules
17 applicable to three different wastewater districts:

- 18 - Tariff RT 1.1 (City of Arnold and surrounding area)
19 - Tariff RT 2.1 (Various communities)
20 - Tariff RT 3.1 (Various communities)

21 The Arnold tariff consists of a monthly flat fee of \$39.09 per month for all customers plus
22 a volumetric charge of \$7.4971 per thousand gallons for usage above 5,000 gallons per
23 month for all customers except for Rock Creek and Northeast Sewer customers. Tariffs

1 RT 2.1 and RT 3.1 both offer a flat fee for residential customers (\$65.36 per month for RT
2 2.1 and \$53.83 per month for RT 3.1) and a graduated monthly charge by meter size for
3 commercial customers with a volumetric charge for commercial customers that applies to
4 all usage above 6,000 gallons per month.

5 **Q. Is the Company proposing to make any significant changes to its rate design for**
6 **wastewater service?**

7 A. Yes. The Company is proposing to make changes to Tariff RT 1.1. The proposed change
8 is to charge all residential customers of the City of Arnold and Surrounding Area a flat rate.
9 This is prudent as the Company obtains these residential customers' water usage
10 information from external sources resulting in billing information that can be late or
11 difficult to reconcile. Removing volumetric rates from residential customers' bills will
12 therefore result in operational efficiencies in addition to simplifying the rate structure. The
13 Company already serves Rock Creek and Northeast Sewer residential customers on a flat
14 rate per unit or customer.

15 The Company is also proposing changes to Tariffs RT 2.1 and 3.1. The proposed
16 changes include the combining of the two tariffs by equalizing charges across RT 2.1 and
17 3.1 as well as implementing a new service charge. All wastewater customers outside of the
18 City of Arnold and Surrounding Area would then be on Tariff RT 2.1.

19 **Q. Please describe the new service charge being proposed for Tariff RT 2.1.**

20 This new service charge will be available to customers that have had water and wastewater
21 service with the Company that used less than or equal to an average of 2,000 gallons of
22 water on their December, January, and February bills. This threshold of 2,000 gallons of
23 water falls below the average winter usage of our customers but enables those customers

1 who use less water to have a lower service charge.

2 **Q. Is the Company proposing to collect its entire proposed wastewater service revenue**
3 **requirement through its wastewater rates?**

4 A. Yes. The Company is proposing to recover its entire proposed wastewater revenue
5 requirement through wastewater rates and does not propose any recovery of wastewater
6 revenue requirements through its water service rates.

7 **Q. Is the Company including any acquisitions in its wastewater rate design and how are**
8 **those acquisitions treated?**

9 A. All wastewater system acquisitions are currently on MAWC rates and would be combined
10 with MAWC's sewer tariff group, outside of the City of Arnold.

11 **Q. Do you have a schedule that provides the Company's complete proposed rate design**
12 **for wastewater service in this case?**

13 A. Yes. Schedule MWM-5 provides the Company's proposed rate design for wastewater
14 service.

15 **IV. ANALYSIS OF MAWC WATER CONSUMPTION**

16 **Q. Are there revenue adjustments the Company is proposing in this case that require a**
17 **quantitative analysis of water consumption by MAWC's customers?**

18 A. Yes. I will explain the modeling used to develop the revenue forecasts for residential,
19 commercial and other public authority ("OPA") customers, and thereafter, I will discuss
20 the development of the revenue projections for all customer classes (residential,
21 commercial, industrial, OPA, and sales for resale). For residential, commercial, and OPA
22 customers, the Company is proposing adjustments for the normalization of the actual
23 billing determinants for the 12-month period ended December 2023, related to trends in

1 declining use, weather normalization, and the impact of the COVID-19 public health
2 emergency on water consumption for MAWC's water customers. These adjustments
3 require the Company to analyze water consumption and determine (1) if there is a
4 significant and pervasive rate of decline in water use per customer over time, (2) if there
5 are significant relationships between water consumption and weather conditions in the
6 Company's service territory, and if weather was different from normal in the 12-month
7 period ended December 2023, and if so, a weather normalization adjustment to usage is
8 appropriate to reflect more normal weather conditions for the 12-month period ended May
9 2026, and (3) if the COVID-19 public health emergency has had a significant impact on
10 water consumption for MAWC's customers, to determine if a COVID-related adjustment
11 to usage is appropriate for the 12-month period ended May 2026.

12 **Q. How do you determine the parameters and relationships necessary to analyze**
13 **declining water use, weather impacts on water consumption, and the impact of**
14 **COVID-19 on water consumption for MAWC's customers?**

15 A. The parameters and relationships necessary to analyze declining use, weather, and COVID-
16 19 on water consumption for MAWC's customers are estimated using statistical linear
17 regression modeling.

18 **Q. What is a statistical linear regression model?**

19 A. Statistical linear regression modeling is a commonly used type of mathematical predictive
20 analysis. The overall idea of regression modeling is to examine two things: (1) does a set
21 of independent explanatory variables do a good job of predicting an outcome (dependent)
22 variable, and (2) which independent explanatory variables in particular are significant
23 predictors of the dependent variable, and in what way do they help predict the results of

1 the dependent variable.

2 There are three major uses for statistical linear regression analysis. These major
3 uses are: (1) determining the predictive power of independent explanatory variables; (2)
4 forecasting the effect that independent variables have on a dependent variable; and (3) trend
5 forecasting. First, the regression analysis can be used to identify the strength of the effect
6 that independent explanatory variables have on a dependent variable. A typical question is:
7 “What is the strength of the relationship between summer heat, precipitation, and water
8 sales?” Second, the regression analysis can be used to forecast the effects or impacts of
9 changes. That is, the regression analysis helps us understand how much the dependent
10 variable changes with a change in one or more of the independent variables. A typical
11 question is: “How much water sales can the Company expect to lose for each inch of
12 rainfall above normal in any given period?” Third, regression analysis can predict trends
13 and future values. The regression analysis can be used to get point estimates of future
14 values of the dependent variable based on assumed values for the independent variables.
15 A typical question can be: “Given current trends in water sales, what can we expect water
16 sales to be each month next year assuming normal weather?”

17 **Q. What does a statistical model produce?**

18 A. A statistical linear regression analysis is a way of mathematically validating which
19 independent variables have a significant impact on the dependent variable – the main
20 factor, the one you are trying to better understand or predict. A statistical linear regression
21 model produces an equation that describes a historical relationship between a set of
22 independent variables and a single dependent variable that can be used to forecast future
23 values of the dependent variable based on assumed values of the independent variables. An

1 example of such an equation is shown below:

2
$$UPC_n = a_0 + (a_1 \times RAIN_n) + (a_2 \times CDD_n) +$$

3
$$+ (a_3 \times COVID-19_n) + (a_4 \times TIME_n)$$

- 4 Where: $UPC_n =$ Use per customer in month n
5 $RAIN_n =$ Rainfall in month n
6 $CDD_n =$ Cooling Degree Days (“CDD”) in month n
7 $COVID_n =$ COVID-19 effect in month n (0% to 100%)
8 $TIME_n =$ Year/Month for month n
9 and: $a_0 =$ constant term
10 $a_1 =$ coefficient for RAIN
11 $a_2 =$ coefficient for CDD
12 $a_3 =$ coefficient for COVID-19 impact per customer
13 $a_4 =$ coefficient for TIME (declining use value)

14 In this example, use per customer is the dependent variable (outcome) and all other
15 variables are independent variables (predictors).

16 **Q. Can statistical linear regression models be used to weather normalize historical water**
17 **sales for different customer classes?**

18 A. Yes. In the statistical model in the example above, the a_1 coefficient for RAIN can be used
19 to estimate the impact of rainfall on use per customer in any given historical period and
20 estimate the impact of what use per customer would have been if rainfall had been different,
21 especially when actual precipitation was higher or lower than normal. Below is a sample
22 calculation of how weather normalization works with a statistical regression model that
23 uses the weather as a strong predictive independent variable that affects the use per

1 customer dependent variable.

$$2 \quad \text{IMPACT}_n = a_1 \times (\text{ACTUAL RAIN}_n - \text{NORMAL RAIN}_n)$$

3 Where: IMPACT_n = Weather impact due to abnormal rainfall in period n

4 ACTUAL RAIN_n = Actual Rainfall (in inches) in period n

5 NORMAL RAIN_n = Average Rainfall (in inches) in period n

6 If the value of the a_1 coefficient for rainfall is -0.30 in this example, actual rainfall for the
7 period is 6 inches and normal rainfall for the period is 4 inches, the weather impact for the
8 period due to higher-than-normal rainfall is a negative 600 gallons per customer meaning
9 that the Company sold 600 fewer gallons per customer of water than it otherwise would
10 have $[-0.30 \times (6 - 4) = -0.60]$. If there are multiple weather variables in the statistical
11 regression analysis, this calculation is completed separately for each variable and the sum
12 of the calculations is rolled up into a single weather impact. This approach to weather
13 normalization allows an analyst to independently assess the impact of each weather
14 component, and also allows an analyst to state the weather impacts over time both in terms
15 of consumption and in terms of revenues by multiplying the consumption impact by a
16 volumetric price.

17 **Q. Can statistical linear regression models be used to estimate the impacts of COVID-19**
18 **on water sales for different customer classes?**

19 A. Yes. In the statistical model example above, the a_3 coefficient for COVID-19 is the
20 estimate of the impact of the COVID-19 public health emergency on monthly use per
21 customer. The historical data set contains a variable for each month that indicates the
22 assumed qualitative level impact of COVID-19 in that month. In all months prior to April
23 2020, that value was set at 0%. From April 2020 on, that value is set at 100% when

1 maximum COVID-19 impacts are observed, or at a level less than 100% where we see
2 reduced COVID-19 impacts on usage. The coefficient for the COVID-19 impact variable
3 estimates the average monthly use per customer based on the months that have been
4 designated as COVID-19 months. This coefficient can then be used to (1) identify a normal
5 level of usage that is not influenced by the impact of COVID-19, in a manner similar to a
6 normalization calculation that adjusts for the influence on water usage associated with
7 weather conditions that depart from normal, and (2) reflect estimates of future impacts of
8 the COVID-19 public health emergency.

9 **Q. Can these models be used to estimate trends in declining use per customer for**
10 **different customer classes?**

11 A. Yes. In the same statistical model example represented above, the a5 coefficient for TIME
12 is the estimate of declining use per customer per month. This coefficient measures the rate
13 of decline in use per customer over the historical data set independent of the effect of any
14 other variable in the model. The historical data set contains a variable for each month
15 which is a timestamp that starts at 1 for the first month in the dataset and increases by 1 for
16 every month going forward. This acts as a trend variable for both historical periods in the
17 dataset and future forecast periods. The coefficient for this trend variable is applied to
18 future increasing values of the trend which results in decreasing forecasts of use per
19 customer.

20 **Q. How does one assess the accuracy of a statistical linear regression model?**

21 A. A statistical linear regression model produces a set of statistics that can be used to judge
22 the accuracy and fitness of the model. The most common statistics are (1) the “R-Squared”
23 value, which is a statistical measure in a regression model that determines the proportion

1 of variance in the dependent variable that can be explained by the independent variables,
2 and (2) values and standard deviations for the coefficients, which can be used to determine
3 “t-statistics” and “p-values” which tell how accurately and precisely the different
4 coefficients are being calculated and whether the associated independent variables are
5 strong predictors of the dependent variable.

6 In the equation described above, the “R-Squared” value is a statistic that measures
7 the percentage of variation from time period to time period in the dependent variable (water
8 use per customer) that is explained by the mathematical relationship with the independent
9 variables. The R-Squared can range from 0% (no explanatory ability) to 100% (perfect
10 explanatory accuracy). In general, the higher the R-squared, the better the predictive value
11 of the model.

12 The second major test involves comparisons of the values of each of the model
13 coefficients and their associated standard errors. Because a statistical regression model
14 estimates an explanatory relationship between a dependent variable and a set of
15 independent variables, there will always be some degree of uncertainty around what that
16 explanatory relationship actually is. As a result, each model coefficient has a level of
17 uncertainty around it, and this level of uncertainty is represented by measuring how many
18 standard errors each coefficient is away from zero, which the model also calculates.

19 Dividing the value of each coefficient by its standard error yields a t-statistic which
20 can be used to judge the predictive power of the independent variable that the coefficient
21 represents. For example, in the case of the generic statistical model described above, if the
22 value of the a_1 coefficient for rainfall is -0.30 and the standard error for that coefficient is
23 0.05 (meaning that the real value of the coefficient could be anywhere between -0.35 and

1 -0.25 with -0.30 being the most likely value), the value of the t-statistic is -6.0 (-0.30
2 divided by 0.05 = 6.0). Generally speaking, t-statistic values greater than 2.0 for positive
3 coefficients or less than -2.0 for negative coefficients indicate an acceptable predictive
4 relationship between that independent variable and the dependent variable of interest. The
5 higher the t-statistic value, the greater the confidence we have in the coefficient as a
6 predictor. Values between 2.0 and -2.0 indicate that the predictive power of that
7 independent variable may not be very strong.

8 **Q. Are there other more qualitative ways to determine whether a statistical linear**
9 **regression model is accurate and produces reasonable results?**

10 A. Yes. There are also several qualitative ways to determine whether a statistical regression
11 model accurately describes the relationship that a chosen set of independent variables has
12 with the dependent variable:

- 13 • **Does the model represent reality?** If it is generally known that water consumption
14 is seasonal and is driven in the summertime by heat and precipitation, it is logical
15 to assume that a statistical model that attempts to describe and predict seasonal
16 water consumption would have explanatory variables related to summer heat and
17 precipitation, and those explanatory variables would be shown to have a strong
18 predictive value in the model. Models that attempt to accurately describe the
19 drivers behind water consumption that do not contain statistically significant
20 coefficients for independent variables that are logically known to drive water
21 consumption are likely not strong predictive models.
- 22 • **Are the signs of the coefficients for major independent variables correct?** If
23 water consumption increases in the summertime with increasing heat and decreases

1 in the summertime with increasing precipitation, it is logical to expect that the
2 coefficients for the independent variables that represent summertime heat and
3 summertime precipitation would be positive and negative, respectively.

- 4 • **Is the model based on a robust data set?** It is easy for a statistical model with
5 many independent variables and relatively few observations of the dependent
6 variable to accurately explain variation in the dependent variable, but that does not
7 mean that the model has strong predictive power if the data set being analyzed is
8 small in scope. A statistical model that attempts to describe water consumption that
9 has good predictive explanatory power over multiple years of monthly historical
10 data is very useful and accurate in projecting future trends and in explaining how
11 changes in strong predictive independent variables will affect levels of the
12 dependent variable.

- 13 • **Do the impacts on the dependent variable that the model describes make**
14 **logical sense?** It is possible outside of a statistical linear regression model to make
15 ballpark estimates of other facts like the impact of COVID-19 on water
16 consumption and long-term trends in declining use. This can be done with a simple
17 linear plot of annual usage data by year. For example, if a linear plot of annual
18 usage data suggests that there is a downward trend of approximately 1,000 gallons
19 per customer per year, one would expect that a statistical model that is measuring
20 that impact would yield a result that is similar. The same is true when looking at
21 the potential impacts of COVID-19 on water consumption. If a visual examination
22 of data suggests that water use per customer for a commercial class has decreased
23 by 2,000 gallons per customer in 2020 due to the COVID-19 emergency, it is

1 logical to expect a statistical regression model that attempts to statistically measure
2 that impact to yield estimates consistent with that expectation.

3 **V. DECLINING USE AND WEATHER ADJUSTMENTS**

4 **Q. Please describe the statistical linear regression model you are using to analyze water**
5 **consumption data for MAWC.**

6 A. In this proceeding, we are using multiple linear regression models to analyze use per
7 customer for the residential, commercial, and OPA classes that relate the dependent
8 variable (i.e., water use per customer) to a collection of independent variables. Separate
9 models are developed for St. Louis County customer usage and for non-St. Louis County
10 customer usage. The models use 120 months of monthly data beginning in January 2014
11 and running through December 2023. Each regression model uses independent variables
12 that can be broken down into four categories to explain monthly use per customer. The
13 four categories are:

- 14 • **Weather:** The weather variables used in the models are Cooling Degree Days
15 (“CDDs”) and precipitation. These weather variables are a weighted average of
16 current month and lagged month weather readings taken by the National Oceanic
17 and Atmospheric Administration at St. Louis Lambert International Airport for the
18 St. Louis County Customers. Similarly, for non-St. Louis County customers, a
19 weighted average of current month and lagged month weather readings were taken
20 across three weather stations and weighted as follows: 50% St Louis Lambert
21 International Airport, 30% St. Joseph Rosecrans Memorial Airport, and 20% Joplin
22 Regional Airport. This weighted average lagged approach is used to account for
23 the differences between billing month sales and calendar month weather.

1 Coefficients from these variables show the impact of weather on monthly use per
2 customer over the 10-year period. Weather variables are modeled as monthly
3 deviations from normal for each month in the data set. Normal weather is
4 calculated for each month of the year based on the average weather over the ten-
5 year historical period.

6 • **Time:** The time variable is a trending variable that notes the passage of time in the
7 model and produces a coefficient that estimates the monthly decline in usage per
8 customer over the 10-year model. The time variable acts as a proxy variable that
9 captures the range of conservation efforts that have been implemented by customers
10 over time, such as the installation of more water-efficient fixtures and appliances.
11 Time on its own is of no consequence, but it is a powerful variable because it is the
12 medium for capturing the conservation effect.

13 • **COVID-19 indicator:** The COVID-19 indicator variable is set at 0% for months
14 prior to April 2020 and 100% for the months of April 2020 through December 2022.
15 The effect of this variable in the model is to identify increases or decreases in use
16 per customer for the April 2020 through December 2022 timeframe that occurred
17 due to systemic changes in the amounts of water customers use as a result of the
18 COVID-19 public health emergency.

19 • **Monthly indicators:** The monthly indicator variables in the model measure
20 structural monthly and/or seasonal changes in use per customer that cannot be
21 explained by any of the other variables in the model.

22 **Q. What information do these models provide that is useful for developing pro forma**
23 **adjustments to revenues that you are sponsoring in your testimony?**

1 A. Each model produces a set of weather coefficients that can be used to weather-normalize
2 historical sales, a coefficient that indicates the monthly trend in declining use per customer
3 for each class, and a coefficient that shows for each class the average use per customer
4 impact associated with changes in usage due to COVID-19.

5 **Q. You mentioned that you have developed models for customer usage relating to the**
6 **residential, commercial, and OPA classes. Are you also modeling usage for the**
7 **industrial and sales for resale customer classes, and for fire service classes?**

8 A. No. The statistical modeling in this case is only for the residential, commercial, and OPA
9 classes. Usage estimates for the industrial and sales for resale classes are developed using
10 a simple multi-year average and are described later in the revenue section of my testimony.

11 **Q. Is this modeling approach approximately the same as the modeling approaches that**
12 **have been used by the Company in previous rate cases in Missouri?**

13 A. Yes. The modeling approach proposed in this case is largely identical to that of the prior
14 rate case. In the previous case, the COVID-19 indicator was set to 100% for the months of
15 April 2020 through December 2021. In this case, the COVID-19 indicator is set to 100%
16 for the months of April 2020 through December 2022.

17 **Q. Please discuss the results of statistical tests for your models and why the models are**
18 **appropriate to use in this proceeding.**

19 A. As shown in Schedules MWM-6, MWM-7, and MWM-8, the Adjusted R-Squared
20 statistics for the residential usage model is 81% and 93% for St. Louis County and non-St.
21 Louis County customers respectively, the Adjusted R-Squared statistic for the commercial
22 usage model is 91% and 90% for St. Louis County and non-St. Louis County customers
23 respectively, and the Adjusted R-Squared statistic for the OPA model is 82% and 72% for

1 St. Louis County and non-St. Louis County customers respectively. This indicates that in
 2 all models, the explanatory variables (weather, COVID-19 impacts, declining use, etc.)
 3 strongly explain the variability in use per customer over time. The values of the
 4 coefficients, standard errors, and t-statistics for the major explanatory variables in the
 5 models are as follows:

**St. Louis County
 Residential Model Major
 Explanatory Variables**

	Coefficient	Standard Error	t-Statistic
Declining Use Trend	-.0070	.0021	-3.3445
Precipitation	-.2158	.0488	-4.4212
CDD	n/a	n/a	n/a
COVID-19 Impact	.0560	.1634	.3426

**Non-St. Louis County
 Residential Model Major
 Explanatory Variables**

	Coefficient	Standard Error	t-Statistic
Declining Use Trend	-.0043	.0009	-4.6956
Precipitation	-.2278	.0268	-8.5020
CDD	.0030	.0009	3.3154
COVID-19 Impact	.1656	.0707	2.3425

**St. Louis County
 Commercial Model Major
 Explanatory Variables**

	Coefficient	Standard Error	t-Statistic
Declining Use Trend	.0088	.0115	.7657
Precipitation	-1.0071	.2287	-4.4031
CDD	.0317	.0120	2.6404
COVID-19 Impact	-3.4018	.8908	-3.8187

**Non-St. Louis County
 Commercial Model Major
 Explanatory Variables**

	Coefficient	Standard Error	t-Statistic
Declining Use Trend	.0146	.0052	2.7935
Precipitation	-.4639	.1546	-3.0017

CDD	.0142	.0052	2.7410
COVID-19 Impact	-.5122	.4028	-1.2717

St. Louis County OPA Model Major Explanatory Variables	Coefficient	Standard Error	t-Statistic
Declining Use Trend	.1960	.0414	4.7395
Precipitation	-3.8492	1.1525	-3.3398
CDD	.0890	.0455	1.9557
COVID-19 Impact	-11.3140	3.2046	-3.5306

Non-St. Louis County OPA Model Major Explanatory Variables	Coefficient	Standard Error	t-Statistic
Declining Use Trend	-.0151	.0213	-.7065
Precipitation	-1.9184	.5404	-3.5502
CDD	.0336	.0231	1.4512
COVID-19 Impact	-1.4355	1.6453	-.8725

1 Apart from the declining usage variables (which I discuss later in my testimony), the
2 statistics for the individual explanatory independent variables above show a high degree of
3 explanatory power with most parameters having t-statistics all outside of the +/- 2.00 range.
4 The coefficients for the precipitation variables are all negative, meaning that increased
5 rainfall over a summer period results in decreased seasonal water usage from our residential
6 customers. The coefficients for the CDD variables are positive, which indicates that as
7 average temperature increases in the summer, water use per customer increases. The
8 COVID-19 impact variables generally indicate that residential usage increased and usage
9 for commercial and OPA customers decreased as a result of COVID-19.

10 **Q. Your regression models show a trend of declining use per customer. What is the**
11 **amount of declining use your models have identified?**

1 A. The annual amount of declining use identified for residential customers is approximately
2 1,000 gallons per year per customer for St. Louis County customers and 600 gallons per
3 year for non-St. Louis County customers. There was no declining use identified for
4 commercial customers for St. Louis County nor non-St. Louis County commercial
5 customers. There was no declining use identified for St. Louis County OPA customers and
6 the annual amount of declining use identified for non-St. Louis County OPA customers is
7 approximately 2,200 gallons per year.

8 **Q. Are these declining usage trends you have identified significant?**

9 A. For residential customers, these declining usage trends are statistically significant. For
10 commercial and OPA customers, these trends are not statistically significant, and therefore
11 we do not propose to include any declining use adjustment for commercial and OPA
12 customers in this proceeding and instead use a three-year average of use per customer as I
13 describe later in my testimony.

14 **Q. Why do you believe that declining use is a valid trend for residential customers that
15 will continue?**

16 A. Consumption patterns for the Company's customers are similar to those for other American
17 Water operating companies which have experienced a decline in residential consumption
18 per customer over the last 10 years. According to the 2010 Water Research Foundation
19 report, "many water utilities across the United States and elsewhere are experiencing
20 declining water sales among households." The report further states: "A pervasive decline
21 in household consumption has been determined at the national and regional levels."¹

22 **Q. What is causing the decline in residential customers' usage?**

¹ Coomes, Paul et al., North America Residential Water Usage Trends Since 1992 – Project #4031, page 1 (Water Research Foundation, 2010).

1 A. Several factors drive the decline in residential customers' usage. These factors include the
2 incremental introduction of low-flow fixtures and appliances, new regulations that lead to
3 further reductions in fixture flow rates, conservation programs, and public initiatives that
4 have led to greater consumer water conservation awareness.

5 Plumbing fixtures such as toilets, showerheads, and faucets available to consumers
6 today are more water-efficient than those fixtures manufactured in the past. Similarly,
7 appliances such as dishwashers and washing machines are also more water efficient. When
8 a customer replaces an older toilet, washing machine, or dishwasher with a new unit, the
9 new unit will almost certainly use less water than the one it replaced. Similarly, the
10 construction of new homes results in the installation of water-efficient fixtures meeting
11 new, more efficient, regulatory standards.

12 **Q. How much water do the new fixtures and appliances save?**

13 A. The Energy Policy Act of 1992 mandated the manufacture of water-efficient toilets,
14 showerheads, and faucet fixtures. For example, a toilet manufactured after 1994 must use
15 no more than 1.6 gallons per flush, compared to a pre-1994 toilet, which typically used
16 from 3.5 to 7 gallons per flush. In fact, toilets using only 1.28 gallons per flush or less are
17 becoming more prevalent in the marketplace. Replacing an old toilet with a new one,
18 therefore, can save from 2 to nearly 6 gallons per flush. The United States Environmental
19 Protection Agency estimates that there are more than 220 million toilets in the United
20 States and that approximately 10 million new toilets are sold each year for installation in
21 new homes and businesses or replacement of aging fixtures in existing homes and
22 businesses.

1 The Energy Independence & Security Act of 2007, which established stringent
2 efficiency standards for dishwashers and washing machines, has further reduced indoor
3 water consumption. Dishwashers manufactured after 2009 and washing machines
4 manufactured after 2010 must use 54% and 30% less water, respectively. All other factors
5 being equal, a typical residential household in a new home constructed in 2015, with water-
6 efficient toilets, washing machines, dishwashers, and other fixtures, uses approximately
7 35% less water for indoor purposes than a non-retrofitted home built prior to 1994.

8 **Q. Are there other factors contributing to the continued decline in water consumption**
9 **patterns?**

10 A. Yes. Programs to raise customer awareness and interest in the benefits of conserving water
11 and energy continue to increase. As awareness of water and energy efficiency increases,
12 customers may decide to replace a fixture or appliance even before it has broken.
13 Additionally, customers may further reduce consumption by changing their household
14 water use habits in other various ways.

15 **Q. Do you expect the trend of declining customer usage to continue in the future?**

16 A. Yes. Water-efficient fixtures and other drivers such as conservation education and
17 government-mandated standards will continue to drive further efficiency into residential
18 and nonresidential usage per customer. In fact, the trend is well established and continues
19 to affect water usage on the MAWC system as well as most water utilities across the United
20 States. The rate of the continued trend is dependent on the pace of fixture replacement
21 within the Company's footprint as well as the broadening acceptance of a conservation
22 ethic through raised customer and business awareness programs, government conservation
23 policy, and similar behavior modification-related programs.

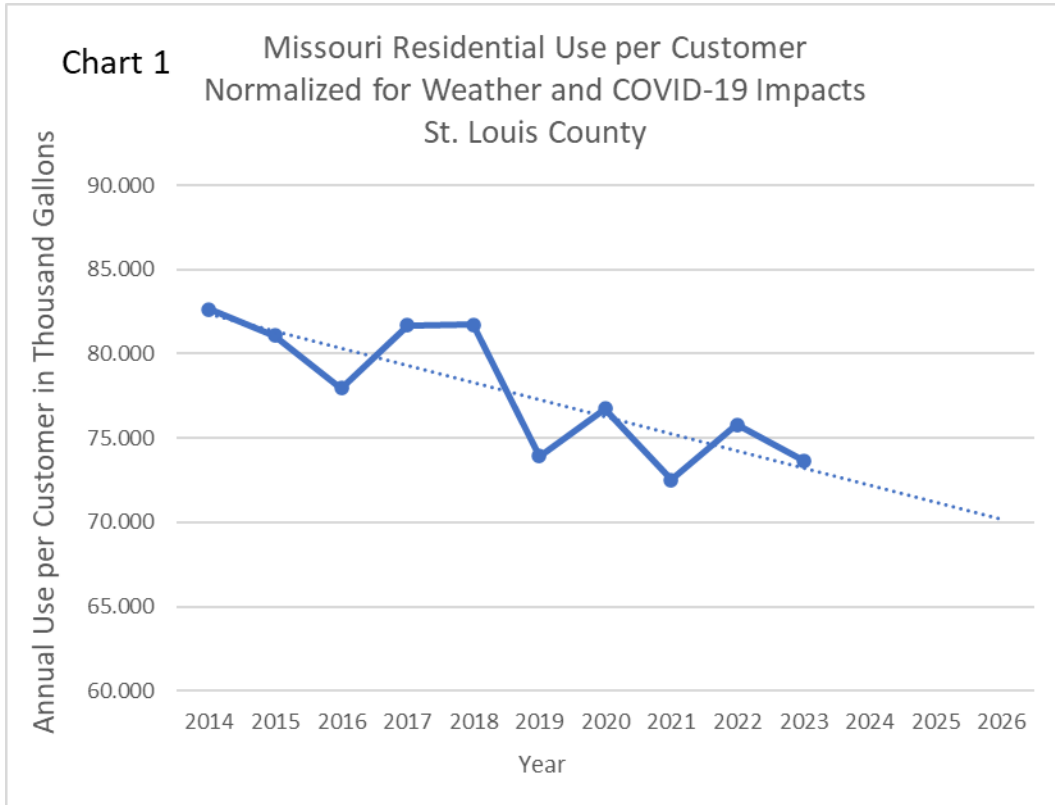
1 Technology is now available for newer, more water-efficient products that further
2 improve on Energy Policy Act levels, and there has been a growing movement to codify
3 these more stringent specifications. The introduction of progressive code modifications –
4 such as the International Code Council’s International Green Construction Code and the
5 International Association of Plumbing and Mechanical Officials Green Plumbing and
6 Mechanical Code Supplement (2011) – support uniform implementation of increased water
7 efficiency standards. An article in the June 2012 issue of the American Water Works
8 Association (“AWWA”) Journal entitled “Insights into declining single-family residential
9 water demands” recognizes this decline in water consumption: “[r]educed residential
10 demand is a cornerstone of future urban water resource management. Great progress has
11 been made in the last 15 years and the industry appears poised to realize further demand
12 reductions in the future.”² The trend of declining water consumption based on improved
13 water efficiency has continued over time.

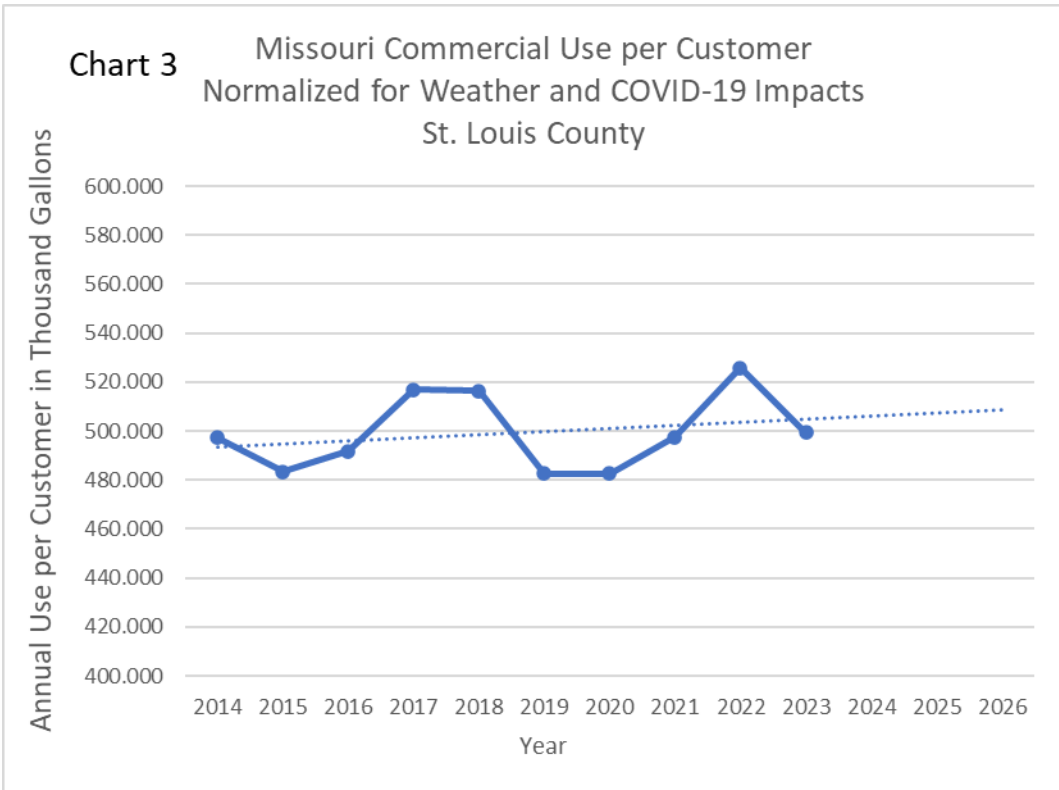
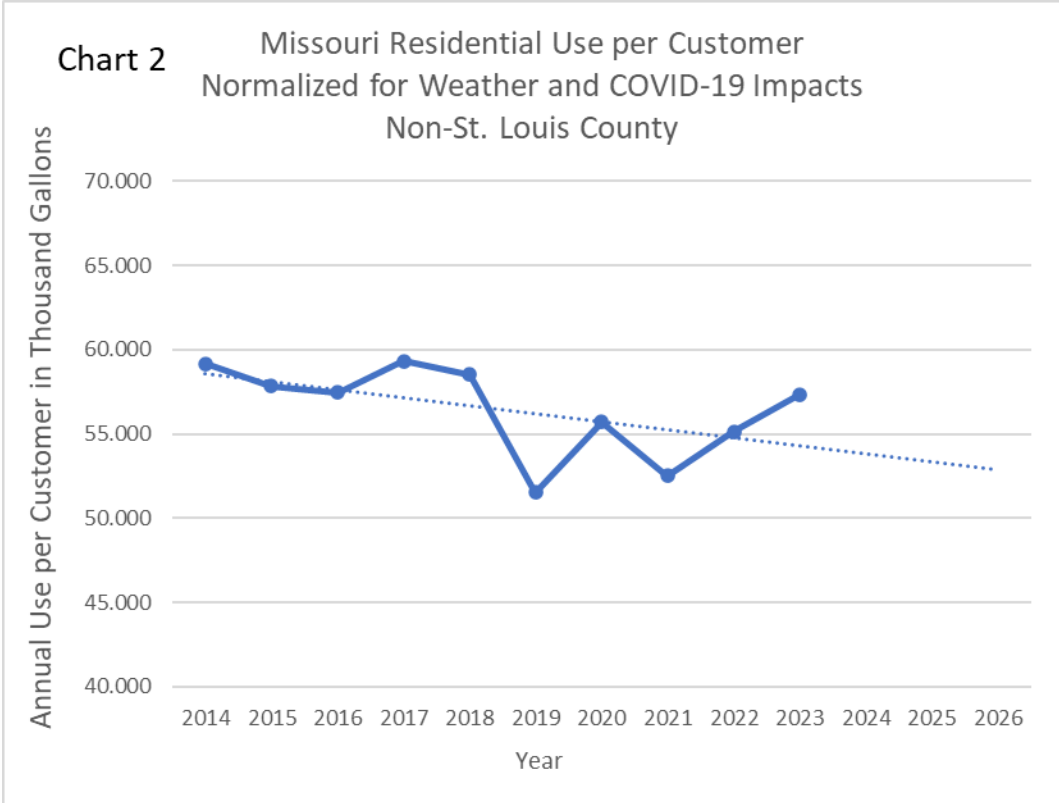
14 **Q. Normalizing historical usage for weather and the COVID-19 emergency, what has the**
15 **overall trend been for use per customer for the residential, commercial, and OPA**
16 **classes?**

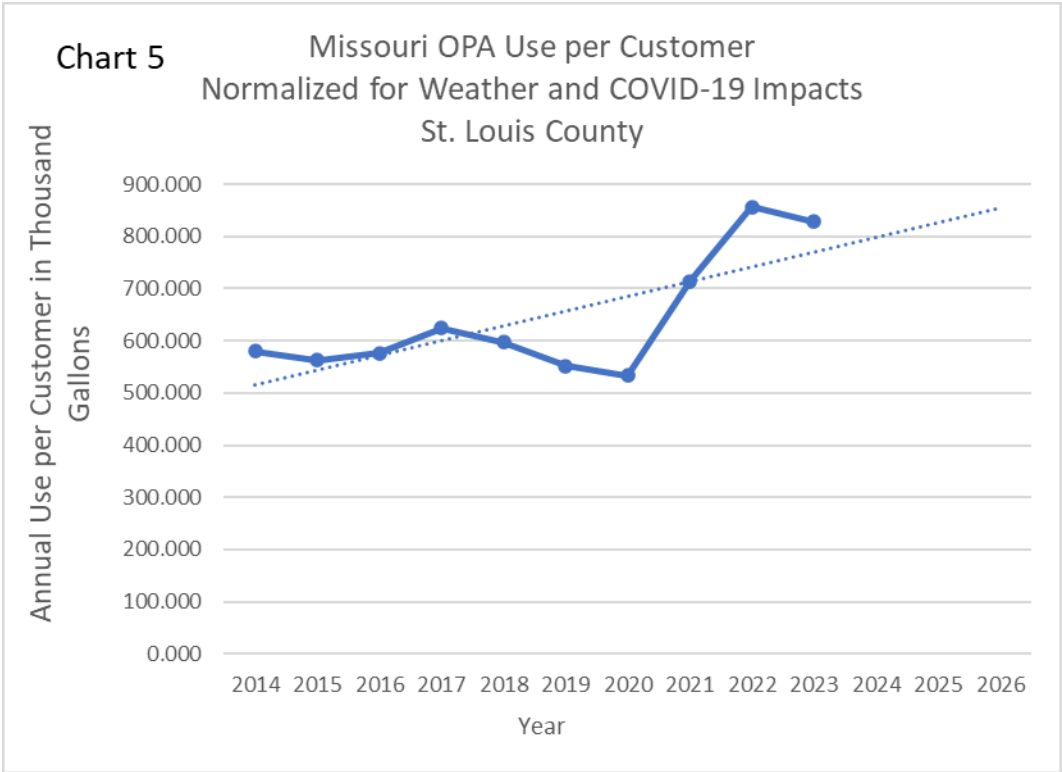
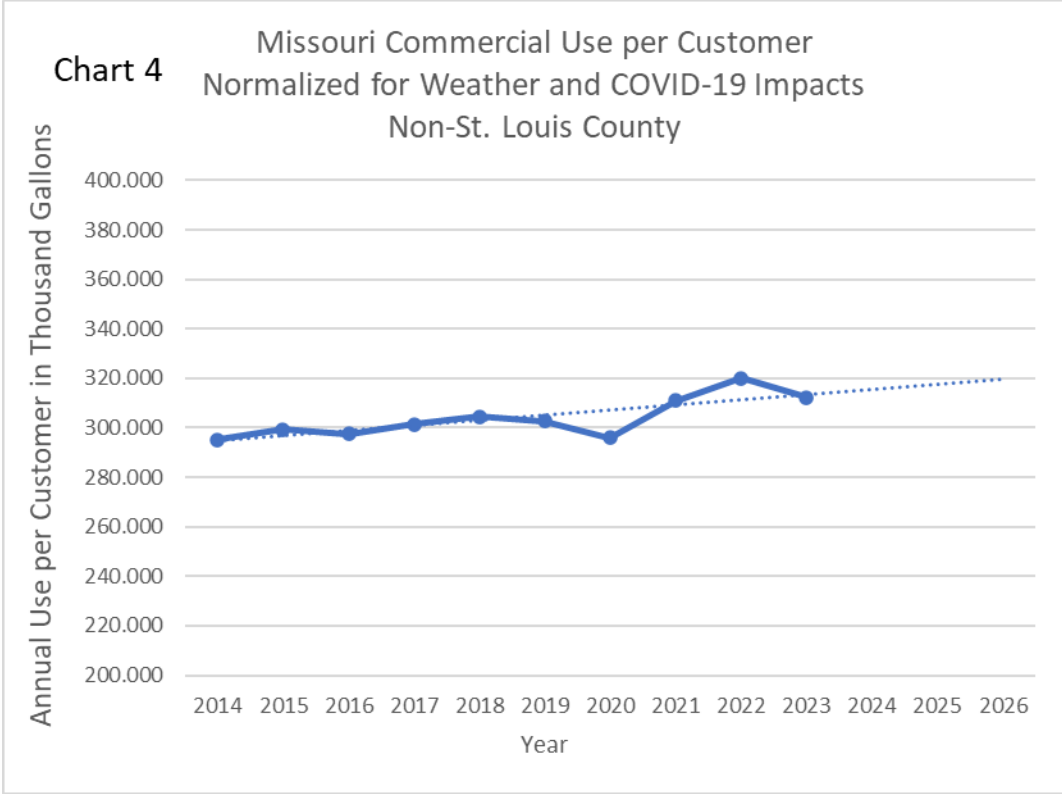
17 A. The statistical analysis of residential, commercial, and OPA usage shows that once weather
18 effects and the one-time effects of COVID-19 have been accounted for, there is a
19 significant downward trend for residential customers, fairly stable usage for commercial,
20 and no clear trend for OPA customers over time. Charts 1 through 6 below show use per
21 customer for residential, commercial, and OPA customers respectively for the ten years

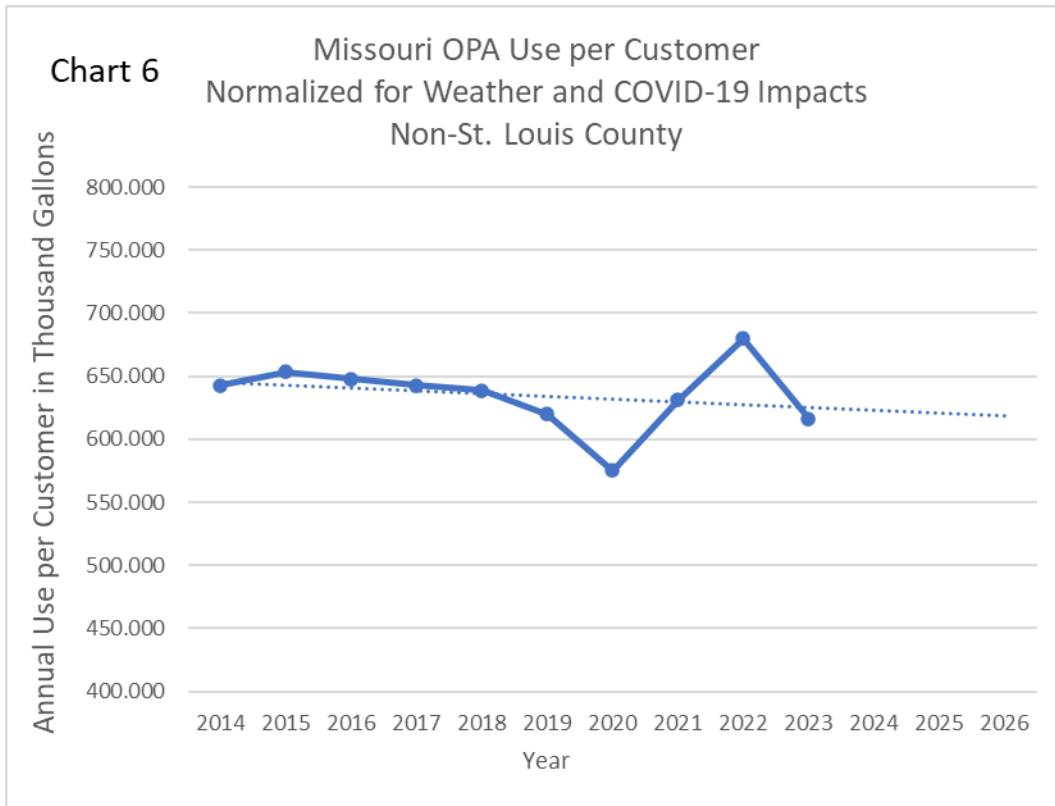
² DeOreo, William and Mayer, Peter. American Water Works Association Journal. Vol. 104. Issue 6.
http://apps.awwa.org/WaterLibrary/showabstract.aspx?an=JAW_0076117. June 2012

1 ending December 2023, adjusted for the weather impacts and COVID-19 impacts I
2 previously described in my testimony.









1 **Q. What conclusions do these charts reveal?**

2 A. Extending the historical trends in adjusted usage going forward, these charts and the
 3 supporting analysis demonstrate that there has been a significant and pervasive decline in
 4 normalized use per customer for residential customers both in St. Louis County and non-
 5 St. Louis County service territories. There has not been a significant decline over time in
 6 normalized use per customer in either the St. Louis County or non-St. Louis County service
 7 territories for commercial or OPA customers.

8 **VI. REVENUE CALCULATIONS**

9 **Q. Please explain the development of MAWC’s pro-forma revenues as set forth in the**
 10 **revenue related Schedules (CAS-8, CAS-11 and CAS-12).**

11 A. The process of developing the Company’s revenue requirement begins with revenues
 12 recorded on the Company's books of account on December 31, 2023, to which various

1 adjustments were made. A summary of the development of pro forma revenues for
2 MAWC's water and wastewater operations under present and proposed rates are set forth
3 on Schedules CAS-11 and CAS-12, which show operating revenues by customer
4 classification for the twelve months ending December 31, 2023 (normalized), twelve
5 months ended December 31, 2024, and twelve months ended May 31, 2026 under present
6 rates and proposed rates. CAS-11 shows a summary by revenue class, and CAS-12 shows
7 the detail by revenue class. In addition to pro forma revenues at current rates, Schedules
8 CAS-11 and 12 show pro forma revenues at proposed rates. These rates are based on the
9 rate design discussion previously outlined in my Direct Testimony.

10 **Q. Please explain the adjustments to the Company's book revenues that were made to**
11 **develop pro forma revenues under present rates as shown on Schedule CAS-8.**

12 A. Schedule CAS-8 begins with test year revenues for the 12 months ended December 31,
13 2023. At the time of filing, the test year is based on 12 months of actual revenues through
14 December 31, 2023. Three adjustments are made to present a pro forma revenue for the
15 12 months ended December 31, 2024. First, unbilled revenue is eliminated. Second, all
16 revenue related to Water & Sewer Infrastructure Replacement Surcharge ("WSIRA") is
17 eliminated. Lastly, the per books revenues were adjusted for the bill analysis normalization
18 as shown in Schedules CAS-11 and 12.

19 **Q. Please explain the adjustments to determine the Company's pro forma revenues as**
20 **shown on Schedules CAS-8 and CAS-11 and 12.**

21 A. The revenue adjustments are primarily for customer growth and for customer usage. We
22 project customer counts and use per customer for residential, commercial, industrial, OPA,
23 sales for resale, and fire service classes for St. Louis County and non-St. Louis County

1 service territories for water service. These include projections specifically for Rate J
2 customers and any special contracts. These projections also include any customers and
3 sales associated with acquisitions. We also project customer counts and usage data for
4 wastewater customers. The Company projects miscellaneous revenues for both water and
5 wastewater service to complete the calculation of revenues for the relevant periods.

6 **Q. Please describe the methods used for estimating customer counts, use per customer,
7 and billing determinants for residential water sales.**

8 A. Customer growth for residential customers was projected using a 3-year historical growth
9 pattern from 2021 through 2023 applied to customer counts as of December 31, 2023.
10 Residential use per customer was developed based on the normalized values from the usage
11 modeling previously discussed in my Direct Testimony.

12 **Q. Please describe the methods used for estimating customer counts, use per customer,
13 and billing determinants for Commercial, Industrial, OPA and Other Water Utilities
14 (OWU) water sales.**

15 A. Commercial and OPA customer counts are based on organic growth using the 3-year
16 historical growth pattern for these classes from 2021 through 2023. No customer growth
17 was projected for the Industrial class and the Sales for Resale class. Usage for all these
18 non-residential classes is projected using a 3-year annual average usage per customer
19 multiplied by the projected number of customers. Because there is not a significant trend
20 in use per customer for these classes as I have previously discussed in my testimony, the
21 Company is using a 3-year average of water usage (2021-2023) for these customer classes,
22 which is an appropriate period to use for normalizing sales when there is no strong
23 underlying trend in usage. This time period eliminates short-term fluctuations in usage

1 while still reflecting normal water consumption levels for these customers.

2 **Q. Please describe how projections were made for Rate J customers and sales.**

3 A. Non-residential customers, excluding Sale for Resale customers and special contract
4 customers, consistently using large quantities of water not less than 450,000 gallons per
5 month are classified as Rate J customers. The usage for Rate J customers was projected by
6 determining what percentage of each non-residential customer classes' total usage
7 comprised Rate J usage and applying that percentage to the projected usage for each
8 customer class. The percentage was determined through analysis of each commercial,
9 industrial, and OPA customer that evaluates whether each customer is eligible for Rate J
10 or not based on their actual usage.

11 **Q. Did you also compute the total estimated gallons of production that correspond to
12 your revenue forecast and that were used by Company witness Manuel Cifuentes for
13 purposes of the system delivery adjustments that he proposes for water service?**

14 A. Yes, I did. System deliveries are calculated separately for St. Louis County and non-St.
15 Louis County operations and are based on the three-year average from 2021 through 2023
16 of non-revenue water percentages, which is the percentage of total system deliveries in a
17 year that is not attributable to metered sales. This average non-revenue water percentage is
18 applied to total sales for the 12-month period ending May 2026 to arrive at system
19 deliveries for the same period.

20 **Q. Please describe the methods used for estimating revenue for private fire service.**

21 A. Revenue for private fire was calculated using twelve months of actual historical counts of
22 service connections and hydrants in service through December 31, 2023. Organic growth
23 was projected using the 3-year average change in counts for the years 2021-2023.

1 **Q. Please describe how customer count and sales information was developed for**
2 **wastewater customers.**

3 A. Organic growth for residential, commercial, and OPA classes were calculated using the 3-
4 year average growth patterns from 2021-2023. Water usage/flow was projected using a 3-
5 year average water usage/flow per customer.

6 **Q. Please describe how miscellaneous revenues were developed.**

7 A. Revenue for rents and usage data are projected based on known and measurable changes
8 in agreements from the Test Year period. Revenue projections for Miscellaneous Services
9 revenues are based on 3-year average historical revenues from 2021 through 2023.
10 Calculations for the Service Activation Fee, Discontinuance Fee, Meter Testing Fee,
11 Special Meter Reading Charge, Returned Deposit Item Charge, Hydrant Inspection Charge
12 and Service Line Inspection Charge were completed to determine the best
13 recommendations for proposed fee costs. Please see the Direct Testimony of Company
14 witness Jody Carlson for details.

15 **Q. Does this conclude your Direct Testimony?**

16 A. Yes.

Missouri-American Water Company
Class Cost of Service Study - Functional Allocators to Customer Class
Case No: WR-2024-0320, SR-2024-0321

	Functional COS	Alloc	Description	Rate F							Total	Variance
				Residential	Non-Residential	Rate J	Rate B	Rate P	Private Fire	Public Fire		
Source of Supply Expense												
Fixed	\$ 10,482,765	2	Base/Extra Daily	\$ 6,173,212	\$ 2,218,124	\$ 1,077,117	\$ 418,203	\$ 587,291	\$ 8,818	\$ -	\$ 10,482,765	\$ -
Variable	\$ 5,209,136	1	Total Usage	\$ 2,955,054	\$ 1,016,376	\$ 640,959	\$ 234,402	\$ 355,594	\$ 6,751	\$ -	\$ 5,209,136	\$ -
Power and Pumping Expenses												
Fixed	\$ 23,743,551	3	Base/Extra Daily w/ Fire	\$ 13,420,755	\$ 4,831,221	\$ 2,316,982	\$ 902,444	\$ 1,262,114	\$ 230,301	\$ 779,733	\$ 23,743,551	\$ -
Variable	\$ 3,404,675	1	Total Usage	\$ 1,931,414	\$ 664,300	\$ 418,929	\$ 153,204	\$ 232,415	\$ 4,412	\$ -	\$ 3,404,675	\$ -
Water Treatment												
Fixed	\$ 49,671,627	2	Base/Extra Daily	\$ 29,251,205	\$ 10,510,380	\$ 5,103,820	\$ 1,981,617	\$ 2,782,824	\$ 41,781	\$ -	\$ 49,671,627	\$ -
Variable	\$ 17,277,643	1	Total Usage	\$ 9,801,312	\$ 3,371,113	\$ 2,125,931	\$ 777,464	\$ 1,179,434	\$ 22,390	\$ -	\$ 17,277,643	\$ -
Transmission	\$ 44,798,714	3	Base/Extra Daily w/ Fire	\$ 25,321,933	\$ 9,115,423	\$ 4,371,621	\$ 1,702,708	\$ 2,381,323	\$ 434,527	\$ 1,471,179	\$ 44,798,714	\$ -
Distribution	\$ 164,489,841	4	Base/Extra Hourly w/ Fire	\$ 120,041,248	\$ 26,266,343	\$ 1,301,901	\$ 887,166	\$ -	\$ 3,593,505	\$ 12,399,678	\$ 164,489,841	\$ -
Storage	\$ 2,928,346	5	Storage	\$ 1,898,888	\$ 390,156	\$ 163,262	\$ 58,648	\$ 80,703	\$ 75,906	\$ 260,782	\$ 2,928,346	\$ -
Meters	\$ 52,285,566	8	Meters	\$ 40,355,087	\$ 10,982,530	\$ 947,949	\$ -	\$ -	\$ -	\$ -	\$ 52,285,566	\$ -
Services	\$ 36,925,635	9	Services	\$ 29,212,576	\$ 4,075,438	\$ 120,499	\$ -	\$ -	\$ 3,517,121	\$ -	\$ 36,925,635	\$ -
Customers	\$ 17,939,480	10	Customers	\$ 16,590,643	\$ 946,836	\$ 8,212	\$ 205	\$ 103	\$ 393,481	\$ -	\$ 17,939,480	\$ -
Hydrants	\$ 18,093,354	7	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,939	\$ 18,072,415	\$ 18,093,354	\$ -
Total	\$ 447,250,332			\$ 296,953,327	\$ 74,388,240	\$ 18,597,182	\$ 7,116,063	\$ 8,861,800	\$ 8,349,932	\$ 32,983,787	\$ 447,250,332	\$ -
				66.40%	16.63%	4.16%	1.59%	1.98%	1.87%	7.37%	100.00%	
			One Step Allocation:	\$ 296,953,327	\$ 74,388,240	\$ 18,597,182	\$ 7,116,063	\$ 8,861,800	\$ 8,349,932	\$ 32,983,787	\$ 447,250,332	
			One Step Delta:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Rate Year Water Revenue	\$ 313,638,057			\$ 219,196,203	\$ 68,531,934	\$ 11,296,485	\$ 4,931,008	\$ 4,684,084	\$ 4,998,343	\$ -	\$ 313,638,057	\$ -
Other Water Operating Revenues	\$ 2,879,768											
Increase	\$ 133,612,275			\$ 77,757,125	\$ 5,856,306	\$ 7,300,697	\$ 2,185,055	\$ 4,177,716	\$ 3,351,589	\$ 32,983,787	\$ 133,612,275	\$ (0)
Percent Increase	42.6%			35.47%	8.55%	64.63%	44.31%	89.19%	67.05%	0.00%	42.60%	
Rate Year Revenue				\$ 219,196,203	\$ 68,531,934	\$ 11,296,485	\$ 4,931,008	\$ 4,684,084	\$ 4,998,343	\$ -	\$ 313,638,057	
Cost of Service Increase				\$ 77,757,125	\$ 5,856,306	\$ 7,300,697	\$ 2,185,055	\$ 4,177,716	\$ 3,351,589	\$ 32,983,787	\$ 133,612,275	
Allocation of Public Fire				\$ 25,457,573	\$ 6,928,211	\$ 598,004				\$ (32,983,787)	\$ -	
Revenue Target				\$ 322,410,900	\$ 81,316,451	\$ 19,195,185	\$ 7,116,063	\$ 8,861,800	\$ 8,349,932	\$ -	\$ 447,250,332	
Percent Increase				47.1%	18.7%	69.9%	44.3%	89.2%	67.1%	0.0%	42.6%	
Including Increase	\$ 450,130,101											
Workpaper	\$ 450,130,101											
	\$ (0)											
Variable Cost	\$ 25,891,454											

Missouri-American Water Company
Class Cost of Service Study - Account Detail
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Source of Supply	Pumping	Water Treatment	Transmission	Distribution	Storage	Meters	Services	Customers	Hydrants	Total	Variance
Source of Supply Expense															
Operating Expense															
Purchased Water	\$ 449,333	A	Source of Supply	\$ 449,333	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 449,333	\$ -
Fuel and Power	\$ 4,759,803	A	Source of Supply	\$ 4,759,803	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,759,803	\$ -
Salaries and Wages	\$ 4,894	A	Source of Supply	\$ 4,894	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,894	\$ -
Contract Services - Other	\$ 302,230	A	Source of Supply	\$ 302,230	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 302,230	\$ -
Building Maintenance and Services	\$ 439,514	A	Source of Supply	\$ 439,514	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 439,514	\$ -
Miscellaneous	\$ 327	A	Source of Supply	\$ 327	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 327	\$ -
Telecommunications	\$ 6,580	A	Source of Supply	\$ 6,580	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,580	\$ -
Postage	\$ -	A	Source of Supply	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Office supplies and services	\$ 7,237	A	Source of Supply	\$ 7,237	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,237	\$ -
Materials & Supplies	\$ 6,731	A	Source of Supply	\$ 6,731	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,731	\$ -
Rents-Property	\$ 5,770	A	Source of Supply	\$ 5,770	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,770	\$ -
Rents-Equipment	\$ 5,455	A	Source of Supply	\$ 5,455	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,455	\$ -
Transportation	\$ 1,911	A	Source of Supply	\$ 1,911	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,911	\$ -
	\$ 5,989,786			\$ 5,989,786	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,989,786	\$ -
Maintenance Expense															
Salaries and Wages	\$ 205,668	A	Source of Supply	\$ 205,668	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 205,668	\$ -
Materials & Supplies	\$ 76,176	A	Source of Supply	\$ 76,176	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 76,176	\$ -
Transportation	\$ 4,911	A	Source of Supply	\$ 4,911	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,911	\$ -
Miscellaneous	\$ 14,158	A	Source of Supply	\$ 14,158	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,158	\$ -
Contract Services - Eng	\$ -	A	Source of Supply	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contract Services - Other	\$ 103,465	A	Source of Supply	\$ 103,465	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 103,465	\$ -
	\$ 404,378			\$ 404,378	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 404,378	\$ -
Total SS Expense	\$ 6,394,164			\$ 6,394,164	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,394,164	\$ -
Power and Pumping Expenses															
Operating Expense															
Fuel and Power	\$ 3,404,675	B	Pumping	\$ -	\$ 3,404,675	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,404,675	\$ -
Salaries and Wages	\$ 1,520,857	B	Pumping	\$ -	\$ 1,520,857	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,520,857	\$ -
Employee Benefits	\$ 1,602	B	Pumping	\$ -	\$ 1,602	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,602	\$ -
Building Maintenance and Services	\$ 3,770	B	Pumping	\$ -	\$ 3,770	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,770	\$ -
Miscellaneous	\$ 3,523	B	Pumping	\$ -	\$ 3,523	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,523	\$ -
Office supplies and services	\$ 192	B	Pumping	\$ -	\$ 192	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 192	\$ -
Materials & Supplies	\$ 12,263	B	Pumping	\$ -	\$ 12,263	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,263	\$ -
Rents-Equipment	\$ 4,852	B	Pumping	\$ -	\$ 4,852	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,852	\$ -
Transportation	\$ 136,768	B	Pumping	\$ -	\$ 136,768	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 136,768	\$ -
	\$ 5,088,502			\$ -	\$ 5,088,502	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,088,502	\$ -
Maintenance Expense															
Salaries and Wages	\$ 622,608	B	Pumping	\$ -	\$ 622,608	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 622,608	\$ -
Transportation	\$ 7,261	B	Pumping	\$ -	\$ 7,261	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,261	\$ -
Contract Services - Eng	\$ 9,407	B	Pumping	\$ -	\$ 9,407	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,407	\$ -
Contract Services - Other	\$ 551,245	B	Pumping	\$ -	\$ 551,245	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 551,245	\$ -
Miscellaneous	\$ 3,075	B	Pumping	\$ -	\$ 3,075	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,075	\$ -
Materials & Supplies	\$ 129,037	B	Pumping	\$ -	\$ 129,037	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 129,037	\$ -
	\$ 1,322,633			\$ -	\$ 1,322,633	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,322,633	\$ -
Total Pumping Expense	\$ 6,411,135			\$ -	\$ 6,411,135	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,411,135	\$ -
Water Treatment															
Operating Expense															
Fuel and Power	\$ 701,440	C	Water Treatment	\$ -	\$ -	\$ 701,440	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 701,440	\$ -
Chemicals	\$ 16,120,089	C	Water Treatment	\$ -	\$ -	\$ 16,120,089	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,120,089	\$ -
Waste Disposal	\$ 456,115	C	Water Treatment	\$ -	\$ -	\$ 456,115	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 456,115	\$ -
Salaries and Wages	\$ 3,318,043	C	Water Treatment	\$ -	\$ -	\$ 3,318,043	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,318,043	\$ -
Employee Benefits	\$ 30	C	Water Treatment	\$ -	\$ -	\$ 30	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 30	\$ -
Contract Services - Eng	\$ 20,736	C	Water Treatment	\$ -	\$ -	\$ 20,736	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,736	\$ -
Contract Services - Other	\$ 192,850	C	Water Treatment	\$ -	\$ -	\$ 192,850	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 192,850	\$ -
Building Maintenance and Services	\$ 44,122	C	Water Treatment	\$ -	\$ -	\$ 44,122	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 44,122	\$ -
Miscellaneous	\$ 268,777	C	Water Treatment	\$ -	\$ -	\$ 268,777	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 268,777	\$ -
Telecommunications	\$ 6,652	C	Water Treatment	\$ -	\$ -	\$ 6,652	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,652	\$ -
Postage	\$ -	C	Water Treatment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Office supplies and services	\$ 28,340	C	Water Treatment	\$ -	\$ -	\$ 28,340	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28,340	\$ -
Materials & Supplies	\$ 46,653	C	Water Treatment	\$ -	\$ -	\$ 46,653	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 46,653	\$ -
Rents-Property	\$ 127	C	Water Treatment	\$ -	\$ -	\$ 127	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 127	\$ -
Rents-Equipment	\$ (129,610)	C	Water Treatment	\$ -	\$ -	\$ (129,610)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (129,610)	\$ -
Transportation	\$ 4,203	C	Water Treatment	\$ -	\$ -	\$ 4,203	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,203	\$ -
	\$ 21,078,568			\$ -	\$ -	\$ 21,078,568	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 21,078,568	\$ -

Missouri-American Water Company
Class Cost of Service Study - Account Detail
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Source of Supply	Pumping	Water Treatment	Transmission	Distribution	Storage	Meters	Services	Customers	Hydrants	Total	Variance
Maintenance Expense															
Salaries and Wages	\$ 1,370,672	C	Water Treatment	\$ -	\$ -	\$ 1,370,672	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,370,672	\$ -
Transportation	\$ 13,840	C	Water Treatment	\$ -	\$ -	\$ 13,840	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,840	\$ -
Contract Services - Eng	\$ 28,475	C	Water Treatment	\$ -	\$ -	\$ 28,475	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28,475	\$ -
Contract Services - Other	\$ 453,996	C	Water Treatment	\$ -	\$ -	\$ 453,996	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 453,996	\$ -
Miscellaneous	\$ 61,296	C	Water Treatment	\$ -	\$ -	\$ 61,296	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 61,296	\$ -
Materials & Supplies	\$ 798,688	C	Water Treatment	\$ -	\$ -	\$ 798,688	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 798,688	\$ -
	\$ 2,726,967			\$ -	\$ -	\$ 2,726,967	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,726,967	\$ -
Total Water Treatment Expense	\$ 23,805,535			\$ -	\$ -	\$ 23,805,535	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 23,805,535	\$ -
Transmission & Distribution Expense															
Operating Expense															
Fuel and Power	\$ 556,928	1	T/D Oper. Expense	\$ -	\$ -	\$ -	\$ 79,570	\$ 292,160	\$ -	\$ 185,199	\$ -	\$ -	\$ -	\$ 556,928	\$ -
Salaries and Wages	\$ 6,153,428	1	T/D Oper. Expense	\$ -	\$ -	\$ -	\$ 879,153	\$ 3,228,035	\$ -	\$ 2,046,240	\$ -	\$ -	\$ -	\$ 6,153,428	\$ -
Employee Benefits	\$ 6,794	1	T/D Oper. Expense	\$ -	\$ -	\$ -	\$ 971	\$ 3,564	\$ -	\$ 2,259	\$ -	\$ -	\$ -	\$ 6,794	\$ -
Contract Services - Eng	\$ 18,139	1	T/D Oper. Expense	\$ -	\$ -	\$ -	\$ 2,592	\$ 9,516	\$ -	\$ 6,032	\$ -	\$ -	\$ -	\$ 18,139	\$ -
Contract Services - Other	\$ 2,560,216	1	T/D Oper. Expense	\$ -	\$ -	\$ -	\$ 365,784	\$ 1,343,067	\$ -	\$ 851,365	\$ -	\$ -	\$ -	\$ 2,560,216	\$ -
Building Maintenance and Services	\$ 125,077	1	T/D Oper. Expense	\$ -	\$ -	\$ -	\$ 17,870	\$ 65,614	\$ -	\$ 41,593	\$ -	\$ -	\$ -	\$ 125,077	\$ -
Miscellaneous	\$ 110,255	1	T/D Oper. Expense	\$ -	\$ -	\$ -	\$ 15,752	\$ 57,839	\$ -	\$ 36,664	\$ -	\$ -	\$ -	\$ 110,255	\$ -
Telecommunications	\$ 40,924	1	T/D Oper. Expense	\$ -	\$ -	\$ -	\$ 5,847	\$ 21,469	\$ -	\$ 13,609	\$ -	\$ -	\$ -	\$ 40,924	\$ -
Postage	\$ -	1	T/D Oper. Expense	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Office supplies and services	\$ 72,133	1	T/D Oper. Expense	\$ -	\$ -	\$ -	\$ 10,306	\$ 37,841	\$ -	\$ 23,987	\$ -	\$ -	\$ -	\$ 72,133	\$ -
Materials & Supplies	\$ 406,122	1	T/D Oper. Expense	\$ -	\$ -	\$ -	\$ 58,023	\$ 213,048	\$ -	\$ 135,050	\$ -	\$ -	\$ -	\$ 406,122	\$ -
Rents-Property	\$ 4,609	1	T/D Oper. Expense	\$ -	\$ -	\$ -	\$ 658	\$ 2,418	\$ -	\$ 1,533	\$ -	\$ -	\$ -	\$ 4,609	\$ -
Rents-Equipment	\$ 63,597	1	T/D Oper. Expense	\$ -	\$ -	\$ -	\$ 9,086	\$ 33,362	\$ -	\$ 21,148	\$ -	\$ -	\$ -	\$ 63,597	\$ -
Transportation	\$ 1,205,033	1	T/D Oper. Expense	\$ -	\$ -	\$ -	\$ 172,166	\$ 632,150	\$ -	\$ 400,718	\$ -	\$ -	\$ -	\$ 1,205,033	\$ -
	\$ 11,323,255			\$ -	\$ -	\$ -	\$ 1,617,778	\$ 5,940,081	\$ -	\$ 3,765,396	\$ -	\$ -	\$ -	\$ 11,323,255	\$ -
Maintenance Expense															
Salaries and Wages	\$ 1,752,724	2	T/D Maint.. Expense	\$ -	\$ -	\$ -	\$ 125,111	\$ 459,376	\$ 73,682	\$ 156,965	\$ 340,494	\$ -	\$ 597,096	\$ 1,752,724	\$ -
Contract Services - Eng	\$ 77,273	2	T/D Maint.. Expense	\$ -	\$ -	\$ -	\$ 5,516	\$ 20,253	\$ 3,248	\$ 6,920	\$ 15,012	\$ -	\$ 26,324	\$ 77,273	\$ -
Contract Services - Other	\$ 3,638,470	2	T/D Maint.. Expense	\$ -	\$ -	\$ -	\$ 259,717	\$ 953,616	\$ 152,956	\$ 325,843	\$ 706,830	\$ -	\$ 1,239,508	\$ 3,638,470	\$ -
Transportation	\$ 418,594	2	T/D Maint.. Expense	\$ -	\$ -	\$ -	\$ 29,880	\$ 109,710	\$ 17,597	\$ 37,487	\$ 81,318	\$ -	\$ 142,601	\$ 418,594	\$ -
Miscellaneous	\$ 625,128	2	T/D Maint.. Expense	\$ -	\$ -	\$ -	\$ 44,622	\$ 163,842	\$ 26,279	\$ 55,983	\$ 121,441	\$ -	\$ 212,961	\$ 625,128	\$ -
Materials & Supplies	\$ 1,065,502	2	T/D Maint.. Expense	\$ -	\$ -	\$ -	\$ 76,056	\$ 279,260	\$ 44,792	\$ 95,421	\$ 206,990	\$ -	\$ 362,982	\$ 1,065,502	\$ -
	\$ 7,577,692			\$ -	\$ -	\$ -	\$ 540,902	\$ 1,986,057	\$ 318,554	\$ 678,620	\$ 1,472,085	\$ -	\$ 2,581,473	\$ 7,577,692	\$ -
Total T&D Expense	\$ 18,900,946			\$ -	\$ -	\$ -	\$ 2,158,679	\$ 7,926,138	\$ 318,554	\$ 4,444,017	\$ 1,472,085	\$ -	\$ 2,581,473	\$ 18,900,946	\$ -
General Mains Expense															
Operations															
Salaries and Wages	\$ 1,176,244	K	Mains	\$ -	\$ -	\$ -	\$ 251,778	\$ 924,466	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,176,244	\$ -
Miscellaneous	\$ 1,659	K	Mains	\$ -	\$ -	\$ -	\$ 355	\$ 1,304	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,659	\$ -
	\$ 1,177,903			\$ -	\$ -	\$ -	\$ 252,133	\$ 925,770	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,177,903	\$ -
Maintenance Expense															
Salaries and Wages	\$ 286,942	K	Mains	\$ -	\$ -	\$ -	\$ 61,421	\$ 225,521	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 286,942	\$ -
Miscellaneous	\$ 6,755	K	Mains	\$ -	\$ -	\$ -	\$ 1,446	\$ 5,309	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,755	\$ -
	\$ 293,697			\$ -	\$ -	\$ -	\$ 62,867	\$ 230,831	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 293,697	\$ -
General Mains Expense	\$ 1,471,600			\$ -	\$ -	\$ -	\$ 315,000	\$ 1,156,601	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,471,600	\$ -
Storage Expense															
Operating Expense															
Salaries and Wages	\$ -	F	Storage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Miscellaneous	\$ -	F	Storage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ -			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Maintenance Expense															
Salaries and Wages	\$ 37,024	F	Storage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 37,024	\$ -	\$ -	\$ -	\$ -	\$ 37,024	\$ -
Miscellaneous	\$ -	F	Storage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ 37,024			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 37,024	\$ -	\$ -	\$ -	\$ -	\$ 37,024	\$ -
Total Storage Expense	\$ 37,024			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 37,024	\$ -	\$ -	\$ -	\$ -	\$ 37,024	\$ -
Meter Expense															
Operating Expense															
Salaries and Wages	\$ 581,233	G	Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 581,233	\$ -	\$ -	\$ -	\$ 581,233	\$ -
Miscellaneous	\$ 5,609	G	Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,609	\$ -	\$ -	\$ -	\$ 5,609	\$ -
	\$ 586,842			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 586,842	\$ -	\$ -	\$ -	\$ 586,842	\$ -
Maintenance Expense															
Salaries and Wages	\$ 78,552	G	Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 78,552	\$ -	\$ -	\$ -	\$ 78,552	\$ -
Miscellaneous	\$ 321	G	Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 321	\$ -	\$ -	\$ -	\$ 321	\$ -
	\$ 78,873			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 78,873	\$ -	\$ -	\$ -	\$ 78,873	\$ -

Missouri-American Water Company
Class Cost of Service Study - Account Detail
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Source of Supply	Pumping	Water Treatment	Transmission	Distribution	Storage	Meters	Services	Customers	Hydrants	Total	Variance
Total Meter Expense	\$ 665,715			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 665,715	\$ -	\$ -	\$ -	\$ 665,715	\$ -
Service Expense															
Operating Expense															
Salaries and Wages	\$ -	H	Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Miscellaneous	\$ -	H	Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ -			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Maintenance Expense															
Salaries and Wages	\$ 172,272	H	Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 172,272	\$ -	\$ -	\$ 172,272	\$ -
Miscellaneous	\$ (1,179)	H	Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1,179)	\$ -	\$ -	\$ (1,179)	\$ -
	\$ 171,094			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 171,094	\$ -	\$ -	\$ 171,094	\$ -
Total Service Expense	\$ 171,094			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 171,094	\$ -	\$ -	\$ 171,094	\$ -
Hydrant Expense															
Maintenance Expense															
Salaries and Wages	\$ 299,611	J	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 299,611	\$ 299,611	\$ -
Miscellaneous	\$ 422	J	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 422	\$ 422	\$ -
	\$ 300,033			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 300,033	\$ 300,033	\$ -
Hydrant Expense	\$ 300,033			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 300,033	\$ 300,033	\$ -
Customer Accounts															
Fuel and Power	\$ 1,643	I	Customers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,643	\$ -	\$ 1,643	\$ -
Salaries and Wages	\$ 674,071	I	Customers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 674,071	\$ -	\$ 674,071	\$ -
Contract Services - Other	\$ 201,390	I	Customers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 201,390	\$ -	\$ 201,390	\$ -
Building Maintenance and Services	\$ 12,428	I	Customers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,428	\$ -	\$ 12,428	\$ -
Miscellaneous	\$ -	I	Customers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Telecommunications	\$ 3,722	I	Customers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,722	\$ -	\$ 3,722	\$ -
Office supplies and services	\$ 3,014	I	Customers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,014	\$ -	\$ 3,014	\$ -
Materials & Supplies	\$ 90,815	I	Customers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 90,815	\$ -	\$ 90,815	\$ -
Transportation	\$ 259	I	Customers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 259	\$ -	\$ 259	\$ -
Uncollectible Accounts	\$ 4,551,592	I	Customers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,551,592	\$ -	\$ 4,551,592	\$ -
Customer accounting, other	\$ 1,317,366	I	Customers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,317,366	\$ -	\$ 1,317,366	\$ -
	\$ 6,856,299			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,856,299	\$ -	\$ 6,856,299	\$ -
Total Customer Accounting Expense	\$ 6,856,299			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,856,299	\$ -	\$ 6,856,299	\$ -
Administrative & General Expense															
Operating Expense															
Fuel and Power	\$ 20,372	3	Fixed O&M	\$ 617	\$ 1,566	\$ 3,399	\$ 1,288	\$ 4,730	\$ 185	\$ 2,661	\$ 856	\$ 3,570	\$ 1,500	\$ 20,372	\$ -
Salaries and Wages	\$ 11,986,734	4	Labor	\$ 138,262	\$ 1,407,470	\$ 3,078,766	\$ 865,090	\$ 3,176,396	\$ 72,693	\$ 1,879,934	\$ 336,699	\$ 442,617	\$ 588,808	\$ 11,986,734	\$ -
Employee Benefits	\$ 6,477,503	4	Labor	\$ 74,715	\$ 760,582	\$ 1,663,732	\$ 467,485	\$ 1,716,490	\$ 39,283	\$ 1,015,896	\$ 181,949	\$ 239,186	\$ 318,185	\$ 6,477,503	\$ -
Support Services Costs - Employee	\$ 15,296,573	4	Labor	\$ 176,439	\$ 1,796,108	\$ 3,928,890	\$ 1,103,963	\$ 4,053,479	\$ 92,766	\$ 2,399,031	\$ 429,671	\$ 564,835	\$ 751,392	\$ 15,296,573	\$ -
Support Services Costs - Admin	\$ 15,372,550	3	Fixed O&M	\$ 465,642	\$ 1,181,352	\$ 2,565,055	\$ 972,002	\$ 3,568,952	\$ 139,720	\$ 2,007,807	\$ 645,667	\$ 2,694,099	\$ 1,132,253	\$ 15,372,550	\$ -
Contract Services - Eng	\$ 14,478	3	Fixed O&M	\$ 439	\$ 1,113	\$ 2,416	\$ 915	\$ 3,361	\$ 132	\$ 1,891	\$ 608	\$ 2,537	\$ 1,066	\$ 14,478	\$ -
Contract Services - Other	\$ 2,413,327	3	Fixed O&M	\$ 73,101	\$ 185,460	\$ 402,686	\$ 152,594	\$ 560,288	\$ 21,935	\$ 315,204	\$ 101,363	\$ 422,945	\$ 177,752	\$ 2,413,327	\$ -
Building Maintenance and Services	\$ 211,946	3	Fixed O&M	\$ 6,420	\$ 16,288	\$ 35,365	\$ 13,401	\$ 49,206	\$ 1,926	\$ 27,682	\$ 8,902	\$ 37,144	\$ 15,611	\$ 211,946	\$ -
Miscellaneous	\$ 1,469,220	3	Fixed O&M	\$ 44,503	\$ 112,907	\$ 245,153	\$ 92,898	\$ 341,100	\$ 13,354	\$ 191,895	\$ 61,709	\$ 257,487	\$ 108,214	\$ 1,469,220	\$ -
Telecommunications	\$ 1,213,837	3	Fixed O&M	\$ 36,768	\$ 93,281	\$ 202,540	\$ 76,751	\$ 281,809	\$ 11,032	\$ 158,539	\$ 50,983	\$ 212,730	\$ 89,404	\$ 1,213,837	\$ -
Postage	\$ -	3	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Office supplies and services	\$ 461,013	3	Fixed O&M	\$ 13,964	\$ 35,428	\$ 76,924	\$ 29,150	\$ 107,031	\$ 4,190	\$ 60,213	\$ 19,363	\$ 80,794	\$ 33,956	\$ 461,013	\$ -
Materials & Supplies	\$ 144,743	3	Fixed O&M	\$ 4,384	\$ 11,123	\$ 24,152	\$ 9,152	\$ 33,604	\$ 1,316	\$ 18,905	\$ 6,079	\$ 25,367	\$ 10,661	\$ 144,743	\$ -
Communications	\$ 51,398	3	Fixed O&M	\$ 1,557	\$ 3,950	\$ 8,576	\$ 3,250	\$ 11,933	\$ 467	\$ 6,713	\$ 2,159	\$ 9,008	\$ 3,786	\$ 51,398	\$ -
Rents-Property	\$ 258,765	3	Fixed O&M	\$ 7,838	\$ 19,886	\$ 43,177	\$ 16,362	\$ 60,076	\$ 2,352	\$ 33,797	\$ 10,868	\$ 45,350	\$ 19,059	\$ 258,765	\$ -
Rents-Equipment	\$ 26,092	3	Fixed O&M	\$ 790	\$ 2,005	\$ 4,354	\$ 1,650	\$ 6,058	\$ 237	\$ 3,408	\$ 1,096	\$ 4,573	\$ 1,922	\$ 26,092	\$ -
Transportation	\$ 1,152,013	3	Fixed O&M	\$ 34,895	\$ 88,530	\$ 192,224	\$ 72,841	\$ 267,456	\$ 10,471	\$ 150,464	\$ 48,386	\$ 201,895	\$ 84,851	\$ 1,152,013	\$ -
Regulatory Expense	\$ 441,971	3	Fixed O&M	\$ 13,388	\$ 33,965	\$ 73,747	\$ 27,946	\$ 102,610	\$ 4,017	\$ 57,726	\$ 18,563	\$ 77,457	\$ 32,553	\$ 441,971	\$ -
Insurance	\$ 6,298,945	3	Fixed O&M	\$ 190,798	\$ 484,062	\$ 1,051,039	\$ 398,281	\$ 1,462,388	\$ 57,251	\$ 822,705	\$ 264,564	\$ 1,103,915	\$ 463,944	\$ 6,298,945	\$ -
	\$ 63,311,478			\$ 1,284,520	\$ 6,235,074	\$ 13,602,196	\$ 4,305,018	\$ 15,806,965	\$ 473,326	\$ 9,154,471	\$ 2,189,485	\$ 6,425,507	\$ 3,834,916	\$ 63,311,478	\$ -
Maintenance Expense															
Salaries and Wages	\$ 97,407	4	Labor	\$ 1,124	\$ 11,437	\$ 25,019	\$ 7,030	\$ 25,812	\$ 591	\$ 15,277	\$ 2,736	\$ 3,597	\$ 4,785	\$ 97,407	\$ -
Transportation	\$ 13,205	3	Fixed O&M	\$ 400	\$ 1,015	\$ 2,203	\$ 835	\$ 3,066	\$ 120	\$ 1,725	\$ 555	\$ 2,314	\$ 973	\$ 13,205	\$ -
Contract Services - Eng	\$ -	3	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contract Services - Other	\$ 47,266	3	Fixed O&M	\$ 1,432	\$ 3,632	\$ 7,887	\$ 2,989	\$ 10,973	\$ 430	\$ 6,173	\$ 1,985	\$ 8,284	\$ 3,481	\$ 47,266	\$ -
Miscellaneous	\$ 49,010	3	Fixed O&M	\$ 1,485	\$ 3,766	\$ 8,178	\$ 3,099	\$ 11,378	\$ 445	\$ 6,401	\$ 2,058	\$ 8,589	\$ 3,610	\$ 49,010	\$ -
Materials & Supplies	\$ 57,601	3	Fixed O&M	\$ 1,745	\$ 4,427	\$ 9,611	\$ 3,642	\$ 13,373	\$ 524	\$ 7,523	\$ 2,419	\$ 10,095	\$ 4,243	\$ 57,601	\$ -
	\$ 264,490			\$ 6,185	\$ 24,277	\$ 52,898	\$ 17,595	\$ 64,603	\$ 2,109	\$ 37,099	\$ 9,754	\$ 32,879	\$ 17,091	\$ 264,490	\$ -
Total A&G Expense	\$ 63,575,968			\$ 1,290,705	\$ 6,259,351	\$ 13,655,094	\$ 4,322,612	\$ 15,871,568	\$ 475,435	\$ 9,191,571	\$ 2,199,239	\$ 6,458,386	\$ 3,852,007	\$ 63,575,968	\$ -
Total Operations & Maintenance Exp. (STL Water)	\$ 128,589,513			\$ 7,684,869	\$ 12,670,487	\$ 37,460,629	\$ 6,796,291	\$ 24,954,307	\$ 831,013	\$ 14,301,303	\$ 3,842,418	\$ 13,314,684	\$ 6,733,513	\$ 128,589,513	\$ -

Missouri-American Water Company
Class Cost of Service Study - Account Detail
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Source of Supply	Pumping	Water Treatment	Transmission	Distribution	Storage	Meters	Services	Customers	Hydrants	Total	Variance
Taxes Other Than Income Tax															
Property Taxes	\$ 36,744,136	5	Net Plant (less gen. and int.)	\$ 834,423	\$ 1,344,030	\$ 2,809,012	\$ 4,858,483	\$ 17,839,153	\$ 210,103	\$ 3,956,163	\$ 3,286,696	\$ 379,836	\$ 1,226,238	\$ 36,744,136	\$ -
Payroll Taxes	\$ 2,321,901	4	Labor	\$ 26,782	\$ 272,635	\$ 596,375	\$ 167,573	\$ 615,287	\$ 14,081	\$ 364,154	\$ 65,221	\$ 85,738	\$ 114,056	\$ 2,321,901	\$ -
Utility Reg Assessment	\$ 1,727,636	6	Rate Base	\$ 44,302	\$ 71,616	\$ 149,696	\$ 217,787	\$ 799,659	\$ 11,161	\$ 206,306	\$ 147,071	\$ 19,695	\$ 60,343	\$ 1,727,636	\$ -
Other Taxes	\$ (190,174)	6	Rate Base	\$ (4,877)	\$ (7,883)	\$ (16,478)	\$ (23,973)	\$ (88,024)	\$ (1,229)	\$ (22,710)	\$ (16,189)	\$ (2,168)	\$ (6,642)	\$ (190,174)	\$ -
	\$ 40,603,500			\$ 900,630	\$ 1,680,398	\$ 3,538,605	\$ 5,219,869	\$ 19,166,074	\$ 234,116	\$ 4,503,914	\$ 3,482,798	\$ 483,101	\$ 1,393,995	\$ 40,603,500	\$ -
Total Taxes Other Than Income Taxes (STL Water)	\$ 40,603,500			\$ 900,630	\$ 1,680,398	\$ 3,538,605	\$ 5,219,869	\$ 19,166,074	\$ 234,116	\$ 4,503,914	\$ 3,482,798	\$ 483,101	\$ 1,393,995	\$ 40,603,500	\$ -
Plant Depreciation															
Intangible Plant															
Organization	\$ -	5	Net Plant (less gen. and int.)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Franchises	\$ -	5	Net Plant (less gen. and int.)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other P/E-Intangible	\$ -	5	Net Plant (less gen. and int.)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Source of Supply															
Land & Land Rights	\$ -	A	Source of Supply	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Structures & Improvements	\$ 545,433	A	Source of Supply	\$ 545,433	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 545,433	\$ -
Collection & Impound Reservoirs	\$ -	A	Source of Supply	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Lake, River, & Other Intakes	\$ 724,692	A	Source of Supply	\$ 724,692	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 724,692	\$ -
Wells & Springs	\$ 9,027	A	Source of Supply	\$ 9,027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,027	\$ -
Infiltration Galleries & Tunnels	\$ -	A	Source of Supply	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supply Mains	\$ 87,848	A	Source of Supply	\$ 87,848	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 87,848	\$ -
Other P/E-Supply	\$ -	A	Source of Supply	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Water Pumping															
Pumping Land & Land Rights	\$ -	B	Pumping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Pumping Structures & Improvements	\$ 1,114,174	B	Pumping	\$ -	\$ 1,114,174	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,114,174	\$ -
Boiler Plant Equipment	\$ -	B	Pumping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Power Generation Equipment	\$ 440,995	B	Pumping	\$ -	\$ 440,995	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 440,995	\$ -
Steam Pumping Equipment	\$ -	B	Pumping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Electric Pumping Equipment	\$ 1,350,203	B	Pumping	\$ -	\$ 1,350,203	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,350,203	\$ -
Diesel Pumping Equipment	\$ 37,170	B	Pumping	\$ -	\$ 37,170	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 37,170	\$ -
Pump Equip Hydraulic	\$ 4,705	B	Pumping	\$ -	\$ 4,705	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,705	\$ -
Other Pumping Equipment	\$ 297,974	B	Pumping	\$ -	\$ 297,974	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 297,974	\$ -
Water Treatment															
Water Treatment Land & Land Rights	\$ -	C	Water Treatment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Water Treatment Structures & Improvements	\$ 2,334,564	C	Water Treatment	\$ -	\$ -	\$ 2,334,564	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,334,564	\$ -
Water Treatment Equipment	\$ 3,545,224	C	Water Treatment	\$ -	\$ -	\$ 3,545,224	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,545,224	\$ -
Water Treatment - Other	\$ -	C	Water Treatment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
T&D															
Transmission & Distribution Land	\$ -	K	Mains	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transmission & Distribution Structures & Impr	\$ 106,653	K	Mains	\$ -	\$ -	\$ -	\$ 22,829	\$ 83,824	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 106,653	\$ -
TD Mains 4in & Less	\$ 583,156	E	Distribution	\$ -	\$ -	\$ -	\$ -	\$ 583,156	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 583,156	\$ -
TD Mains 6in to 8in	\$ 22,022,763	E	Distribution	\$ -	\$ -	\$ -	\$ -	\$ 22,022,763	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 22,022,763	\$ -
TD Mains 10in to 16in	\$ 3,980,796	D	Transmission	\$ -	\$ -	\$ -	\$ 3,980,796	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,980,796	\$ -
TD Mains 18in & Grtr	\$ 2,175,914	D	Transmission	\$ -	\$ -	\$ -	\$ 2,175,914	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,175,914	\$ -
Other Transmission & Distribution Plant	\$ -	K	Mains	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Storage															
Distribution Reservoirs & Standpipes	\$ 402,936	F	Storage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 402,936	\$ -	\$ -	\$ -	\$ -	\$ 402,936	\$ -
Distribution Reservoirs & Standpipes - Tank Coating	\$ -	F	Storage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Meters															
Meters	\$ 6,006,556	G	Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,006,556	\$ -	\$ -	\$ -	\$ 6,006,556	\$ -
Meter Installation	\$ 983,668	G	Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 983,668	\$ -	\$ -	\$ -	\$ 983,668	\$ -
Meter Vaults	\$ -	G	Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Services															
Services	\$ 7,636,691	H	Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,636,691	\$ -	\$ -	\$ 7,636,691	\$ -
Hydrants															
Hydrants	\$ 1,949,157	J	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,949,157	\$ 1,949,157	\$ -
Fire Mains	\$ -	J	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Missouri-American Water Company
Class Cost of Service Study - Account Detail
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Source of Supply	Pumping	Water Treatment	Transmission	Distribution	Storage	Meters	Services	Customers	Hydrants	Total	Variance
Income Taxes															
Federal Income Tax	\$ 5,342,587	6	Rate Base	\$ 136,999	\$ 221,467	\$ 462,923	\$ 673,490	\$ 2,472,888	\$ 34,515	\$ 637,987	\$ 454,806	\$ 60,905	\$ 186,608	\$ 5,342,587	\$ -
State Income Tax	\$ 927,272	6	Rate Base	\$ 23,778	\$ 38,438	\$ 80,346	\$ 116,892	\$ 429,200	\$ 5,990	\$ 110,730	\$ 78,937	\$ 10,571	\$ 32,388	\$ 927,272	\$ -
Deferred Income Taxes	\$ 23,389,633	6	Rate Base	\$ 599,777	\$ 969,574	\$ 2,026,660	\$ 2,948,511	\$ 10,826,204	\$ 151,104	\$ 2,793,080	\$ 1,991,123	\$ 266,638	\$ 816,961	\$ 23,389,633	\$ -
ITC Restored	\$ (71,288)	6	Rate Base	\$ (1,828)	\$ (2,955)	\$ (6,177)	\$ (8,987)	\$ (32,997)	\$ (461)	\$ (8,513)	\$ (6,069)	\$ (813)	\$ (2,490)	\$ (71,288)	\$ -
Total Income Taxes (STL Water)	\$ 29,588,204			\$ 758,726	\$ 1,226,525	\$ 2,563,752	\$ 3,729,906	\$ 13,695,296	\$ 191,149	\$ 3,533,284	\$ 2,518,798	\$ 337,301	\$ 1,033,467	\$ 29,588,204	\$ -
Total Income Tax Expense	\$ 29,588,204			\$ 758,726	\$ 1,226,525	\$ 2,563,752	\$ 3,729,906	\$ 13,695,296	\$ 191,149	\$ 3,533,284	\$ 2,518,798	\$ 337,301	\$ 1,033,467	\$ 29,588,204	
Required Net Operating Income (STL Water)	\$ 182,789,448	6	Rate Base	\$ 4,687,243	\$ 7,577,200	\$ 15,838,300	\$ 23,042,543	\$ 84,606,540	\$ 1,180,877	\$ 21,827,855	\$ 15,560,583	\$ 2,083,772	\$ 6,384,535	\$ 182,789,448	\$ -
Required Net Operating Income	\$ 182,789,448			\$ 4,687,243	\$ 7,577,200	\$ 15,838,300	\$ 23,042,543	\$ 84,606,540	\$ 1,180,877	\$ 21,827,855	\$ 15,560,583	\$ 2,083,772	\$ 6,384,535	\$ 182,789,448	\$ -
Total Revenue Requirement (STL Water)	\$ 450,130,101			\$ 15,765,746	\$ 27,267,601	\$ 67,198,796	\$ 45,161,739	\$ 165,822,780	\$ 2,946,950	\$ 52,629,455	\$ 37,170,785	\$ 17,972,309	\$ 18,193,940	\$ 450,130,101	\$ -
Other Operating Revenue (STL Water)	\$ (2,879,768)	6	Rate Base	\$ (73,845)	\$ (119,375)	\$ (249,526)	\$ (363,025)	\$ (1,332,939)	\$ (18,604)	\$ (343,888)	\$ (245,150)	\$ (32,829)	\$ (100,586)	\$ (2,879,768)	\$ -
Total Retail Revenue Requirement (STL Water)	\$ 447,250,332			\$ 15,691,901	\$ 27,148,225	\$ 66,949,270	\$ 44,798,714	\$ 164,489,841	\$ 2,928,346	\$ 52,285,566	\$ 36,925,635	\$ 17,939,480	\$ 18,093,354	\$ 447,250,332	\$ -
Total Revenue Requirement (STL Water)	\$ 450,130,101														
check	\$ 0														

Missouri-American Water Company
Class Cost of Service Study - Account Detail
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Source of Supply	Pumping	Water Treatment	Transmission	Distribution	Storage	Meters	Services	Customers	Hydrants	Total	Variance
Plant Account															
Intangible Plant															
Organization	\$ 285,088	5	Net Plant (less gen. and int.)	\$ 6,474	\$ 10,428	\$ 21,794	\$ 37,696	\$ 138,409	\$ 1,630	\$ 30,695	\$ 25,501	\$ 2,947	\$ 9,514	\$ 285,088	\$ -
Franchises	\$ -	5	Net Plant (less gen. and int.)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other P/E-Intangible	\$ 1,410,851	5	Net Plant (less gen. and int.)	\$ 32,039	\$ 51,606	\$ 107,857	\$ 186,549	\$ 684,963	\$ 8,067	\$ 151,903	\$ 126,198	\$ 14,584	\$ 47,083	\$ 1,410,851	\$ -
Source of Supply															
Land & Land Rights	\$ 13,658,085	A	Source of Supply	\$ 13,658,085	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,658,085	\$ -
Structures & Improvements	\$ 25,848,952	A	Source of Supply	\$ 25,848,952	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,848,952	\$ -
Collection & Impound Reservoirs	\$ -	A	Source of Supply	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Lake, River, & Other Intakes	\$ 22,039,171	A	Source of Supply	\$ 22,039,171	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 22,039,171	\$ -
Wells & Springs	\$ 325,571	A	Source of Supply	\$ 325,571	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 325,571	\$ -
Infiltration Galleries & Tunnels	\$ -	A	Source of Supply	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supply Mains	\$ 1,304,079	A	Source of Supply	\$ 1,304,079	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,304,079	\$ -
Other P/E-Supply	\$ -	A	Source of Supply	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Water Pumping															
Pumping Land & Land Rights	\$ 332,675	B	Pumping	\$ -	\$ 332,675	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 332,675	\$ -
Pumping Structures & Improvements	\$ 18,698,879	B	Pumping	\$ -	\$ 18,698,879	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,698,879	\$ -
Boiler Plant Equipment	\$ -	B	Pumping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Power Generation Equipment	\$ 11,367,527	B	Pumping	\$ -	\$ 11,367,527	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,367,527	\$ -
Steam Pumping Equipment	\$ 1,120,451	B	Pumping	\$ -	\$ 1,120,451	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,120,451	\$ -
Electric Pumping Equipment	\$ 47,863,547	B	Pumping	\$ -	\$ 47,863,547	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 47,863,547	\$ -
Diesel Pumping Equipment	\$ 26,758	B	Pumping	\$ -	\$ 26,758	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 26,758	\$ -
Pump Equip Hydraulic	\$ 196,128	B	Pumping	\$ -	\$ 196,128	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 196,128	\$ -
Other Pumping Equipment	\$ 17,155,891	B	Pumping	\$ -	\$ 17,155,891	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17,155,891	\$ -
Water Treatment															
Water Treatment Land & Land Rights	\$ 1,902,246	C	Water Treatment	\$ -	\$ -	\$ 1,902,246	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,902,246	\$ -
Water Treatment Structures & Improvements	\$ 58,738,228	C	Water Treatment	\$ -	\$ -	\$ 58,738,228	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 58,738,228	\$ -
Water Treatment Equipment	\$ 139,800,618	C	Water Treatment	\$ -	\$ -	\$ 139,800,618	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 139,800,618	\$ -
Water Treatment - Other	\$ -	C	Water Treatment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
T&D															
Transmission & Distribution Land	\$ 3,991,405	K	Mains	\$ -	\$ -	\$ -	\$ 854,370	\$ 3,137,035	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,991,405	\$ -
Transmission & Distribution Structures & Impr	\$ 2,880,243	K	Mains	\$ -	\$ -	\$ -	\$ 616,523	\$ 2,263,720	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,880,243	\$ -
TD Mains 4in & Less	\$ 36,611,275	E	Distribution	\$ -	\$ -	\$ -	\$ -	\$ 36,611,275	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 36,611,275	\$ -
TD Mains 6in to 8in	\$ 1,382,615,884	E	Distribution	\$ -	\$ -	\$ -	\$ -	\$ 1,382,615,884	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,382,615,884	\$ -
TD Mains 10in to 16in	\$ 249,919,195	D	Transmission	\$ -	\$ -	\$ -	\$ 249,919,195	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 249,919,195	\$ -
TD Mains 18in & Grtr	\$ 136,606,510	D	Transmission	\$ -	\$ -	\$ -	\$ 136,606,510	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 136,606,510	\$ -
Other Transmission & Distribution Plant	\$ -	K	Mains	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Storage															
Distribution Reservoirs & Standpipes	\$ 15,485,961	F	Storage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,485,961	\$ -	\$ -	\$ -	\$ -	\$ 15,485,961	\$ -
Distribution Reservoirs & Standpipes - Tank Coating	\$ 160,972	F	Storage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 160,972	\$ -	\$ -	\$ -	\$ -	\$ 160,972	\$ -
Meters															
Meters	\$ 273,880,916	G	Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 273,880,916	\$ -	\$ -	\$ -	\$ 273,880,916	\$ -
Meter Installation	\$ 27,964,291	G	Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 27,964,291	\$ -	\$ -	\$ -	\$ 27,964,291	\$ -
Meter Vaults	\$ -	G	Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Services															
Services	\$ 262,611,902	H	Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 262,611,902	\$ -	\$ -	\$ 262,611,902	\$ -
Hydrants															
Hydrants	\$ 87,650,905	J	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 87,650,905	\$ 87,650,905	\$ -
Fire Mains	\$ -	J	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Missouri-American Water Company
Class Cost of Service Study - Account Detail
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Source of Supply	Pumping	Water Treatment	Transmission	Distribution	Storage	Meters	Services	Customers	Hydrants	Total	Variance
Miscellaneous T&D Operating Expense	\$ 1,764,746	1	\$	\$ -	\$ -	\$ -	\$ 252,133	\$ 925,770	\$ -	\$ 586,842	\$ -	\$ -	\$ -	\$ 1,764,746	
				-	-	-	0.14287	0.52459	-	0.33254	-	-	-	1.00000	
Miscellaneous T&D Maintenance Expense	\$ 880,721	2	\$	\$ -	\$ -	\$ -	\$ 62,867	\$ 230,831	\$ 37,024	\$ 78,873	\$ 171,094	\$ -	\$ 300,033	\$ 880,721	
				-	-	-	0.07138	0.26209	0.04204	0.08956	0.19427	-	0.34067	1.00000	
Fixed O&M	\$ 38,543,149	3	\$	\$ 1,185,028	\$ 3,006,461	\$ 6,527,891	\$ 2,473,679	\$ 9,082,739	\$ 355,578	\$ 5,109,732	\$ 1,643,179	\$ 6,856,299	\$ 2,881,506	\$ 39,122,092	
				0.03029	0.07685	0.16686	0.06323	0.23216	0.00909	0.13061	0.04200	0.17525	0.07365	1.00000	
Labor	\$ 30,338,984	4	\$	\$ 210,561	\$ 2,143,465	\$ 4,688,715	\$ 1,317,463	\$ 4,837,398	\$ 110,706	\$ 2,862,990	\$ 512,766	\$ 674,071	\$ 896,707	\$ 18,254,842	
				0.01153	0.11742	0.25685	0.07217	0.26499	0.00606	0.15683	0.02809	0.03693	0.04912	1.00000	
Net Plant	\$ 3,021,239,349	5	\$	\$ 68,570,821	\$ 110,449,081	\$ 230,837,752	\$ 399,258,277	\$ 1,465,978,027	\$ 17,265,740	\$ 325,107,793	\$ 270,092,644	\$ 31,214,014	\$ 100,769,260	\$ 3,019,543,410	
				0.02271	0.03658	0.07645	0.13222	0.48550	0.00572	0.10767	0.08945	0.01034	0.03337	1.00000	
Rate Base	\$ 2,336,824,661	6	\$	\$ 59,922,857	\$ 96,868,764	\$ 202,480,672	\$ 294,581,458	\$ 1,081,630,536	\$ 15,096,620	\$ 279,052,591	\$ 198,930,269	\$ 26,639,448	\$ 81,621,446	\$ 2,336,824,661	
				0.02564	0.04145	0.08665	0.12606	0.46286	0.00646	0.11942	0.08513	0.01140	0.03493	1.00000	
Variable Cost	\$ 25,891,454		\$	\$ 5,209,136	\$ 3,404,675	\$ 17,277,643	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,891,454	

Missouri-American Water Company
Class Cost of Service Study - Account Detail using One-Step Allocation
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Residential	Non-Residential	Rate J	Rate B	Rate P	Rate F		Total	Variance
									Private Fire	Public Fire		
Source of Supply Expense												
Operating Expense												
Purchased Water	\$ 449,333	1	Total Usage	\$ 254,899	\$ 87,671	\$ 55,288	\$ 20,219	\$ 30,673	\$ 582	\$ -	\$ 449,333	\$ -
Fuel and Power	\$ 4,759,803	1	Total Usage	\$ 2,700,155	\$ 928,705	\$ 585,671	\$ 214,183	\$ 324,921	\$ 6,168	\$ -	\$ 4,759,803	\$ -
Salaries and Wages	\$ 4,894	2	Base/Extra Daily	\$ 2,882	\$ 1,036	\$ 503	\$ 195	\$ 274	\$ 4	\$ -	\$ 4,894	\$ -
Contract Services - Other	\$ 302,230	2	Base/Extra Daily	\$ 177,981	\$ 63,951	\$ 31,055	\$ 12,057	\$ 16,932	\$ 254	\$ -	\$ 302,230	\$ -
Building Maintenance and Services	\$ 439,514	2	Base/Extra Daily	\$ 258,826	\$ 93,000	\$ 45,161	\$ 17,534	\$ 24,624	\$ 370	\$ -	\$ 439,514	\$ -
Miscellaneous	\$ 327	2	Base/Extra Daily	\$ 192	\$ 69	\$ 34	\$ 13	\$ 18	\$ 0	\$ -	\$ 327	\$ -
Telecommunications	\$ 6,580	2	Base/Extra Daily	\$ 3,875	\$ 1,392	\$ 676	\$ 263	\$ 369	\$ 6	\$ -	\$ 6,580	\$ -
Postage	\$ -	2	Base/Extra Daily	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Office supplies and services	\$ 7,237	2	Base/Extra Daily	\$ 4,262	\$ 1,531	\$ 744	\$ 289	\$ 405	\$ 6	\$ -	\$ 7,237	\$ -
Materials & Supplies	\$ 6,731	2	Base/Extra Daily	\$ 3,964	\$ 1,424	\$ 692	\$ 269	\$ 377	\$ 6	\$ -	\$ 6,731	\$ -
Rents-Property	\$ 5,770	2	Base/Extra Daily	\$ 3,398	\$ 1,221	\$ 593	\$ 230	\$ 323	\$ 5	\$ -	\$ 5,770	\$ -
Rents-Equipment	\$ 5,455	2	Base/Extra Daily	\$ 3,213	\$ 1,154	\$ 561	\$ 218	\$ 306	\$ 5	\$ -	\$ 5,455	\$ -
Transportation	\$ 1,911	2	Base/Extra Daily	\$ 1,126	\$ 404	\$ 196	\$ 76	\$ 107	\$ 2	\$ -	\$ 1,911	\$ -
	\$ 5,989,786			\$ 3,414,772	\$ 1,181,559	\$ 721,172	\$ 265,546	\$ 399,330	\$ 7,407	\$ -	\$ 5,989,786	\$ -
Maintenance Expense												
Salaries and Wages	\$ 205,668	2	Base/Extra Daily	\$ 121,116	\$ 43,519	\$ 21,133	\$ 8,205	\$ 11,522	\$ 173	\$ -	\$ 205,668	\$ -
Materials & Supplies	\$ 76,176	2	Base/Extra Daily	\$ 44,860	\$ 16,119	\$ 7,827	\$ 3,039	\$ 4,268	\$ 64	\$ -	\$ 76,176	\$ -
Transportation	\$ 4,911	2	Base/Extra Daily	\$ 2,892	\$ 1,039	\$ 505	\$ 196	\$ 275	\$ 4	\$ -	\$ 4,911	\$ -
Miscellaneous	\$ 14,158	2	Base/Extra Daily	\$ 8,338	\$ 2,996	\$ 1,455	\$ 565	\$ 793	\$ 12	\$ -	\$ 14,158	\$ -
Contract Services - Eng	\$ -	2	Base/Extra Daily	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contract Services - Other	\$ 103,465	2	Base/Extra Daily	\$ 60,929	\$ 21,893	\$ 10,631	\$ 4,128	\$ 5,797	\$ 87	\$ -	\$ 103,465	\$ -
	\$ 404,378			\$ 238,135	\$ 85,565	\$ 41,550	\$ 16,132	\$ 22,655	\$ 340	\$ -	\$ 404,378	\$ -
Total SS Expense	\$ 6,394,164			\$ 3,652,907	\$ 1,267,125	\$ 762,722	\$ 281,678	\$ 421,985	\$ 7,747	\$ -	\$ 6,394,164	\$ -
Power and Pumping Expenses												
Operating Expense												
Fuel and Power	\$ 3,404,675	1	Total Usage	\$ 1,931,414	\$ 664,300	\$ 418,929	\$ 153,204	\$ 232,415	\$ 4,412	\$ -	\$ 3,404,675	\$ -
Salaries and Wages	\$ 1,520,857	3	Base/Extra Daily w/ Fire	\$ 859,646	\$ 309,457	\$ 148,411	\$ 57,805	\$ 80,843	\$ 14,752	\$ 49,945	\$ 1,520,857	\$ -
Employee Benefits	\$ 1,602	3	Base/Extra Daily w/ Fire	\$ 905	\$ 326	\$ 156	\$ 61	\$ 85	\$ 16	\$ 53	\$ 1,602	\$ -
Building Maintenance and Services	\$ 3,770	3	Base/Extra Daily w/ Fire	\$ 2,131	\$ 767	\$ 368	\$ 143	\$ 200	\$ 37	\$ 124	\$ 3,770	\$ -
Miscellaneous	\$ 3,523	3	Base/Extra Daily w/ Fire	\$ 1,991	\$ 717	\$ 344	\$ 134	\$ 187	\$ 34	\$ 116	\$ 3,523	\$ -
Office supplies and services	\$ 192	3	Base/Extra Daily w/ Fire	\$ 108	\$ 39	\$ 19	\$ 7	\$ 10	\$ 2	\$ 6	\$ 192	\$ -
Materials & Supplies	\$ 12,263	3	Base/Extra Daily w/ Fire	\$ 6,932	\$ 2,495	\$ 1,197	\$ 466	\$ 652	\$ 119	\$ 403	\$ 12,263	\$ -
Rents-Equipment	\$ 4,852	3	Base/Extra Daily w/ Fire	\$ 2,743	\$ 987	\$ 473	\$ 184	\$ 258	\$ 47	\$ 159	\$ 4,852	\$ -
Transportation	\$ 136,768	3	Base/Extra Daily w/ Fire	\$ 77,307	\$ 27,829	\$ 13,346	\$ 5,198	\$ 7,270	\$ 1,327	\$ 4,491	\$ 136,768	\$ -
	\$ 5,088,502			\$ 2,883,177	\$ 1,006,917	\$ 583,243	\$ 217,203	\$ 321,921	\$ 20,744	\$ 55,297	\$ 5,088,502	\$ -
Maintenance Expense												
Salaries and Wages	\$ 622,608	3	Base/Extra Daily w/ Fire	\$ 351,921	\$ 126,685	\$ 60,756	\$ 23,664	\$ 33,095	\$ 6,039	\$ 20,446	\$ 622,608	\$ -
Transportation	\$ 7,261	3	Base/Extra Daily w/ Fire	\$ 4,104	\$ 1,477	\$ 709	\$ 276	\$ 386	\$ 70	\$ 238	\$ 7,261	\$ -
Contract Services - Eng	\$ 9,407	3	Base/Extra Daily w/ Fire	\$ 5,317	\$ 1,914	\$ 918	\$ 358	\$ 500	\$ 91	\$ 309	\$ 9,407	\$ -
Contract Services - Other	\$ 551,245	3	Base/Extra Daily w/ Fire	\$ 311,585	\$ 112,165	\$ 53,793	\$ 20,952	\$ 29,302	\$ 5,347	\$ 18,103	\$ 551,245	\$ -
Miscellaneous	\$ 3,075	3	Base/Extra Daily w/ Fire	\$ 1,738	\$ 626	\$ 300	\$ 117	\$ 163	\$ 30	\$ 101	\$ 3,075	\$ -
Materials & Supplies	\$ 129,037	3	Base/Extra Daily w/ Fire	\$ 72,937	\$ 26,256	\$ 12,592	\$ 4,904	\$ 6,859	\$ 1,252	\$ 4,238	\$ 129,037	\$ -
	\$ 1,322,633			\$ 747,602	\$ 269,123	\$ 129,067	\$ 50,271	\$ 70,306	\$ 12,829	\$ 43,435	\$ 1,322,633	\$ -
Total Pumping Expense	\$ 6,411,135			\$ 3,630,779	\$ 1,276,040	\$ 712,310	\$ 267,474	\$ 392,227	\$ 33,573	\$ 98,731	\$ 6,411,135	\$ -
Water Treatment												
Operating Expense												
Fuel and Power	\$ 701,440	1	Total Usage	\$ 397,915	\$ 136,861	\$ 86,309	\$ 31,564	\$ 47,883	\$ 909	\$ -	\$ 701,440	\$ -
Chemicals	\$ 16,120,089	1	Total Usage	\$ 9,144,651	\$ 3,145,257	\$ 1,983,500	\$ 725,376	\$ 1,100,415	\$ 20,890	\$ -	\$ 16,120,089	\$ -
Waste Disposal	\$ 456,115	1	Total Usage	\$ 258,746	\$ 88,994	\$ 56,123	\$ 20,524	\$ 31,136	\$ 591	\$ -	\$ 456,115	\$ -
Salaries and Wages	\$ 3,318,043	2	Base/Extra Daily	\$ 1,953,967	\$ 702,089	\$ 340,933	\$ 132,371	\$ 185,891	\$ 2,791	\$ -	\$ 3,318,043	\$ -
Employee Benefits	\$ 30	2	Base/Extra Daily	\$ 18	\$ 6	\$ 3	\$ 1	\$ 2	\$ 0	\$ -	\$ 30	\$ -
Contract Services - Eng	\$ 20,736	2	Base/Extra Daily	\$ 12,212	\$ 4,388	\$ 2,131	\$ 827	\$ 1,162	\$ 17	\$ -	\$ 20,736	\$ -
Contract Services - Other	\$ 192,850	2	Base/Extra Daily	\$ 113,568	\$ 40,807	\$ 19,816	\$ 7,694	\$ 10,804	\$ 162	\$ -	\$ 192,850	\$ -
Building Maintenance and Services	\$ 44,122	2	Base/Extra Daily	\$ 25,983	\$ 9,336	\$ 4,534	\$ 1,760	\$ 2,472	\$ 37	\$ -	\$ 44,122	\$ -
Miscellaneous	\$ 268,777	2	Base/Extra Daily	\$ 158,280	\$ 56,872	\$ 27,617	\$ 10,723	\$ 15,058	\$ 226	\$ -	\$ 268,777	\$ -
Telecommunications	\$ 6,652	2	Base/Extra Daily	\$ 3,917	\$ 1,408	\$ 684	\$ 265	\$ 373	\$ 6	\$ -	\$ 6,652	\$ -
Postage	\$ -	2	Base/Extra Daily	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Office supplies and services	\$ 28,340	2	Base/Extra Daily	\$ 16,689	\$ 5,997	\$ 2,912	\$ 1,131	\$ 1,588	\$ 24	\$ -	\$ 28,340	\$ -
Materials & Supplies	\$ 46,653	2	Base/Extra Daily	\$ 27,473	\$ 9,872	\$ 4,794	\$ 1,861	\$ 2,614	\$ 39	\$ -	\$ 46,653	\$ -
Rents-Property	\$ 127	2	Base/Extra Daily	\$ 75	\$ 27	\$ 13	\$ 5	\$ 7	\$ 0	\$ -	\$ 127	\$ -
Rents-Equipment	\$ (129,610)	2	Base/Extra Daily	\$ (76,326)	\$ (27,425)	\$ (13,318)	\$ (5,171)	\$ (7,261)	\$ (109)	\$ -	\$ (129,610)	\$ -
Transportation	\$ 4,203	2	Base/Extra Daily	\$ 2,475	\$ 889	\$ 432	\$ 168	\$ 235	\$ 4	\$ -	\$ 4,203	\$ -
	\$ 21,078,568			\$ 12,039,644	\$ 4,175,378	\$ 2,516,481	\$ 929,099	\$ 1,392,378	\$ 25,587	\$ -	\$ 21,078,568	\$ -

Missouri-American Water Company
Class Cost of Service Study - Account Detail using One-Step Allocation
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Residential	Non-Residential	Rate J	Rate B	Rate P	Rate F		Total	Variance
									Private Fire	Public Fire		
Maintenance Expense												
Salaries and Wages	\$ 1,370,672	2	Base/Extra Daily	\$ 807,178	\$ 290,031	\$ 140,838	\$ 54,682	\$ 76,791	\$ 1,153	\$ -	\$ 1,370,672	\$ -
Transportation	\$ 13,840	2	Base/Extra Daily	\$ 8,150	\$ 2,928	\$ 1,422	\$ 552	\$ 775	\$ 12	\$ -	\$ 13,840	\$ -
Contract Services - Eng	\$ 28,475	2	Base/Extra Daily	\$ 16,769	\$ 6,025	\$ 2,926	\$ 1,136	\$ 1,595	\$ 24	\$ -	\$ 28,475	\$ -
Contract Services - Other	\$ 453,996	2	Base/Extra Daily	\$ 267,354	\$ 96,064	\$ 46,649	\$ 18,112	\$ 25,435	\$ 382	\$ -	\$ 453,996	\$ -
Miscellaneous	\$ 61,296	2	Base/Extra Daily	\$ 36,097	\$ 12,970	\$ 6,298	\$ 2,445	\$ 3,434	\$ 52	\$ -	\$ 61,296	\$ -
Materials & Supplies	\$ 798,688	2	Base/Extra Daily	\$ 470,341	\$ 169,000	\$ 82,066	\$ 31,863	\$ 44,746	\$ 672	\$ -	\$ 798,688	\$ -
	\$ 2,726,967			\$ 1,605,888	\$ 577,019	\$ 280,199	\$ 108,791	\$ 152,777	\$ 2,294	\$ -	\$ 2,726,967	\$ -
Total Water Treatment Expense	\$ 23,805,535			\$ 13,645,532	\$ 4,752,396	\$ 2,796,680	\$ 1,037,890	\$ 1,545,155	\$ 27,881	\$ -	\$ 23,805,535	\$ -
Transmission & Distribution Expense												
Operating Expense												
Fuel and Power	\$ 556,928	11	T/D Oper. Expense	\$ 401,128	\$ 101,744	\$ 13,435	\$ 4,600	\$ 4,230	\$ 7,154	\$ 24,637	\$ 556,928	\$ -
Salaries and Wages	\$ 6,153,428	11	T/D Oper. Expense	\$ 4,432,013	\$ 1,124,161	\$ 148,439	\$ 50,825	\$ 46,732	\$ 79,048	\$ 272,209	\$ 6,153,428	\$ -
Employee Benefits	\$ 6,794	11	T/D Oper. Expense	\$ 4,893	\$ 1,241	\$ 164	\$ 56	\$ 52	\$ 87	\$ 301	\$ 6,794	\$ -
Contract Services - Eng	\$ 18,139	11	T/D Oper. Expense	\$ 13,065	\$ 3,314	\$ 438	\$ 150	\$ 138	\$ 233	\$ 802	\$ 18,139	\$ -
Contract Services - Other	\$ 2,560,216	11	T/D Oper. Expense	\$ 1,843,998	\$ 467,722	\$ 61,760	\$ 21,146	\$ 19,444	\$ 32,889	\$ 113,256	\$ 2,560,216	\$ -
Building Maintenance and Services	\$ 125,077	11	T/D Oper. Expense	\$ 90,087	\$ 22,850	\$ 3,017	\$ 1,033	\$ 950	\$ 1,607	\$ 5,533	\$ 125,077	\$ -
Miscellaneous	\$ 110,255	11	T/D Oper. Expense	\$ 79,411	\$ 20,142	\$ 2,660	\$ 911	\$ 837	\$ 1,416	\$ 4,877	\$ 110,255	\$ -
Telecommunications	\$ 40,924	11	T/D Oper. Expense	\$ 29,476	\$ 7,476	\$ 987	\$ 338	\$ 311	\$ 526	\$ 1,810	\$ 40,924	\$ -
Postage	\$ -	11	T/D Oper. Expense	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Office supplies and services	\$ 72,133	11	T/D Oper. Expense	\$ 51,954	\$ 13,178	\$ 1,740	\$ 596	\$ 548	\$ 927	\$ 3,191	\$ 72,133	\$ -
Materials & Supplies	\$ 406,122	11	T/D Oper. Expense	\$ 292,510	\$ 74,194	\$ 9,797	\$ 3,354	\$ 3,084	\$ 5,217	\$ 17,966	\$ 406,122	\$ -
Rents-Property	\$ 4,609	11	T/D Oper. Expense	\$ 3,319	\$ 842	\$ 111	\$ 38	\$ 35	\$ 59	\$ 204	\$ 4,609	\$ -
Rents-Equipment	\$ 63,597	11	T/D Oper. Expense	\$ 45,805	\$ 11,618	\$ 1,534	\$ 525	\$ 483	\$ 817	\$ 2,813	\$ 63,597	\$ -
Transportation	\$ 1,205,033	11	T/D Oper. Expense	\$ 867,927	\$ 220,146	\$ 29,069	\$ 9,953	\$ 9,152	\$ 15,480	\$ 53,307	\$ 1,205,033	\$ -
	\$ 11,323,255			\$ 8,155,587	\$ 2,068,629	\$ 273,151	\$ 93,526	\$ 85,995	\$ 145,461	\$ 500,906	\$ 11,323,255	\$ -
Maintenance Expense												
Salaries and Wages	\$ 1,752,724	12	T/D Maint.. Expense	\$ 844,260	\$ 179,179	\$ 23,909	\$ 8,709	\$ 8,681	\$ 46,282	\$ 641,704	\$ 1,752,724	\$ -
Contract Services - Eng	\$ 77,273	12	T/D Maint.. Expense	\$ 37,221	\$ 7,900	\$ 1,054	\$ 384	\$ 383	\$ 2,040	\$ 28,291	\$ 77,273	\$ -
Contract Services - Other	\$ 3,638,470	12	T/D Maint.. Expense	\$ 1,752,594	\$ 371,957	\$ 49,634	\$ 18,078	\$ 18,021	\$ 96,076	\$ 1,332,110	\$ 3,638,470	\$ -
Transportation	\$ 418,594	12	T/D Maint.. Expense	\$ 201,630	\$ 42,792	\$ 5,710	\$ 2,080	\$ 2,073	\$ 11,053	\$ 153,255	\$ 418,594	\$ -
Miscellaneous	\$ 625,128	12	T/D Maint.. Expense	\$ 301,115	\$ 63,906	\$ 8,528	\$ 3,106	\$ 3,096	\$ 16,507	\$ 228,871	\$ 625,128	\$ -
Materials & Supplies	\$ 1,065,502	12	T/D Maint.. Expense	\$ 513,236	\$ 108,925	\$ 14,535	\$ 5,294	\$ 5,277	\$ 28,135	\$ 390,100	\$ 1,065,502	\$ -
	\$ 7,577,692			\$ 3,650,056	\$ 774,659	\$ 103,370	\$ 37,650	\$ 37,531	\$ 200,094	\$ 2,774,331	\$ 7,577,692	\$ -
Total T&D Expense	\$ 18,900,946			\$ 11,805,643	\$ 2,843,288	\$ 376,520	\$ 131,176	\$ 123,526	\$ 345,555	\$ 3,275,238	\$ 18,900,946	\$ -
General Mains Expense												
Operations												
Salaries and Wages	\$ 1,176,244	17	Mains	\$ 816,971	\$ 198,853	\$ 31,886	\$ 14,556	\$ 13,384	\$ 22,638	\$ 77,957	\$ 1,176,244	\$ -
Miscellaneous	\$ 1,659	17	Mains	\$ 1,152	\$ 280	\$ 45	\$ 21	\$ 19	\$ 32	\$ 110	\$ 1,659	\$ -
	\$ 1,177,903			\$ 818,123	\$ 199,133	\$ 31,931	\$ 14,576	\$ 13,402	\$ 22,670	\$ 78,067	\$ 1,177,903	\$ -
Maintenance Expense												
Salaries and Wages	\$ 286,942	17	Mains	\$ 199,298	\$ 48,510	\$ 7,779	\$ 3,551	\$ 3,265	\$ 5,523	\$ 19,017	\$ 286,942	\$ -
Miscellaneous	\$ 6,755	17	Mains	\$ 4,692	\$ 1,142	\$ 183	\$ 84	\$ 77	\$ 130	\$ 448	\$ 6,755	\$ -
	\$ 293,697			\$ 203,990	\$ 49,652	\$ 7,962	\$ 3,634	\$ 3,342	\$ 5,653	\$ 19,465	\$ 293,697	\$ -
General Mains Expense	\$ 1,471,600			\$ 1,022,113	\$ 248,785	\$ 39,893	\$ 18,211	\$ 16,744	\$ 28,323	\$ 97,532	\$ 1,471,600	\$ -
Storage Expense												
Operating Expense												
Salaries and Wages	\$ -	5	Storage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Miscellaneous	\$ -	5	Storage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ -			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Maintenance Expense												
Salaries and Wages	\$ 37,024	5	Storage	\$ 24,008	\$ 4,933	\$ 2,064	\$ 742	\$ 1,020	\$ 960	\$ 3,297	\$ 37,024	\$ -
Miscellaneous	\$ -	5	Storage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ 37,024			\$ 24,008	\$ 4,933	\$ 2,064	\$ 742	\$ 1,020	\$ 960	\$ 3,297	\$ 37,024	\$ -
Total Storage Expense	\$ 37,024			\$ 24,008	\$ 4,933	\$ 2,064	\$ 742	\$ 1,020	\$ 960	\$ 3,297	\$ 37,024	\$ -
Meter Expense												
Operating Expense												
Salaries and Wages	\$ 581,233	8	Meters	\$ 448,608	\$ 122,087	\$ 10,538	\$ -	\$ -	\$ -	\$ -	\$ 581,233	\$ -
Miscellaneous	\$ 5,609	8	Meters	\$ 4,329	\$ 1,178	\$ 102	\$ -	\$ -	\$ -	\$ -	\$ 5,609	\$ -
	\$ 586,842			\$ 452,937	\$ 123,266	\$ 10,640	\$ -	\$ -	\$ -	\$ -	\$ 586,842	\$ -

Missouri-American Water Company
Class Cost of Service Study - Account Detail using One-Step Allocation
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Residential	Non-Residential	Rate J	Rate B	Rate P	Rate F		Public Fire	Total	Variance
									Private Fire				
Maintenance Expense													
Salaries and Wages	\$ 78,552	8	Meters	\$ 60,628	\$ 16,500	\$ 1,424	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 78,552	\$ -
Miscellaneous	\$ 321	8	Meters	\$ 248	\$ 67	\$ 6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 321	\$ -
	\$ 78,873			\$ 60,876	\$ 16,567	\$ 1,430	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 78,873	\$ -

Missouri-American Water Company
Class Cost of Service Study - Account Detail using One-Step Allocation
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Residential	Non-Residential	Rate J	Rate B	Rate P	Rate F		Total	Variance
									Private Fire	Public Fire		
Total Meter Expense	\$ 665,715			\$ 513,813	\$ 139,833	\$ 12,070	\$ -	\$ -	\$ -	\$ -	\$ 665,715	\$ -
Service Expense												
Operating Expense												
Salaries and Wages	\$ -	9	Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Miscellaneous	\$ -	9	Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ -			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Maintenance Expense												
Salaries and Wages	\$ 172,272	9	Services	\$ 136,288	\$ 19,014	\$ 562	\$ -	\$ -	\$ 16,409	\$ -	\$ 172,272	\$ -
Miscellaneous	\$ (1,179)	9	Services	\$ (932)	\$ (130)	\$ (4)	\$ -	\$ -	\$ (112)	\$ -	\$ (1,179)	\$ -
	\$ 171,094			\$ 135,356	\$ 18,883	\$ 558	\$ -	\$ -	\$ 16,296	\$ -	\$ 171,094	\$ -
Total Service Expense	\$ 171,094			\$ 135,356	\$ 18,883	\$ 558	\$ -	\$ -	\$ 16,296	\$ -	\$ 171,094	\$ -
Hydrant Expense												
Maintenance Expense												
Salaries and Wages	\$ 299,611	7	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 347	\$ 299,264	\$ 299,611	\$ -
Miscellaneous	\$ 422	7	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0	\$ 421	\$ 422	\$ -
	\$ 300,033			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 347	\$ 299,686	\$ 300,033	\$ -
Hydrant Expense	\$ 300,033			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 347	\$ 299,686	\$ 300,033	\$ -
Customer Accounts												
Fuel and Power	\$ 1,643	10	Customers	\$ 1,519	\$ 87	\$ 1	\$ 0	\$ 0	\$ 36	\$ -	\$ 1,643	\$ -
Salaries and Wages	\$ 674,071	10	Customers	\$ 623,388	\$ 35,577	\$ 309	\$ 8	\$ 4	\$ 14,785	\$ -	\$ 674,071	\$ -
Contract Services - Other	\$ 201,390	10	Customers	\$ 186,248	\$ 10,629	\$ 92	\$ 2	\$ 1	\$ 4,417	\$ -	\$ 201,390	\$ -
Building Maintenance and Services	\$ 12,428	10	Customers	\$ 11,494	\$ 656	\$ 6	\$ 0	\$ 0	\$ 273	\$ -	\$ 12,428	\$ -
Miscellaneous	\$ -	10	Customers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Telecommunications	\$ 3,722	10	Customers	\$ 3,442	\$ 196	\$ 2	\$ 0	\$ 0	\$ 82	\$ -	\$ 3,722	\$ -
Office supplies and services	\$ 3,014	10	Customers	\$ 2,787	\$ 159	\$ 1	\$ 0	\$ 0	\$ 66	\$ -	\$ 3,014	\$ -
Materials & Supplies	\$ 90,815	10	Customers	\$ 83,986	\$ 4,793	\$ 42	\$ 1	\$ 1	\$ 1,992	\$ -	\$ 90,815	\$ -
Transportation	\$ 259	10	Customers	\$ 240	\$ 14	\$ 0	\$ 0	\$ 0	\$ 6	\$ -	\$ 259	\$ -
Uncollectible Accounts	\$ 4,551,592	10	Customers	\$ 4,209,366	\$ 240,231	\$ 2,084	\$ 52	\$ 26	\$ 99,834	\$ -	\$ 4,551,592	\$ -
Customer accounting, other	\$ 1,317,366	10	Customers	\$ 1,218,316	\$ 69,530	\$ 603	\$ 15	\$ 8	\$ 28,895	\$ -	\$ 1,317,366	\$ -
	\$ 6,856,299			\$ 6,340,786	\$ 361,872	\$ 3,138	\$ 78	\$ 39	\$ 150,385	\$ -	\$ 6,856,299	\$ -
Total Customer Accounting Expense	\$ 6,856,299			\$ 6,340,786	\$ 361,872	\$ 3,138	\$ 78	\$ 39	\$ 150,385	\$ -	\$ 6,856,299	\$ -
Administrative & General Expense												
Operating Expense												
Fuel and Power	\$ 20,372	13	Fixed O&M	\$ 13,582	\$ 3,052	\$ 792	\$ 298	\$ 382	\$ 301	\$ 1,965	\$ 20,372	\$ -
Salaries and Wages	\$ 11,986,734	14	Labor	\$ 7,670,902	\$ 2,115,428	\$ 616,896	\$ 233,309	\$ 303,038	\$ 138,486	\$ 908,675	\$ 11,986,734	\$ -
Employee Benefits	\$ 6,477,503	14	Labor	\$ 4,145,273	\$ 1,143,154	\$ 333,364	\$ 126,078	\$ 163,759	\$ 74,836	\$ 491,038	\$ 6,477,503	\$ -
Support Services Costs - Employee	\$ 15,296,573	14	Labor	\$ 9,789,030	\$ 2,699,550	\$ 787,237	\$ 297,732	\$ 386,715	\$ 176,725	\$ 1,159,583	\$ 15,296,573	\$ -
Support Services Costs - Admin	\$ 15,372,550	13	Fixed O&M	\$ 10,249,060	\$ 2,303,153	\$ 597,319	\$ 224,830	\$ 288,123	\$ 226,927	\$ 1,483,138	\$ 15,372,550	\$ -
Contract Services - Eng	\$ 14,478	13	Fixed O&M	\$ 9,653	\$ 2,169	\$ 563	\$ 212	\$ 271	\$ 214	\$ 1,397	\$ 14,478	\$ -
Contract Services - Other	\$ 2,413,327	13	Fixed O&M	\$ 1,608,994	\$ 361,571	\$ 93,773	\$ 35,296	\$ 45,232	\$ 35,625	\$ 232,837	\$ 2,413,327	\$ -
Building Maintenance and Services	\$ 211,946	13	Fixed O&M	\$ 141,307	\$ 31,754	\$ 8,235	\$ 3,100	\$ 3,972	\$ 3,129	\$ 20,448	\$ 211,946	\$ -
Miscellaneous	\$ 1,469,220	13	Fixed O&M	\$ 979,546	\$ 220,122	\$ 57,088	\$ 21,488	\$ 27,537	\$ 21,688	\$ 141,750	\$ 1,469,220	\$ -
Telecommunications	\$ 1,213,837	13	Fixed O&M	\$ 809,279	\$ 181,860	\$ 47,165	\$ 17,753	\$ 22,751	\$ 17,918	\$ 117,111	\$ 1,213,837	\$ -
Postage	\$ -	13	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Office supplies and services	\$ 461,013	13	Fixed O&M	\$ 307,363	\$ 69,070	\$ 17,913	\$ 6,743	\$ 8,641	\$ 6,805	\$ 44,478	\$ 461,013	\$ -
Materials & Supplies	\$ 144,743	13	Fixed O&M	\$ 96,502	\$ 21,686	\$ 5,624	\$ 2,117	\$ 2,713	\$ 2,137	\$ 13,965	\$ 144,743	\$ -
Communications	\$ 51,398	13	Fixed O&M	\$ 34,267	\$ 7,701	\$ 1,997	\$ 752	\$ 963	\$ 759	\$ 4,959	\$ 51,398	\$ -
Rents-Property	\$ 258,765	13	Fixed O&M	\$ 172,521	\$ 38,769	\$ 10,055	\$ 3,785	\$ 4,850	\$ 3,820	\$ 24,966	\$ 258,765	\$ -
Rents-Equipment	\$ 26,092	13	Fixed O&M	\$ 17,396	\$ 3,909	\$ 1,014	\$ 382	\$ 489	\$ 385	\$ 2,517	\$ 26,092	\$ -
Transportation	\$ 1,152,013	13	Fixed O&M	\$ 768,061	\$ 172,597	\$ 44,763	\$ 16,849	\$ 21,592	\$ 17,006	\$ 111,146	\$ 1,152,013	\$ -
Regulatory Expense	\$ 441,971	13	Fixed O&M	\$ 294,667	\$ 66,217	\$ 17,173	\$ 6,464	\$ 8,284	\$ 6,524	\$ 42,641	\$ 441,971	\$ -
Insurance	\$ 6,298,945	13	Fixed O&M	\$ 4,199,581	\$ 943,723	\$ 244,753	\$ 92,125	\$ 118,059	\$ 92,984	\$ 607,720	\$ 6,298,945	\$ -
	\$ 63,311,478			\$ 41,306,983	\$ 10,385,485	\$ 2,885,725	\$ 1,089,310	\$ 1,407,371	\$ 826,270	\$ 5,410,334	\$ 63,311,478	\$ -
Maintenance Expense												
Salaries and Wages	\$ 97,407	14	Labor	\$ 62,336	\$ 17,191	\$ 5,013	\$ 1,896	\$ 2,463	\$ 1,125	\$ 7,384	\$ 97,407	\$ -
Transportation	\$ 13,205	13	Fixed O&M	\$ 8,804	\$ 1,978	\$ 513	\$ 193	\$ 248	\$ 195	\$ 1,274	\$ 13,205	\$ -
Contract Services - Eng	\$ -	13	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contract Services - Other	\$ 47,266	13	Fixed O&M	\$ 31,513	\$ 7,081	\$ 1,837	\$ 691	\$ 886	\$ 698	\$ 4,560	\$ 47,266	\$ -
Miscellaneous	\$ 49,010	13	Fixed O&M	\$ 32,676	\$ 7,343	\$ 1,904	\$ 717	\$ 919	\$ 723	\$ 4,728	\$ 49,010	\$ -
Materials & Supplies	\$ 57,601	13	Fixed O&M	\$ 38,403	\$ 8,630	\$ 2,238	\$ 842	\$ 1,080	\$ 850	\$ 5,557	\$ 57,601	\$ -
	\$ 264,490			\$ 173,731	\$ 42,223	\$ 11,505	\$ 4,340	\$ 5,594	\$ 3,592	\$ 23,504	\$ 264,490	\$ -

Missouri-American Water Company
Class Cost of Service Study - Account Detail using One-Step Allocation
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Residential	Non-Residential	Rate J	Rate B	Rate P	Rate F Private Fire	Public Fire	Total	Variance
Total A&G Expense	\$ 63,575,968			\$ 41,480,714	\$ 10,427,708	\$ 2,897,230	\$ 1,093,650	\$ 1,412,965	\$ 829,861	\$ 5,433,838	\$ 63,575,968	\$ -
Total Operations & Maintenance Exp. (STL Water)	\$ 128,589,513			\$ 82,251,652	\$ 21,340,864	\$ 7,603,187	\$ 2,830,898	\$ 3,913,661	\$ 1,440,929	\$ 9,208,323	\$ 128,589,513	\$ -

Missouri-American Water Company
Class Cost of Service Study - Account Detail using One-Step Allocation
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Rate F							Total	Variance
				Residential	Non-Residential	Rate J	Rate B	Rate P	Private Fire	Public Fire		
Taxes Other Than Income Tax												
Property Taxes	\$ 36,744,136	15	Net Plant (less gen. and int.)	\$ 24,811,260	\$ 6,123,396	\$ 1,215,163	\$ 481,524	\$ 539,615	\$ 781,197	\$ 2,791,981	\$ 36,744,136	\$ -
Payroll Taxes	\$ 2,321,901	14	Labor	\$ 1,485,899	\$ 409,771	\$ 119,496	\$ 45,193	\$ 58,700	\$ 26,825	\$ 176,016	\$ 2,321,901	\$ -
Utility Reg Assessment	\$ 1,727,636	16	Rate Base	\$ 1,162,433	\$ 289,721	\$ 59,355	\$ 23,276	\$ 26,560	\$ 35,239	\$ 131,052	\$ 1,727,636	\$ -
Other Taxes	\$ (190,174)	16	Rate Base	\$ (127,958)	\$ (31,892)	\$ (6,534)	\$ (2,562)	\$ (2,924)	\$ (3,879)	\$ (14,426)	\$ (190,174)	\$ -
	\$ 40,603,500			\$ 27,331,634	\$ 6,790,997	\$ 1,387,481	\$ 547,431	\$ 621,951	\$ 839,383	\$ 3,084,623	\$ 40,603,500	\$ -
Total Taxes Other Than Income Taxes (STL Water)	\$ 40,603,500			\$ 27,331,634	\$ 6,790,997	\$ 1,387,481	\$ 547,431	\$ 621,951	\$ 839,383	\$ 3,084,623	\$ 40,603,500	\$ -
Plant Depreciation												
Intangible Plant												
Organization	\$ -	15	Net Plant (less gen. and int.)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Franchises	\$ -	15	Net Plant (less gen. and int.)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other P/E-Intangible	\$ -	15	Net Plant (less gen. and int.)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Source of Supply												
Land & Land Rights	\$ -	2	Base/Extra Daily	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Structures & Improvements	\$ 545,433	2	Base/Extra Daily	\$ 321,201	\$ 115,412	\$ 56,044	\$ 21,760	\$ 30,558	\$ 459	\$ -	\$ 545,433	\$ -
Collection & Impound Reservoirs	\$ -	2	Base/Extra Daily	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Lake, River, & Other Intakes	\$ 724,692	2	Base/Extra Daily	\$ 426,765	\$ 153,343	\$ 74,463	\$ 28,911	\$ 40,600	\$ 610	\$ -	\$ 724,692	\$ -
Wells & Springs	\$ 9,027	2	Base/Extra Daily	\$ 5,316	\$ 1,910	\$ 927	\$ 360	\$ 506	\$ 8	\$ -	\$ 9,027	\$ -
Infiltration Galleries & Tunnels	\$ -	2	Base/Extra Daily	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supply Mains	\$ 87,848	2	Base/Extra Daily	\$ 51,733	\$ 18,588	\$ 9,026	\$ 3,505	\$ 4,922	\$ 74	\$ -	\$ 87,848	\$ -
Other P/E-Supply	\$ -	2	Base/Extra Daily	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Water Pumping												
Pumping Land & Land Rights	\$ -	3	Base/Extra Daily w/ Fire	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Pumping Structures & Improvements	\$ 1,114,174	3	Base/Extra Daily w/ Fire	\$ 629,774	\$ 226,707	\$ 108,725	\$ 42,347	\$ 59,225	\$ 10,807	\$ 36,589	\$ 1,114,174	\$ -
Boiler Plant Equipment	\$ -	3	Base/Extra Daily w/ Fire	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Power Generation Equipment	\$ 440,995	3	Base/Extra Daily w/ Fire	\$ 249,267	\$ 89,732	\$ 43,034	\$ 16,761	\$ 23,442	\$ 4,277	\$ 14,482	\$ 440,995	\$ -
Steam Pumping Equipment	\$ -	3	Base/Extra Daily w/ Fire	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Electric Pumping Equipment	\$ 1,350,203	3	Base/Extra Daily w/ Fire	\$ 763,186	\$ 274,733	\$ 131,758	\$ 51,318	\$ 71,771	\$ 13,096	\$ 44,340	\$ 1,350,203	\$ -
Diesel Pumping Equipment	\$ 37,170	3	Base/Extra Daily w/ Fire	\$ 21,010	\$ 7,563	\$ 3,627	\$ 1,413	\$ 1,976	\$ 361	\$ 1,221	\$ 37,170	\$ -
Pump Equip Hydraulic	\$ 4,705	3	Base/Extra Daily w/ Fire	\$ 2,659	\$ 957	\$ 459	\$ 179	\$ 250	\$ 46	\$ 155	\$ 4,705	\$ -
Other Pumping Equipment	\$ 297,974	3	Base/Extra Daily w/ Fire	\$ 168,426	\$ 60,630	\$ 29,077	\$ 11,325	\$ 15,839	\$ 2,890	\$ 9,785	\$ 297,974	\$ -
Water Treatment												
Water Treatment Land & Land Rights	\$ -	2	Base/Extra Daily	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Water Treatment Structures & Improvements	\$ 2,334,564	2	Base/Extra Daily	\$ 1,374,805	\$ 493,987	\$ 239,879	\$ 93,136	\$ 130,793	\$ 1,964	\$ -	\$ 2,334,564	\$ -
Water Treatment Equipment	\$ 3,545,224	2	Base/Extra Daily	\$ 2,087,753	\$ 750,160	\$ 364,276	\$ 141,434	\$ 198,619	\$ 2,982	\$ -	\$ 3,545,224	\$ -
Water Treatment - Other	\$ -	2	Base/Extra Daily	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
T&D												
Transmission & Distribution Land	\$ -	17	Mains	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transmission & Distribution Structures & Impr	\$ 106,653	17	Mains	\$ 74,077	\$ 18,031	\$ 2,891	\$ 1,320	\$ 1,214	\$ 2,053	\$ 7,069	\$ 106,653	\$ -
TD Mains 4in & Less	\$ 583,156	4	Base/Extra Hourly w/ Fire	\$ 425,575	\$ 93,121	\$ 4,616	\$ 3,145	\$ -	\$ 12,740	\$ 43,960	\$ 583,156	\$ -
TD Mains 6in to 8in	\$ 22,022,763	4	Base/Extra Hourly w/ Fire	\$ 16,071,752	\$ 3,516,676	\$ 174,305	\$ 118,779	\$ -	\$ 481,117	\$ 1,660,134	\$ 22,022,763	\$ -
TD Mains 10in to 16in	\$ 3,980,796	3	Base/Extra Daily w/ Fire	\$ 2,250,097	\$ 809,993	\$ 388,460	\$ 151,302	\$ 211,603	\$ 38,612	\$ 130,728	\$ 3,980,796	\$ -
TD Mains 18in & Grtr	\$ 2,175,914	3	Base/Extra Daily w/ Fire	\$ 1,229,909	\$ 442,744	\$ 212,334	\$ 82,702	\$ 115,663	\$ 21,105	\$ 71,457	\$ 2,175,914	\$ -
Other Transmission & Distribution Plant	\$ -	17	Mains	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Storage												
Distribution Reservoirs & Standpipes	\$ 402,936	5	Storage	\$ 261,284	\$ 53,685	\$ 22,465	\$ 8,070	\$ 11,105	\$ 10,445	\$ 35,883	\$ 402,936	\$ -
Distribution Reservoirs & Standpipes - Tank Coating	\$ -	5	Storage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Meters												
Meters	\$ 6,006,556	8	Meters	\$ 4,635,985	\$ 1,261,671	\$ 108,900	\$ -	\$ -	\$ -	\$ -	\$ 6,006,556	\$ -
Meter Installation	\$ 983,668	8	Meters	\$ 759,216	\$ 206,619	\$ 17,834	\$ -	\$ -	\$ -	\$ -	\$ 983,668	\$ -
Meter Vaults	\$ -	8	Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Services												
Services	\$ 7,636,691	9	Services	\$ 6,041,533	\$ 842,853	\$ 24,921	\$ -	\$ -	\$ 727,385	\$ -	\$ 7,636,691	\$ -
Hydrants												
Hydrants	\$ 1,949,157	7	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,256	\$ 1,946,901	\$ 1,949,157	\$ -
Fire Mains	\$ -	7	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Missouri-American Water Company
Class Cost of Service Study - Account Detail using One-Step Allocation
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Rate F										Total	Variance
				Residential	Non-Residential	Rate J	Rate B	Rate P	Private Fire	Public Fire					
General Plant															
General Land & Land Rights	\$ -	13	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Stores Shops Equipment Structures	\$ 831,702	13	Fixed O&M	\$ 554,506	\$ 124,608	\$ 32,317	\$ 12,164	\$ 15,588	\$ 12,277	\$ 80,242	\$ 831,702	\$ -	\$ -	\$ -	\$ -
Office Structures	\$ 119,249	13	Fixed O&M	\$ 79,505	\$ 17,866	\$ 4,634	\$ 1,744	\$ 2,235	\$ 1,760	\$ 11,505	\$ 119,249	\$ -	\$ -	\$ -	\$ -
General Structures - HVAC	\$ 71,552	13	Fixed O&M	\$ 47,705	\$ 10,720	\$ 2,780	\$ 1,046	\$ 1,341	\$ 1,056	\$ 6,903	\$ 71,552	\$ -	\$ -	\$ -	\$ -
Miscellaneous Structures	\$ 78,241	13	Fixed O&M	\$ 52,164	\$ 11,722	\$ 3,040	\$ 1,144	\$ 1,466	\$ 1,155	\$ 7,549	\$ 78,241	\$ -	\$ -	\$ -	\$ -
Structures & Improvements - Leasehold	\$ 2,609	13	Fixed O&M	\$ 1,739	\$ 391	\$ 101	\$ 38	\$ 49	\$ 39	\$ 252	\$ 2,609	\$ -	\$ -	\$ -	\$ -
Office Furniture and Equipment	\$ 69,972	13	Fixed O&M	\$ 46,651	\$ 10,483	\$ 2,719	\$ 1,023	\$ 1,311	\$ 1,033	\$ 6,751	\$ 69,972	\$ -	\$ -	\$ -	\$ -
Computers & Peripheral Equipment	\$ 1,319,498	13	Fixed O&M	\$ 879,725	\$ 197,690	\$ 51,271	\$ 19,298	\$ 24,731	\$ 19,478	\$ 127,305	\$ 1,319,498	\$ -	\$ -	\$ -	\$ -
Computer Hardware & Software	\$ 395,987	13	Fixed O&M	\$ 264,009	\$ 59,328	\$ 15,387	\$ 5,791	\$ 7,422	\$ 5,846	\$ 38,205	\$ 395,987	\$ -	\$ -	\$ -	\$ -
Computer Software	\$ 3,191,396	13	Fixed O&M	\$ 2,127,741	\$ 478,143	\$ 124,006	\$ 46,676	\$ 59,815	\$ 47,111	\$ 307,905	\$ 3,191,396	\$ -	\$ -	\$ -	\$ -
Personal Computer Software	\$ -	13	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Office Equipment	\$ 74,639	13	Fixed O&M	\$ 49,762	\$ 11,183	\$ 2,900	\$ 1,092	\$ 1,399	\$ 1,102	\$ 7,201	\$ 74,639	\$ -	\$ -	\$ -	\$ -
BTS Initial Investment	\$ 1,528,051	13	Fixed O&M	\$ 1,018,769	\$ 228,936	\$ 59,374	\$ 22,348	\$ 28,640	\$ 22,557	\$ 147,426	\$ 1,528,051	\$ -	\$ -	\$ -	\$ -
Transportation Equipment - Light Trucks	\$ 853,825	13	Fixed O&M	\$ 569,255	\$ 127,922	\$ 33,176	\$ 12,488	\$ 16,003	\$ 12,604	\$ 82,377	\$ 853,825	\$ -	\$ -	\$ -	\$ -
Transportation Equipment - Heavy Trucks	\$ -	13	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transportation Equipment - Cars	\$ -	13	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transportation Equipment - Other	\$ 843,556	13	Fixed O&M	\$ 562,409	\$ 126,384	\$ 32,777	\$ 12,337	\$ 15,811	\$ 12,452	\$ 81,386	\$ 843,556	\$ -	\$ -	\$ -	\$ -
Stores Equipment	\$ 23,244	13	Fixed O&M	\$ 15,497	\$ 3,483	\$ 903	\$ 340	\$ 436	\$ 343	\$ 2,243	\$ 23,244	\$ -	\$ -	\$ -	\$ -
Tools, Shop, & Garage Equipment	\$ 443,793	13	Fixed O&M	\$ 295,882	\$ 66,490	\$ 17,244	\$ 6,491	\$ 8,318	\$ 6,551	\$ 42,817	\$ 443,793	\$ -	\$ -	\$ -	\$ -
Laboratory Equipment	\$ 42,654	2	Base/Extra Daily	\$ 25,118	\$ 9,025	\$ 4,383	\$ 1,702	\$ 2,390	\$ 36	\$ -	\$ 42,654	\$ -	\$ -	\$ -	\$ -
Power Operated Equipment	\$ 32,231	13	Fixed O&M	\$ 21,489	\$ 4,829	\$ 1,252	\$ 471	\$ 604	\$ 476	\$ 3,110	\$ 32,231	\$ -	\$ -	\$ -	\$ -
Communication Equipment	\$ -	13	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Communication Equipment (non telephone)	\$ 455,562	13	Fixed O&M	\$ 303,728	\$ 68,253	\$ 17,701	\$ 6,663	\$ 8,538	\$ 6,725	\$ 43,952	\$ 455,562	\$ -	\$ -	\$ -	\$ -
Telephone Equipment	\$ 7,637	13	Fixed O&M	\$ 5,092	\$ 1,144	\$ 297	\$ 112	\$ 143	\$ 113	\$ 737	\$ 7,637	\$ -	\$ -	\$ -	\$ -
Miscellaneous Equipment	\$ 251,262	13	Fixed O&M	\$ 167,520	\$ 37,645	\$ 9,763	\$ 3,675	\$ 4,709	\$ 3,709	\$ 24,242	\$ 251,262	\$ -	\$ -	\$ -	\$ -
Other Tangible Property	\$ 15,686	13	Fixed O&M	\$ 10,458	\$ 2,350	\$ 610	\$ 229	\$ 294	\$ 232	\$ 1,513	\$ 15,686	\$ -	\$ -	\$ -	\$ -
Transportation Equipment Capitalization	\$ (780,946)	13	Fixed O&M	\$ (520,666)	\$ (117,003)	\$ (30,345)	\$ (11,422)	\$ (14,637)	\$ (11,528)	\$ (75,345)	\$ (780,946)	\$ -	\$ -	\$ -	\$ -
Plant Depreciation (STL Water)	\$ 66,211,702			\$ 44,429,383	\$ 10,920,705	\$ 2,404,313	\$ 923,219	\$ 1,104,692	\$ 1,478,412	\$ 4,950,978	\$ 66,211,702	\$ -	\$ -	\$ -	\$ -
CIAC-Non Taxable - Mains	\$ (2,226,429)	17	Mains	\$ (1,546,386)	\$ (376,394)	\$ (60,355)	\$ (27,551)	\$ (25,333)	\$ (42,851)	\$ (147,559)	\$ (2,226,429)	\$ -	\$ -	\$ -	\$ -
CIAC-Non Taxable - Ext Dep	\$ (722,168)	17	Mains	\$ (501,588)	\$ (122,088)	\$ (19,577)	\$ (8,937)	\$ (8,217)	\$ (13,899)	\$ (47,863)	\$ (722,168)	\$ -	\$ -	\$ -	\$ -
CIAC-Non Taxable - Services	\$ (267)	9	Services	\$ (211)	\$ (29)	\$ (1)	\$ -	\$ -	\$ (25)	\$ -	\$ (267)	\$ -	\$ -	\$ -	\$ -
CIAC-Non Taxable - Meters	\$ (126,758)	8	Meters	\$ (97,834)	\$ (26,625)	\$ (2,298)	\$ -	\$ -	\$ -	\$ -	\$ (126,758)	\$ -	\$ -	\$ -	\$ -
CIAC-Non Taxable - Hydrants	\$ (115,211)	7	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (133)	\$ (115,078)	\$ (115,211)	\$ -	\$ -	\$ -	\$ -
CIAC-Non Taxable - Other	\$ (58,401)	17	Mains	\$ (40,563)	\$ (9,873)	\$ (1,583)	\$ (723)	\$ (664)	\$ (1,124)	\$ (3,871)	\$ (58,401)	\$ -	\$ -	\$ -	\$ -
CIAC-Non Taxable - WIP	\$ -	17	Mains	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CIAC-Taxable - Mains	\$ (553,566)	17	Mains	\$ (384,484)	\$ (93,584)	\$ (15,006)	\$ (6,850)	\$ (6,299)	\$ (10,654)	\$ (36,688)	\$ (553,566)	\$ -	\$ -	\$ -	\$ -
CIAC-Taxable - Extension Deposits	\$ (34,778)	17	Mains	\$ (24,155)	\$ (5,879)	\$ (943)	\$ (430)	\$ (396)	\$ (669)	\$ (2,305)	\$ (34,778)	\$ -	\$ -	\$ -	\$ -
CIAC-Taxable - Services	\$ (1,091,630)	9	Services	\$ (863,609)	\$ (120,482)	\$ (3,562)	\$ -	\$ -	\$ (103,976)	\$ -	\$ (1,091,630)	\$ -	\$ -	\$ -	\$ -
CIAC-Taxable - Meters	\$ (8,035)	8	Meters	\$ (6,201)	\$ (1,688)	\$ (146)	\$ -	\$ -	\$ -	\$ -	\$ (8,035)	\$ -	\$ -	\$ -	\$ -
CIAC-Taxable - Hydrants	\$ (4,194)	7	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (5)	\$ (4,189)	\$ (4,194)	\$ -	\$ -	\$ -	\$ -
CIAC-Taxable - Other	\$ (1,164)	17	Mains	\$ (808)	\$ (197)	\$ (32)	\$ (14)	\$ (13)	\$ (22)	\$ (77)	\$ (1,164)	\$ -	\$ -	\$ -	\$ -
CIAC-Taxable - WIP	\$ -	17	Mains	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CIAC-Taxable - Services SIT	\$ -	17	Mains	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Amortization of CIAC (STL Water)	\$ (4,942,600)			\$ (3,465,840)	\$ (756,840)	\$ (103,503)	\$ (44,506)	\$ (40,922)	\$ (173,360)	\$ (357,630)	\$ (4,942,600)	\$ -	\$ -	\$ -	\$ -
Total Depreciation Expense (STL Water)	\$ 61,269,101			\$ 40,963,542	\$ 10,163,865	\$ 2,300,810	\$ 878,713	\$ 1,063,770	\$ 1,305,053	\$ 4,593,348	\$ 61,269,101	\$ -	\$ -	\$ -	\$ -
Eureka Depreciation	\$ -	13	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Depreciation Expense	\$ 61,269,101			\$ 40,963,542	\$ 10,163,865	\$ 2,300,810	\$ 878,713	\$ 1,063,770	\$ 1,305,053	\$ 4,593,348	\$ 61,269,101	\$ -	\$ -	\$ -	\$ -
Amortization Expense															
Lead Service Replacement	\$ 4,577,646	9	Services	\$ 3,621,464	\$ 505,229	\$ 14,938	\$ -	\$ -	\$ 436,015	\$ -	\$ 4,577,646	\$ -	\$ -	\$ -	\$ -
Tank Painting Tracker	\$ 293,475	16	Rate Base	\$ 197,463	\$ 49,215	\$ 10,083	\$ 3,954	\$ 4,512	\$ 5,986	\$ 22,262	\$ 293,475	\$ -	\$ -	\$ -	\$ -
Property Tax Tracker	\$ 2,410,364	16	Rate Base	\$ 1,621,804	\$ 404,213	\$ 82,811	\$ 32,474	\$ 37,056	\$ 49,165	\$ 182,841	\$ 2,410,364	\$ -	\$ -	\$ -	\$ -
Enterprise Solutions	\$ 6,432	16	Rate Base	\$ 4,328	\$ 1,079	\$ 221	\$ 87	\$ 99	\$ 131	\$ 488	\$ 6,432	\$ -	\$ -	\$ -	\$ -
Low Income Costs	\$ 2,417	16	Rate Base	\$ 1,626	\$ 405	\$ 83	\$ 33	\$ 37	\$ 49	\$ 183	\$ 2,417	\$ -	\$ -	\$ -	\$ -
Total Amortization Expense (STL Water)	\$ 7,290,335			\$ 5,446,685	\$ 960,142	\$ 108,136	\$ 36,547	\$ 41,703	\$ 491,347	\$ 205,774	\$ 7,290,335	\$ -	\$ -	\$ -	\$ -
Total Amortization Expense	\$ 7,290,335			\$ 5,446,685	\$ 960,142	\$ 108,136	\$ 36,547	\$ 41,703	\$ 491,347	\$ 205,774	\$ 7,290,335	\$ -	\$ -	\$ -	\$ -

Missouri-American Water Company
Class Cost of Service Study - Account Detail using One-Step Allocation
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Residential	Non-Residential	Rate J	Rate B	Rate P	Rate F		Total	Variance
									Private Fire	Public Fire		
Income Taxes												
Federal Income Tax	\$ 5,342,587	16	Rate Base	\$ 3,594,738	\$ 895,941	\$ 183,551	\$ 71,978	\$ 82,134	\$ 108,975	\$ 405,268	\$ 5,342,587	\$ -
State Income Tax	\$ 927,272	16	Rate Base	\$ 623,911	\$ 155,502	\$ 31,858	\$ 12,493	\$ 14,255	\$ 18,914	\$ 70,339	\$ 927,272	\$ -
Deferred Income Taxes	\$ 23,389,633	16	Rate Base	\$ 15,737,621	\$ 3,922,394	\$ 803,581	\$ 315,118	\$ 359,580	\$ 477,089	\$ 1,774,249	\$ 23,389,633	\$ -
ITC Restored	\$ (71,288)	16	Rate Base	\$ (47,966)	\$ (11,955)	\$ (2,449)	\$ (960)	\$ (1,096)	\$ (1,454)	\$ (5,408)	\$ (71,288)	\$ -
Total Income Taxes (STL Water)	\$ 29,588,204			\$ 19,908,305	\$ 4,961,882	\$ 1,016,541	\$ 398,629	\$ 454,874	\$ 603,524	\$ 2,244,450	\$ 29,588,204	\$ -
Total Income Tax Expense	\$ 29,588,204			\$ 19,908,305	\$ 4,961,882	\$ 1,016,541	\$ 398,629	\$ 454,874	\$ 603,524	\$ 2,244,450	\$ 29,588,204	
Required Net Operating Income (STL Water)	\$ 182,789,448	16	Rate Base	\$ 122,989,150	\$ 30,653,423	\$ 6,279,965	\$ 2,462,642	\$ 2,810,112	\$ 3,728,438	\$ 13,865,718	\$ 182,789,448	\$ -
Required Net Operating Income	\$ 182,789,448			\$ 122,989,150	\$ 30,653,423	\$ 6,279,965	\$ 2,462,642	\$ 2,810,112	\$ 3,728,438	\$ 13,865,718	\$ 182,789,448	\$ -
Total Revenue Requirement (STL Water)	\$ 450,130,101			\$ 298,890,968	\$ 74,871,172	\$ 18,696,120	\$ 7,154,861	\$ 8,906,072	\$ 8,408,672	\$ 33,202,236	\$ 450,130,101	\$ -
Other Operating Revenue (STL Water)	\$ (2,879,768)	16	Rate Base	\$ (1,937,641)	\$ (482,931)	\$ (98,938)	\$ (38,798)	\$ (44,272)	\$ (58,740)	\$ (218,448)	\$ (2,879,768)	\$ -
Total Retail Revenue Requirement (STL Water)	\$ 447,250,332			\$ 296,953,327	\$ 74,388,240	\$ 18,597,182	\$ 7,116,063	\$ 8,861,800	\$ 8,349,932	\$ 32,983,787	\$ 447,250,332	\$ -
Total Revenue Requirement (STL Water)	\$ 450,130,101											
check	\$ 0											

Missouri-American Water Company
Class Cost of Service Study - Account Detail using One-Step Allocation
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Residential	Non-Residential	Rate J	Rate B	Rate P	Rate F		Total	Variance
									Private Fire	Public Fire		
Plant Account												
Intangible Plant												
Organization	\$ 285,088	15	Net Plant (less gen. and int.)	\$ 192,504	\$ 47,510	\$ 9,428	\$ 3,736	\$ 4,187	\$ 6,061	\$ 21,662	\$ 285,088	\$ -
Franchises	\$ -	15	Net Plant (less gen. and int.)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other P/E-Intangible	\$ 1,410,851	15	Net Plant (less gen. and int.)	\$ 952,668	\$ 235,118	\$ 46,658	\$ 18,489	\$ 20,719	\$ 29,995	\$ 107,203	\$ 1,410,851	\$ -
Source of Supply												
Land & Land Rights	\$ 13,658,085	2	Base/Extra Daily	\$ 8,043,132	\$ 2,890,013	\$ 1,403,385	\$ 544,880	\$ 765,186	\$ 11,489	\$ -	\$ 13,658,085	\$ -
Structures & Improvements	\$ 25,848,952	2	Base/Extra Daily	\$ 15,222,231	\$ 5,469,567	\$ 2,656,011	\$ 1,031,227	\$ 1,448,172	\$ 21,743	\$ -	\$ 25,848,952	\$ -
Collection & Impound Reservoirs	\$ -	2	Base/Extra Daily	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Lake, River, & Other Intakes	\$ 22,039,171	2	Base/Extra Daily	\$ 12,978,683	\$ 4,663,428	\$ 2,264,552	\$ 879,238	\$ 1,234,732	\$ 18,538	\$ -	\$ 22,039,171	\$ -
Wells & Springs	\$ 325,571	2	Base/Extra Daily	\$ 191,726	\$ 68,890	\$ 33,453	\$ 12,988	\$ 18,240	\$ 274	\$ -	\$ 325,571	\$ -
Infiltration Galleries & Tunnels	\$ -	2	Base/Extra Daily	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supply Mains	\$ 1,304,079	2	Base/Extra Daily	\$ 767,961	\$ 275,940	\$ 133,996	\$ 52,025	\$ 73,060	\$ 1,097	\$ -	\$ 1,304,079	\$ -
Other P/E-Supply	\$ -	2	Base/Extra Daily	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Water Pumping												
Pumping Land & Land Rights	\$ 332,675	3	Base/Extra Daily w/ Fire	\$ 188,041	\$ 67,691	\$ 32,464	\$ 12,644	\$ 17,684	\$ 3,227	\$ 10,925	\$ 332,675	\$ -
Pumping Structures & Improvements	\$ 18,698,879	3	Base/Extra Daily w/ Fire	\$ 10,569,316	\$ 3,804,756	\$ 1,824,705	\$ 710,706	\$ 993,959	\$ 181,370	\$ 614,067	\$ 18,698,879	\$ -
Boiler Plant Equipment	\$ -	3	Base/Extra Daily w/ Fire	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Power Generation Equipment	\$ 11,367,527	3	Base/Extra Daily w/ Fire	\$ 6,425,357	\$ 2,313,009	\$ 1,109,285	\$ 432,057	\$ 604,253	\$ 110,260	\$ 373,307	\$ 11,367,527	\$ -
Steam Pumping Equipment	\$ 1,120,451	3	Base/Extra Daily w/ Fire	\$ 633,321	\$ 227,984	\$ 109,338	\$ 42,586	\$ 59,559	\$ 10,868	\$ 36,795	\$ 1,120,451	\$ -
Electric Pumping Equipment	\$ 47,863,547	3	Base/Extra Daily w/ Fire	\$ 27,054,292	\$ 9,739,040	\$ 4,670,699	\$ 1,819,196	\$ 2,544,237	\$ 464,254	\$ 1,571,828	\$ 47,863,547	\$ -
Diesel Pumping Equipment	\$ 26,758	3	Base/Extra Daily w/ Fire	\$ 15,125	\$ 5,445	\$ 2,611	\$ 1,017	\$ 1,422	\$ 260	\$ 879	\$ 26,758	\$ -
Pump Equip Hydraulic	\$ 196,128	3	Base/Extra Daily w/ Fire	\$ 110,859	\$ 39,907	\$ 19,139	\$ 7,454	\$ 10,425	\$ 1,902	\$ 6,441	\$ 196,128	\$ -
Other Pumping Equipment	\$ 17,155,891	3	Base/Extra Daily w/ Fire	\$ 9,697,160	\$ 3,490,797	\$ 1,674,134	\$ 652,061	\$ 911,940	\$ 166,404	\$ 563,396	\$ 17,155,891	\$ -
Water Treatment												
Water Treatment Land & Land Rights	\$ 1,902,246	2	Base/Extra Daily	\$ 1,120,217	\$ 402,510	\$ 195,458	\$ 75,889	\$ 106,572	\$ 1,600	\$ -	\$ 1,902,246	\$ -
Water Treatment Structures & Improvements	\$ 58,738,228	2	Base/Extra Daily	\$ 34,590,450	\$ 12,428,848	\$ 6,035,425	\$ 2,343,323	\$ 3,290,775	\$ 49,408	\$ -	\$ 58,738,228	\$ -
Water Treatment Equipment	\$ 139,800,618	2	Base/Extra Daily	\$ 82,327,412	\$ 29,581,427	\$ 14,364,684	\$ 5,577,254	\$ 7,832,247	\$ 117,594	\$ -	\$ 139,800,618	\$ -
Water Treatment - Other	\$ -	2	Base/Extra Daily	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
T&D												
Transmission & Distribution Land	\$ 3,991,405	17	Mains	\$ 2,772,265	\$ 674,776	\$ 108,201	\$ 49,392	\$ 45,415	\$ 76,820	\$ 264,535	\$ 3,991,405	\$ -
Transmission & Distribution Structures & Impr	\$ 2,880,243	17	Mains	\$ 2,000,497	\$ 486,926	\$ 78,079	\$ 35,642	\$ 32,772	\$ 55,434	\$ 190,892	\$ 2,880,243	\$ -
TD Mains 4in & Less	\$ 36,611,275	4	Base/Extra Hourly w/ Fire	\$ 26,718,143	\$ 5,846,223	\$ 289,770	\$ 197,461	\$ -	\$ 799,823	\$ 2,759,854	\$ 36,611,275	\$ -
TD Mains 6in to 8in	\$ 1,382,615,884	4	Base/Extra Hourly w/ Fire	\$ 1,009,004,178	\$ 220,781,188	\$ 10,943,098	\$ 7,457,059	\$ -	\$ 30,205,128	\$ 104,225,232	\$ 1,382,615,884	\$ -
TD Mains 10in to 16in	\$ 249,919,195	3	Base/Extra Daily w/ Fire	\$ 141,263,809	\$ 50,852,334	\$ 24,388,023	\$ 9,498,921	\$ 13,284,719	\$ 2,424,100	\$ 8,207,289	\$ 249,919,195	\$ -
TD Mains 18in & Grtr	\$ 136,606,510	3	Base/Extra Daily w/ Fire	\$ 77,215,181	\$ 27,796,024	\$ 13,330,559	\$ 5,192,136	\$ 7,261,464	\$ 1,325,020	\$ 4,486,126	\$ 136,606,510	\$ -
Other Transmission & Distribution Plant	\$ -	17	Mains	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Storage												
Distribution Reservoirs & Standpipes	\$ 15,485,961	5	Storage	\$ 10,041,882	\$ 2,063,262	\$ 863,377	\$ 310,150	\$ 426,782	\$ 401,415	\$ 1,379,092	\$ 15,485,961	\$ -
Distribution Reservoirs & Standpipes - Tank Coating	\$ 160,972	5	Storage	\$ 104,382	\$ 21,447	\$ 8,975	\$ 3,224	\$ 4,436	\$ 4,173	\$ 14,335	\$ 160,972	\$ -
Meters												
Meters	\$ 273,880,916	8	Meters	\$ 211,386,986	\$ 57,528,406	\$ 4,965,523	\$ -	\$ -	\$ -	\$ -	\$ 273,880,916	\$ -
Meter Installation	\$ 27,964,291	8	Meters	\$ 21,583,421	\$ 5,873,871	\$ 506,999	\$ -	\$ -	\$ -	\$ -	\$ 27,964,291	\$ -
Meter Vaults	\$ -	8	Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Services												
Services	\$ 262,611,902	9	Services	\$ 207,757,303	\$ 28,984,162	\$ 856,976	\$ -	\$ -	\$ 25,013,461	\$ -	\$ 262,611,902	\$ -
Hydrants												
Hydrants	\$ 87,650,905	7	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 101,437	\$ 87,549,468	\$ 87,650,905	\$ -
Fire Mains	\$ -	7	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Missouri-American Water Company
Class Cost of Service Study - Account Detail using One-Step Allocation
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Rate F							Total	Variance
				Residential	Non-Residential	Rate J	Rate B	Rate P	Private Fire	Public Fire		
General Plant												
General Land & Land Rights	\$ 32,372	13	Fixed O&M	\$ 21,583	\$ 4,850	\$ 1,258	\$ 473	\$ 607	\$ 478	\$ 3,123	\$ 32,372	\$ -
Stores Shops Equipment Structures	\$ 24,528,093	13	Fixed O&M	\$ 16,353,168	\$ 3,674,858	\$ 953,069	\$ 358,734	\$ 459,722	\$ 362,080	\$ 2,366,461	\$ 24,528,093	\$ -
Office Structures	\$ 4,425,250	13	Fixed O&M	\$ 2,950,366	\$ 663,002	\$ 171,949	\$ 64,721	\$ 82,941	\$ 65,325	\$ 426,946	\$ 4,425,250	\$ -
General Structures - HVAC	\$ 1,611,719	13	Fixed O&M	\$ 1,074,552	\$ 241,472	\$ 62,625	\$ 23,572	\$ 30,208	\$ 23,792	\$ 155,498	\$ 1,611,719	\$ -
Miscellaneous Structures	\$ 1,011,963	13	Fixed O&M	\$ 674,687	\$ 151,615	\$ 39,321	\$ 14,800	\$ 18,967	\$ 14,938	\$ 97,634	\$ 1,011,963	\$ -
Structures & Improvements - Leasehold	\$ (93,510)	13	Fixed O&M	\$ (62,344)	\$ (14,010)	\$ (3,633)	\$ (1,368)	\$ (1,753)	\$ (1,380)	\$ (9,022)	\$ (93,510)	\$ -
Office Furniture and Equipment	\$ 1,444,634	13	Fixed O&M	\$ 963,155	\$ 216,439	\$ 56,133	\$ 21,128	\$ 27,076	\$ 21,325	\$ 139,378	\$ 1,444,634	\$ -
Computers & Peripheral Equipment	\$ 3,947,193	13	Fixed O&M	\$ 2,631,640	\$ 591,378	\$ 153,373	\$ 57,729	\$ 73,981	\$ 58,268	\$ 380,824	\$ 3,947,193	\$ -
Computer Hardware & Software	\$ (758,976)	13	Fixed O&M	\$ (506,018)	\$ (113,712)	\$ (29,491)	\$ (11,100)	\$ (14,225)	\$ (11,204)	\$ (73,226)	\$ (758,976)	\$ -
Computer Software	\$ 46,361,895	13	Fixed O&M	\$ 30,910,020	\$ 6,946,051	\$ 1,801,449	\$ 678,063	\$ 868,946	\$ 684,387	\$ 4,472,978	\$ 46,361,895	\$ -
Personal Computer Software	\$ -	13	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Office Equipment	\$ 747,758	13	Fixed O&M	\$ 498,539	\$ 112,031	\$ 29,055	\$ 10,936	\$ 14,015	\$ 11,038	\$ 72,143	\$ 747,758	\$ -
BTS Initial Investment	\$ 11,159,601	13	Fixed O&M	\$ 7,440,237	\$ 1,671,958	\$ 433,620	\$ 163,214	\$ 209,161	\$ 164,736	\$ 1,076,674	\$ 11,159,601	\$ -
Transportation Equipment - Light Trucks	\$ 10,234,825	13	Fixed O&M	\$ 6,823,678	\$ 1,533,406	\$ 397,687	\$ 149,689	\$ 191,828	\$ 151,085	\$ 987,452	\$ 10,234,825	\$ -
Transportation Equipment - Heavy Trucks	\$ 22,541,844	13	Fixed O&M	\$ 15,028,912	\$ 3,377,274	\$ 875,891	\$ 329,684	\$ 422,495	\$ 332,759	\$ 2,174,828	\$ 22,541,844	\$ -
Transportation Equipment - Cars	\$ 21,653,192	13	Fixed O&M	\$ 14,466,437	\$ 3,244,134	\$ 841,362	\$ 316,688	\$ 405,839	\$ 319,641	\$ 2,089,092	\$ 21,653,192	\$ -
Transportation Equipment - Other	\$ 9,376,852	13	Fixed O&M	\$ 6,251,657	\$ 1,404,863	\$ 364,349	\$ 137,141	\$ 175,747	\$ 138,420	\$ 904,675	\$ 9,376,852	\$ -
Stores Equipment	\$ 696,243	13	Fixed O&M	\$ 464,193	\$ 104,313	\$ 27,053	\$ 10,183	\$ 13,049	\$ 10,278	\$ 67,173	\$ 696,243	\$ -
Tools, Shop, & Garage Equipment	\$ 8,486,307	13	Fixed O&M	\$ 5,657,921	\$ 1,271,439	\$ 329,746	\$ 124,116	\$ 159,056	\$ 125,274	\$ 818,756	\$ 8,486,307	\$ -
Laboratory Equipment	\$ 677,756	2	Base/Extra Daily	\$ 399,125	\$ 143,411	\$ 69,640	\$ 27,039	\$ 37,971	\$ 570	\$ -	\$ 677,756	\$ -
Power Operated Equipment	\$ 73,253	13	Fixed O&M	\$ 48,839	\$ 10,975	\$ 2,846	\$ 1,071	\$ 1,373	\$ 1,081	\$ 7,067	\$ 73,253	\$ -
Communication Equipment	\$ 65,142	13	Fixed O&M	\$ 43,431	\$ 9,760	\$ 2,531	\$ 953	\$ 1,221	\$ 962	\$ 6,285	\$ 65,142	\$ -
Communication Equipment (non telephone)	\$ 5,301,277	13	Fixed O&M	\$ 3,534,424	\$ 794,250	\$ 205,988	\$ 77,534	\$ 99,360	\$ 78,257	\$ 511,465	\$ 5,301,277	\$ -
Telephone Equipment	\$ 59,554	13	Fixed O&M	\$ 39,706	\$ 8,923	\$ 2,314	\$ 871	\$ 1,116	\$ 879	\$ 5,746	\$ 59,554	\$ -
Miscellaneous Equipment	\$ 2,199,156	13	Fixed O&M	\$ 1,466,203	\$ 329,483	\$ 85,451	\$ 32,164	\$ 41,218	\$ 32,464	\$ 212,174	\$ 2,199,156	\$ -
Other Tangible Property	\$ 556,560	13	Fixed O&M	\$ 371,065	\$ 83,385	\$ 21,626	\$ 8,140	\$ 10,431	\$ 8,216	\$ 53,697	\$ 556,560	\$ -
Transportation Equipment Capitalization	\$ 2,445,193	13	Fixed O&M	\$ 1,630,239	\$ 366,345	\$ 95,011	\$ 35,762	\$ 45,829	\$ 36,096	\$ 235,911	\$ 2,445,193	\$ -
Net Utility Plant	\$ 3,021,239,349			\$ 2,040,073,919	\$ 503,488,390	\$ 99,915,228	\$ 39,592,695	\$ 44,369,140	\$ 64,232,920	\$ 229,567,058	\$ 3,021,239,349	\$ -
	internal check: 0											
Additions to Rate Base												
Cash Working Capital(STL Water)	\$ (4,917,917)	13	Fixed O&M	\$ (3,278,833)	\$ (736,814)	\$ (191,092)	\$ (71,927)	\$ (92,175)	\$ (72,598)	\$ (474,479)	\$ (4,917,917)	\$ -
Materials and Supplies(STL Water)	\$ 8,784,150	15	Net Plant (less gen. and int.)	\$ 5,931,445	\$ 1,463,875	\$ 290,500	\$ 115,114	\$ 129,002	\$ 186,755	\$ 667,458	\$ 8,784,150	\$ -
Pension Asset(STL Water)	\$ 21,065,567	15	Net Plant (less gen. and int.)	\$ 14,224,399	\$ 3,510,569	\$ 696,658	\$ 276,060	\$ 309,363	\$ 447,864	\$ 1,600,654	\$ 21,065,567	\$ -
Regulatory Deferrals(STL Water)	\$ 9,641,328	15	Net Plant (less gen. and int.)	\$ 6,510,249	\$ 1,606,724	\$ 318,848	\$ 126,348	\$ 141,590	\$ 204,979	\$ 732,591	\$ 9,641,328	\$ -
Tank Painting Tracker(STL Water)	\$ -	5	Storage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Additions	\$ 34,573,128			\$ 23,387,260	\$ 5,844,353	\$ 1,114,914	\$ 445,595	\$ 487,780	\$ 767,000	\$ 2,526,225	\$ 34,573,128	\$ -
Reductions to Rate Base												
Customer Advances for Construction												
Advances for Construction - NT Mains	\$ -	17	Mains	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Advances for Construction - NT Extension Deposits	\$ -	17	Mains	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Advances for Construction - NT Hydrants	\$ -	7	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Advances for Construction - NT WIP	\$ -	8	Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Advances for Construction - TAX Mains	\$ -	9	Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Advances for Construction - Reclassed to Current	\$ -	17	Mains	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Allocated MAWC Corporate - Customer Advances	\$ (56,680)	17	Mains	\$ (39,368)	\$ (9,582)	\$ (1,537)	\$ (701)	\$ (645)	\$ (1,091)	\$ (3,757)	\$ (56,680)	\$ -
CIAC												
CIAC-Non Taxable - Mains	\$ (159,443,024)	17	Mains	\$ (110,742,535)	\$ (26,955,013)	\$ (4,322,279)	\$ (1,973,053)	\$ (1,814,172)	\$ (3,068,689)	\$ (10,567,283)	\$ (159,443,024)	\$ -
CIAC-Non Taxable - Ext Dep	\$ (51,954,549)	17	Mains	\$ (36,085,483)	\$ (8,783,298)	\$ (1,408,416)	\$ (642,920)	\$ (591,148)	\$ (999,933)	\$ (3,443,352)	\$ (51,954,549)	\$ -
CIAC-Non Taxable - Services	\$ (9,152)	9	Services	\$ (7,240)	\$ (1,010)	\$ (30)	\$ -	\$ -	\$ (872)	\$ -	\$ (9,152)	\$ -
CIAC-Non Taxable - Meters	\$ (5,286,181)	8	Meters	\$ (4,079,984)	\$ (1,110,357)	\$ (95,840)	\$ -	\$ -	\$ -	\$ -	\$ (5,286,181)	\$ -
CIAC-Non Taxable - Hydrants	\$ (6,227,639)	7	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (7,207)	\$ (6,220,432)	\$ (6,227,639)	\$ -
CIAC-Non Taxable - Other	\$ (1,968,056)	17	Mains	\$ (1,366,930)	\$ (332,714)	\$ (53,351)	\$ (24,354)	\$ (22,393)	\$ (37,878)	\$ (130,435)	\$ (1,968,056)	\$ -
CIAC-Non Taxable - WIP	\$ -	17	Mains	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CIAC-Taxable - Mains	\$ (39,824,874)	17	Mains	\$ (27,660,712)	\$ (6,732,687)	\$ (1,079,597)	\$ (492,819)	\$ (453,135)	\$ (766,482)	\$ (2,639,443)	\$ (39,824,874)	\$ -
CIAC-Taxable - Extension Deposits	\$ (2,502,015)	17	Mains	\$ (1,737,796)	\$ (422,984)	\$ (67,826)	\$ (30,962)	\$ (28,468)	\$ (48,155)	\$ (165,824)	\$ (2,502,015)	\$ -
CIAC-Taxable - Services	\$ (37,384,590)	9	Services	\$ (29,575,665)	\$ (4,126,093)	\$ (121,996)	\$ -	\$ -	\$ (3,560,836)	\$ -	\$ (37,384,590)	\$ -
CIAC-Taxable - Meters	\$ (334,776)	8	Meters	\$ (258,387)	\$ (70,319)	\$ (6,070)	\$ -	\$ -	\$ -	\$ -	\$ (334,776)	\$ -
CIAC-Taxable - Hydrants	\$ (226,701)	7	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (262)	\$ (226,439)	\$ (226,701)	\$ -
CIAC-Taxable - Other	\$ (39,314)	17	Mains	\$ (27,306)	\$ (6,646)	\$ (1,066)	\$ (486)	\$ (447)	\$ (757)	\$ (2,606)	\$ (39,314)	\$ -
CIAC-Taxable - WIP	\$ -	17	Mains	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CIAC-Taxable - Services SIT	\$ -	9	Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Accum Amort CIAC	\$ 73,517,060	15	Net Plant (less gen. and int.)	\$ 49,641,958	\$ 12,251,590	\$ 2,431,278	\$ 963,425	\$ 1,079,653	\$ 1,563,006	\$ 5,586,150	\$ 73,517,060	\$ -
Allocated MAWC Corporate - CIAC	\$ (712,082)	17	Mains	\$ (494,583)	\$ (120,383)	\$ (19,304)	\$ (8,812)	\$ (8,102)	\$ (13,705)	\$ (47,194)	\$ (712,082)	\$ -
Deferred Income Tax (STL Water)	\$ (491,464,492)	15	Net Plant (less gen. and int.)	\$ (331,858,478)	\$ (81,902,371)	\$ (16,253,193)	\$ (6,440,537)	\$ (7,217,520)	\$ (10,448,758)	\$ (37,343,634)	\$ (491,464,492)	\$ -
Pension/OPEB Tracker (STL Water)	\$ 4,929,249	14	Labor	\$ 3,154,469	\$ 869,917	\$ 253,683	\$ 95,943	\$ 124,617	\$ 56,949	\$ 373,670	\$ 4,929,249	\$ -
Total Reductions	\$ (718,987,816)			\$ (491,138,040)	\$ (117,451,949)	\$ (20,745,541)	\$ (8,555,276)	\$ (8,931,761)	\$ (17,334,670)	\$ (54,830,579)	\$ (718,987,816)	\$ -

Missouri-American Water Company
Class Cost of Service Study - Account Detail using One-Step Allocation
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc Description	Residential	Non-Residential	Rate J	Rate B	Rate P	Rate F Private Fire	Public Fire	Total	Variance
TOTAL RATE BASE (STL Water)	\$ 2,336,824,661		\$ 1,572,323,140	\$ 391,880,794	\$ 80,284,601	\$ 31,483,013	\$ 35,925,159	\$ 47,665,250	\$ 177,262,704	\$ 2,336,824,661	\$ -
TOTAL MO RATE BASE	\$ 2,336,824,661		0.63995								

Missouri-American Water Company
Class Cost of Service Study - Account Detail using One-Step Allocation
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Residential	Non-Residential	Rate J	Rate B	Rate P	Rate F		Total	Variance
									Private Fire	Public Fire		
Miscellaneous T&D Operating Expense	\$ 1,764,746	1	\$ -	\$ 1,271,060 0.72025	\$ 322,399 0.18269	\$ 42,571 0.02412	\$ 14,576 0.00826	\$ 13,402 0.00759	\$ 22,670 0.01285	\$ 78,067 0.04424	\$ 1,764,746 1.00000	
Miscellaneous T&D Maintenance Expense	\$ 880,721	2		\$ 424,230 0.48168	\$ 90,035 0.10223	\$ 12,014 0.01364	\$ 4,376 0.00497	\$ 4,362 0.00495	\$ 23,256 0.02641	\$ 322,448 0.36612	\$ 880,721 1.00000	
Fixed O&M	\$ 38,543,149	3		\$ 26,083,158 0.66671	\$ 5,861,366 0.14982	\$ 1,520,137 0.03886	\$ 572,178 0.01463	\$ 733,253 0.01874	\$ 577,515 0.01476	\$ 3,774,484 0.09648	\$ 39,122,092 1.00000	
Labor	\$ 30,338,984	4		\$ 11,682,173 0.63995	\$ 3,221,628 0.17648	\$ 939,484 0.05146	\$ 355,311 0.01946	\$ 461,503 0.02528	\$ 210,903 0.01155	\$ 1,383,840 0.07581	\$ 18,254,842 1.00000	
Net Plant	\$ 3,021,239,349	5		\$ 2,038,928,747 0.67524	\$ 503,205,762 0.16665	\$ 99,859,142 0.03307	\$ 39,570,470 0.01310	\$ 44,344,234 0.01469	\$ 64,196,863 0.02126	\$ 229,438,193 0.07598	\$ 3,019,543,410 1.00000	
Rate Base	\$ 2,336,824,661	6		\$ 1,572,323,140 0.67285	\$ 391,880,794 0.16770	\$ 80,284,601 0.03436	\$ 31,483,013 0.01347	\$ 35,925,159 0.01537	\$ 47,665,250 0.02040	\$ 177,262,704 0.07586	\$ 2,336,824,661 1.00000	
Variable Cost	\$ 25,891,454			\$ 14,687,779	\$ 5,051,789	\$ 3,185,819	\$ 1,165,070	\$ 1,767,443	\$ 33,553	\$ -	\$ 25,891,454	

Missouri-American Water Company
Cost of Service Study - Usage Statistics
Case No: WR-2024-0320, SR-2024-0321

	Residential	Non Residential	Rate J	Rate B	Contracts	Rate F Private Fire	Public Fire	Total	
Total Usage	228,746,333	78,676,166	49,615,703	18,144,716	27,526,028	522,548		403,231,495	hundred gallons
Average Day Usage	626,702	215,551	135,933	49,712	75,414	1,432	-	1,104,744	hundred gallons
Max Day Capacity Factor	2.00	2.12	1.48	1.61	1.44			---	
Max Day Usage	1,254,297	457,150	201,015	80,104	108,732	26,743	93,257	2,221,299	hundred gallons
Extra Capacity	627,595	241,599	65,082	30,392	33,318	25,311	93,257	1,116,555	hundred gallons
Fire Allocator						0.2229	0.7771	1.0000	20,000 gpm for 10 hours
Distribution Multiplier	1.00	1.00	0.11	0.21		1.00	1.00	N/A	
Average Hourly Usage	26,113	8,981	623	431	-	60	-	36,207	hundred gallons
Max Hour Capacity Factor	4.47	2.59	1.64	1.61	1.44			---	
Max Hour Usage	116,802	23,227	1,024	694	-	4,011	13,989	159,747	hundred gallons
Extra Capacity	90,689	14,246	401	263	-	3,952	13,989	123,540	hundred gallons
Customers	323,252	18,448	160	4	2	7,667		349,533	
Hydrants						39	33,301	33,340	
Revenue	\$ 219,196,203	\$ 68,531,934	\$ 11,296,485	\$ 4,931,008	\$ 4,684,084	\$ 4,998,343		\$ 313,638,057	

	Residential	Non Residential	Rate J	Rate B	Rate P	Rate F Private Fire	Public Fire	Meter Weighting	Service Weighting
5/8-METER	286,221	7,696	1	-	-	-		1.0	1.0
3/4-METER	24,510	3,064	-	-	-	-		1.5	1.0
1-METER	10,179	2,207	1	-	-	-		2.5	2.9
1.5-METER	821	1,122	1	-	-	-		5.0	4.0
2-METER	979	3,326	29	-	-	143		8.0	5.6
3-METER	14	330	18	-	-	3		16.0	5.6
4-METER	15	234	39	-	-	544		25.0	6.4
6-METER	16	221	39	-	-	2,308		50.0	9.9
8-METER	30	258	34	-	-	1,373		80.0	9.9
10-METER	2	55	21	-	-	46		115.0	9.9
12-METER	-	-	-	-	-	74		215.0	12.2
14-METER	-	-	-	-	-	-		320.0	12.2

Missouri-American Water Company
Cost of Service Study - Usage Statistics
Case No: WR-2024-0320, SR-2024-0321

System Load Factor:	0.6491	1,701,996	max day - thousand gallons per day
System Load Factor (fire):	0.6068	1,820,565	max day with fire - thousand gallons per day
System Load Factor (Hourly)	0.4006	90,381	max hour - thousand gallons per day
System Load Factor (Hourly fire)	0.3343	108,321	max hour with fire - thousand gallons per day

Average system hourly flow on max day
Average system hourly flow on max day

Mains Statistics

Type		Pct
Transmission	5,244,060	0.2141
Distribution	19,254,897	0.7859
Total	24,498,957	1.0000

Storage Statistics

Total Capacity	1,034,700	hundred gallons (2023 annual report)
Fire Allocation	0.1146	percentage of storage needed for maximum fire protection day
Non-Fire Allocation	0.8854	

Missouri-American Water Company
Cost of Service Study - Class Allocators
Case No: WR-2024-0320, SR-2024-0321

1. VARIABLE COST

Item	Non Residential		Rate J	Rate B	Rate P	Rate F		Total	Units
	Residential	Residential				Private Fire	Public Fire		
Total Usage	228,746,333	78,676,166	49,615,703	18,144,716	27,526,028	522,548	-	403,231,495	hundred gallons
Allocator	0.5673	0.1951	0.1230	0.0450	0.0683	0.0013	-	1.0000	

2. BASE/EXTRA DAILY

Item	Non Residential		Rate J	Rate B	Rate P	Rate F		Total	Units
	Residential	Residential				Private Fire	Public Fire		
Average Daily Use	626,702	215,551	135,933	49,712	75,414	1,432	-	1,104,744	hundred gallons
Extra Capacity	627,595	241,599	65,082	30,392	33,318			997,986	hundred gallons
System Capacity Factor	0.6491								
Average Day Allocator	0.3682	0.1266	0.0799	0.0292	0.0443	0.0008	-	0.6491	
Extra Capacity Allocator	0.2207	0.0850	0.0229	0.0107	0.0117	-	-	0.3509	
Allocator	0.5889	0.2116	0.1028	0.0399	0.0560	0.0008	-	1.0000	

3. BASE/EXTRA DAILY (w FIRE PROTECTION)

Item	Non Residential		Rate J	Rate B	Rate P	Rate F		Total	Units
	Residential	Residential				Private Fire	Public Fire		
Average Daily Use	626,702	215,551	135,933	49,712	75,414	1,432	-	1,104,744	hundred gallons
Extra Capacity	627,595	241,599	65,082	30,392	33,318	25,311	93,257	1,116,555	hundred gallons
System Capacity Factor	0.6068	assuming fire protection							
Average Day Allocator	0.3442	0.1184	0.0747	0.0273	0.0414	0.0008	-	0.6068	
Extra Capacity Allocator	0.2210	0.0851	0.0229	0.0107	0.0117	0.0089	0.0328	0.3932	
Combined Allocator	0.5652	0.2035	0.0976	0.0380	0.0532	0.0097	0.0328	1.0000	

4. BASE/EXTRA HOURLY (w FIRE PROTECTION)

Item	Non Residential		Rate J	Rate B	Rate P	Rate F		Total	Units
	Residential	Residential				Private Fire	Public Fire		
Average Hourly Use	26,113	8,981	623	431	-	60	-	36,207	hundred gallons
Extra Capacity	90,689	14,246	401	263	-	3,952	13,989	123,540	hundred gallons
System Capacity Factor	0.3343	assuming fire protection							
Average Day Allocator	0.2411	0.0829	0.0058	0.0040	-	0.0006	-	0.3343	
Extra Capacity Allocator	0.4887	0.0768	0.0022	0.0014	-	0.0213	0.0754	0.6657	
Combined Allocator	0.7298	0.1597	0.0079	0.0054	-	0.0218	0.0754	1.0000	

Missouri-American Water Company
Cost of Service Study - Class Allocators
Case No: WR-2024-0320, SR-2024-0321

5. STORAGE

Item	Non Residential		Rate J	Rate B	Rate P	Rate F		Total	Units
	Residential	Residential				Private Fire	Public Fire		
Average Hourly Use	26,113	8,981	5,664	2,071	3,142	60		46,031	
Extra Capacity	90,689	14,246	3,649	1,266	1,388	----		111,239	
Fire Allocator						0.22286	0.77714	1.00000	
System Capacity Factor	0.3343	assuming fire protection							
Average Day Allocator	0.1896	0.0652	0.0411	0.0150	0.0228	0.0004		0.3343	
Extra Capacity Allocator	0.5428	0.0853	0.0218	0.0076	0.0083			0.6657	
Allocator	0.7324	0.1505	0.0630	0.0226	0.0311	0.0004		1.0000	
Non-Fire Allocation of Storage	0.88541								
Fire Allocaton of Storage	0.11459								
Non-Fire Allocator	0.6485	0.1332	0.0558	0.0200	0.0276	0.0004	-	0.8854	
Fire Allocator	-	-	-	-	-	0.0255	0.0891	0.1146	
Combined Allocator	0.6485	0.1332	0.0558	0.0200	0.0276	0.0259	0.0891	1.0000	

6. MAINS

Item	Non Residential		Rate J	Rate B	Rate P	Rate F		Total	Units
	Residential	Residential				Private Fire	Public Fire		
Factor 4	0.5652	0.2035	0.0976	0.0380	0.0532	0.0097	0.0328	1.0000	hundred gallons
Factor 5	0.7298	0.1597	0.0079	0.0054	-	0.0218	0.0754	1.0000	hundred gallons
Tranmission Weighting	0.2141	Average system hourly load							
Distribution Weighting	0.7859	Average system hourly load - max day with fire protection (incremental)							
Combined Allocator	0.6946	0.1691	0.0271	0.0124	0.0114	0.0192	0.0663	1.0000	

7. HYDRANTS

Item	Non Residential		Rate J	Rate B	Rate P	Rate F		Total	Units
	Residential	Residential				Private Fire	Public Fire		
Total Hydrants	-	-	-	-	-	39	33,301	33,340	
Allocator	-	-	-	-	-	0.00116	0.99884	1.00000	

Missouri-American Water Company
Cost of Service Study - Class Allocators
Case No: WR-2024-0320, SR-2024-0321

8. METERS

Item	Non Residential		Rate J	Rate B	Rate P	Rate F		Total	Weighting
	Residential	Residential				Private Fire	Public Fire		
5/8-METER	286,221	7,696	1	-	-	-	-	293,917	1.0
3/4-METER	24,510	3,064	-	-	-	-	-	27,574	1.5
1-METER	10,179	2,207	1	-	-	-	-	12,386	2.5
1.5-METER	821	1,122	1	-	-	-	-	1,944	5.0
2-METER	979	3,326	29	-	-	-	-	4,333	8.0
3-METER	14	330	18	-	-	-	-	362	16.0
4-METER	15	234	39	-	-	-	-	287	25.0
6-METER	16	221	39	-	-	-	-	276	50.0
8-METER	30	258	34	-	-	-	-	322	80.0
10-METER	2	55	21	-	-	-	-	78	115.0
12-METER	-	-	-	-	-	-	-	-	215.0
16-METER	-	-	-	-	-	-	-	-	320.0
Total	364,402	99,171	8,560	-	-	-	-	472,133	-----
Allocator	0.77182	0.21005	0.01813	-	-	-	-	1.00000	

9. SERVICES

Item	Non Residential		Rate J	Rate B	Rate P	Rate F		Total	Weighting
	Residential	Residential				Private Fire	Public Fire		
5/8-METER	286,221	7,696	1	-	-	-	-	293,917	1.0
3/4-METER	24,510	3,064	-	-	-	-	-	27,574	1.0
1-METER	10,179	2,207	1	-	-	-	-	12,386	2.9
1.5-METER	821	1,122	1	-	-	-	-	1,944	4.0
2-METER	979	3,326	29	-	-	143	-	4,476	5.6
3-METER	14	330	18	-	-	3	-	365	5.6
4-METER	15	234	39	-	-	544	-	831	6.4
6-METER	16	221	39	-	-	2,308	-	2,584	9.9
8-METER	30	258	34	-	-	1,373	-	1,694	9.9
10-METER	2	55	21	-	-	46	-	125	9.9
12-METER	-	-	-	-	-	74	-	74	12.2
16-METER	-	-	-	-	-	-	-	-	12.2
Total	350,037	48,834	1,444	-	-	42,144	-	442,458	-----
Allocator	0.79112	0.11037	0.00326	-	-	0.09525	-	1.00000	

10. CUSTOMERS

Item	Non Residential		Rate J	Rate B	Rate P	Rate F		Total
	Residential	Residential				Private Fire	Public Fire	
Total Customers	323,252	18,448	160	4	2	7,667	-	349,533
Allocator	0.92481	0.05278	0.00046	0.00001	0.00001	0.02193	-	1.00000

11. METERED CUSTOMERS

Missouri-American Water Company
Cost of Service Study - Class Allocators
Case No: WR-2024-0320, SR-2024-0321

Item	Residential	Non Residential	Rate J	Rate B	Rate P	Rate F Private Fire	Public Fire	Total
Total Customers	323,252	18,448	160	4	2	7,667		349,533
Allocator	0.92481	0.05278	0.00046	0.00001	0.00001	0.02193		1.00000

Missouri-American Water Company
Cost of Service Study - Allocator Summary
Case No: WR-2024-0320, SR-2024-0321

Alloc	Description	Source of Supply	Pumping	Water Treatment	Transmission	Distribution	Storage	Meters	Services	Customers	Hydrants	Total	Notes
A	Source of Supply	1.00000	-	-	-	-	-	-	-	-	-	1.00000	
B	Pumping	-	1.00000	-	-	-	-	-	-	-	-	1.00000	
C	Water Treatment	-	-	1.00000	-	-	-	-	-	-	-	1.00000	
D	Transmission	-	-	-	1.00000	-	-	-	-	-	-	1.00000	
E	Distribution	-	-	-	-	1.00000	-	-	-	-	-	1.00000	
F	Storage	-	-	-	-	-	1.00000	-	-	-	-	1.00000	
G	Meters	-	-	-	-	-	-	1.00000	-	-	-	1.00000	
H	Services	-	-	-	-	-	-	-	1.00000	-	-	1.00000	
I	Customers	-	-	-	-	-	-	-	-	1.00000	-	1.00000	
J	Hydrants	-	-	-	-	-	-	-	-	-	1.00000	1.00000	
K	Mains	-	-	-	0.21405	0.78595	-	-	-	-	-	1.00000	
1	T/D Oper. Expense	-	-	-	0.14287	0.52459	-	0.33254	-	-	-	1.00000	
2	T/D Maint.. Expense	-	-	-	0.07138	0.26209	0.04204	0.08956	0.19427	-	0.34067	1.00000	
3	Fixed O&M	0.03029	0.07685	0.16686	0.06323	0.23216	0.00909	0.13061	0.04200	0.17525	0.07365	1.00000	
4	Labor	0.01153	0.11742	0.25685	0.07217	0.26499	0.00606	0.15683	0.02809	0.03693	0.04912	1.00000	
5	Net Plant (less gen. and int.)	0.02271	0.03658	0.07645	0.13222	0.48550	0.00572	0.10767	0.08945	0.01034	0.03337	1.00000	
6	Rate Base	0.02564	0.04145	0.08665	0.12606	0.46286	0.00646	0.11942	0.08513	0.01140	0.03493	1.00000	
--	-----												
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Alloc	Description	Rate F							Total
		Residential	Non-Residential	Rate J	Rate B	Rate P	Private Fire	Public Fire	
1	Total Usage	0.56728	0.19511	0.12305	0.04500	0.06826	0.00130	-	1.00000
2	Base/Extra Daily	0.58889	0.21160	0.10275	0.03989	0.05602	0.00084	-	1.00000
3	Base/Extra Daily w/ Fire	0.56524	0.20348	0.09758	0.03801	0.05316	0.00970	0.03284	1.00000
4	Base/Extra Hourly w/ Fire	0.72978	0.15968	0.00791	0.00539	-	0.02185	0.07538	1.00000
5	Storage	0.64845	0.13323	0.05575	0.02003	0.02756	0.02592	0.08905	1.00000
7	Hydrants	-	-	-	-	-	0.00116	0.99884	1.00000
8	Meters	0.77182	0.21005	0.01813	-	-	-	-	1.00000
9	Services	0.79112	0.11037	0.00326	-	-	0.09525	-	1.00000
10	Customers	0.92481	0.05278	0.00046	0.00001	0.00001	0.02193	-	1.00000
11	T/D Oper. Expense	0.72025	0.18269	0.02412	0.00826	0.00759	0.01285	0.04424	1.00000
12	T/D Maint.. Expense	0.48168	0.10223	0.01364	0.00497	0.00495	0.02641	0.36612	1.00000
13	Fixed O&M	0.66671	0.14982	0.03886	0.01463	0.01874	0.01476	0.09648	1.00000
14	Labor	0.63995	0.17648	0.05146	0.01946	0.02528	0.01155	0.07581	1.00000
15	Net Plant (less gen. and int.)	0.67524	0.16665	0.03307	0.01310	0.01469	0.02126	0.07598	1.00000
16	Rate Base	0.67285	0.16770	0.03436	0.01347	0.01537	0.02040	0.07586	1.00000
17	Mains	0.69456	0.16906	0.02711	0.01237	0.01138	0.01925	0.06628	1.00000

Missouri-American Water Company
Class Cost of Service Study - Functional Allocators to Customer Class
Case No: WR-2024-0320, SR-2024-0321

	Functional COS	Alloc	Description	Rate F							Total	Variance
				Residential	Non-Residential	Rate J	Rate B	Rate P	Private Fire	Public Fire		
Source of Supply Expense												
Fixed	\$ 9,402,169	2	Base/Extra Daily	\$ 4,237,481	\$ 2,305,062	\$ 1,597,224	\$ 762,285	\$ 498,735	\$ 1,382	\$ -	\$ 9,402,169	\$ -
Variable	\$ 4,023,853	1	Total Usage	\$ 1,629,686	\$ 850,101	\$ 872,953	\$ 410,700	\$ 259,586	\$ 829	\$ -	\$ 4,023,853	\$ -
Power and Pumping Expenses												
Fixed	\$ 10,593,765	3	Base/Extra Daily w/ Fire	\$ 4,419,825	\$ 2,414,806	\$ 1,590,953	\$ 761,009	\$ 500,545	\$ 217,150	\$ 689,477	\$ 10,593,765	\$ -
Variable	\$ 1,860,865	1	Total Usage	\$ 753,662	\$ 393,136	\$ 403,704	\$ 189,931	\$ 120,048	\$ 383	\$ -	\$ 1,860,865	\$ -
Water Treatment												
Fixed	\$ 29,105,469	2	Base/Extra Daily	\$ 13,117,597	\$ 7,135,578	\$ 4,944,387	\$ 2,359,738	\$ 1,543,892	\$ 4,277	\$ -	\$ 29,105,469	\$ -
Variable	\$ 6,216,772	1	Total Usage	\$ 2,517,831	\$ 1,313,388	\$ 1,348,695	\$ 634,523	\$ 401,054	\$ 1,281	\$ -	\$ 6,216,772	\$ -
Transmission	\$ 12,090,833	3	Base/Extra Daily w/ Fire	\$ 5,044,417	\$ 2,756,056	\$ 1,815,780	\$ 868,552	\$ 571,280	\$ 247,837	\$ 786,911	\$ 12,090,833	\$ -
Distribution	\$ 47,519,699	4	Base/Extra Hourly w/ Fire	\$ 24,611,750	\$ 6,805,184	\$ 264,049	\$ 640,867	\$ -	\$ 3,633,117	\$ 11,564,731	\$ 47,519,699	\$ -
Storage	\$ 3,934,483	5	Storage	\$ 2,658,672	\$ 683,801	\$ 162,213	\$ 81,411	\$ 59,415	\$ 69,169	\$ 219,801	\$ 3,934,483	\$ -
Meters	\$ 18,975,414	8	Meters	\$ 14,191,002	\$ 4,346,467	\$ 331,032	\$ 89,879	\$ 17,034	\$ -	\$ -	\$ 18,975,414	\$ -
Services	\$ 13,455,827	9	Services	\$ 10,071,890	\$ 2,127,884	\$ 57,798	\$ 17,657	\$ 1,485	\$ 1,179,114	\$ -	\$ 13,455,827	\$ -
Customers	\$ 8,074,560	10	Customers	\$ 7,222,104	\$ 672,222	\$ 4,091	\$ 1,364	\$ 178	\$ 174,601	\$ -	\$ 8,074,560	\$ -
Hydrants	\$ 8,115,923	7	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 173,335	\$ 7,942,588	\$ 8,115,923	\$ -
Total	\$ 173,369,630			\$ 90,475,916	\$ 31,803,685	\$ 13,392,880	\$ 6,817,915	\$ 3,973,251	\$ 5,702,475	\$ 21,203,508	\$ 173,369,630	\$ -
				52.19%	18.34%	7.73%	3.93%	2.29%	3.29%	12.23%	100.00%	
			One Step Allocation:	\$ 90,475,916	\$ 31,803,685	\$ 13,392,880	\$ 6,817,915	\$ 3,973,251	\$ 5,702,475	\$ 21,203,508	\$ 173,369,630	
			One Step Delta:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Rate Year Water Revenue	\$ 117,792,936			\$ 68,796,681	\$ 30,997,236	\$ 10,574,416	\$ 4,406,843	\$ 1,091,501	\$ 1,926,258	\$ -	\$ 117,792,936	\$ -
Other Water Operating Revenues	\$ 1,546,294											
Increase	\$ 55,576,695			\$ 21,679,235	\$ 806,449	\$ 2,818,463	\$ 2,411,072	\$ 2,881,750	\$ 3,776,217	\$ 21,203,508	\$ 55,576,694	\$ (1)
Percent Increase	47.2%			31.51%	2.60%	26.65%	54.71%	264.02%	196.04%	0.00%	47.18%	
Rate Year Revenue				\$ 68,796,681	\$ 30,997,236	\$ 10,574,416	\$ 4,406,843	\$ 1,091,501	\$ 1,926,258	\$ -	\$ 117,792,936	
Cost of Service Increase				\$ 21,679,235	\$ 806,449	\$ 2,818,463	\$ 2,411,072	\$ 2,881,750	\$ 3,776,217	\$ 21,203,508	\$ 55,576,694	
Allocation of Public Fire				\$ 15,947,161	\$ 4,884,349	\$ 371,998				\$ (21,203,508)	\$ -	
Revenue Target				\$ 106,423,077	\$ 36,688,034	\$ 13,764,877	\$ 6,817,915	\$ 3,973,251	\$ 5,702,475	\$ -	\$ 173,369,630	
Percent Increase				54.7%	18.4%	30.2%	54.7%	264.0%	196.0%	0.0%	47.2%	

Missouri-American Water Company
Class Cost of Service Study - Account Detail
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Source of Supply	Pumping	Water Treatment	Transmission	Distribution	Storage	Meters	Services	Customers	Hydrants	Total	Variance
Source of Supply Expense															
Operating Expense															
Purchased Water	\$ 1,422,327	A	Source of Supply	\$ 1,422,327	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,422,327	\$ -
Fuel and Power	\$ 2,601,526	A	Source of Supply	\$ 2,601,526	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,601,526	\$ -
Salaries and Wages	\$ 1,701	A	Source of Supply	\$ 1,701	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,701	\$ -
Contract Services - Other	\$ 71,816	A	Source of Supply	\$ 71,816	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 71,816	\$ -
Building Maintenance and Services	\$ 493,463	A	Source of Supply	\$ 493,463	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 493,463	\$ -
Miscellaneous	\$ 159	A	Source of Supply	\$ 159	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 159	\$ -
Telecommunications	\$ 2,793	A	Source of Supply	\$ 2,793	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,793	\$ -
Postage	\$ -	A	Source of Supply	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Office supplies and services	\$ 4,360	A	Source of Supply	\$ 4,360	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,360	\$ -
Materials & Supplies	\$ 3,283	A	Source of Supply	\$ 3,283	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,283	\$ -
Rents-Property	\$ 1,747	A	Source of Supply	\$ 1,747	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,747	\$ -
Rents-Equipment	\$ 1,651	A	Source of Supply	\$ 1,651	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,651	\$ -
Transportation	\$ 539	A	Source of Supply	\$ 539	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 539	\$ -
	\$ 4,605,365			\$ 4,605,365	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,605,365	\$ -
Maintenance Expense															
Salaries and Wages	\$ 71,499	A	Source of Supply	\$ 71,499	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 71,499	\$ -
Materials & Supplies	\$ 34,552	A	Source of Supply	\$ 34,552	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 34,552	\$ -
Transportation	\$ 1,384	A	Source of Supply	\$ 1,384	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,384	\$ -
Miscellaneous	\$ 6,422	A	Source of Supply	\$ 6,422	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,422	\$ -
Contract Services - Eng	\$ -	A	Source of Supply	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contract Services - Other	\$ 46,930	A	Source of Supply	\$ 46,930	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 46,930	\$ -
	\$ 160,788			\$ 160,788	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 160,788	\$ -
Total SS Expense	\$ 4,766,153			\$ 4,766,153	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,766,153	\$ -
Power and Pumping Expenses															
Operating Expense															
Fuel and Power	\$ 1,860,865	B	Pumping	\$ -	\$ 1,860,865	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,860,865	\$ -
Salaries and Wages	\$ 528,719	B	Pumping	\$ -	\$ 528,719	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 528,719	\$ -
Employee Benefits	\$ 680	B	Pumping	\$ -	\$ 680	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 680	\$ -
Building Maintenance and Services	\$ 4,233	B	Pumping	\$ -	\$ 4,233	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,233	\$ -
Miscellaneous	\$ 1,719	B	Pumping	\$ -	\$ 1,719	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,719	\$ -
Office supplies and services	\$ 116	B	Pumping	\$ -	\$ 116	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 116	\$ -
Materials & Supplies	\$ 5,982	B	Pumping	\$ -	\$ 5,982	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,982	\$ -
Rents-Equipment	\$ 1,469	B	Pumping	\$ -	\$ 1,469	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,469	\$ -
Transportation	\$ 38,552	B	Pumping	\$ -	\$ 38,552	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 38,552	\$ -
	\$ 2,442,334			\$ -	\$ 2,442,334	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,442,334	\$ -
Maintenance Expense															
Salaries and Wages	\$ 216,447	B	Pumping	\$ -	\$ 216,447	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 216,447	\$ -
Transportation	\$ 2,047	B	Pumping	\$ -	\$ 2,047	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,047	\$ -
Contract Services - Eng	\$ 4,267	B	Pumping	\$ -	\$ 4,267	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,267	\$ -
Contract Services - Other	\$ 250,035	B	Pumping	\$ -	\$ 250,035	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 250,035	\$ -
Miscellaneous	\$ 1,395	B	Pumping	\$ -	\$ 1,395	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,395	\$ -
Materials & Supplies	\$ 58,529	B	Pumping	\$ -	\$ 58,529	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 58,529	\$ -
	\$ 532,719			\$ -	\$ 532,719	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 532,719	\$ -
Total Pumping Expense	\$ 2,975,053			\$ -	\$ 2,975,053	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,975,053	\$ -
Water Treatment															
Operating Expense															
Fuel and Power	\$ 383,380	C	Water Treatment	\$ -	\$ -	\$ 383,380	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 383,380	\$ -
Chemicals	\$ 4,034,489	C	Water Treatment	\$ -	\$ -	\$ 4,034,489	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,034,489	\$ -
Waste Disposal	\$ 1,798,903	C	Water Treatment	\$ -	\$ -	\$ 1,798,903	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,798,903	\$ -
Salaries and Wages	\$ 1,153,501	C	Water Treatment	\$ -	\$ -	\$ 1,153,501	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,153,501	\$ -
Employee Benefits	\$ 13	C	Water Treatment	\$ -	\$ -	\$ 13	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13	\$ -
Contract Services - Eng	\$ 4,927	C	Water Treatment	\$ -	\$ -	\$ 4,927	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,927	\$ -
Contract Services - Other	\$ 45,825	C	Water Treatment	\$ -	\$ -	\$ 45,825	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 45,825	\$ -
Building Maintenance and Services	\$ 49,538	C	Water Treatment	\$ -	\$ -	\$ 49,538	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 49,538	\$ -
Miscellaneous	\$ 131,113	C	Water Treatment	\$ -	\$ -	\$ 131,113	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 131,113	\$ -
Telecommunications	\$ 2,824	C	Water Treatment	\$ -	\$ -	\$ 2,824	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,824	\$ -
Postage	\$ -	C	Water Treatment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Office supplies and services	\$ 15,896	C	Water Treatment	\$ -	\$ -	\$ 15,896	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,896	\$ -
Materials & Supplies	\$ 22,758	C	Water Treatment	\$ -	\$ -	\$ 22,758	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 22,758	\$ -
Rents-Property	\$ 39	C	Water Treatment	\$ -	\$ -	\$ 39	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 39	\$ -
Rents-Equipment	\$ (39,231)	C	Water Treatment	\$ -	\$ -	\$ (39,231)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (39,231)	\$ -
Transportation	\$ 1,185	C	Water Treatment	\$ -	\$ -	\$ 1,185	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,185	\$ -
	\$ 7,605,159			\$ -	\$ -	\$ 7,605,159	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,605,159	\$ -

Missouri-American Water Company
Class Cost of Service Study - Account Detail
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Source of											Total	Variance		
				Supply	Pumping	Water Treatment	Transmission	Distribution	Storage	Meters	Services	Customers	Hydrants					
Maintenance Expense																		
Salaries and Wages	\$ 476,508	C	Water Treatment	\$ -	\$ -	\$ 476,508	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 476,508	\$ -
Transportation	\$ 3,901	C	Water Treatment	\$ -	\$ -	\$ 3,901	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,901	\$ -
Contract Services - Eng	\$ 12,916	C	Water Treatment	\$ -	\$ -	\$ 12,916	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,916	\$ -
Contract Services - Other	\$ 205,925	C	Water Treatment	\$ -	\$ -	\$ 205,925	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 205,925	\$ -
Miscellaneous	\$ 27,803	C	Water Treatment	\$ -	\$ -	\$ 27,803	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 27,803	\$ -
Materials & Supplies	\$ 362,271	C	Water Treatment	\$ -	\$ -	\$ 362,271	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 362,271	\$ -
	\$ 1,089,324			\$ -	\$ -	\$ 1,089,324	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,089,324	\$ -
Total Water Treatment Expense	\$ 8,694,482			\$ -	\$ -	\$ 8,694,482	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,694,482	\$ -
Transmission & Distribution Expense																		
Operating Expense																		
Fuel and Power	\$ 304,396	1	T/D Oper. Expense	\$ -	\$ -	\$ -	\$ 41,165	\$ 161,787	\$ -	\$ 101,444	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 304,396	\$ -
Salaries and Wages	\$ 2,139,209	1	T/D Oper. Expense	\$ -	\$ -	\$ -	\$ 289,294	\$ 1,136,992	\$ -	\$ 712,923	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,139,209	\$ -
Employee Benefits	\$ 2,884	1	T/D Oper. Expense	\$ -	\$ -	\$ -	\$ 390	\$ 1,533	\$ -	\$ 961	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,884	\$ -
Contract Services - Eng	\$ 4,310	1	T/D Oper. Expense	\$ -	\$ -	\$ -	\$ 583	\$ 2,291	\$ -	\$ 1,436	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,310	\$ -
Contract Services - Other	\$ 608,355	1	T/D Oper. Expense	\$ -	\$ -	\$ -	\$ 82,270	\$ 323,341	\$ -	\$ 202,743	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 608,355	\$ -
Building Maintenance and Services	\$ 140,430	1	T/D Oper. Expense	\$ -	\$ -	\$ -	\$ 18,991	\$ 74,639	\$ -	\$ 46,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 140,430	\$ -
Miscellaneous	\$ 53,784	1	T/D Oper. Expense	\$ -	\$ -	\$ -	\$ 7,273	\$ 28,586	\$ -	\$ 17,924	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 53,784	\$ -
Telecommunications	\$ 17,373	1	T/D Oper. Expense	\$ -	\$ -	\$ -	\$ 2,349	\$ 9,234	\$ -	\$ 5,790	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17,373	\$ -
Postage	\$ -	1	T/D Oper. Expense	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Office supplies and services	\$ 43,308	1	T/D Oper. Expense	\$ -	\$ -	\$ -	\$ 5,857	\$ 23,018	\$ -	\$ 14,433	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 43,308	\$ -
Materials & Supplies	\$ 198,111	1	T/D Oper. Expense	\$ -	\$ -	\$ -	\$ 26,791	\$ 105,296	\$ -	\$ 66,024	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 198,111	\$ -
Rents-Property	\$ 1,395	1	T/D Oper. Expense	\$ -	\$ -	\$ -	\$ 189	\$ 741	\$ -	\$ 465	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,395	\$ -
Rents-Equipment	\$ 19,250	1	T/D Oper. Expense	\$ -	\$ -	\$ -	\$ 2,603	\$ 10,231	\$ -	\$ 6,415	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 19,250	\$ -
Transportation	\$ 339,671	1	T/D Oper. Expense	\$ -	\$ -	\$ -	\$ 45,935	\$ 180,535	\$ -	\$ 113,200	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 339,671	\$ -
	\$ 3,872,475			\$ -	\$ -	\$ -	\$ 523,691	\$ 2,058,224	\$ -	\$ 1,290,559	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,872,475	\$ -
Maintenance Expense																		
Salaries and Wages	\$ 609,326	2	T/D Maint.. Expense	\$ -	\$ -	\$ -	\$ 41,412	\$ 162,760	\$ 25,559	\$ 54,517	\$ 117,865	\$ -	\$ 207,213	\$ -	\$ -	\$ 609,326	\$ -	
Contract Services - Eng	\$ 35,545	2	T/D Maint.. Expense	\$ -	\$ -	\$ -	\$ 2,416	\$ 9,494	\$ 1,491	\$ 3,180	\$ 6,876	\$ -	\$ 12,088	\$ -	\$ -	\$ 35,545	\$ -	
Contract Services - Other	\$ 1,650,348	2	T/D Maint.. Expense	\$ -	\$ -	\$ -	\$ 112,164	\$ 440,831	\$ 69,227	\$ 147,658	\$ 319,235	\$ -	\$ 561,234	\$ -	\$ -	\$ 1,650,348	\$ -	
Transportation	\$ 117,992	2	T/D Maint.. Expense	\$ -	\$ -	\$ -	\$ 8,019	\$ 31,517	\$ 4,949	\$ 10,557	\$ 22,824	\$ -	\$ 40,125	\$ -	\$ -	\$ 117,992	\$ -	
Miscellaneous	\$ 283,548	2	T/D Maint.. Expense	\$ -	\$ -	\$ -	\$ 19,271	\$ 75,740	\$ 11,894	\$ 25,369	\$ 54,848	\$ -	\$ 96,426	\$ -	\$ -	\$ 283,548	\$ -	
Materials & Supplies	\$ 483,294	2	T/D Maint.. Expense	\$ -	\$ -	\$ -	\$ 32,847	\$ 129,095	\$ 20,273	\$ 43,241	\$ 93,486	\$ -	\$ 164,354	\$ -	\$ -	\$ 483,294	\$ -	
	\$ 3,180,052			\$ -	\$ -	\$ -	\$ 216,129	\$ 849,436	\$ 133,393	\$ 284,521	\$ 615,133	\$ -	\$ 1,081,440	\$ -	\$ -	\$ 3,180,052	\$ -	
Total T&D Expense	\$ 7,052,527			\$ -	\$ -	\$ -	\$ 739,820	\$ 2,907,661	\$ 133,393	\$ 1,575,080	\$ 615,133	\$ -	\$ 1,081,440	\$ -	\$ -	\$ 7,052,527	\$ -	
General Mains Expense																		
Operations																		
Salaries and Wages	\$ 408,916	K	Mains	\$ -	\$ -	\$ -	\$ 82,941	\$ 325,975	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 408,916	\$ -	
Miscellaneous	\$ 809	K	Mains	\$ -	\$ -	\$ -	\$ 164	\$ 645	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 809	\$ -	
	\$ 409,725			\$ -	\$ -	\$ -	\$ 83,105	\$ 326,620	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 409,725	\$ -	
Maintenance Expense																		
Salaries and Wages	\$ 99,754	K	Mains	\$ -	\$ -	\$ -	\$ 20,233	\$ 79,521	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 99,754	\$ -	
Miscellaneous	\$ 3,064	K	Mains	\$ -	\$ -	\$ -	\$ 621	\$ 2,443	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,064	\$ -	
	\$ 102,818			\$ -	\$ -	\$ -	\$ 20,855	\$ 81,963	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 102,818	\$ -	
General Mains Expense	\$ 512,543			\$ -	\$ -	\$ -	\$ 103,959	\$ 408,584	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 512,543	\$ -	
Storage Expense																		
Operating Expense																		
Salaries and Wages	\$ -	F	Storage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Miscellaneous	\$ -	F	Storage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ -			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Maintenance Expense																		
Salaries and Wages	\$ 12,871	F	Storage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,871	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,871	\$ -	
Miscellaneous	\$ -	F	Storage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ 12,871			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,871	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,871	\$ -	
Total Storage Expense	\$ 12,871			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,871	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,871	\$ -	
Meter Expense																		
Operating Expense																		
Salaries and Wages	\$ 202,063	G	Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 202,063	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 202,063	\$ -	
Miscellaneous	\$ 2,736	G	Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,736	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,736	\$ -	
	\$ 204,799			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 204,799	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 204,799	\$ -	
Maintenance Expense																		
Salaries and Wages	\$ 27,308	G	Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 27,308	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 27,308	\$ -	
Miscellaneous	\$ 146	G	Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 146	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 146	\$ -	
	\$ 27,454			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 27,454	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 27,454	\$ -	

Missouri-American Water Company
Class Cost of Service Study - Account Detail
Case No: WR-2024-0320, SR-2024-0321

Post Test Year	Alloc	Description	Source of Supply	Pumping	Water Treatment	Transmission	Distribution	Storage	Meters	Services	Customers	Hydrants	Total	Variance
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Missouri-American Water Company
 Class Cost of Service Study - Account Detail
 Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Source of Supply	Pumping	Water Treatment	Transmission	Distribution	Storage	Meters	Services	Customers	Hydrants	Total	Variance
Total Meter Expense	\$ 232,253			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 232,253	\$ -	\$ -	\$ -	\$ 232,253	\$ -
Service Expense															
Operating Expense															
Salaries and Wages	\$ -	H	Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Miscellaneous	\$ -	H	Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Service Expense	\$ 59,355			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 59,355	\$ -	\$ -	\$ 59,355	\$ -
Maintenance Expense															
Salaries and Wages	\$ 59,890	H	Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 59,890	\$ -	\$ -	\$ 59,890	\$ -
Miscellaneous	\$ (535)	H	Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (535)	\$ -	\$ -	\$ (535)	\$ -
Total Service Expense	\$ 59,355			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 59,355	\$ -	\$ -	\$ 59,355	\$ -
Hydrant Expense															
Maintenance Expense															
Salaries and Wages	\$ 104,158	J	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 104,158	\$ 104,158	\$ -
Miscellaneous	\$ 191	J	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 191	\$ 191	\$ -
Hydrant Expense	\$ 104,350			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 104,350	\$ 104,350	\$ -
Customer Accounts															
Fuel and Power	\$ 898	I	Customers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 898	\$ -	\$ 898	\$ -
Salaries and Wages	\$ 234,337	I	Customers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 234,337	\$ -	\$ 234,337	\$ -
Contract Services - Other	\$ 47,854	I	Customers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 47,854	\$ -	\$ 47,854	\$ -
Building Maintenance and Services	\$ 13,954	I	Customers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,954	\$ -	\$ 13,954	\$ -
Telecommunications	\$ 1,580	I	Customers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,580	\$ -	\$ 1,580	\$ -
Office supplies and services	\$ 1,820	I	Customers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,820	\$ -	\$ 1,820	\$ -
Materials & Supplies	\$ 44,301	I	Customers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 44,301	\$ -	\$ 44,301	\$ -
Transportation	\$ 73	I	Customers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 73	\$ -	\$ 73	\$ -
Uncollectible Accounts	\$ 1,800,985	I	Customers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,800,985	\$ -	\$ 1,800,985	\$ -
Customer accounting, other	\$ 565,618	I	Customers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 565,618	\$ -	\$ 565,618	\$ -
Total Customer Accounting Expense	\$ 2,711,420			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,711,420	\$ -	\$ 2,711,420	\$ -
Administrative & General Expense															
Operating Expense															
Fuel and Power	\$ 11,134	3	Fixed O&M	\$ 550	\$ 826	\$ 1,837	\$ 626	\$ 2,458	\$ 108	\$ 1,340	\$ 500	\$ 2,010	\$ 879	\$ 11,134	\$ -
Salaries and Wages	\$ 4,167,130	4	Labor	\$ 48,066	\$ 489,300	\$ 1,070,318	\$ 284,900	\$ 1,119,722	\$ 25,235	\$ 654,539	\$ 116,720	\$ 153,874	\$ 204,457	\$ 4,167,130	\$ -
Employee Benefits	\$ 2,761,747	4	Labor	\$ 31,856	\$ 324,281	\$ 709,348	\$ 188,816	\$ 742,091	\$ 16,724	\$ 433,793	\$ 77,355	\$ 101,979	\$ 135,503	\$ 2,761,747	\$ -
Support Services Costs - Employee	\$ 6,493,498	4	Labor	\$ 74,900	\$ 762,460	\$ 1,667,840	\$ 443,950	\$ 1,744,825	\$ 39,322	\$ 1,019,946	\$ 181,880	\$ 239,776	\$ 318,598	\$ 6,493,498	\$ -
Support Services Costs - Admin	\$ 6,525,751	3	Fixed O&M	\$ 322,518	\$ 484,098	\$ 1,076,527	\$ 366,609	\$ 1,440,858	\$ 63,549	\$ 785,259	\$ 293,055	\$ 1,178,071	\$ 515,207	\$ 6,525,751	\$ -
Contract Services - Eng	\$ 3,440	3	Fixed O&M	\$ 170	\$ 255	\$ 568	\$ 193	\$ 760	\$ 34	\$ 414	\$ 154	\$ 621	\$ 272	\$ 3,440	\$ -
Contract Services - Other	\$ 573,451	3	Fixed O&M	\$ 28,341	\$ 42,540	\$ 94,600	\$ 32,216	\$ 126,616	\$ 5,584	\$ 69,005	\$ 25,752	\$ 103,523	\$ 45,274	\$ 573,451	\$ -
Building Maintenance and Services	\$ 237,961	3	Fixed O&M	\$ 11,761	\$ 17,653	\$ 39,255	\$ 13,368	\$ 52,541	\$ 2,317	\$ 28,634	\$ 10,686	\$ 42,958	\$ 18,787	\$ 237,961	\$ -
Miscellaneous	\$ 686,568	3	Fixed O&M	\$ 33,932	\$ 50,931	\$ 113,260	\$ 38,571	\$ 151,591	\$ 6,686	\$ 82,616	\$ 30,832	\$ 123,944	\$ 54,204	\$ 686,568	\$ -
Telecommunications	\$ 515,282	3	Fixed O&M	\$ 25,466	\$ 38,225	\$ 85,004	\$ 28,948	\$ 113,772	\$ 5,018	\$ 62,005	\$ 23,140	\$ 93,022	\$ 40,681	\$ 515,282	\$ -
Postage	\$ -	3	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Office supplies and services	\$ 274,454	3	Fixed O&M	\$ 13,564	\$ 20,360	\$ 45,276	\$ 15,419	\$ 60,598	\$ 2,673	\$ 33,026	\$ 12,325	\$ 49,546	\$ 21,668	\$ 274,454	\$ -
Materials & Supplies	\$ 70,607	3	Fixed O&M	\$ 3,490	\$ 5,238	\$ 11,648	\$ 3,967	\$ 15,590	\$ 688	\$ 8,496	\$ 3,171	\$ 12,746	\$ 5,574	\$ 70,607	\$ -
Communications	\$ 25,072	3	Fixed O&M	\$ 1,239	\$ 1,860	\$ 4,136	\$ 1,409	\$ 5,536	\$ 244	\$ 3,017	\$ 1,126	\$ 4,526	\$ 1,979	\$ 25,072	\$ -
Rents-Property	\$ 78,325	3	Fixed O&M	\$ 3,871	\$ 5,810	\$ 12,921	\$ 4,400	\$ 17,294	\$ 763	\$ 9,425	\$ 3,517	\$ 14,140	\$ 6,184	\$ 78,325	\$ -
Rents-Equipment	\$ 7,898	3	Fixed O&M	\$ 390	\$ 586	\$ 1,303	\$ 444	\$ 1,744	\$ 77	\$ 950	\$ 355	\$ 1,426	\$ 624	\$ 7,898	\$ -
Transportation	\$ 324,725	3	Fixed O&M	\$ 16,049	\$ 24,089	\$ 53,569	\$ 18,243	\$ 71,698	\$ 3,162	\$ 39,075	\$ 14,583	\$ 58,622	\$ 25,637	\$ 324,725	\$ -
Regulatory Expense	\$ 187,619	3	Fixed O&M	\$ 9,273	\$ 13,918	\$ 30,951	\$ 10,540	\$ 41,425	\$ 1,827	\$ 22,577	\$ 8,425	\$ 33,870	\$ 14,813	\$ 187,619	\$ -
Insurance	\$ 2,696,028	3	Fixed O&M	\$ 133,244	\$ 199,999	\$ 444,753	\$ 151,460	\$ 595,271	\$ 26,255	\$ 324,419	\$ 121,072	\$ 486,704	\$ 212,851	\$ 2,696,028	\$ -
Total A&G Expense	\$ 25,640,691			\$ 758,679	\$ 2,482,429	\$ 5,463,114	\$ 1,604,078	\$ 6,304,389	\$ 200,266	\$ 3,578,536	\$ 924,648	\$ 2,701,358	\$ 1,623,193	\$ 25,640,691	\$ -
Maintenance Expense															
Salaries and Wages	\$ 33,863	4	Labor	\$ 391	\$ 3,976	\$ 8,698	\$ 2,315	\$ 9,099	\$ 205	\$ 5,319	\$ 948	\$ 1,250	\$ 1,661	\$ 33,863	\$ -
Transportation	\$ 3,722	3	Fixed O&M	\$ 184	\$ 276	\$ 614	\$ 209	\$ 822	\$ 36	\$ 448	\$ 167	\$ 672	\$ 294	\$ 3,722	\$ -
Contract Services - Eng	\$ -	3	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contract Services - Other	\$ 20,944	3	Fixed O&M	\$ 1,035	\$ 1,554	\$ 3,455	\$ 1,177	\$ 4,624	\$ 204	\$ 2,520	\$ 941	\$ 3,781	\$ 1,654	\$ 20,944	\$ -
Miscellaneous	\$ 22,230	3	Fixed O&M	\$ 1,099	\$ 1,649	\$ 3,667	\$ 1,249	\$ 4,908	\$ 216	\$ 2,675	\$ 998	\$ 4,013	\$ 1,755	\$ 22,230	\$ -
Materials & Supplies	\$ 26,127	3	Fixed O&M	\$ 1,291	\$ 1,938	\$ 4,310	\$ 1,468	\$ 5,769	\$ 254	\$ 3,144	\$ 1,173	\$ 4,717	\$ 2,063	\$ 26,127	\$ -
Total A&G Expense	\$ 52,868,585			\$ 4,000	\$ 9,393	\$ 20,744	\$ 6,418	\$ 25,222	\$ 916	\$ 14,106	\$ 4,228	\$ 14,433	\$ 7,427	\$ 52,868,585	\$ -
Total Operations & Maintenance Exp. (Other Water)	\$ 52,868,585			\$ 5,528,831	\$ 5,466,875	\$ 14,178,341	\$ 2,454,275	\$ 9,645,856	\$ 347,447	\$ 5,399,975	\$ 1,603,364	\$ 5,427,211	\$ 2,816,410	\$ 52,868,585	\$ -

Missouri-American Water Company
Class Cost of Service Study - Account Detail
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Source of Supply	Pumping	Water Treatment	Transmission	Distribution	Storage	Meters	Services	Customers	Hydrants	Total	Variance
Taxes Other Than Income Tax															
Property Taxes	\$ 11,171,788	5	Net Plant (less gen. ar	\$ 651,359	\$ 522,813	\$ 1,645,863	\$ 1,056,674	\$ 4,152,966	\$ 298,676	\$ 1,104,552	\$ 1,114,099	\$ 170,468	\$ 454,318	\$ 11,171,788	\$ -
Payroll Taxes	\$ 817,364	4	Labor	\$ 9,428	\$ 95,974	\$ 209,938	\$ 55,882	\$ 219,629	\$ 4,950	\$ 128,385	\$ 22,894	\$ 30,182	\$ 40,103	\$ 817,364	\$ -
Utility Reg Assessment	\$ 829,029	6	Rate Base	\$ 56,094	\$ 45,205	\$ 142,143	\$ 70,723	\$ 277,957	\$ 25,732	\$ 94,494	\$ 65,211	\$ 14,623	\$ 36,848	\$ 829,029	\$ -
Other Taxes	\$ (55,061)	6	Rate Base	\$ (3,726)	\$ (3,002)	\$ (9,441)	\$ (4,697)	\$ (18,461)	\$ (1,709)	\$ (6,276)	\$ (4,331)	\$ (971)	\$ (2,447)	\$ (55,061)	\$ (0)
	\$ 12,763,121			\$ 713,155	\$ 660,989	\$ 1,988,504	\$ 1,178,581	\$ 4,632,091	\$ 327,649	\$ 1,321,155	\$ 1,197,873	\$ 214,301	\$ 528,822	\$ 12,763,121	\$ (0)
Total Taxes Other Than Income Taxes (Other Water)	\$ 12,763,121			\$ 713,155	\$ 660,989	\$ 1,988,504	\$ 1,178,581	\$ 4,632,091	\$ 327,649	\$ 1,321,155	\$ 1,197,873	\$ 214,301	\$ 528,822	\$ 12,763,121	\$ (0)
Plant Depreciation															
Intangible Plant															
Organization	\$ -	5	Net Plant (less gen. ar	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Franchises	\$ -	5	Net Plant (less gen. ar	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other P/E-Intangible	\$ -	5	Net Plant (less gen. ar	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Source of Supply															
Land & Land Rights	\$ -	A	Source of Supply	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Structures & Improvements	\$ 460,440	A	Source of Supply	\$ 460,440	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 460,440	\$ -
Collection & Impound Reservoirs	\$ 27,224	A	Source of Supply	\$ 27,224	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 27,224	\$ -
Lake, River, & Other Intakes	\$ 354,441	A	Source of Supply	\$ 354,441	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 354,441	\$ -
Wells & Springs	\$ 334,577	A	Source of Supply	\$ 334,577	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 334,577	\$ -
Infiltration Galleries & Tunnels	\$ 45	A	Source of Supply	\$ 45	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 45	\$ -
Supply Mains	\$ 240,434	A	Source of Supply	\$ 240,434	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 240,434	\$ -
Other P/E-Supply	\$ 20,828	A	Source of Supply	\$ 20,828	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,828	\$ -
Water Pumping															
Pumping Land & Land Rights	\$ -	B	Pumping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Pumping Structures & Improvements	\$ 645,983	B	Pumping	\$ -	\$ 645,983	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 645,983	\$ -
Boiler Plant Equipment	\$ -	B	Pumping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Power Generation Equipment	\$ 158,392	B	Pumping	\$ -	\$ 158,392	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 158,392	\$ -
Steam Pumping Equipment	\$ 51,077	B	Pumping	\$ -	\$ 51,077	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 51,077	\$ -
Electric Pumping Equipment	\$ 541,695	B	Pumping	\$ -	\$ 541,695	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 541,695	\$ -
Diesel Pumping Equipment	\$ 9,059	B	Pumping	\$ -	\$ 9,059	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,059	\$ -
Pump Equip Hydraulic	\$ 6,590	B	Pumping	\$ -	\$ 6,590	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,590	\$ -
Other Pumping Equipment	\$ 91,734	B	Pumping	\$ -	\$ 91,734	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 91,734	\$ -
Water Treatment															
Water Treatment Land & land Rights	\$ -	C	Water Treatment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Water Treatment Structures & Improvements	\$ 1,820,166	C	Water Treatment	\$ -	\$ -	\$ 1,820,166	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,820,166	\$ -
Water Treatment Equipment	\$ 2,463,879	C	Water Treatment	\$ -	\$ -	\$ 2,463,879	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,463,879	\$ -
Water Treatment - Other	\$ 49,058	C	Water Treatment	\$ -	\$ -	\$ 49,058	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 49,058	\$ -
T&D															
Transmission & Distribution Land	\$ -	K	Mains	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transmission & Distribution Structures & Impr	\$ 146,347	K	Mains	\$ -	\$ -	\$ -	\$ 29,684	\$ 116,663	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 146,347	\$ -
TD Mains 4in & Less	\$ 1,559,540	E	Distribution	\$ -	\$ -	\$ -	\$ -	\$ 1,559,540	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,559,540	\$ -
TD Mains 6in to 8in	\$ 4,470,663	E	Distribution	\$ -	\$ -	\$ -	\$ -	\$ 4,470,663	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,470,663	\$ -
TD Mains 10in to 16in	\$ 1,276,531	D	Transmission	\$ -	\$ -	\$ -	\$ 1,276,531	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,276,531	\$ -
TD Mains 18in & Grtr	\$ 257,783	D	Transmission	\$ -	\$ -	\$ -	\$ 257,783	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 257,783	\$ -
Other Transmission & Distribution Plant	\$ 2,465	K	Mains	\$ -	\$ -	\$ -	\$ 500	\$ 1,965	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,465	\$ -
Storage															
Distribution Reservoirs & Standpipes	\$ 695,612	F	Storage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 695,612	\$ -	\$ -	\$ -	\$ -	\$ 695,612	\$ -
Distribution Reservoirs & Standpipes - Tank Coating	\$ -	F	Storage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Meters															
Meters	\$ 1,761,112	G	Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,761,112	\$ -	\$ -	\$ -	\$ 1,761,112	\$ -
Meter Installation	\$ 628,748	G	Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 628,748	\$ -	\$ -	\$ -	\$ 628,748	\$ -
Meter Vaults	\$ -	G	Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Services															
Services	\$ 3,596,402	H	Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,596,402	\$ -	\$ -	\$ 3,596,402	\$ -
Hydrants															
Hydrants	\$ 778,074	J	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 778,074	\$ 778,074	\$ -
Fire Mains	\$ 10,774	J	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,774	\$ 10,774	\$ -

Schedule MWM-2
MAWC Class Cost of Service Study
Case No: WR-2024-0320, SR 2024-0321
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Missouri-American Water Company
Class Cost of Service Study - Account Detail
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Source of Supply	Pumping	Water Treatment	Transmission	Distribution	Storage	Meters	Services	Customers	Hydrants	Total	Variance	
General Plant																
General Land & Land Rights	\$ -	3	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Stores Shops Equipment Structures	\$ 686,469	3	Fixed O&M	\$ 33,927	\$ 50,924	\$ 113,244	\$ 38,565	\$ 151,569	\$ 6,685	\$ 82,604	\$ 30,828	\$ 123,926	\$ 54,197	\$ 686,469	\$ -	
Office Structures	\$ 206,918	3	Fixed O&M	\$ 10,226	\$ 15,350	\$ 34,134	\$ 11,624	\$ 45,687	\$ 2,015	\$ 24,899	\$ 9,292	\$ 37,354	\$ 16,336	\$ 206,918	\$ -	
General Structures - HVAC	\$ -	3	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Miscellaneous Structures	\$ 98,900	3	Fixed O&M	\$ 4,888	\$ 7,337	\$ 16,315	\$ 5,556	\$ 21,837	\$ 963	\$ 11,901	\$ 4,441	\$ 17,854	\$ 7,808	\$ 98,900	\$ -	
Structures & Improvements - Leasehold	\$ 1,344	3	Fixed O&M	\$ 66	\$ 100	\$ 222	\$ 75	\$ 297	\$ 13	\$ 162	\$ 60	\$ 243	\$ 106	\$ 1,344	\$ -	
Office Furniture and Equipment	\$ 39,108	3	Fixed O&M	\$ 1,933	\$ 2,901	\$ 6,452	\$ 2,197	\$ 8,635	\$ 381	\$ 4,706	\$ 1,756	\$ 7,060	\$ 3,088	\$ 39,108	\$ -	
Computers & Peripheral Equipment	\$ 868,744	3	Fixed O&M	\$ 42,935	\$ 64,446	\$ 143,313	\$ 48,805	\$ 191,815	\$ 8,460	\$ 104,538	\$ 39,013	\$ 156,831	\$ 68,587	\$ 868,744	\$ -	
Computer Hardware & Software	\$ 163,513	3	Fixed O&M	\$ 8,081	\$ 12,130	\$ 26,974	\$ 9,186	\$ 36,103	\$ 1,592	\$ 19,676	\$ 7,343	\$ 29,518	\$ 12,909	\$ 163,513	\$ -	
Computer Software	\$ 1,310,121	3	Fixed O&M	\$ 64,749	\$ 97,188	\$ 216,125	\$ 73,601	\$ 289,269	\$ 12,758	\$ 157,650	\$ 58,834	\$ 236,511	\$ 103,434	\$ 1,310,121	\$ -	
Personal Computer Software	\$ -	3	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other Office Equipment	\$ 33,443	3	Fixed O&M	\$ 1,653	\$ 2,481	\$ 5,517	\$ 1,879	\$ 7,384	\$ 326	\$ 4,024	\$ 1,502	\$ 6,037	\$ 2,640	\$ 33,443	\$ -	
BTS Initial Investment	\$ 630,970	3	Fixed O&M	\$ 31,184	\$ 46,807	\$ 104,089	\$ 35,447	\$ 139,315	\$ 6,145	\$ 75,926	\$ 28,335	\$ 113,907	\$ 49,815	\$ 630,970	\$ -	
Transportation Equipment - Light Trucks	\$ 687,840	3	Fixed O&M	\$ 33,995	\$ 51,026	\$ 113,470	\$ 38,642	\$ 151,872	\$ 6,698	\$ 82,769	\$ 30,889	\$ 124,173	\$ 54,305	\$ 687,840	\$ -	
Transportation Equipment - Heavy Trucks	\$ -	3	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Transportation Equipment - Cars	\$ -	3	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Transportation Equipment - Other	\$ 345,139	3	Fixed O&M	\$ 17,058	\$ 25,603	\$ 56,936	\$ 19,390	\$ 76,205	\$ 3,361	\$ 41,531	\$ 15,499	\$ 62,307	\$ 27,249	\$ 345,139	\$ -	
Stores Equipment	\$ 7,438	3	Fixed O&M	\$ 368	\$ 552	\$ 1,227	\$ 418	\$ 1,642	\$ 72	\$ 895	\$ 334	\$ 1,343	\$ 587	\$ 7,438	\$ -	
Tools, Shop, & Garage Equipment	\$ 214,138	3	Fixed O&M	\$ 10,583	\$ 15,885	\$ 35,326	\$ 12,030	\$ 47,281	\$ 2,085	\$ 25,768	\$ 9,616	\$ 38,658	\$ 16,906	\$ 214,138	\$ -	
Laboratory Equipment	\$ 40,024	C	Water Treatment	\$ -	\$ -	\$ 40,024	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 40,024	\$ -	
Power Operated Equipment	\$ 62,173	3	Fixed O&M	\$ 3,073	\$ 4,612	\$ 10,256	\$ 3,493	\$ 13,727	\$ 605	\$ 7,481	\$ 2,792	\$ 11,224	\$ 4,909	\$ 62,173	\$ -	
Communication Equipment	\$ -	3	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Communication Equipment (non telephone)	\$ 515,518	3	Fixed O&M	\$ 25,478	\$ 38,242	\$ 85,043	\$ 28,961	\$ 113,824	\$ 5,020	\$ 62,033	\$ 23,151	\$ 93,065	\$ 40,700	\$ 515,518	\$ -	
Telephone Equipment	\$ 4,268	3	Fixed O&M	\$ 211	\$ 317	\$ 704	\$ 240	\$ 942	\$ 42	\$ 514	\$ 192	\$ 770	\$ 337	\$ 4,268	\$ -	
Miscellaneous Equipment	\$ 163,595	3	Fixed O&M	\$ 8,085	\$ 12,136	\$ 26,988	\$ 9,191	\$ 36,121	\$ 1,593	\$ 19,686	\$ 7,347	\$ 29,533	\$ 12,916	\$ 163,595	\$ -	
Other Tangible Property	\$ 13,772	3	Fixed O&M	\$ 681	\$ 1,022	\$ 2,272	\$ 774	\$ 3,041	\$ 134	\$ 1,657	\$ 618	\$ 2,486	\$ 1,087	\$ 13,772	\$ -	
Transportation Equipment Capitalization	\$ (475,262)	3	Fixed O&M	\$ (23,489)	\$ (35,256)	\$ (78,402)	\$ (26,700)	\$ (104,936)	\$ (4,628)	\$ (57,189)	\$ (21,343)	\$ (85,797)	\$ (37,522)	\$ (475,262)	\$ -	
Plant Depreciation (Other Water)	\$ 28,077,844			\$ 1,713,674	\$ 1,918,331	\$ 5,293,331	\$ 1,877,872	\$ 7,380,462	\$ 749,934	\$ 3,061,092	\$ 3,846,902	\$ 1,007,003	\$ 1,229,242	\$ 28,077,844	\$ -	
Depreciation - Acquisition																
CIAC-Non Taxable - Mains	\$ (565,128)	K	Mains	\$ -	\$ -	\$ -	\$ (114,625)	\$ (450,503)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (565,128)	\$ -	
CIAC-Non Taxable - Ext Dep	\$ (365,380)	K	Mains	\$ -	\$ -	\$ -	\$ (74,110)	\$ (291,270)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (365,380)	\$ -	
CIAC-Non Taxable - Services	\$ (7,758)	H	Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (7,758)	\$ -	\$ -	\$ (7,758)	\$ -	
CIAC-Non Taxable - Meters	\$ (13,983)	G	Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (13,983)	\$ -	\$ -	\$ -	\$ (13,983)	\$ -	
CIAC-Non Taxable - Hydrants	\$ (51,324)	J	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (51,324)	\$ (51,324)	\$ -	
CIAC-Non Taxable - Other	\$ (90,265)	K	Mains	\$ -	\$ -	\$ -	\$ (18,308)	\$ (71,957)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (90,265)	\$ -	
CIAC-Non Taxable - WIP	\$ -	K	Mains	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
CIAC-Taxable - Mains	\$ (427,796)	K	Mains	\$ -	\$ -	\$ -	\$ (86,770)	\$ (341,026)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (427,796)	\$ -	
CIAC-Taxable - Extension Deposits	\$ (109,641)	K	Mains	\$ -	\$ -	\$ -	\$ (22,239)	\$ (87,402)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (109,641)	\$ -	
CIAC-Taxable - Services	\$ (950,310)	H	Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (950,310)	\$ -	\$ -	\$ (950,310)	\$ -	
CIAC-Taxable - Meters	\$ (8,056)	G	Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (8,056)	\$ -	\$ -	\$ -	\$ (8,056)	\$ -	
CIAC-Taxable - Hydrants	\$ (706)	J	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (706)	\$ (706)	\$ -	
CIAC-Taxable - Other	\$ (4,269)	K	Mains	\$ -	\$ -	\$ -	\$ (866)	\$ (3,403)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (4,269)	\$ -	
CIAC-Taxable - WIP	\$ -	K	Mains	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
CIAC-Taxable - Services SIT	\$ -	K	Mains	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Amortization of CIAC (Other Water)	\$ (2,594,616)			\$ -	\$ -	\$ -	\$ (316,918)	\$ (1,245,561)	\$ -	\$ (22,039)	\$ (958,068)	\$ -	\$ (52,030)	\$ (2,594,616)	\$ -	
Total Depreciation Expense (Other Water)	\$ 25,483,228			\$ 1,713,674	\$ 1,918,331	\$ 5,293,331	\$ 1,560,954	\$ 6,134,901	\$ 749,934	\$ 3,039,053	\$ 2,888,834	\$ 1,007,003	\$ 1,177,212	\$ 25,483,228	\$ -	
Total Depreciation Expense	\$ 25,483,228															
Amortization Expense																
Lead Service Replacement	\$ 1,406,242	H	Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,406,242	\$ -	\$ -	\$ 1,406,242	\$ -	
Troubled Systems	\$ 55,018	6	Rate Base	\$ 3,723	\$ 3,000	\$ 9,433	\$ 4,693	\$ 18,446	\$ 1,708	\$ 6,271	\$ 4,328	\$ 970	\$ 2,445	\$ 55,018	\$ 0	
Tank Painting Tracker	\$ 120,994	6	Rate Base	\$ 8,187	\$ 6,597	\$ 20,745	\$ 10,322	\$ 40,567	\$ 3,756	\$ 13,791	\$ 9,517	\$ 2,134	\$ 5,378	\$ 120,994	\$ 0	
Property Tax Tracker	\$ 993,750	6	Rate Base	\$ 67,239	\$ 54,186	\$ 170,386	\$ 84,775	\$ 333,184	\$ 30,845	\$ 113,269	\$ 78,168	\$ 17,528	\$ 44,169	\$ 993,750	\$ 0	
Enterprise Solutions	\$ 2,652	6	Rate Base	\$ 179	\$ 145	\$ 455	\$ 226	\$ 889	\$ 82	\$ 302	\$ 209	\$ 47	\$ 118	\$ 2,652	\$ -	
Low Income Costs	\$ 997	6	Rate Base	\$ 67	\$ 54	\$ 171	\$ 85	\$ 334	\$ 31	\$ 114	\$ 78	\$ 18	\$ 44	\$ 997	\$ 0	
Hollister Pipeline	\$ 6,466	6	Rate Base	\$ 438	\$ 353	\$ 1,109	\$ 552	\$ 2,168	\$ 201	\$ 737	\$ 509	\$ 114	\$ 287	\$ 6,466	\$ 0	
Total Amortization Expense (Other Water)	\$ 2,586,118			\$ 79,833	\$ 64,335	\$ 202,299	\$ 100,653	\$ 395,589	\$ 36,622	\$ 134,484	\$ 1,499,050	\$ 20,811	\$ 52,442	\$ 2,586,118	\$ 0	
Total Amortization Expense	\$ 2,586,118			\$ 79,833	\$ 64,335	\$ 202,299	\$ 100,653	\$ 395,589	\$ 36,622	\$ 134,484	\$ 1,499,050	\$ 20,811	\$ 52,442	\$ 2,586,118	\$ 0	

Missouri-American Water Company
Class Cost of Service Study - Account Detail
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Source of Supply	Pumping	Water Treatment	Transmission	Distribution	Storage	Meters	Services	Customers	Hydrants	Total	Variance
Income Taxes															
Federal Income Tax	\$ 669,601	6	Rate Base	\$ 45,306	\$ 36,511	\$ 114,808	\$ 57,122	\$ 224,504	\$ 20,784	\$ 76,322	\$ 52,671	\$ 11,811	\$ 29,762	\$ 669,601	\$ 0
State Income Tax	\$ 118,516	6	Rate Base	\$ 8,019	\$ 6,462	\$ 20,320	\$ 10,110	\$ 39,736	\$ 3,679	\$ 13,509	\$ 9,322	\$ 2,090	\$ 5,268	\$ 118,516	
Deferred Income Tax	\$ 11,197,630	6	Rate Base	\$ 757,653	\$ 610,575	\$ 1,919,916	\$ 955,248	\$ 3,754,339	\$ 347,563	\$ 1,276,323	\$ 880,802	\$ 197,509	\$ 497,702	\$ 11,197,630	
ITC Restored	\$ (30,262)	6	Rate Base	\$ (2,048)	\$ (1,650)	\$ (5,189)	\$ (2,582)	\$ (10,146)	\$ (939)	\$ (3,449)	\$ (2,380)	\$ (534)	\$ (1,345)	\$ (30,262)	\$ (0)
Total Income Taxes (Other Water)	\$ 11,955,485			\$ 808,931	\$ 651,898	\$ 2,049,856	\$ 1,019,899	\$ 4,008,432	\$ 371,086	\$ 1,362,704	\$ 940,415	\$ 210,877	\$ 531,387	\$ 11,955,485	\$ (0)
Total Income Tax Expense	\$ 11,955,485			\$ 808,931	\$ 651,898	\$ 2,049,856	\$ 1,019,899	\$ 4,008,432	\$ 371,086	\$ 1,362,704	\$ 940,415	\$ 210,877	\$ 531,387	\$ 11,955,485	
Required Net Operating Income (Other Water)	\$ 69,259,387	6	Rate Base	\$ 4,686,223	\$ 3,776,516	\$ 11,875,034	\$ 5,908,381	\$ 23,221,271	\$ 2,149,741	\$ 7,894,291	\$ 5,447,922	\$ 1,221,630	\$ 3,078,378	\$ 69,259,387	\$ -
Required Net Operating Income	\$ 69,259,387														
Total Revenue Requirement (Other Water)	\$ 174,915,924			\$ 13,530,647	\$ 12,538,945	\$ 35,587,365	\$ 12,222,744	\$ 48,038,140	\$ 3,982,478	\$ 19,151,662	\$ 13,577,458	\$ 8,101,834	\$ 8,184,651	\$ 174,915,924	\$ -
Other Operating Revenue (Other Water)	\$ (1,546,294)	6	Rate Base	\$ (104,625)	\$ (84,315)	\$ (265,123)	\$ (131,911)	\$ (518,441)	\$ (47,995)	\$ (176,249)	\$ (121,631)	\$ (27,274)	\$ (68,728)	\$ (1,546,294)	\$ -
Total Retail Revenue Requirement (Other Water)	\$ 173,369,630			\$ 13,426,022	\$ 12,454,630	\$ 35,322,241	\$ 12,090,833	\$ 47,519,699	\$ 3,934,483	\$ 18,975,414	\$ 13,455,827	\$ 8,074,560	\$ 8,115,923	\$ 173,369,630	\$ -
	\$ 174,915,924														
check	\$ -														

Missouri-American Water Company
Class Cost of Service Study - Account Detail
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Source of Supply	Pumping	Water Treatment	Transmission	Distribution	Storage	Meters	Services	Customers	Hydrants	Total	Variance
Plant Account															
Intangible Plant															
Organization	\$ 85,897	5	Net Plant (less gen. ar	\$ 5,008	\$ 4,020	\$ 12,655	\$ 8,125	\$ 31,931	\$ 2,296	\$ 8,493	\$ 8,566	\$ 1,311	\$ 3,493	\$ 85,897	\$ -
Franchises	\$ 43,698	5	Net Plant (less gen. ar	\$ 2,548	\$ 2,045	\$ 6,438	\$ 4,133	\$ 16,244	\$ 1,168	\$ 4,320	\$ 4,358	\$ 667	\$ 1,777	\$ 43,698	\$ -
Other P/E-Intangible	\$ 604,504	5	Net Plant (less gen. ar	\$ 35,245	\$ 28,289	\$ 89,058	\$ 57,177	\$ 224,717	\$ 16,161	\$ 59,767	\$ 60,284	\$ 9,224	\$ 24,583	\$ 604,504	\$ -
Source of Supply															
Land & Land Rights	\$ 2,889,403	A	Source of Supply	\$ 2,889,403	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,889,403	\$ -
Structures & Improvements	\$ 21,696,334	A	Source of Supply	\$ 21,696,334	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 21,696,334	\$ -
Collection & Impound Reservoirs	\$ 8,603,950	A	Source of Supply	\$ 8,603,950	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,603,950	\$ -
Lake, River, & Other Intakes	\$ 7,066,686	A	Source of Supply	\$ 7,066,686	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,066,686	\$ -
Wells & Springs	\$ 9,732,194	A	Source of Supply	\$ 9,732,194	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,732,194	\$ -
Infiltration Galleries & Tunnels	\$ 1,120	A	Source of Supply	\$ 1,120	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,120	\$ -
Supply Mains	\$ 10,321,276	A	Source of Supply	\$ 10,321,276	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,321,276	\$ -
Other P/E-Supply	\$ 311,464	A	Source of Supply	\$ 311,464	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 311,464	\$ -
Water Pumping															
Pumping Land & Land Rights	\$ 187,000	B	Pumping	\$ -	\$ 187,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 187,000	\$ -
Pumping Structures & Improvements	\$ 9,597,675	B	Pumping	\$ -	\$ 9,597,675	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,597,675	\$ -
Boiler Plant Equipment	\$ -	B	Pumping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Power Generation Equipment	\$ 4,412,845	B	Pumping	\$ -	\$ 4,412,845	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,412,845	\$ -
Steam Pumping Equipment	\$ 2,982,638	B	Pumping	\$ -	\$ 2,982,638	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,982,638	\$ -
Electric Pumping Equipment	\$ 22,299,035	B	Pumping	\$ -	\$ 22,299,035	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 22,299,035	\$ -
Diesel Pumping Equipment	\$ 315,082	B	Pumping	\$ -	\$ 315,082	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 315,082	\$ -
Pump Equip Hydraulic	\$ 295,296	B	Pumping	\$ -	\$ 295,296	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 295,296	\$ -
Other Pumping Equipment	\$ 5,301,607	B	Pumping	\$ -	\$ 5,301,607	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,301,607	\$ -
Water Treatment															
Water Treatment Land & Land Rights	\$ 1,457,375	C	Water Treatment	\$ -	\$ -	\$ 1,457,375	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,457,375	\$ -
Water Treatment Structures & Improvements	\$ 54,667,487	C	Water Treatment	\$ -	\$ -	\$ 54,667,487	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 54,667,487	\$ -
Water Treatment Equipment	\$ 92,137,672	C	Water Treatment	\$ -	\$ -	\$ 92,137,672	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 92,137,672	\$ -
Water Treatment - Other	\$ 591,735	C	Water Treatment	\$ -	\$ -	\$ 591,735	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 591,735	\$ -
T&D															
Transmission & Distribution Land	\$ 1,477,369	K	Mains	\$ -	\$ -	\$ -	\$ 299,655	\$ 1,177,714	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,477,369	\$ -
Transmission & Distribution Structures & Impr	\$ 7,442,322	K	Mains	\$ -	\$ -	\$ -	\$ 1,509,530	\$ 5,932,793	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,442,322	\$ -
TD Mains 4in & Less	\$ 100,420,263	E	Distribution	\$ -	\$ -	\$ -	\$ -	\$ 100,420,263	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,420,263	\$ -
TD Mains 6in to 8in	\$ 287,870,227	E	Distribution	\$ -	\$ -	\$ -	\$ -	\$ 287,870,227	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 287,870,227	\$ -
TD Mains 10in to 16in	\$ 82,197,072	D	Transmission	\$ -	\$ -	\$ -	\$ 82,197,072	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 82,197,072	\$ -
TD Mains 18in & Grtr	\$ 16,598,913	D	Transmission	\$ -	\$ -	\$ -	\$ 16,598,913	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,598,913	\$ -
Other Transmission & Distribution Plant	\$ 58,622	K	Mains	\$ -	\$ -	\$ -	\$ 11,890	\$ 46,732	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 58,622	\$ -
Storage															
Distribution Reservoirs & Standpipes	\$ 28,954,962	F	Storage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28,954,962	\$ -	\$ -	\$ -	\$ -	\$ 28,954,962	\$ -
Distribution Reservoirs & Standpipes - Tank Coating	\$ 66,469	F	Storage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 66,469	\$ -	\$ -	\$ -	\$ -	\$ 66,469	\$ -
Meters															
Meters	\$ 80,526,166	G	Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 80,526,166	\$ -	\$ -	\$ -	\$ 80,526,166	\$ -
Meter Installation	\$ 18,817,575	G	Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,817,575	\$ -	\$ -	\$ -	\$ 18,817,575	\$ -
Meter Vaults	\$ -	G	Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Services															
Services	\$ 107,441,202	H	Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 107,441,202	\$ -	\$ -	\$ 107,441,202	\$ -
Hydrants															
Hydrants	\$ 37,625,935	J	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 37,625,935	\$ 37,625,935	\$ -
Fire Mains	\$ 447,087	J	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 447,087	\$ 447,087	\$ -
													\$ -	\$ -	\$ -

Missouri-American Water Company
Class Cost of Service Study - Account Detail
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Source of Supply	Pumping	Water Treatment	Transmission	Distribution	Storage	Meters	Services	Customers	Hydrants	Total	Variance
General Plant															
General Land & Land Rights	\$ 654,992	3	Fixed O&M	\$ 32,371	\$ 48,589	\$ 108,051	\$ 36,797	\$ 144,619	\$ 6,378	\$ 78,817	\$ 29,414	\$ 118,243	\$ 51,712	\$ 654,992	\$ -
Stores Shops Equipment Structures	\$ 19,357,116	3	Fixed O&M	\$ 956,674	\$ 1,435,963	\$ 3,193,267	\$ 1,087,461	\$ 4,273,967	\$ 188,505	\$ 2,329,286	\$ 869,278	\$ 3,494,471	\$ 1,528,243	\$ 19,357,116	\$ -
Office Structures	\$ 9,142,789	3	Fixed O&M	\$ 451,858	\$ 678,237	\$ 1,508,250	\$ 513,632	\$ 2,018,688	\$ 89,035	\$ 1,100,173	\$ 410,579	\$ 1,650,515	\$ 721,822	\$ 9,142,789	\$ -
General Structures - HVAC	\$ -	3	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Miscellaneous Structures	\$ 1,173,732	3	Fixed O&M	\$ 58,009	\$ 87,071	\$ 193,626	\$ 65,939	\$ 259,155	\$ 11,430	\$ 141,238	\$ 52,709	\$ 211,890	\$ 92,666	\$ 1,173,732	\$ -
Structures & Improvements - Leasehold	\$ 39,243	3	Fixed O&M	\$ 1,939	\$ 2,911	\$ 6,474	\$ 2,205	\$ 8,665	\$ 382	\$ 4,722	\$ 1,762	\$ 7,084	\$ 3,098	\$ 39,243	\$ -
Office Furniture and Equipment	\$ 471,374	3	Fixed O&M	\$ 23,296	\$ 34,968	\$ 77,761	\$ 26,481	\$ 104,077	\$ 4,590	\$ 56,722	\$ 21,168	\$ 85,096	\$ 37,215	\$ 471,374	\$ -
Computers & Peripheral Equipment	\$ 2,692,579	3	Fixed O&M	\$ 133,074	\$ 199,743	\$ 444,184	\$ 151,266	\$ 594,510	\$ 26,221	\$ 324,004	\$ 120,917	\$ 486,082	\$ 212,579	\$ 2,692,579	\$ -
Computer Hardware & Software	\$ (313,400)	3	Fixed O&M	\$ (15,489)	\$ (23,249)	\$ (51,700)	\$ (17,606)	\$ (69,197)	\$ (3,052)	\$ (37,712)	\$ (14,074)	\$ (56,577)	\$ (24,743)	\$ (313,400)	\$ -
Computer Software	\$ 19,396,846	3	Fixed O&M	\$ 958,638	\$ 1,438,910	\$ 3,199,821	\$ 1,089,693	\$ 4,282,740	\$ 188,892	\$ 2,334,067	\$ 871,063	\$ 3,501,644	\$ 1,531,379	\$ 19,396,846	\$ -
Personal Computer Software	\$ -	3	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Office Equipment	\$ 337,033	3	Fixed O&M	\$ 16,657	\$ 25,002	\$ 55,599	\$ 18,934	\$ 74,415	\$ 3,282	\$ 40,556	\$ 15,135	\$ 60,843	\$ 26,609	\$ 337,033	\$ -
BTS Initial Investment	\$ 4,608,076	3	Fixed O&M	\$ 227,742	\$ 341,839	\$ 760,176	\$ 258,877	\$ 1,017,443	\$ 44,875	\$ 554,500	\$ 206,937	\$ 831,880	\$ 363,807	\$ 4,608,076	\$ -
Transportation Equipment - Light Trucks	\$ 8,661,826	3	Fixed O&M	\$ 428,088	\$ 642,557	\$ 1,428,907	\$ 486,612	\$ 1,912,494	\$ 84,351	\$ 1,042,297	\$ 388,980	\$ 1,563,689	\$ 683,850	\$ 8,661,826	\$ -
Transportation Equipment - Heavy Trucks	\$ 2,881,779	3	Fixed O&M	\$ 142,424	\$ 213,778	\$ 475,396	\$ 161,895	\$ 636,284	\$ 28,064	\$ 346,771	\$ 129,413	\$ 520,237	\$ 227,516	\$ 2,881,779	\$ -
Transportation Equipment - Cars	\$ 9,104,500	3	Fixed O&M	\$ 449,966	\$ 675,396	\$ 1,501,934	\$ 511,481	\$ 2,010,234	\$ 88,662	\$ 1,095,565	\$ 408,860	\$ 1,643,603	\$ 718,800	\$ 9,104,500	\$ -
Transportation Equipment - Other	\$ 2,861,232	3	Fixed O&M	\$ 141,409	\$ 212,254	\$ 472,006	\$ 160,741	\$ 631,748	\$ 27,863	\$ 344,299	\$ 128,491	\$ 516,528	\$ 225,894	\$ 2,861,232	\$ -
Stores Equipment	\$ 61,065	3	Fixed O&M	\$ 3,018	\$ 4,530	\$ 10,074	\$ 3,431	\$ 13,483	\$ 595	\$ 7,348	\$ 2,742	\$ 11,024	\$ 4,821	\$ 61,065	\$ -
Tools, Shop, & Garage Equipment	\$ 3,815,869	3	Fixed O&M	\$ 188,589	\$ 283,071	\$ 629,489	\$ 214,371	\$ 842,527	\$ 37,160	\$ 459,172	\$ 171,361	\$ 688,865	\$ 301,263	\$ 3,815,869	\$ -
Laboratory Equipment	\$ 532,536	C	Water Treatment	\$ -	\$ -	\$ 532,536	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 532,536	\$ -
Power Operated Equipment	\$ 530,530	3	Fixed O&M	\$ 26,220	\$ 39,356	\$ 87,519	\$ 29,805	\$ 117,139	\$ 5,166	\$ 63,840	\$ 23,825	\$ 95,775	\$ 41,885	\$ 530,530	\$ -
Communication Equipment	\$ 26,899	3	Fixed O&M	\$ 1,329	\$ 1,995	\$ 4,437	\$ 1,511	\$ 5,939	\$ 262	\$ 3,237	\$ 1,208	\$ 4,856	\$ 2,124	\$ 26,899	\$ -
Communication Equipment (non telephone)	\$ 6,657,374	3	Fixed O&M	\$ 329,023	\$ 493,862	\$ 1,098,241	\$ 374,004	\$ 1,469,919	\$ 64,831	\$ 801,097	\$ 298,966	\$ 1,201,832	\$ 525,599	\$ 6,657,374	\$ -
Telephone Equipment	\$ (25,751)	3	Fixed O&M	\$ (1,273)	\$ (1,910)	\$ (4,248)	\$ (1,447)	\$ (5,686)	\$ (251)	\$ (3,099)	\$ (1,156)	\$ (4,649)	\$ (2,033)	\$ (25,751)	\$ -
Miscellaneous Equipment	\$ 1,743,019	3	Fixed O&M	\$ 86,144	\$ 129,302	\$ 287,539	\$ 97,921	\$ 384,851	\$ 16,974	\$ 209,741	\$ 78,275	\$ 314,661	\$ 137,611	\$ 1,743,019	\$ -
Other Tangible Property	\$ 789,137	3	Fixed O&M	\$ 39,001	\$ 58,540	\$ 130,181	\$ 44,333	\$ 174,238	\$ 7,685	\$ 94,959	\$ 35,438	\$ 142,460	\$ 62,302	\$ 789,137	\$ -
Net Utility Plant	\$ 1,120,746,551			\$ 65,343,935	\$ 52,448,247	\$ 165,111,938	\$ 106,004,829	\$ 416,622,873	\$ 29,962,958	\$ 110,807,922	\$ 111,765,700	\$ 17,101,254	\$ 45,576,894	\$ 1,120,746,551	\$ -
Additions to Rate Base															
Cash Working Capital(Other Water)	\$ (777,261)	3	Fixed O&M	\$ (38,414)	\$ (57,659)	\$ (128,222)	\$ (43,666)	\$ (171,616)	\$ (7,569)	\$ (93,530)	\$ (34,905)	\$ (140,316)	\$ (61,365)	\$ (777,261)	\$ -
Materials and Supplies(Other Water)	\$ 4,910,095	5	Net Plant (less gen. ar	\$ 286,278	\$ 229,781	\$ 723,371	\$ 464,417	\$ 1,825,264	\$ 131,271	\$ 485,460	\$ 489,656	\$ 74,922	\$ 199,677	\$ 4,910,095	\$ -
Pension Asset(Other Water)	\$ 8,684,955	5	Net Plant (less gen. ar	\$ 506,367	\$ 406,435	\$ 1,279,495	\$ 821,459	\$ 3,228,518	\$ 232,191	\$ 858,679	\$ 866,101	\$ 132,522	\$ 353,187	\$ 8,684,955	\$ -
Regulatory Deferrals(Other Water)	\$ 4,211,509	5	Net Plant (less gen. ar	\$ 245,548	\$ 197,089	\$ 620,453	\$ 398,342	\$ 1,565,573	\$ 112,594	\$ 416,391	\$ 419,990	\$ 64,263	\$ 171,268	\$ 4,211,509	\$ -
Tank Painting Tracker(Other Water)	\$ -	F	Storage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Additions	\$ 17,029,298			\$ 999,778	\$ 775,645	\$ 2,495,097	\$ 1,640,552	\$ 6,447,740	\$ 468,486	\$ 1,667,000	\$ 1,740,842	\$ 131,391	\$ 662,767	\$ 17,029,298	\$ -
Reductions to Rate Base															
Customer Advances for Construction															
Advances for Construction - NT Mains	\$ 1,657,625	K	Mains	\$ -	\$ -	\$ -	\$ 336,217	\$ 1,321,408	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,657,625	\$ -
Advances for Construction - NT Extension Deposits	\$ -	K	Mains	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Advances for Construction - NT Hydrants	\$ 336,220	J	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 336,220	\$ 336,220	\$ -
Advances for Construction - NT WIP	\$ -	G	Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Advances for Construction - TAX Mains	\$ -	H	Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Advances for Construction - Reclassed to Current	\$ -	K	Mains	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Allocated MAWC Corporate - Customer Advances	\$ (23,405)	K	Mains	\$ -	\$ -	\$ -	\$ (4,747)	\$ (18,658)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (23,405)	\$ -
CIAC															
CIAC-Non Taxable - Mains	\$ (40,354,566)	K	Mains	\$ -	\$ -	\$ -	\$ (8,185,136)	\$ (32,169,430)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (40,354,566)	\$ -
CIAC-Non Taxable - Ext Dep	\$ (26,286,308)	K	Mains	\$ -	\$ -	\$ -	\$ (5,331,665)	\$ (20,954,643)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (26,286,308)	\$ -
CIAC-Non Taxable - Services	\$ (265,700)	H	Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (265,700)	\$ -	\$ -	\$ (265,700)	\$ -
CIAC-Non Taxable - Meters	\$ (584,544)	G	Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (584,544)	\$ -	\$ -	\$ -	\$ (584,544)	\$ -
CIAC-Non Taxable - Hydrants	\$ (2,774,275)	J	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (2,774,275)	\$ (2,774,275)	\$ -
CIAC-Non Taxable - Other	\$ (3,047,459)	K	Mains	\$ -	\$ -	\$ -	\$ (618,118)	\$ (2,429,341)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (3,047,459)	\$ -
CIAC-Non Taxable - WIP	\$ -	K	Mains	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CIAC-Taxable - Mains	\$ (30,776,674)	K	Mains	\$ -	\$ -	\$ -	\$ (6,242,448)	\$ (24,534,226)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (30,776,674)	\$ -
CIAC-Taxable - Extension Deposits	\$ (7,887,871)	K	Mains	\$ -	\$ -	\$ -	\$ (1,599,901)	\$ (6,287,970)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (7,887,871)	\$ -
CIAC-Taxable - Services	\$ (32,544,851)	H	Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (32,544,851)	\$ -	\$ -	\$ (32,544,851)	\$ -
CIAC-Taxable - Meters	\$ (335,686)	G	Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (335,686)	\$ -	\$ -	\$ -	\$ (335,686)	\$ -
CIAC-Taxable - Hydrants	\$ (38,147)	J	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (38,147)	\$ (38,147)	\$ -
CIAC-Taxable - Other	\$ (144,214)	K	Mains	\$ -	\$ -	\$ -	\$ (29,251)	\$ (114,963)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (144,214)	\$ -
CIAC-Taxable - WIP	\$ -	K	Mains	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CIAC-Taxable - Services SIT	\$ -	H	Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Accum Amort CIAC	\$ 37,918,862	5	Net Plant (less gen. ar	\$ 2,210,819	\$ 1,774,512	\$ 5,586,327	\$ 3,586,522	\$ 14,095,841	\$ 1,013,754	\$ 3,749,028	\$ 3,781,433	\$ 578,597	\$ 1,542,029	\$ 37,918,862	\$ -
Allocated MAWC Corporate - CIAC	\$ (294,036)	K	Mains	\$ -	\$ -	\$ -	\$ (59,639)	\$ (234,397)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (294,036)	\$ -
Deferred Income Tax (Other Water)	\$ (150,568,506)	5	Net Plant (less gen. ar	\$ (8,778,737)	\$ (7,046,245)	\$ (22,182,230)	\$ (14,241,390)	\$ (55,971,873)	\$ (4,025,422)	\$ (14,886,669)	\$ (15,015,344)	\$ (2,297,496)	\$ (6,123,102)	\$ (150,568,506)	\$ -
Pension/OPEB Tracker (Other Water)	\$ 2,032,241	4	Labor	\$ 23,441	\$ 238,624	\$ 521,977	\$ 138,941	\$ 546,070	\$ 12,307	\$ 319,208	\$ 56,922	\$ 75,042	\$ 99,710	\$ 2,032,241	\$ -
Total Reductions	\$ (253,981,294)			\$ (6,544,477)	\$ (5,033,109)	\$ (16,073,927)	\$ (32,250,614)	\$ (126,752,183)	\$ (2,999,361)	\$ (11,738,663)	\$ (43,987,539)	\$ (1,643,857)	\$ (6,957,564)	\$ (253,981,294)	\$ -
TOTAL RATE BASE (Other Water)	\$ 883,794,555			\$ 59,799,237	\$ 48,190,783	\$ 151,533,109	\$ 75,394,767	\$ 296,318,430	\$ 27,432,082	\$ 100,736,259	\$ 69,519,004	\$ 15,588,787	\$ 39,282,097	\$ 883,794,555	\$ -

Missouri-American Water Company
Class Cost of Service Study - Account Detail
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Source of Supply	Pumping	Water Treatment	Transmission	Distribution	Storage	Meters	Services	Customers	Hydrants	Total	Variance
Miscellaneous T&D Operating Expense	\$ 614,524	1		\$ -	\$ -	\$ -	\$ 83,105	\$ 326,620	\$ -	\$ 204,799	\$ -	\$ -	\$ -	\$ 614,524	
				-	-	-	0.13523	0.53150	-	0.33326	-	-	-	1.00000	
Miscellaneous T&D Maintenance Expense	\$ 306,848	2		\$ -	\$ -	\$ -	\$ 20,855	\$ 81,963	\$ 12,871	\$ 27,454	\$ 59,355	\$ -	\$ 104,350	\$ 306,848	
				-	-	-	0.06796	0.26711	0.04195	0.08947	0.19343	-	0.34007	1.00000	
Fixed O&M	\$ 15,019,517	3		\$ 742,300	\$ 1,114,188	\$ 2,477,710	\$ 843,780	\$ 3,316,244	\$ 146,264	\$ 1,807,333	\$ 674,488	\$ 2,711,420	\$ 1,185,790	\$ 15,019,517	
				0.04942	0.07418	0.16497	0.05618	0.22080	0.00974	0.12033	0.04491	0.18053	0.07895	1.00000	
Labor	\$ 5,175,134	4		\$ 73,201	\$ 745,165	\$ 1,630,009	\$ 433,880	\$ 1,705,248	\$ 38,430	\$ 996,811	\$ 177,755	\$ 234,337	\$ 311,372	\$ 6,346,208	
				0.01153	0.11742	0.25685	0.06837	0.26870	0.00606	0.15707	0.02801	0.03693	0.04906	1.00000	
Net Plant	\$ 1,120,012,452	5		\$ 65,301,134	\$ 52,413,893	\$ 165,003,788	\$ 105,935,394	\$ 416,349,981	\$ 29,943,332	\$ 110,735,342	\$ 111,692,493	\$ 17,090,053	\$ 45,547,041	\$ 1,120,012,452	
				0.05830	0.04680	0.14732	0.09458	0.37174	0.02673	0.09887	0.09972	0.01526	0.04067	1.00000	
Rate Base	\$ 883,794,555	6		\$ 59,799,237	\$ 48,190,783	\$ 151,533,109	\$ 75,394,767	\$ 296,318,430	\$ 27,432,082	\$ 100,736,259	\$ 69,519,004	\$ 15,588,787	\$ 39,282,097	\$ 883,794,555	
				0.06766	0.05453	0.17146	0.08531	0.33528	0.03104	0.11398	0.07866	0.01764	0.04445	1.00000	
Variable Cost	\$ 12,101,490			\$ 4,023,853	\$ 1,860,865	\$ 6,216,772	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,101,490	

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Missouri-American Water Company
Class Cost of Service Study - Account Detail using One-Step Allocation
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Rate F						Total	Variance	
				Residential	Non-Residential	Rate J	Rate B	Rate P	Private Fire			Public Fire
Source of Supply Expense												
Operating Expense												
Purchased Water	\$ 1,422,327	1	Total Usage	\$ 576,051	\$ 300,488	\$ 308,566	\$ 145,172	\$ 91,757	\$ 293	\$ -	\$ 1,422,327	\$ -
Fuel and Power	\$ 2,601,526	1	Total Usage	\$ 1,053,634	\$ 549,612	\$ 564,387	\$ 265,528	\$ 167,829	\$ 536	\$ -	\$ 2,601,526	\$ -
Salaries and Wages	\$ 1,701	2	Base/Extra Daily	\$ 767	\$ 417	\$ 289	\$ 138	\$ 90	\$ 0	\$ -	\$ 1,701	\$ -
Contract Services - Other	\$ 71,816	2	Base/Extra Daily	\$ 32,367	\$ 17,606	\$ 12,200	\$ 5,822	\$ 3,809	\$ 11	\$ -	\$ 71,816	\$ -
Building Maintenance and Services	\$ 493,463	2	Base/Extra Daily	\$ 222,400	\$ 120,979	\$ 83,829	\$ 40,008	\$ 26,176	\$ 73	\$ -	\$ 493,463	\$ -
Miscellaneous	\$ 159	2	Base/Extra Daily	\$ 72	\$ 39	\$ 27	\$ 13	\$ 8	\$ 0	\$ -	\$ 159	\$ -
Telecommunications	\$ 2,793	2	Base/Extra Daily	\$ 1,259	\$ 685	\$ 475	\$ 226	\$ 148	\$ 0	\$ -	\$ 2,793	\$ -
Postage	\$ -	2	Base/Extra Daily	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Office supplies and services	\$ 4,360	2	Base/Extra Daily	\$ 1,965	\$ 1,069	\$ 741	\$ 353	\$ 231	\$ 1	\$ -	\$ 4,360	\$ -
Materials & Supplies	\$ 3,283	2	Base/Extra Daily	\$ 1,480	\$ 805	\$ 558	\$ 266	\$ 174	\$ 0	\$ -	\$ 3,283	\$ -
Rents-Property	\$ 1,747	2	Base/Extra Daily	\$ 787	\$ 428	\$ 297	\$ 142	\$ 93	\$ 0	\$ -	\$ 1,747	\$ -
Rents-Equipment	\$ 1,651	2	Base/Extra Daily	\$ 744	\$ 405	\$ 281	\$ 134	\$ 88	\$ 0	\$ -	\$ 1,651	\$ -
Transportation	\$ 539	2	Base/Extra Daily	\$ 243	\$ 132	\$ 92	\$ 44	\$ 29	\$ 0	\$ -	\$ 539	\$ -
	\$ 4,605,365			\$ 1,891,768	\$ 992,666	\$ 971,739	\$ 457,846	\$ 290,432	\$ 915	\$ -	\$ 4,605,365	\$ -
Maintenance Expense												
Salaries and Wages	\$ 71,499	2	Base/Extra Daily	\$ 32,224	\$ 17,529	\$ 12,146	\$ 5,797	\$ 3,793	\$ 11	\$ -	\$ 71,499	\$ -
Materials & Supplies	\$ 34,552	2	Base/Extra Daily	\$ 15,572	\$ 8,471	\$ 5,870	\$ 2,801	\$ 1,833	\$ 5	\$ -	\$ 34,552	\$ -
Transportation	\$ 1,384	2	Base/Extra Daily	\$ 624	\$ 339	\$ 235	\$ 112	\$ 73	\$ 0	\$ -	\$ 1,384	\$ -
Miscellaneous	\$ 6,422	2	Base/Extra Daily	\$ 2,894	\$ 1,574	\$ 1,091	\$ 521	\$ 341	\$ 1	\$ -	\$ 6,422	\$ -
Contract Services - Eng	\$ -	2	Base/Extra Daily	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contract Services - Other	\$ 46,930	2	Base/Extra Daily	\$ 21,151	\$ 11,505	\$ 7,972	\$ 3,805	\$ 2,489	\$ 7	\$ -	\$ 46,930	\$ -
	\$ 160,788			\$ 72,466	\$ 39,419	\$ 27,314	\$ 13,036	\$ 8,529	\$ 24	\$ -	\$ 160,788	\$ -
Total SS Expense	\$ 4,766,153			\$ 1,964,234	\$ 1,032,085	\$ 999,054	\$ 470,882	\$ 298,961	\$ 938	\$ -	\$ 4,766,153	\$ -
Power and Pumping Expenses												
Operating Expense												
Fuel and Power	\$ 1,860,865	1	Total Usage	\$ 753,662	\$ 393,136	\$ 403,704	\$ 189,931	\$ 120,048	\$ 383	\$ -	\$ 1,860,865	\$ -
Salaries and Wages	\$ 528,719	3	Base/Extra Daily w/ Fi	\$ 220,587	\$ 120,519	\$ 79,402	\$ 37,981	\$ 24,981	\$ 10,838	\$ 34,411	\$ 528,719	\$ -
Employee Benefits	\$ 680	3	Base/Extra Daily w/ Fi	\$ 284	\$ 155	\$ 102	\$ 49	\$ 32	\$ 14	\$ 24	\$ 680	\$ -
Building Maintenance and Services	\$ 4,233	3	Base/Extra Daily w/ Fi	\$ 1,766	\$ 965	\$ 636	\$ 304	\$ 200	\$ 87	\$ 475	\$ 4,233	\$ -
Miscellaneous	\$ 1,719	3	Base/Extra Daily w/ Fi	\$ 717	\$ 392	\$ 258	\$ 123	\$ 81	\$ 35	\$ 112	\$ 1,719	\$ -
Office supplies and services	\$ 116	3	Base/Extra Daily w/ Fi	\$ 48	\$ 26	\$ 17	\$ 8	\$ 5	\$ 2	\$ 8	\$ 116	\$ -
Materials & Supplies	\$ 5,982	3	Base/Extra Daily w/ Fi	\$ 2,496	\$ 1,364	\$ 898	\$ 430	\$ 283	\$ 123	\$ 389	\$ 5,982	\$ -
Rents-Equipment	\$ 1,469	3	Base/Extra Daily w/ Fi	\$ 613	\$ 335	\$ 221	\$ 106	\$ 69	\$ 30	\$ 96	\$ 1,469	\$ -
Transportation	\$ 38,552	3	Base/Extra Daily w/ Fi	\$ 16,084	\$ 8,788	\$ 5,790	\$ 2,769	\$ 1,822	\$ 790	\$ 2,509	\$ 38,552	\$ -
	\$ 2,442,334			\$ 996,256	\$ 525,680	\$ 491,028	\$ 231,702	\$ 147,521	\$ 12,302	\$ 37,844	\$ 2,442,334	\$ -
Maintenance Expense												
Salaries and Wages	\$ 216,447	3	Base/Extra Daily w/ Fi	\$ 90,304	\$ 49,338	\$ 32,506	\$ 15,549	\$ 10,227	\$ 4,437	\$ 14,087	\$ 216,447	\$ -
Transportation	\$ 2,047	3	Base/Extra Daily w/ Fi	\$ 854	\$ 467	\$ 307	\$ 147	\$ 97	\$ 42	\$ 133	\$ 2,047	\$ -
Contract Services - Eng	\$ 4,267	3	Base/Extra Daily w/ Fi	\$ 1,780	\$ 973	\$ 641	\$ 307	\$ 202	\$ 87	\$ 278	\$ 4,267	\$ -
Contract Services - Other	\$ 250,035	3	Base/Extra Daily w/ Fi	\$ 104,317	\$ 56,995	\$ 37,550	\$ 17,961	\$ 11,814	\$ 5,125	\$ 16,273	\$ 250,035	\$ -
Miscellaneous	\$ 1,395	3	Base/Extra Daily w/ Fi	\$ 582	\$ 318	\$ 209	\$ 100	\$ 66	\$ 29	\$ 91	\$ 1,395	\$ -
Materials & Supplies	\$ 58,529	3	Base/Extra Daily w/ Fi	\$ 24,419	\$ 13,341	\$ 8,790	\$ 4,204	\$ 2,765	\$ 1,200	\$ 3,809	\$ 58,529	\$ -
	\$ 532,719			\$ 222,256	\$ 121,431	\$ 80,003	\$ 38,268	\$ 25,170	\$ 10,920	\$ 34,671	\$ 532,719	\$ -
Total Pumping Expense	\$ 2,975,053			\$ 1,218,512	\$ 647,111	\$ 571,031	\$ 269,970	\$ 172,692	\$ 23,222	\$ 72,515	\$ 2,975,053	\$ -
Water Treatment												
Operating Expense												
Fuel and Power	\$ 383,380	1	Total Usage	\$ 155,271	\$ 80,995	\$ 83,172	\$ 39,130	\$ 24,733	\$ 79	\$ -	\$ 383,380	\$ -
Chemicals	\$ 4,034,489	1	Total Usage	\$ 1,633,993	\$ 852,347	\$ 875,260	\$ 411,785	\$ 260,272	\$ 831	\$ -	\$ 4,034,489	\$ -
Waste Disposal	\$ 1,798,903	1	Total Usage	\$ 728,567	\$ 380,046	\$ 390,262	\$ 183,607	\$ 116,050	\$ 371	\$ -	\$ 1,798,903	\$ -
Salaries and Wages	\$ 1,153,501	2	Base/Extra Daily	\$ 519,874	\$ 282,796	\$ 195,955	\$ 93,521	\$ 61,187	\$ 170	\$ -	\$ 1,153,501	\$ -
Employee Benefits	\$ 13	2	Base/Extra Daily	\$ 6	\$ 3	\$ 2	\$ 1	\$ 1	\$ 0	\$ -	\$ 13	\$ -
Contract Services - Eng	\$ 4,927	2	Base/Extra Daily	\$ 2,221	\$ 1,208	\$ 837	\$ 399	\$ 261	\$ 1	\$ -	\$ 4,927	\$ -
Contract Services - Other	\$ 45,825	2	Base/Extra Daily	\$ 20,653	\$ 11,235	\$ 7,785	\$ 3,715	\$ 2,431	\$ 7	\$ -	\$ 45,825	\$ -
Building Maintenance and Services	\$ 49,538	2	Base/Extra Daily	\$ 22,326	\$ 12,145	\$ 8,415	\$ 4,016	\$ 2,628	\$ 7	\$ -	\$ 49,538	\$ -
Miscellaneous	\$ 131,113	2	Base/Extra Daily	\$ 59,091	\$ 32,144	\$ 22,273	\$ 10,630	\$ 6,955	\$ 19	\$ -	\$ 131,113	\$ -
Telecommunications	\$ 2,824	2	Base/Extra Daily	\$ 1,273	\$ 692	\$ 480	\$ 229	\$ 150	\$ 0	\$ -	\$ 2,824	\$ -
Postage	\$ -	2	Base/Extra Daily	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Office supplies and services	\$ 15,896	2	Base/Extra Daily	\$ 7,164	\$ 3,897	\$ 2,700	\$ 1,289	\$ 843	\$ 2	\$ -	\$ 15,896	\$ -
Materials & Supplies	\$ 22,758	2	Base/Extra Daily	\$ 10,257	\$ 5,579	\$ 3,866	\$ 1,845	\$ 1,207	\$ 3	\$ -	\$ 22,758	\$ -
Rents-Property	\$ 39	2	Base/Extra Daily	\$ 17	\$ 9	\$ 7	\$ 3	\$ 2	\$ 0	\$ -	\$ 39	\$ -
Rents-Equipment	\$ (39,231)	2	Base/Extra Daily	\$ (17,681)	\$ (9,618)	\$ (6,665)	\$ (3,181)	\$ (2,081)	\$ (6)	\$ -	\$ (39,231)	\$ -
Transportation	\$ 1,185	2	Base/Extra Daily	\$ 534	\$ 290	\$ 201	\$ 96	\$ 63	\$ 0	\$ -	\$ 1,185	\$ -
	\$ 7,605,159			\$ 3,143,566	\$ 1,653,769	\$ 1,584,551	\$ 747,087	\$ 474,701	\$ 1,485	\$ -	\$ 7,605,159	\$ -

Missouri-American Water Company
Class Cost of Service Study - Account Detail using One-Step Allocation
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Rate F						Total	Variance	
				Residential	Non-Residential	Rate J	Rate B	Rate P	Private Fire			Public Fire
Maintenance Expense												
Salaries and Wages	\$ 476,508	2	Base/Extra Daily	\$ 214,758	\$ 116,822	\$ 80,948	\$ 38,633	\$ 25,276	\$ 70	\$ -	\$ 476,508	\$ -
Transportation	\$ 3,901	2	Base/Extra Daily	\$ 1,758	\$ 956	\$ 663	\$ 316	\$ 207	\$ 1	\$ -	\$ 3,901	\$ -
Contract Services - Eng	\$ 12,916	2	Base/Extra Daily	\$ 5,821	\$ 3,166	\$ 2,194	\$ 1,047	\$ 685	\$ 2	\$ -	\$ 12,916	\$ -
Contract Services - Other	\$ 205,925	2	Base/Extra Daily	\$ 92,809	\$ 50,485	\$ 34,982	\$ 16,695	\$ 10,923	\$ 30	\$ -	\$ 205,925	\$ -
Miscellaneous	\$ 27,803	2	Base/Extra Daily	\$ 12,530	\$ 6,816	\$ 4,723	\$ 2,254	\$ 1,475	\$ 4	\$ -	\$ 27,803	\$ -
Materials & Supplies	\$ 362,271	2	Base/Extra Daily	\$ 163,273	\$ 88,815	\$ 61,542	\$ 29,371	\$ 19,217	\$ 53	\$ -	\$ 362,271	\$ -
	\$ 1,089,324			\$ 490,949	\$ 267,062	\$ 185,052	\$ 88,317	\$ 57,783	\$ 160	\$ -	\$ 1,089,324	\$ -
Total Water Treatment Expense	\$ 8,694,482			\$ 3,634,515	\$ 1,920,831	\$ 1,769,604	\$ 835,404	\$ 532,484	\$ 1,645	\$ -	\$ 8,694,482	\$ -
Transmission & Distribution Expense												
Operating Expense												
Fuel and Power	\$ 304,396	11	T/D Oper. Expense	\$ 176,834	\$ 55,789	\$ 8,851	\$ 5,619	\$ 2,036	\$ 13,213	\$ 42,053	\$ 304,396	\$ -
Salaries and Wages	\$ 2,139,209	11	T/D Oper. Expense	\$ 1,242,744	\$ 392,070	\$ 62,201	\$ 39,492	\$ 14,309	\$ 92,859	\$ 295,535	\$ 2,139,209	\$ -
Employee Benefits	\$ 2,884	11	T/D Oper. Expense	\$ 1,675	\$ 952	\$ 84	\$ 53	\$ 19	\$ 125	\$ 398	\$ 2,884	\$ -
Contract Services - Eng	\$ 4,310	11	T/D Oper. Expense	\$ 2,504	\$ 790	\$ 125	\$ 80	\$ 29	\$ 187	\$ 595	\$ 4,310	\$ -
Contract Services - Other	\$ 608,355	11	T/D Oper. Expense	\$ 353,415	\$ 111,498	\$ 17,689	\$ 11,231	\$ 4,069	\$ 26,407	\$ 84,045	\$ 608,355	\$ -
Building Maintenance and Services	\$ 140,430	11	T/D Oper. Expense	\$ 81,581	\$ 25,738	\$ 4,083	\$ 2,592	\$ 939	\$ 6,096	\$ 19,401	\$ 140,430	\$ -
Miscellaneous	\$ 53,784	11	T/D Oper. Expense	\$ 31,245	\$ 9,857	\$ 1,564	\$ 993	\$ 360	\$ 2,335	\$ 7,430	\$ 53,784	\$ -
Telecommunications	\$ 17,373	11	T/D Oper. Expense	\$ 10,092	\$ 3,184	\$ 505	\$ 321	\$ 116	\$ 754	\$ 2,400	\$ 17,373	\$ -
Postage	\$ -	11	T/D Oper. Expense	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Office supplies and services	\$ 43,308	11	T/D Oper. Expense	\$ 25,159	\$ 7,937	\$ 1,259	\$ 800	\$ 290	\$ 1,880	\$ 5,983	\$ 43,308	\$ -
Materials & Supplies	\$ 198,111	11	T/D Oper. Expense	\$ 115,090	\$ 36,309	\$ 5,760	\$ 3,657	\$ 1,325	\$ 8,600	\$ 27,369	\$ 198,111	\$ -
Rents-Property	\$ 1,395	11	T/D Oper. Expense	\$ 810	\$ 256	\$ 41	\$ 26	\$ 9	\$ 61	\$ 193	\$ 1,395	\$ -
Rents-Equipment	\$ 19,250	11	T/D Oper. Expense	\$ 11,183	\$ 3,528	\$ 560	\$ 355	\$ 129	\$ 836	\$ 2,659	\$ 19,250	\$ -
Transportation	\$ 339,671	11	T/D Oper. Expense	\$ 197,327	\$ 62,254	\$ 9,876	\$ 6,271	\$ 2,272	\$ 14,744	\$ 46,926	\$ 339,671	\$ -
	\$ 3,872,475			\$ 2,249,661	\$ 709,739	\$ 112,598	\$ 71,490	\$ 25,902	\$ 168,096	\$ 534,988	\$ 3,872,475	\$ -
Maintenance Expense												
Salaries and Wages	\$ 609,326	12	T/D Maint.. Expense	\$ 247,841	\$ 68,317	\$ 9,635	\$ 6,112	\$ 2,405	\$ 28,496	\$ 246,521	\$ 609,326	\$ -
Contract Services - Eng	\$ 35,545	12	T/D Maint.. Expense	\$ 14,458	\$ 3,985	\$ 562	\$ 357	\$ 140	\$ 1,662	\$ 14,381	\$ 35,545	\$ -
Contract Services - Other	\$ 1,650,348	12	T/D Maint.. Expense	\$ 671,273	\$ 185,035	\$ 26,095	\$ 16,553	\$ 6,513	\$ 77,180	\$ 667,698	\$ 1,650,348	\$ -
Transportation	\$ 117,992	12	T/D Maint.. Expense	\$ 47,993	\$ 13,229	\$ 1,866	\$ 1,183	\$ 466	\$ 5,518	\$ 47,737	\$ 117,992	\$ -
Miscellaneous	\$ 283,548	12	T/D Maint.. Expense	\$ 115,332	\$ 31,791	\$ 4,483	\$ 2,844	\$ 1,119	\$ 13,260	\$ 114,718	\$ 283,548	\$ -
Materials & Supplies	\$ 483,294	12	T/D Maint.. Expense	\$ 196,578	\$ 54,186	\$ 7,642	\$ 4,848	\$ 1,907	\$ 22,602	\$ 195,531	\$ 483,294	\$ -
	\$ 3,180,052			\$ 1,293,475	\$ 356,543	\$ 50,283	\$ 31,897	\$ 12,550	\$ 148,719	\$ 1,286,586	\$ 3,180,052	\$ -
Total T&D Expense	\$ 7,052,527			\$ 3,543,135	\$ 1,066,282	\$ 162,881	\$ 103,387	\$ 38,452	\$ 316,815	\$ 1,821,574	\$ 7,052,527	\$ -
General Mains Expense												
Operations												
Salaries and Wages	\$ 408,916	17	Mains	\$ 203,435	\$ 65,588	\$ 14,267	\$ 10,354	\$ 3,919	\$ 26,623	\$ 84,730	\$ 408,916	\$ -
Miscellaneous	\$ 809	17	Mains	\$ 403	\$ 130	\$ 28	\$ 20	\$ 8	\$ 53	\$ 168	\$ 809	\$ -
	\$ 409,725			\$ 203,838	\$ 65,718	\$ 14,295	\$ 10,375	\$ 3,927	\$ 26,675	\$ 84,897	\$ 409,725	\$ -
Maintenance Expense												
Salaries and Wages	\$ 99,754	17	Mains	\$ 49,627	\$ 16,000	\$ 3,480	\$ 2,526	\$ 956	\$ 6,495	\$ 20,670	\$ 99,754	\$ -
Miscellaneous	\$ 3,064	17	Mains	\$ 1,524	\$ 491	\$ 107	\$ 78	\$ 29	\$ 199	\$ 635	\$ 3,064	\$ -
	\$ 102,818			\$ 51,152	\$ 16,492	\$ 3,587	\$ 2,603	\$ 985	\$ 6,694	\$ 21,304	\$ 102,818	\$ -
General Mains Expense	\$ 512,543			\$ 254,989	\$ 82,209	\$ 17,883	\$ 12,978	\$ 4,912	\$ 33,369	\$ 106,202	\$ 512,543	\$ -
Storage Expense												
Operating Expense												
Salaries and Wages	\$ -	5	Storage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Miscellaneous	\$ -	5	Storage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ -			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Maintenance Expense												
Salaries and Wages	\$ 12,871	5	Storage	\$ 8,698	\$ 2,237	\$ 531	\$ 266	\$ 194	\$ 226	\$ 719	\$ 12,871	\$ -
Miscellaneous	\$ -	5	Storage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ 12,871			\$ 8,698	\$ 2,237	\$ 531	\$ 266	\$ 194	\$ 226	\$ 719	\$ 12,871	\$ -
Total Storage Expense	\$ 12,871			\$ 8,698	\$ 2,237	\$ 531	\$ 266	\$ 194	\$ 226	\$ 719	\$ 12,871	\$ -
Meter Expense												
Operating Expense												
Salaries and Wages	\$ 202,063	8	Meters	\$ 151,115	\$ 46,284	\$ 3,525	\$ 957	\$ 181	\$ -	\$ -	\$ 202,063	\$ -
Miscellaneous	\$ 2,736	8	Meters	\$ 2,046	\$ 627	\$ 48	\$ 13	\$ 2	\$ -	\$ -	\$ 2,736	\$ -
	\$ 204,799			\$ 153,162	\$ 46,911	\$ 3,573	\$ 970	\$ 184	\$ -	\$ -	\$ 204,799	\$ -
Maintenance Expense												
Salaries and Wages	\$ 27,308	8	Meters	\$ 20,423	\$ 6,255	\$ 476	\$ 129	\$ 25	\$ -	\$ -	\$ 27,308	\$ -
Miscellaneous	\$ 146	8	Meters	\$ 109	\$ 33	\$ 3	\$ 1	\$ 0	\$ -	\$ -	\$ 146	\$ -
	\$ 27,454			\$ 20,532	\$ 6,289	\$ 479	\$ 130	\$ 25	\$ -	\$ -	\$ 27,454	\$ -

Missouri-American Water Company
Class Cost of Service Study - Account Detail using One-Step Allocation
Case No: WR-2024-0320, SR-2024-0321

Post Test Year	Alloc	Description	Residential	Non-Residential	Rate J	Rate B	Rate P	Rate F Private Fire	Public Fire	Total	Variance
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Missouri-American Water Company
Class Cost of Service Study - Account Detail using One-Step Allocation
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Residential	Non-Residential	Rate J	Rate B	Rate P	Rate F		Total	Variance
									Private Fire	Public Fire		
Total Meter Expense	\$ 232,253			\$ 173,693	\$ 53,199	\$ 4,052	\$ 1,100	\$ 208	\$ -	\$ -	\$ 232,253	\$ -
Service Expense												
Operating Expense												
Salaries and Wages	\$ -	9	Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Miscellaneous	\$ -	9	Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ -			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Maintenance Expense												
Salaries and Wages	\$ 59,890	9	Services	\$ 44,828	\$ 9,471	\$ 257	\$ 79	\$ 7	\$ 5,248	\$ -	\$ 59,890	\$ -
Miscellaneous	\$ (535)	9	Services	\$ (400)	\$ (85)	\$ (2)	\$ (1)	\$ (0)	\$ (47)	\$ -	\$ (535)	\$ -
	\$ 59,355			\$ 44,428	\$ 9,386	\$ 255	\$ 78	\$ 7	\$ 5,201	\$ -	\$ 59,355	\$ -
Total Service Expense	\$ 59,355			\$ 44,428	\$ 9,386	\$ 255	\$ 78	\$ 7	\$ 5,201	\$ -	\$ 59,355	\$ -
Hydrant Expense												
Maintenance Expense												
Salaries and Wages	\$ 104,158	7	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,225	\$ 101,934	\$ 104,158	\$ -
Miscellaneous	\$ 191	7	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4	\$ 187	\$ 191	\$ -
	\$ 104,350			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,229	\$ 102,121	\$ 104,350	\$ -
Hydrant Expense	\$ 104,350			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,229	\$ 102,121	\$ 104,350	\$ -
Customer Accounts												
Fuel and Power	\$ 898	10	Customers	\$ 803	\$ 75	\$ 0	\$ 0	\$ 0	\$ 19	\$ -	\$ 898	\$ -
Salaries and Wages	\$ 234,337	10	Customers	\$ 209,598	\$ 19,509	\$ 119	\$ 40	\$ 5	\$ 5,067	\$ -	\$ 234,337	\$ -
Contract Services - Other	\$ 47,854	10	Customers	\$ 42,802	\$ 3,984	\$ 24	\$ 8	\$ 1	\$ 1,035	\$ -	\$ 47,854	\$ -
Building Maintenance and Services	\$ 13,954	10	Customers	\$ 12,480	\$ 1,162	\$ 7	\$ 2	\$ 0	\$ 302	\$ -	\$ 13,954	\$ -
Telecommunications	\$ 1,580	10	Customers	\$ 1,413	\$ 132	\$ 1	\$ 0	\$ 0	\$ 34	\$ -	\$ 1,580	\$ -
Office supplies and services	\$ 1,820	10	Customers	\$ 1,628	\$ 152	\$ 1	\$ 0	\$ 0	\$ 39	\$ -	\$ 1,820	\$ -
Materials & Supplies	\$ 44,301	10	Customers	\$ 39,624	\$ 3,688	\$ 22	\$ 7	\$ 1	\$ 958	\$ -	\$ 44,301	\$ -
Transportation	\$ 73	10	Customers	\$ 65	\$ 6	\$ 0	\$ 0	\$ 0	\$ 2	\$ -	\$ 73	\$ -
Uncollectible Accounts	\$ 1,800,985	10	Customers	\$ 1,610,850	\$ 149,935	\$ 913	\$ 304	\$ 40	\$ 38,944	\$ -	\$ 1,800,985	\$ -
Customer accounting, other	\$ 565,618	10	Customers	\$ 505,904	\$ 47,089	\$ 287	\$ 96	\$ 12	\$ 12,231	\$ -	\$ 565,618	\$ -
	\$ 2,711,420			\$ 2,425,167	\$ 225,731	\$ 1,374	\$ 458	\$ 60	\$ 58,631	\$ -	\$ 2,711,420	\$ -
Total Customer Accounting Expense	\$ 2,711,420			\$ 2,425,167	\$ 225,731	\$ 1,374	\$ 458	\$ 60	\$ 58,631	\$ -	\$ 2,711,420	\$ -
Administrative & General Expense												
Operating Expense												
Fuel and Power	\$ 11,134	13	Fixed O&M	\$ 6,202	\$ 1,840	\$ 668	\$ 341	\$ 198	\$ 326	\$ 1,559	\$ 11,134	\$ -
Salaries and Wages	\$ 4,167,130	14	Labor	\$ 2,138,538	\$ 796,596	\$ 325,517	\$ 165,191	\$ 96,889	\$ 120,008	\$ 524,391	\$ 4,167,130	\$ -
Employee Benefits	\$ 2,761,747	14	Labor	\$ 1,417,306	\$ 527,940	\$ 215,735	\$ 109,480	\$ 64,213	\$ 79,535	\$ 347,538	\$ 2,761,747	\$ -
Support Services Costs - Employee	\$ 6,493,498	14	Labor	\$ 3,332,411	\$ 1,241,308	\$ 507,243	\$ 257,412	\$ 150,980	\$ 187,004	\$ 817,141	\$ 6,493,498	\$ -
Support Services Costs - Admin	\$ 6,525,751	13	Fixed O&M	\$ 3,634,983	\$ 1,078,585	\$ 391,606	\$ 199,589	\$ 116,130	\$ 191,079	\$ 913,778	\$ 6,525,751	\$ -
Contract Services - Eng	\$ 3,440	13	Fixed O&M	\$ 1,916	\$ 569	\$ 206	\$ 105	\$ 61	\$ 101	\$ 482	\$ 3,440	\$ -
Contract Services - Other	\$ 573,451	13	Fixed O&M	\$ 319,425	\$ 94,781	\$ 34,412	\$ 17,539	\$ 10,205	\$ 16,791	\$ 80,298	\$ 573,451	\$ -
Building Maintenance and Services	\$ 237,961	13	Fixed O&M	\$ 132,549	\$ 39,331	\$ 14,280	\$ 7,278	\$ 4,235	\$ 6,968	\$ 33,321	\$ 237,961	\$ -
Miscellaneous	\$ 686,568	13	Fixed O&M	\$ 382,433	\$ 113,477	\$ 41,201	\$ 20,999	\$ 12,218	\$ 20,103	\$ 96,138	\$ 686,568	\$ -
Telecommunications	\$ 515,282	13	Fixed O&M	\$ 287,023	\$ 85,166	\$ 30,922	\$ 15,760	\$ 9,170	\$ 15,088	\$ 72,153	\$ 515,282	\$ -
Postage	\$ -	13	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Office supplies and services	\$ 274,454	13	Fixed O&M	\$ 152,877	\$ 45,362	\$ 16,470	\$ 8,394	\$ 4,884	\$ 8,036	\$ 38,431	\$ 274,454	\$ -
Materials & Supplies	\$ 70,607	13	Fixed O&M	\$ 39,330	\$ 11,670	\$ 4,237	\$ 2,160	\$ 1,257	\$ 2,067	\$ 9,887	\$ 70,607	\$ -
Communications	\$ 25,072	13	Fixed O&M	\$ 13,966	\$ 4,144	\$ 1,505	\$ 767	\$ 446	\$ 734	\$ 3,511	\$ 25,072	\$ -
Rents-Property	\$ 78,325	13	Fixed O&M	\$ 43,629	\$ 12,946	\$ 4,700	\$ 2,396	\$ 1,394	\$ 2,293	\$ 10,968	\$ 78,325	\$ -
Rents-Equipment	\$ 7,898	13	Fixed O&M	\$ 4,399	\$ 1,305	\$ 474	\$ 242	\$ 141	\$ 231	\$ 1,106	\$ 7,898	\$ -
Transportation	\$ 324,725	13	Fixed O&M	\$ 180,879	\$ 53,671	\$ 19,487	\$ 9,932	\$ 5,779	\$ 9,508	\$ 45,470	\$ 324,725	\$ -
Regulatory Expense	\$ 187,619	13	Fixed O&M	\$ 104,508	\$ 31,010	\$ 11,259	\$ 5,738	\$ 3,339	\$ 5,494	\$ 26,272	\$ 187,619	\$ -
Insurance	\$ 2,696,028	13	Fixed O&M	\$ 1,501,746	\$ 445,603	\$ 161,787	\$ 82,458	\$ 47,978	\$ 78,942	\$ 377,516	\$ 2,696,028	\$ -
	\$ 25,640,691			\$ 13,694,119	\$ 4,585,304	\$ 1,781,709	\$ 905,778	\$ 529,515	\$ 744,308	\$ 3,399,958	\$ 25,640,691	\$ -
Maintenance Expense												
Salaries and Wages	\$ 33,863	14	Labor	\$ 17,378	\$ 6,473	\$ 2,645	\$ 1,342	\$ 787	\$ 975	\$ 4,261	\$ 33,863	\$ -
Transportation	\$ 3,722	13	Fixed O&M	\$ 2,073	\$ 615	\$ 223	\$ 114	\$ 66	\$ 109	\$ 521	\$ 3,722	\$ -
Contract Services - Eng	\$ -	13	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contract Services - Other	\$ 20,944	13	Fixed O&M	\$ 11,666	\$ 3,462	\$ 1,257	\$ 641	\$ 373	\$ 613	\$ 2,933	\$ 20,944	\$ -
Miscellaneous	\$ 22,230	13	Fixed O&M	\$ 12,383	\$ 3,674	\$ 1,334	\$ 680	\$ 396	\$ 651	\$ 3,113	\$ 22,230	\$ -
Materials & Supplies	\$ 26,127	13	Fixed O&M	\$ 14,553	\$ 4,318	\$ 1,568	\$ 799	\$ 465	\$ 765	\$ 3,658	\$ 26,127	\$ -
	\$ 106,887			\$ 58,054	\$ 18,543	\$ 7,027	\$ 3,576	\$ 2,087	\$ 3,113	\$ 14,487	\$ 106,887	\$ -
Total A&G Expense	\$ 25,747,578			\$ 13,752,173	\$ 4,603,847	\$ 1,788,736	\$ 909,353	\$ 531,602	\$ 747,421	\$ 3,414,445	\$ 25,747,578	\$ -
Total Operations & Maintenance Exp. (Other Water)	\$ 52,868,585			\$ 27,019,546	\$ 9,642,918	\$ 5,315,400	\$ 2,603,876	\$ 1,579,571	\$ 1,189,697	\$ 5,517,576	\$ 52,868,585	\$ -

Missouri-American Water Company
Class Cost of Service Study - Account Detail using One-Step Allocation
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Residential	Non-Residential	Rate J	Rate B	Rate P	Rate F		Total	Variance
									Private Fire	Public Fire		
Taxes Other Than Income Tax												
Property Taxes	\$ 11,171,788	15	Net Plant (less gen. ar	\$ 5,859,522	\$ 2,013,256	\$ 686,984	\$ 368,623	\$ 202,113	\$ 466,495	\$ 1,574,794	\$ 11,171,788	\$ -
Payroll Taxes	\$ 817,364	14	Labor	\$ 419,465	\$ 156,249	\$ 63,849	\$ 32,402	\$ 19,004	\$ 23,539	\$ 102,857	\$ 817,364	\$ -
Utility Reg Assessment	\$ 829,029	16	Rate Base	\$ 431,618	\$ 152,478	\$ 55,627	\$ 29,217	\$ 16,474	\$ 30,926	\$ 112,689	\$ 829,029	\$ -
Other Taxes	\$ (55,061)	16	Rate Base	\$ (28,666)	\$ (10,127)	\$ (3,695)	\$ (1,940)	\$ (1,094)	\$ (2,054)	\$ (7,484)	\$ (55,061)	\$ -
	\$ 12,763,121			\$ 6,681,939	\$ 2,311,856	\$ 802,766	\$ 428,300	\$ 236,497	\$ 518,907	\$ 1,782,856	\$ 12,763,121	\$ -
Total Taxes Other Than Income Taxes (Other Water)	\$ 12,763,121			\$ 6,681,939	\$ 2,311,856	\$ 802,766	\$ 428,300	\$ 236,497	\$ 518,907	\$ 1,782,856	\$ 12,763,121	\$ -
Plant Depreciation												
Intangible Plant												
Organization	\$ -	15	Net Plant (less gen. ar	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Franchises	\$ -	15	Net Plant (less gen. ar	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other P/E-Intangible	\$ -	15	Net Plant (less gen. ar	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Source of Supply												
Land & Land Rights	\$ -	2	Base/Extra Daily	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Structures & Improvements	\$ 460,440	2	Base/Extra Daily	\$ 207,516	\$ 112,883	\$ 78,219	\$ 37,330	\$ 24,424	\$ 68	\$ -	\$ 460,440	\$ -
Collection & Impound Reservoirs	\$ 27,224	2	Base/Extra Daily	\$ 12,270	\$ 6,674	\$ 4,625	\$ 2,207	\$ 1,444	\$ 4	\$ -	\$ 27,224	\$ -
Lake, River, & Other Intakes	\$ 354,441	2	Base/Extra Daily	\$ 159,743	\$ 86,896	\$ 60,212	\$ 28,736	\$ 18,801	\$ 52	\$ -	\$ 354,441	\$ -
Wells & Springs	\$ 334,577	2	Base/Extra Daily	\$ 150,791	\$ 82,026	\$ 56,837	\$ 27,126	\$ 17,748	\$ 49	\$ -	\$ 334,577	\$ -
Infiltration Galleries & Tunnels	\$ 45	2	Base/Extra Daily	\$ 20	\$ 11	\$ 8	\$ 4	\$ 2	\$ 0	\$ -	\$ 45	\$ -
Supply Mains	\$ 240,434	2	Base/Extra Daily	\$ 108,362	\$ 58,946	\$ 40,845	\$ 19,493	\$ 12,754	\$ 35	\$ -	\$ 240,434	\$ -
Other P/E-Supply	\$ 20,828	2	Base/Extra Daily	\$ 9,387	\$ 5,106	\$ 3,538	\$ 1,689	\$ 1,105	\$ 3	\$ -	\$ 20,828	\$ -
Water Pumping												
Pumping Land & Land Rights	\$ -	3	Base/Extra Daily w/ Fi	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Pumping Structures & Improvements	\$ 645,983	3	Base/Extra Daily w/ Fi	\$ 269,510	\$ 147,249	\$ 97,013	\$ 46,405	\$ 30,522	\$ 13,241	\$ 42,043	\$ 645,983	\$ -
Boiler Plant Equipment	\$ -	3	Base/Extra Daily w/ Fi	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Power Generation Equipment	\$ 158,392	3	Base/Extra Daily w/ Fi	\$ 66,083	\$ 36,105	\$ 23,787	\$ 11,378	\$ 7,484	\$ 3,247	\$ 10,309	\$ 158,392	\$ -
Steam Pumping Equipment	\$ 51,077	3	Base/Extra Daily w/ Fi	\$ 21,310	\$ 11,643	\$ 7,671	\$ 3,669	\$ 2,413	\$ 1,047	\$ 3,324	\$ 51,077	\$ -
Electric Pumping Equipment	\$ 541,695	3	Base/Extra Daily w/ Fi	\$ 226,001	\$ 123,477	\$ 81,351	\$ 38,913	\$ 25,595	\$ 11,104	\$ 35,255	\$ 541,695	\$ -
Diesel Pumping Equipment	\$ 9,059	3	Base/Extra Daily w/ Fi	\$ 3,779	\$ 2,065	\$ 1,360	\$ 651	\$ 428	\$ 186	\$ 590	\$ 9,059	\$ -
Pump Equip Hydraulic	\$ 6,590	3	Base/Extra Daily w/ Fi	\$ 2,749	\$ 1,502	\$ 990	\$ 473	\$ 311	\$ 135	\$ 429	\$ 6,590	\$ -
Other Pumping Equipment	\$ 91,734	3	Base/Extra Daily w/ Fi	\$ 38,272	\$ 20,910	\$ 13,776	\$ 6,590	\$ 4,334	\$ 1,880	\$ 5,970	\$ 91,734	\$ -
Water Treatment												
Water Treatment Land & Land Rights	\$ -	2	Base/Extra Daily	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Water Treatment Structures & Improvements	\$ 1,820,166	2	Base/Extra Daily	\$ 820,334	\$ 446,237	\$ 309,207	\$ 147,571	\$ 96,550	\$ 267	\$ -	\$ 1,820,166	\$ -
Water Treatment Equipment	\$ 2,463,879	2	Base/Extra Daily	\$ 1,110,450	\$ 604,051	\$ 418,559	\$ 199,760	\$ 130,696	\$ 362	\$ -	\$ 2,463,879	\$ -
Water Treatment - Other	\$ 49,058	2	Base/Extra Daily	\$ 22,110	\$ 12,027	\$ 8,334	\$ 3,977	\$ 2,602	\$ 7	\$ -	\$ 49,058	\$ -
T&D												
Transmission & Distribution Land	\$ -	17	Mains	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transmission & Distribution Structures & Impr	\$ 146,347	17	Mains	\$ 72,807	\$ 23,473	\$ 5,106	\$ 3,706	\$ 1,403	\$ 9,528	\$ 30,324	\$ 146,347	\$ -
TD Mains 4in & Less	\$ 1,559,540	4	Base/Extra Hourly w/	\$ 807,728	\$ 223,338	\$ 8,666	\$ 21,032	\$ -	\$ 119,235	\$ 379,541	\$ 1,559,540	\$ -
TD Mains 6in to 8in	\$ 4,470,663	4	Base/Extra Hourly w/	\$ 2,315,478	\$ 640,233	\$ 24,842	\$ 60,293	\$ -	\$ 341,804	\$ 1,088,012	\$ 4,470,663	\$ -
TD Mains 10in to 16in	\$ 1,276,531	3	Base/Extra Daily w/ Fi	\$ 532,582	\$ 290,980	\$ 191,707	\$ 91,700	\$ 60,315	\$ 26,166	\$ 83,081	\$ 1,276,531	\$ -
TD Mains 18in & Grtr	\$ 257,783	3	Base/Extra Daily w/ Fi	\$ 107,550	\$ 58,761	\$ 38,713	\$ 18,518	\$ 12,180	\$ 5,284	\$ 16,777	\$ 257,783	\$ -
Other Transmission & Distribution Plant	\$ 2,465	17	Mains	\$ 1,226	\$ 395	\$ 86	\$ 62	\$ 24	\$ 160	\$ 511	\$ 2,465	\$ -
Storage												
Distribution Reservoirs & Standpipes	\$ 695,612	5	Storage	\$ 470,050	\$ 120,895	\$ 28,679	\$ 14,393	\$ 10,505	\$ 12,229	\$ 38,861	\$ 695,612	\$ -
Distribution Reservoirs & Standpipes - Tank Coating	\$ -	5	Storage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Meters												
Meters	\$ 1,761,112	8	Meters	\$ 1,317,070	\$ 403,397	\$ 30,723	\$ 8,342	\$ 1,581	\$ -	\$ -	\$ 1,761,112	\$ -
Meter Installation	\$ 628,748	8	Meters	\$ 470,217	\$ 144,020	\$ 10,969	\$ 2,978	\$ 564	\$ -	\$ -	\$ 628,748	\$ -
Meter Vaults	\$ -	8	Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Services												
Services	\$ 3,596,402	9	Services	\$ 2,691,961	\$ 568,730	\$ 15,448	\$ 4,719	\$ 397	\$ 315,147	\$ -	\$ 3,596,402	\$ -
Hydrants												
Hydrants	\$ 778,074	7	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,618	\$ 761,456	\$ 778,074	\$ -
Fire Mains	\$ 10,774	7	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 230	\$ 10,544	\$ 10,774	\$ -

Missouri-American Water Company
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	Post Test Year	Alloc	Description	Rate F							Total	Variance	
				Residential	Non-Residential	Rate J	Rate B	Rate P	Private Fire	Public Fire			
General Plant													
General Land & Land Rights	\$ -	13	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Stores Shops Equipment Structures	\$ 686,469	13	Fixed O&M	\$ 382,378	\$ 113,461	\$ 41,195	\$ 20,996	\$ 12,216	\$ 20,100	\$ 96,124	\$ 686,469	\$ -	\$ -
Office Structures	\$ 206,918	13	Fixed O&M	\$ 115,258	\$ 34,200	\$ 12,417	\$ 6,329	\$ 3,682	\$ 6,059	\$ 28,974	\$ 206,918	\$ -	\$ -
General Structures - HVAC	\$ -	13	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Miscellaneous Structures	\$ 98,900	13	Fixed O&M	\$ 55,089	\$ 16,346	\$ 5,935	\$ 3,025	\$ 1,760	\$ 2,896	\$ 13,849	\$ 98,900	\$ -	\$ -
Structures & Improvements - Leasehold	\$ 1,344	13	Fixed O&M	\$ 748	\$ 222	\$ 81	\$ 41	\$ 24	\$ 39	\$ 188	\$ 1,344	\$ -	\$ -
Office Furniture and Equipment	\$ 39,108	13	Fixed O&M	\$ 21,784	\$ 6,464	\$ 2,347	\$ 1,196	\$ 696	\$ 1,145	\$ 5,476	\$ 39,108	\$ -	\$ -
Computers & Peripheral Equipment	\$ 868,744	13	Fixed O&M	\$ 483,909	\$ 143,587	\$ 52,133	\$ 26,570	\$ 15,460	\$ 25,437	\$ 121,647	\$ 868,744	\$ -	\$ -
Computer Hardware & Software	\$ 163,513	13	Fixed O&M	\$ 91,080	\$ 27,026	\$ 9,812	\$ 5,001	\$ 2,910	\$ 4,788	\$ 22,896	\$ 163,513	\$ -	\$ -
Computer Software	\$ 1,310,121	13	Fixed O&M	\$ 729,766	\$ 216,539	\$ 78,620	\$ 40,070	\$ 23,314	\$ 38,361	\$ 183,452	\$ 1,310,121	\$ -	\$ -
Personal Computer Software	\$ -	13	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Office Equipment	\$ 33,443	13	Fixed O&M	\$ 18,629	\$ 5,528	\$ 2,007	\$ 1,023	\$ 595	\$ 979	\$ 4,683	\$ 33,443	\$ -	\$ -
BTS Initial Investment	\$ 630,970	13	Fixed O&M	\$ 351,464	\$ 104,288	\$ 37,864	\$ 19,298	\$ 11,229	\$ 18,475	\$ 88,353	\$ 630,970	\$ -	\$ -
Transportation Equipment - Light Trucks	\$ 687,840	13	Fixed O&M	\$ 383,142	\$ 113,687	\$ 41,277	\$ 21,037	\$ 12,241	\$ 20,140	\$ 96,316	\$ 687,840	\$ -	\$ -
Transportation Equipment - Heavy Trucks	\$ -	13	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transportation Equipment - Cars	\$ -	13	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transportation Equipment - Other	\$ 345,139	13	Fixed O&M	\$ 192,250	\$ 57,045	\$ 20,712	\$ 10,556	\$ 6,142	\$ 10,106	\$ 48,329	\$ 345,139	\$ -	\$ -
Stores Equipment	\$ 7,438	13	Fixed O&M	\$ 4,143	\$ 1,229	\$ 446	\$ 227	\$ 132	\$ 218	\$ 1,041	\$ 7,438	\$ -	\$ -
Tools, Shop, & Garage Equipment	\$ 214,138	13	Fixed O&M	\$ 119,280	\$ 35,393	\$ 12,850	\$ 6,549	\$ 3,811	\$ 6,270	\$ 29,985	\$ 214,138	\$ -	\$ -
Laboratory Equipment	\$ 40,024	2	Base/Extra Daily	\$ 18,038	\$ 9,812	\$ 6,799	\$ 3,245	\$ 2,123	\$ 6	\$ -	\$ 40,024	\$ -	\$ -
Power Operated Equipment	\$ 62,173	13	Fixed O&M	\$ 34,632	\$ 10,276	\$ 3,731	\$ 1,902	\$ 1,106	\$ 1,820	\$ 8,706	\$ 62,173	\$ -	\$ -
Communication Equipment	\$ -	13	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Communication Equipment (non telephone)	\$ 515,518	13	Fixed O&M	\$ 287,154	\$ 85,205	\$ 30,936	\$ 15,767	\$ 9,174	\$ 15,095	\$ 72,186	\$ 515,518	\$ -	\$ -
Telephone Equipment	\$ 4,268	13	Fixed O&M	\$ 2,377	\$ 705	\$ 256	\$ 131	\$ 76	\$ 125	\$ 598	\$ 4,268	\$ -	\$ -
Miscellaneous Equipment	\$ 163,595	13	Fixed O&M	\$ 91,126	\$ 27,039	\$ 9,817	\$ 5,004	\$ 2,911	\$ 4,790	\$ 22,908	\$ 163,595	\$ -	\$ -
Other Tangible Property	\$ 13,772	13	Fixed O&M	\$ 7,671	\$ 2,276	\$ 826	\$ 421	\$ 245	\$ 403	\$ 1,928	\$ 13,772	\$ -	\$ -
Transportation Equipment Capitalization	\$ (475,262)	13	Fixed O&M	\$ (264,731)	\$ (78,552)	\$ (28,520)	\$ (14,536)	\$ (8,458)	\$ (13,916)	\$ (66,549)	\$ (475,262)	\$ -	\$ -
Plant Depreciation (Other Water)	\$ 28,077,844			\$ 15,140,546	\$ 5,163,806	\$ 1,902,810	\$ 975,568	\$ 565,571	\$ 1,041,428	\$ 3,288,115	\$ 28,077,844	\$ -	\$ -
Depreciation - Acquisition													
CIAC-Non Taxable - Mains	\$ (565,128)	17	Mains	\$ (281,150)	\$ (90,644)	\$ (19,717)	\$ (14,310)	\$ (5,416)	\$ (36,793)	\$ (117,098)	\$ (565,128)	\$ -	\$ -
CIAC-Non Taxable - Ext Dep	\$ (365,380)	17	Mains	\$ (181,776)	\$ (58,605)	\$ (12,748)	\$ (9,252)	\$ (3,502)	\$ (23,788)	\$ (75,709)	\$ (365,380)	\$ -	\$ -
CIAC-Non Taxable - Services	\$ (7,758)	9	Services	\$ (5,807)	\$ (1,227)	\$ (33)	\$ (10)	\$ (1)	\$ (680)	\$ -	\$ (7,758)	\$ -	\$ -
CIAC-Non Taxable - Meters	\$ (13,983)	8	Meters	\$ (10,457)	\$ (3,203)	\$ (244)	\$ (66)	\$ (13)	\$ -	\$ -	\$ (13,983)	\$ -	\$ -
CIAC-Non Taxable - Hydrants	\$ (51,324)	7	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1,096)	\$ (50,228)	\$ (51,324)	\$ -	\$ -
CIAC-Non Taxable - Other	\$ (90,265)	17	Mains	\$ (44,907)	\$ (14,478)	\$ (3,149)	\$ (2,286)	\$ (865)	\$ (5,877)	\$ (18,703)	\$ (90,265)	\$ -	\$ -
CIAC-Non Taxable - WIP	\$ -	17	Mains	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CIAC-Taxable - Mains	\$ (427,796)	17	Mains	\$ (212,828)	\$ (68,616)	\$ (14,926)	\$ (10,832)	\$ (4,100)	\$ (27,852)	\$ (88,642)	\$ (427,796)	\$ -	\$ -
CIAC-Taxable - Extension Deposits	\$ (109,641)	17	Mains	\$ (54,546)	\$ (17,586)	\$ (3,825)	\$ (2,776)	\$ (1,051)	\$ (7,138)	\$ (22,718)	\$ (109,641)	\$ -	\$ -
CIAC-Taxable - Services	\$ (950,310)	9	Services	\$ (711,321)	\$ (150,281)	\$ (4,082)	\$ (1,247)	\$ (105)	\$ (83,274)	\$ -	\$ (950,310)	\$ -	\$ -
CIAC-Taxable - Meters	\$ (8,056)	8	Meters	\$ (6,025)	\$ (1,845)	\$ (141)	\$ (38)	\$ (7)	\$ -	\$ -	\$ (8,056)	\$ -	\$ -
CIAC-Taxable - Hydrants	\$ (706)	7	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (15)	\$ (691)	\$ (706)	\$ -	\$ -
CIAC-Taxable - Other	\$ (4,269)	17	Mains	\$ (2,124)	\$ (685)	\$ (149)	\$ (108)	\$ (41)	\$ (278)	\$ (885)	\$ (4,269)	\$ -	\$ -
CIAC-Taxable - WIP	\$ -	17	Mains	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CIAC-Taxable - Services SIT	\$ -	17	Mains	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Amortization of CIAC (Other Water)	\$ (2,594,616)			\$ (1,510,942)	\$ (407,170)	\$ (59,015)	\$ (40,926)	\$ (15,100)	\$ (186,791)	\$ (374,673)	\$ (2,594,616)	\$ -	\$ -
Total Depreciation Expense (Other Water)	\$ 25,483,228			\$ 13,629,604	\$ 4,756,636	\$ 1,843,795	\$ 934,643	\$ 550,471	\$ 854,637	\$ 2,913,442	\$ 25,483,228	\$ -	\$ -
Total Depreciation Expense	\$ 25,483,228												
Amortization Expense													
Lead Service Replacement	\$ 1,406,242	9	Services	\$ 1,052,593	\$ 222,381	\$ 6,040	\$ 1,845	\$ 155	\$ 123,227	\$ -	\$ 1,406,242	\$ -	\$ -
Troubled Systems	\$ 55,018	16	Rate Base	\$ 28,644	\$ 10,119	\$ 3,692	\$ 1,939	\$ 1,093	\$ 2,052	\$ 7,478	\$ 55,018	\$ -	\$ -
Tank Painting Tracker	\$ 120,994	16	Rate Base	\$ 62,993	\$ 22,254	\$ 8,119	\$ 4,264	\$ 2,404	\$ 4,514	\$ 16,447	\$ 120,994	\$ -	\$ -
Property Tax Tracker	\$ 993,750	16	Rate Base	\$ 517,377	\$ 182,774	\$ 66,680	\$ 35,022	\$ 19,747	\$ 37,071	\$ 135,079	\$ 993,750	\$ -	\$ -
Enterprise Solutions	\$ 2,652	16	Rate Base	\$ 1,381	\$ 488	\$ 178	\$ 93	\$ 53	\$ 99	\$ 360	\$ 2,652	\$ -	\$ -
Low Income Costs	\$ 997	16	Rate Base	\$ 519	\$ 183	\$ 67	\$ 35	\$ 20	\$ 37	\$ 135	\$ 997	\$ -	\$ -
Hollister Pipeline	\$ 6,466	16	Rate Base	\$ 3,367	\$ 1,189	\$ 434	\$ 228	\$ 128	\$ 241	\$ 879	\$ 6,466	\$ -	\$ -
Total Amortization Expense (Other Water)	\$ 2,586,118			\$ 1,666,874	\$ 439,387	\$ 85,209	\$ 43,426	\$ 23,601	\$ 167,241	\$ 160,379	\$ 2,586,118	\$ -	\$ -
Total Amortization Expense	\$ 2,586,118			\$ 1,666,874	\$ 439,387	\$ 85,209	\$ 43,426	\$ 23,601	\$ 167,241	\$ 160,379	\$ 2,586,118	\$ -	\$ -

Missouri-American Water Company
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Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Residential	Non-Residential	Rate J	Rate B	Rate P	Rate F		Total	Variance
									Private Fire	Public Fire		
Income Taxes												
Federal Income Tax	\$ 669,601	16	Rate Base	\$ 348,615	\$ 123,155	\$ 44,930	\$ 23,598	\$ 13,306	\$ 24,979	\$ 91,018	\$ 669,601	\$ -
State Income Tax	\$ 118,516	16	Rate Base	\$ 61,703	\$ 21,798	\$ 7,952	\$ 4,177	\$ 2,355	\$ 4,421	\$ 16,110	\$ 118,516	\$ -
Deferred Income Tax	\$ 11,197,630	16	Rate Base	\$ 5,829,836	\$ 2,059,502	\$ 751,354	\$ 394,625	\$ 222,510	\$ 417,722	\$ 1,522,081	\$ 11,197,630	\$ -
ITC Restored	\$ (30,262)	16	Rate Base	\$ (15,756)	\$ (5,566)	\$ (2,031)	\$ (1,067)	\$ (601)	\$ (1,129)	\$ (4,114)	\$ (30,262)	\$ -
Total Income Taxes (Other Water)	\$ 11,955,485			\$ 6,224,399	\$ 2,198,889	\$ 802,205	\$ 421,334	\$ 237,570	\$ 445,993	\$ 1,625,095	\$ 11,955,485	\$ -
Total Income Tax Expense	\$ 11,955,485			\$ 6,224,399	\$ 2,198,889	\$ 802,205	\$ 421,334	\$ 237,570	\$ 445,993	\$ 1,625,095	\$ 11,955,485	
Required Net Operating Income (Other Water)	\$ 69,259,387	16	Rate Base	\$ 36,058,603	\$ 12,738,397	\$ 4,647,260	\$ 2,440,830	\$ 1,376,267	\$ 2,583,684	\$ 9,414,346	\$ 69,259,387	\$ -
Required Net Operating Income	\$ 69,259,387											
Total Revenue Requirement (Other Water)	\$ 174,915,924			\$ 91,280,965	\$ 32,088,084	\$ 13,496,635	\$ 6,872,409	\$ 4,003,978	\$ 5,760,159	\$ 21,413,694	\$ 174,915,924	\$ -
Other Operating Revenue (Other Water)	\$ (1,546,294)	16	Rate Base	\$ (805,049)	\$ (284,399)	\$ (103,755)	\$ (54,494)	\$ (30,727)	\$ (57,684)	\$ (210,186)	\$ (1,546,294)	\$ -
Total Retail Revenue Requirement (Other Water)	\$ 173,369,630			\$ 90,475,916	\$ 31,803,685	\$ 13,392,880	\$ 6,817,915	\$ 3,973,251	\$ 5,702,475	\$ 21,203,508	\$ 173,369,630	\$ -
	\$ 174,915,924											
check	\$ -											

Missouri-American Water Company
Class Cost of Service Study - Account Detail using One-Step Allocation
Case No: WR-2024-0320, SR-2024-0321

Plant Account	Post Test Year	Alloc	Description	Rate F						Total	Variance	
				Residential	Non-Residential	Rate J	Rate B	Rate P	Private Fire			Public Fire
Plant Account												
Intangible Plant												
Organization	\$ 85,897	15	Net Plant (less gen. ar	\$ 45,052	\$ 15,479	\$ 5,282	\$ 2,834	\$ 1,554	\$ 3,587	\$ 12,108	\$ 85,897	\$ -
Franchises	\$ 43,698	15	Net Plant (less gen. ar	\$ 22,919	\$ 7,875	\$ 2,687	\$ 1,442	\$ 791	\$ 1,825	\$ 6,160	\$ 43,698	\$ -
Other P/E-Intangible	\$ 604,504	15	Net Plant (less gen. ar	\$ 317,058	\$ 108,937	\$ 37,173	\$ 19,946	\$ 10,936	\$ 25,242	\$ 85,212	\$ 604,504	\$ -
Source of Supply												
Land & Land Rights	\$ 2,889,403	2	Base/Extra Daily	\$ 1,302,230	\$ 708,374	\$ 490,847	\$ 234,260	\$ 153,268	\$ 425	\$ -	\$ 2,889,403	\$ -
Structures & Improvements	\$ 21,696,334	2	Base/Extra Daily	\$ 9,778,360	\$ 5,319,134	\$ 3,685,736	\$ 1,759,039	\$ 1,150,876	\$ 3,189	\$ -	\$ 21,696,334	\$ -
Collection & Impound Reservoirs	\$ 8,603,950	2	Base/Extra Daily	\$ 3,877,730	\$ 2,109,368	\$ 1,461,624	\$ 697,569	\$ 456,394	\$ 1,264	\$ -	\$ 8,603,950	\$ -
Lake, River, & Other Intakes	\$ 7,066,686	2	Base/Extra Daily	\$ 3,184,898	\$ 1,732,489	\$ 1,200,477	\$ 572,934	\$ 374,850	\$ 1,039	\$ -	\$ 7,066,686	\$ -
Wells & Springs	\$ 9,732,194	2	Base/Extra Daily	\$ 4,386,220	\$ 2,385,972	\$ 1,653,288	\$ 789,042	\$ 516,242	\$ 1,430	\$ -	\$ 9,732,194	\$ -
Infiltration Galleries & Tunnels	\$ 1,120	2	Base/Extra Daily	\$ 505	\$ 275	\$ 190	\$ 91	\$ 59	\$ 0	\$ -	\$ 1,120	\$ -
Supply Mains	\$ 10,321,276	2	Base/Extra Daily	\$ 4,651,715	\$ 2,530,393	\$ 1,753,361	\$ 836,802	\$ 547,489	\$ 1,517	\$ -	\$ 10,321,276	\$ -
Other P/E-Supply	\$ 311,464	2	Base/Extra Daily	\$ 140,374	\$ 76,359	\$ 52,911	\$ 25,252	\$ 16,522	\$ 46	\$ -	\$ 311,464	\$ -
Water Pumping												
Pumping Land & Land Rights	\$ 187,000	3	Base/Extra Daily w/ Fi	\$ 78,018	\$ 42,626	\$ 28,083	\$ 13,433	\$ 8,836	\$ 3,833	\$ 12,171	\$ 187,000	\$ -
Pumping Structures & Improvements	\$ 9,597,675	3	Base/Extra Daily w/ Fi	\$ 4,004,246	\$ 2,187,751	\$ 1,441,362	\$ 689,454	\$ 453,481	\$ 196,732	\$ 624,648	\$ 9,597,675	\$ -
Boiler Plant Equipment	\$ -	3	Base/Extra Daily w/ Fi	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Power Generation Equipment	\$ 4,412,845	3	Base/Extra Daily w/ Fi	\$ 1,841,083	\$ 1,005,890	\$ 662,713	\$ 316,999	\$ 208,503	\$ 90,454	\$ 287,202	\$ 4,412,845	\$ -
Steam Pumping Equipment	\$ 2,982,638	3	Base/Extra Daily w/ Fi	\$ 1,244,386	\$ 679,880	\$ 447,927	\$ 214,259	\$ 140,927	\$ 61,138	\$ 194,120	\$ 2,982,638	\$ -
Electric Pumping Equipment	\$ 22,299,035	3	Base/Extra Daily w/ Fi	\$ 9,303,381	\$ 5,082,974	\$ 3,348,830	\$ 1,601,864	\$ 1,053,608	\$ 457,084	\$ 1,451,294	\$ 22,299,035	\$ -
Diesel Pumping Equipment	\$ 315,082	3	Base/Extra Daily w/ Fi	\$ 131,455	\$ 71,822	\$ 47,318	\$ 22,634	\$ 14,887	\$ 6,459	\$ 20,507	\$ 315,082	\$ -
Pump Equip Hydraulic	\$ 295,296	3	Base/Extra Daily w/ Fi	\$ 123,200	\$ 67,312	\$ 44,347	\$ 21,213	\$ 13,952	\$ 6,053	\$ 19,219	\$ 295,296	\$ -
Other Pumping Equipment	\$ 5,301,607	3	Base/Extra Daily w/ Fi	\$ 2,211,884	\$ 1,208,480	\$ 796,186	\$ 380,844	\$ 250,496	\$ 108,672	\$ 345,046	\$ 5,301,607	\$ -
Water Treatment												
Water Treatment Land & Land Rights	\$ 1,457,375	2	Base/Extra Daily	\$ 656,827	\$ 357,294	\$ 247,576	\$ 118,157	\$ 77,306	\$ 214	\$ -	\$ 1,457,375	\$ -
Water Treatment Structures & Improvements	\$ 54,667,487	2	Base/Extra Daily	\$ 24,638,189	\$ 13,402,434	\$ 9,286,819	\$ 4,432,189	\$ 2,899,822	\$ 8,034	\$ -	\$ 54,667,487	\$ -
Water Treatment Equipment	\$ 92,137,672	2	Base/Extra Daily	\$ 41,525,695	\$ 22,588,729	\$ 15,652,190	\$ 7,470,100	\$ 4,887,417	\$ 13,541	\$ -	\$ 92,137,672	\$ -
Water Treatment - Other	\$ 591,735	2	Base/Extra Daily	\$ 266,690	\$ 145,071	\$ 100,523	\$ 47,975	\$ 31,388	\$ 87	\$ -	\$ 591,735	\$ -
T&D												
Transmission & Distribution Land	\$ 1,477,369	17	Mains	\$ 734,989	\$ 236,963	\$ 51,546	\$ 37,409	\$ 14,158	\$ 96,184	\$ 306,119	\$ 1,477,369	\$ -
Transmission & Distribution Structures & Impr	\$ 7,442,322	17	Mains	\$ 3,702,546	\$ 1,193,712	\$ 259,665	\$ 188,450	\$ 71,324	\$ 484,534	\$ 1,542,092	\$ 7,442,322	\$ -
TD Mains 4in & Less	\$ 100,420,263	4	Base/Extra Hourly w/	\$ 52,010,397	\$ 14,380,950	\$ 557,997	\$ 1,354,303	\$ -	\$ 7,677,628	\$ 24,438,988	\$ 100,420,263	\$ -
TD Mains 6in to 8in	\$ 287,870,227	4	Base/Extra Hourly w/	\$ 149,095,854	\$ 41,225,219	\$ 1,599,586	\$ 3,882,318	\$ -	\$ 22,009,108	\$ 70,058,141	\$ 287,870,227	\$ -
TD Mains 10in to 16in	\$ 82,197,072	3	Base/Extra Daily w/ Fi	\$ 34,293,442	\$ 18,736,488	\$ 12,344,214	\$ 5,904,672	\$ 3,883,732	\$ 1,684,869	\$ 5,349,655	\$ 82,197,072	\$ -
TD Mains 18in & Grtr	\$ 16,598,913	3	Base/Extra Daily w/ Fi	\$ 6,925,233	\$ 3,783,655	\$ 2,492,796	\$ 1,192,392	\$ 784,283	\$ 340,243	\$ 1,080,312	\$ 16,598,913	\$ -
Other Transmission & Distribution Plant	\$ 58,622	17	Mains	\$ 29,164	\$ 9,403	\$ 2,045	\$ 1,484	\$ 562	\$ 3,817	\$ 12,147	\$ 58,622	\$ -
Storage												
Distribution Reservoirs & Standpipes	\$ 28,954,962	5	Storage	\$ 19,565,916	\$ 5,032,282	\$ 1,193,771	\$ 599,127	\$ 437,252	\$ 509,036	\$ 1,617,579	\$ 28,954,962	\$ -
Distribution Reservoirs & Standpipes - Tank Coating	\$ 66,469	5	Storage	\$ 44,916	\$ 11,552	\$ 2,740	\$ 1,375	\$ 1,004	\$ 1,169	\$ 3,713	\$ 66,469	\$ -
Meters												
Meters	\$ 80,526,166	8	Meters	\$ 60,222,508	\$ 18,445,149	\$ 1,404,803	\$ 381,419	\$ 72,286	\$ -	\$ -	\$ 80,526,166	\$ -
Meter Installation	\$ 18,817,575	8	Meters	\$ 14,072,961	\$ 4,310,313	\$ 328,278	\$ 89,131	\$ 16,892	\$ -	\$ -	\$ 18,817,575	\$ -
Meter Vaults	\$ -	8	Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Services												
Services	\$ 107,441,202	9	Services	\$ 80,421,363	\$ 16,990,590	\$ 461,499	\$ 140,986	\$ 11,854	\$ 9,414,910	\$ -	\$ 107,441,202	\$ -
Hydrants												
Hydrants	\$ 37,625,935	7	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 803,590	\$ 36,822,344	\$ 37,625,935	\$ -
Fire Mains	\$ 447,087	7	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,549	\$ 437,538	\$ 447,087	\$ -
											\$ -	\$ -

Missouri-American Water Company
Class Cost of Service Study - Account Detail using One-Step Allocation
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Residential	Non-Residential	Rate J	Rate B	Rate P	Rate F		Total	Variance
									Private Fire	Public Fire		
General Plant												
General Land & Land Rights	\$ 654,992	13	Fixed O&M	\$ 364,845	\$ 108,258	\$ 39,306	\$ 20,033	\$ 11,656	\$ 19,179	\$ 91,716	\$ 654,992	\$ -
Stores Shops Equipment Structures	\$ 19,357,116	13	Fixed O&M	\$ 10,782,330	\$ 3,199,371	\$ 1,161,608	\$ 592,034	\$ 344,472	\$ 566,791	\$ 2,710,510	\$ 19,357,116	\$ -
Office Structures	\$ 9,142,789	13	Fixed O&M	\$ 5,092,730	\$ 1,511,133	\$ 548,653	\$ 279,631	\$ 162,702	\$ 267,708	\$ 1,280,233	\$ 9,142,789	\$ -
General Structures - HVAC	\$ -	13	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Miscellaneous Structures	\$ 1,173,732	13	Fixed O&M	\$ 653,794	\$ 193,996	\$ 70,435	\$ 35,898	\$ 20,887	\$ 34,368	\$ 164,354	\$ 1,173,732	\$ -
Structures & Improvements - Leasehold	\$ 39,243	13	Fixed O&M	\$ 21,859	\$ 6,486	\$ 2,355	\$ 1,200	\$ 698	\$ 1,149	\$ 5,495	\$ 39,243	\$ -
Office Furniture and Equipment	\$ 471,374	13	Fixed O&M	\$ 262,566	\$ 77,909	\$ 28,287	\$ 14,417	\$ 8,388	\$ 13,802	\$ 66,005	\$ 471,374	\$ -
Computers & Peripheral Equipment	\$ 2,692,579	13	Fixed O&M	\$ 1,499,825	\$ 445,033	\$ 161,580	\$ 82,352	\$ 47,916	\$ 78,841	\$ 377,033	\$ 2,692,579	\$ -
Computer Hardware & Software	\$ (313,400)	13	Fixed O&M	\$ (174,570)	\$ (51,799)	\$ (18,807)	\$ (9,585)	\$ (5,577)	\$ (9,177)	\$ (43,884)	\$ (313,400)	\$ -
Computer Software	\$ 19,396,846	13	Fixed O&M	\$ 10,804,460	\$ 3,205,937	\$ 1,163,993	\$ 593,249	\$ 345,179	\$ 567,954	\$ 2,716,073	\$ 19,396,846	\$ -
Personal Computer Software	\$ -	13	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Office Equipment	\$ 337,033	13	Fixed O&M	\$ 187,735	\$ 55,705	\$ 20,225	\$ 10,308	\$ 5,998	\$ 9,869	\$ 47,194	\$ 337,033	\$ -
BTS Initial Investment	\$ 4,608,076	13	Fixed O&M	\$ 2,566,797	\$ 761,629	\$ 276,528	\$ 140,937	\$ 82,004	\$ 134,928	\$ 645,253	\$ 4,608,076	\$ -
Transportation Equipment - Light Trucks	\$ 8,661,826	13	Fixed O&M	\$ 4,824,823	\$ 1,431,638	\$ 519,791	\$ 264,921	\$ 154,143	\$ 253,625	\$ 1,212,886	\$ 8,661,826	\$ -
Transportation Equipment - Heavy Trucks	\$ 2,881,779	13	Fixed O&M	\$ 1,605,213	\$ 476,304	\$ 172,934	\$ 88,139	\$ 51,283	\$ 84,381	\$ 403,526	\$ 2,881,779	\$ -
Transportation Equipment - Cars	\$ 9,104,500	13	Fixed O&M	\$ 5,071,402	\$ 1,504,804	\$ 546,355	\$ 278,460	\$ 162,020	\$ 266,587	\$ 1,274,872	\$ 9,104,500	\$ -
Transportation Equipment - Other	\$ 2,861,232	13	Fixed O&M	\$ 1,593,768	\$ 472,908	\$ 171,701	\$ 87,510	\$ 50,917	\$ 83,779	\$ 400,648	\$ 2,861,232	\$ -
Stores Equipment	\$ 61,065	13	Fixed O&M	\$ 34,015	\$ 10,093	\$ 3,664	\$ 1,868	\$ 1,087	\$ 1,788	\$ 8,551	\$ 61,065	\$ -
Tools, Shop, & Garage Equipment	\$ 3,815,869	13	Fixed O&M	\$ 2,125,521	\$ 630,692	\$ 228,988	\$ 116,708	\$ 67,906	\$ 111,731	\$ 534,323	\$ 3,815,869	\$ -
Laboratory Equipment	\$ 532,536	2	Base/Extra Daily	\$ 240,010	\$ 130,558	\$ 90,466	\$ 43,176	\$ 28,248	\$ 78	\$ -	\$ 532,536	\$ -
Power Operated Equipment	\$ 530,530	13	Fixed O&M	\$ 295,517	\$ 87,687	\$ 31,837	\$ 16,226	\$ 9,441	\$ 15,534	\$ 74,288	\$ 530,530	\$ -
Communication Equipment	\$ 26,899	13	Fixed O&M	\$ 14,983	\$ 4,446	\$ 1,614	\$ 823	\$ 479	\$ 788	\$ 3,767	\$ 26,899	\$ -
Communication Equipment (non telephone)	\$ 6,657,374	13	Fixed O&M	\$ 3,708,300	\$ 1,100,340	\$ 399,505	\$ 203,615	\$ 118,472	\$ 194,933	\$ 932,209	\$ 6,657,374	\$ -
Telephone Equipment	\$ (25,751)	13	Fixed O&M	\$ (14,344)	\$ (4,256)	\$ (1,545)	\$ (788)	\$ (458)	\$ (754)	\$ (3,606)	\$ (25,751)	\$ -
Miscellaneous Equipment	\$ 1,743,019	13	Fixed O&M	\$ 970,899	\$ 288,089	\$ 104,597	\$ 53,310	\$ 31,018	\$ 51,037	\$ 244,069	\$ 1,743,019	\$ -
Other Tangible Property	\$ 789,137	13	Fixed O&M	\$ 439,566	\$ 130,430	\$ 47,356	\$ 24,136	\$ 14,043	\$ 23,107	\$ 110,500	\$ 789,137	\$ -
Net Utility Plant	\$ 1,120,746,551			\$ 587,823,449	\$ 201,968,584	\$ 68,917,819	\$ 36,979,976	\$ 20,275,873	\$ 46,798,523	\$ 157,982,328	\$ 1,120,746,551	\$ -
Additions to Rate Base												
Cash Working Capital(Other Water)	\$ (777,261)	13	Fixed O&M	\$ (432,951)	\$ (128,467)	\$ (46,643)	\$ (23,772)	\$ (13,832)	\$ (22,759)	\$ (108,837)	\$ (777,261)	\$ -
Materials and Supplies(Other Water)	\$ 4,910,095	15	Net Plant (less gen. ar	\$ 2,575,309	\$ 884,843	\$ 301,935	\$ 162,013	\$ 88,830	\$ 205,029	\$ 692,135	\$ 4,910,095	\$ -
Pension Asset(Other Water)	\$ 8,684,955	15	Net Plant (less gen. ar	\$ 4,555,196	\$ 1,565,107	\$ 534,062	\$ 286,567	\$ 157,123	\$ 362,654	\$ 1,224,246	\$ 8,684,955	\$ -
Regulatory Deferrals(Other Water)	\$ 4,211,509	15	Net Plant (less gen. ar	\$ 2,208,906	\$ 758,952	\$ 258,977	\$ 138,962	\$ 76,192	\$ 175,858	\$ 593,661	\$ 4,211,509	\$ -
Tank Painting Tracker(Other Water)	\$ -	5	Storage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Additions	\$ 17,029,298			\$ 8,906,460	\$ 3,080,435	\$ 1,048,332	\$ 563,770	\$ 308,314	\$ 720,782	\$ 2,401,205	\$ 17,029,298	\$ -
Reductions to Rate Base												
Customer Advances for Construction												
Advances for Construction - NT Mains	\$ 1,657,625	17	Mains	\$ 824,666	\$ 265,875	\$ 57,835	\$ 41,973	\$ 15,886	\$ 107,920	\$ 343,469	\$ 1,657,625	\$ -
Advances for Construction - NT Extension Deposits	\$ -	17	Mains	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Advances for Construction - NT Hydrants	\$ 336,220	7	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,181	\$ 329,039	\$ 336,220	\$ -
Advances for Construction - NT WIP	\$ -	8	Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Advances for Construction - TAX Mains	\$ -	9	Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Advances for Construction - Reclassed to Current	\$ -	17	Mains	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Allocated MAWC Corporate - Customer Advances	\$ (23,405)	17	Mains	\$ (11,644)	\$ (3,754)	\$ (817)	\$ (593)	\$ (224)	\$ (1,524)	\$ (4,850)	\$ (23,405)	\$ -
CIAC												
CIAC-Non Taxable - Mains	\$ (40,354,566)	17	Mains	\$ (20,076,347)	\$ (6,472,677)	\$ (1,407,983)	\$ (1,021,832)	\$ (386,740)	\$ (2,627,291)	\$ (8,361,696)	\$ (40,354,566)	\$ -
CIAC-Non Taxable - Ext Dep	\$ (26,286,308)	17	Mains	\$ (13,077,406)	\$ (4,216,196)	\$ (917,137)	\$ (665,605)	\$ (251,916)	\$ (1,711,375)	\$ (5,446,673)	\$ (26,286,308)	\$ -
CIAC-Non Taxable - Services	\$ (265,700)	9	Services	\$ (198,880)	\$ (42,017)	\$ (1,141)	\$ (349)	\$ (29)	\$ (23,283)	\$ -	\$ (265,700)	\$ -
CIAC-Non Taxable - Meters	\$ (584,544)	8	Meters	\$ (437,159)	\$ (133,894)	\$ (10,198)	\$ (2,769)	\$ (525)	\$ -	\$ -	\$ (584,544)	\$ -
CIAC-Non Taxable - Hydrants	\$ (2,774,275)	7	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (59,251)	\$ (2,715,024)	\$ (2,774,275)	\$ -
CIAC-Non Taxable - Other	\$ (3,047,459)	17	Mains	\$ (1,516,107)	\$ (488,798)	\$ (106,327)	\$ (77,166)	\$ (29,205)	\$ (198,405)	\$ (631,451)	\$ (3,047,459)	\$ -
CIAC-Non Taxable - WIP	\$ -	17	Mains	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CIAC-Taxable - Mains	\$ (30,776,674)	17	Mains	\$ (15,311,358)	\$ (4,936,429)	\$ (1,073,807)	\$ (779,307)	\$ (294,950)	\$ (2,003,721)	\$ (6,377,102)	\$ (30,776,674)	\$ -
CIAC-Taxable - Extension Deposits	\$ (7,887,871)	17	Mains	\$ (3,924,206)	\$ (1,265,176)	\$ (275,210)	\$ (199,732)	\$ (75,594)	\$ (513,541)	\$ (1,634,412)	\$ (7,887,871)	\$ -
CIAC-Taxable - Services	\$ (32,544,851)	9	Services	\$ (24,360,313)	\$ (5,146,594)	\$ (139,792)	\$ (42,706)	\$ (3,591)	\$ (2,851,856)	\$ -	\$ (32,544,851)	\$ -
CIAC-Taxable - Meters	\$ (335,686)	8	Meters	\$ (251,047)	\$ (76,892)	\$ (5,856)	\$ (1,590)	\$ (301)	\$ -	\$ -	\$ (335,686)	\$ -
CIAC-Taxable - Hydrants	\$ (38,147)	7	Hydrants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (815)	\$ (37,332)	\$ (38,147)	\$ -
CIAC-Taxable - Other	\$ (144,214)	17	Mains	\$ (71,746)	\$ (23,131)	\$ (5,032)	\$ (3,652)	\$ (1,382)	\$ (9,389)	\$ (29,882)	\$ (144,214)	\$ -
CIAC-Taxable - WIP	\$ -	17	Mains	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CIAC-Taxable - Services SIT	\$ -	9	Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Accum Amort CIAC	\$ 37,918,862	15	Net Plant (less gen. ar	\$ 19,888,168	\$ 6,833,319	\$ 2,331,736	\$ 1,251,165	\$ 686,005	\$ 1,583,361	\$ 5,345,107	\$ 37,918,862	\$ -
Allocated MAWC Corporate - CIAC	\$ (294,036)	17	Mains	\$ (146,283)	\$ (47,162)	\$ (10,259)	\$ (7,445)	\$ (2,818)	\$ (19,143)	\$ (60,926)	\$ (294,036)	\$ -
Deferred Income Tax (Other Water)	\$ (150,568,506)	15	Net Plant (less gen. ar	\$ (78,972,091)	\$ (27,133,796)	\$ (9,258,876)	\$ (4,968,135)	\$ (2,723,995)	\$ (6,287,223)	\$ (21,224,391)	\$ (150,568,506)	\$ -
Pension/OPEB Tracker (Other Water)	\$ 2,032,241	14	Labor	\$ 1,042,930	\$ 388,487	\$ 158,750	\$ 80,561	\$ 47,251	\$ 58,526	\$ 255,737	\$ 2,032,241	\$ -
Total Reductions	\$ (253,981,294)			\$ (136,598,822)	\$ (42,498,836)	\$ (10,664,114)	\$ (6,397,179)	\$ (3,022,127)	\$ (14,549,829)	\$ (40,250,387)	\$ (253,981,294)	\$ -
TOTAL RATE BASE (Other Water)	\$ 883,794,555			\$ 460,131,086	\$ 162,550,183	\$ 59,302,037	\$ 31,146,566	\$ 17,562,059	\$ 32,969,476	\$ 120,133,147	\$ 883,794,555	\$ -

Missouri-American Water Company
Class Cost of Service Study - Account Detail using One-Step Allocation
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Residential		Non-Residential		Rate J	Rate B	Rate P	Rate F		Total	Variance
											Private Fire	Public Fire		
Miscellaneous T&D Operating Expense	\$ 614,524	1	\$ -	\$ 356,999 0.58094	\$ 112,629 0.18328	\$ 17,868 0.02908	\$ 11,345 0.01846	\$ 4,110 0.00669	\$ 26,675 0.04341	\$ 84,897 0.13815	\$ 614,524 1.00000			
Miscellaneous T&D Maintenance Expense	\$ 306,848	2		\$ 124,809 0.40675	\$ 34,403 0.11212	\$ 4,852 0.01581	\$ 3,078 0.01003	\$ 1,211 0.00395	\$ 14,350 0.04677	\$ 124,145 0.40458	\$ 306,848 1.00000			
Fixed O&M	\$ 15,019,517	3		\$ 8,366,194 0.55702	\$ 2,482,446 0.16528	\$ 901,312 0.06001	\$ 459,369 0.03058	\$ 267,282 0.01780	\$ 439,783 0.02928	\$ 2,103,131 0.14003	\$ 15,019,517 1.00000			
Labor	\$ 5,175,134	4		\$ 3,256,823 0.51319	\$ 1,213,152 0.19116	\$ 495,737 0.07812	\$ 251,573 0.03964	\$ 147,555 0.02325	\$ 182,762 0.02880	\$ 798,606 0.12584	\$ 5,175,134 1.00000			
Net Plant	\$ 1,120,012,452	5		\$ 587,438,419 0.52449	\$ 201,836,293 0.18021	\$ 68,872,677 0.06149	\$ 36,955,753 0.03300	\$ 20,262,592 0.01809	\$ 46,767,869 0.04176	\$ 157,878,848 0.14096	\$ 1,120,012,452 1.00000			
Rate Base	\$ 883,794,555	6		\$ 460,131,086 0.52063	\$ 162,550,183 0.18392	\$ 59,302,037 0.06710	\$ 31,146,566 0.03524	\$ 17,562,059 0.01987	\$ 32,969,476 0.03730	\$ 120,133,147 0.13593	\$ 883,794,555 1.00000			
Variable Cost	\$ 12,101,490			\$ 4,901,179	\$ 2,556,625	\$ 2,625,352	\$ 1,235,154	\$ 780,687	\$ 2,494	\$ -	\$ 12,101,490			

Missouri-American Water Company
Cost of Service Study - Usage Statistics
Case No: WR-2024-0320

	Residential	Non Residential	Rate J	Rate B	Rate P	Rate F Private Fire	Public Fire	Total	
Total Usage	63,591,963	33,171,773	34,063,497	16,025,909	10,129,287	32,353		157,014,781	hundred gallons
Average Day Usage	174,225	90,882	93,325	43,907	27,751	89	-	430,177	hundred gallons
Max Day Capacity Factor	2.00	2.12	1.17	1.20	1.27			---	
Max Day Usage	348,697	192,745	109,655	52,832	35,334	21,521	68,479	829,263	hundred gallons
Extra Capacity	174,473	101,864	16,330	8,925	7,582	21,433	68,479	399,086	hundred gallons
Fire Allocator						0.2391	0.7609	1.0000	15,000 gpm for 10 hours
Distribution Multiplier	1.00	1.00	0.11	0.56		1.00	1.00	N/A	
Average Hourly Usage	7,259	3,787	436	1,018	-	4	-	12,504	hundred gallons
Max Hour Capacity Factor	4.47	2.59	1.17	1.20	1.27			---	
Max Hour Usage	32,471	9,793	512	1,225	-	4,304	13,696	62,002	hundred gallons
Extra Capacity	25,212	6,006	76	207	-	4,301	13,696	49,498	hundred gallons
Customers	121,805	11,337	69	23	3	2,945		136,182	
Hydrants						256	11,746	12,002	
Revenue	\$ 68,796,681	\$ 30,997,236	\$ 10,574,416	\$ 4,406,843	\$ 1,091,501	\$ 1,926,258		\$ 117,792,936	

	Residential	Non Residential	Rate J	Rate B	Rate P	Rate F Private Fire	Public Fire	Meter Weighting	Service Weighting
5/8-METER	113,665	6,193	7	-	-	-		1.0	1.0
3/4-METER	1,569	184	1	-	-	-		1.5	1.0
1-METER	6,105	2,104	7	2	-	-		2.5	2.9
1.5-METER	153	434	-	-	-	-		5.0	4.0
2-METER	141	2,172	33	12	-	100		8.0	5.6
3-METER	3	101	12	4	-	3		16.0	5.6
4-METER	-	136	27	8	-	352		25.0	6.4
6-METER	-	31	23	8	-	755		50.0	9.9
8-METER	1	30	7	1	2	453		80.0	9.9
10-METER	-	3	2	-	-	71		115.0	9.9
12-METER	-	1	-	-	-	21		215.0	12.2
14-METER								320.0	12.2

Missouri-American Water Company
Cost of Service Study - Usage Statistics
Case No: WR-2024-0320

System Load Factor:	0.7132	603,139	max day - thousand gallons per day
System Load Factor (fire):	0.6207	693,050	max day with fire - thousand gallons per day
System Load Factor (Hourly)	0.1457	85,819	max hour - thousand gallons per day
System Load Factor (Hourly fire)	0.1204	103,816	max hour with fire - thousand gallons per day

Average system hourly flow on max day
Average system hourly flow on max day

Mains Statistics

Type		Pct
10-Inch and Larger	2,586,511	0.2028
Under 10-inch	10,165,573	0.7972
Total	12,752,084	1.0000

Storage Statistics

Total Capacity	1,224,573	hundred gallons (2023 annual report)
Fire Allocation	0.0734	percentage of storage needed for maximum fire protection day
Non-Fire Allocation	0.9266	

Missouri-American Water Company
Cost of Service Study - Class Allocators
Case No: WR-2024-0320, SR-2024-0321

1. VARIABLE COST

Item	Non Residential		Rate J	Rate B	Rate P	Rate F		Total	Units
	Residential	Residential				Private Fire	Public Fire		
Total Usage	63,591,963	33,171,773	34,063,497	16,025,909	10,129,287	32,353	-	157,014,781	hundred gallons
Allocator	0.4050	0.2113	0.2169	0.1021	0.0645	0.0002	-	1.0000	

2. BASE/EXTRA DAILY

Item	Non Residential		Rate J	Rate B	Rate P	Rate F		Total	Units
	Residential	Residential				Private Fire	Public Fire		
Average Daily Use	174,225	90,882	93,325	43,907	27,751	89	-	430,177	hundred gallons
Extra Capacity	174,473	101,864	16,330	8,925	7,582			309,175	hundred gallons
System Capacity Factor	0.7132								
Average Day Allocator	0.2889	0.1507	0.1547	0.0728	0.0460	0.0001	-	0.7132	
Extra Capacity Allocator	0.1618	0.0945	0.0151	0.0083	0.0070	-	-	0.2868	
Allocator	0.4507	0.2452	0.1699	0.0811	0.0530	0.0001	-	1.0000	

3. BASE/EXTRA DAILY (w FIRE PROTECTION)

Item	Non Residential		Rate J	Rate B	Rate P	Rate F		Total	Units
	Residential	Residential				Private Fire	Public Fire		
Average Daily Use	174,225	90,882	93,325	43,907	27,751	89	-	430,177	hundred gallons
Extra Capacity	174,473	101,864	16,330	8,925	7,582	21,433	68,479	399,086	hundred gallons
System Capacity Factor	0.6207	assuming fire protection							
Average Day Allocator	0.2514	0.1311	0.1347	0.0634	0.0400	0.0001	-	0.6207	
Extra Capacity Allocator	0.1658	0.0968	0.0155	0.0085	0.0072	0.0204	0.0651	0.3793	
Combined Allocator	0.4172	0.2279	0.1502	0.0718	0.0472	0.0205	0.0651	1.0000	

4. BASE/EXTRA HOURLY (w FIRE PROTECTION)

Item	Non Residential		Rate J	Rate B	Rate P	Rate F		Total	Units
	Residential	Residential				Private Fire	Public Fire		
Average Hourly Use	7,259	3,787	436	1,018	-	4	-	12,504	hundred gallons
Extra Capacity	25,212	6,006	76	207	-	4,301	13,696	49,498	hundred gallons
System Capacity Factor	0.1204	assuming fire protection							
Average Day Allocator	0.0699	0.0365	0.0042	0.0098	-	0.0000	-	0.1204	
Extra Capacity Allocator	0.4480	0.1067	0.0014	0.0037	-	0.0764	0.2434	0.8796	
Combined Allocator	0.5179	0.1432	0.0056	0.0135	-	0.0765	0.2434	1.0000	

Missouri-American Water Company
Cost of Service Study - Class Allocators
Case No: WR-2024-0320, SR-2024-0321

5. STORAGE

Item	Non Residential		Rate J	Rate B	Rate P	Rate F		Total	Units
	Residential	Residential				Private Fire	Public Fire		
Average Hourly Use	7,259	3,787	3,889	1,829	1,156	4		17,924	
Extra Capacity	25,212	6,006	680	372	316	----		32,586	
Fire Allocator						0.23913	0.76087	1.00000	
System Capacity Factor	0.1204 assuming fire protection								
Average Day Allocator	0.0488	0.0254	0.0261	0.0123	0.0078	0.0000		0.1204	
Extra Capacity Allocator	0.6805	0.1621	0.0184	0.0100	0.0085			0.8796	
Allocator	0.7293	0.1876	0.0445	0.0223	0.0163	0.0000		1.0000	
Non-Fire Allocation of Storage	0.92658								
Fire Allocation of Storage	0.07342								
Non-Fire Allocator	0.6757	0.1738	0.0412	0.0207	0.0151	0.0000	-	0.9266	
Fire Allocator	-	-	-	-	-	0.0176	0.0559	0.0734	
Combined Allocator	0.6757	0.1738	0.0412	0.0207	0.0151	0.0176	0.0559	1.0000	

6. MAINS

Item	Non Residential		Rate J	Rate B	Rate P	Rate F		Total	Units
	Residential	Residential				Private Fire	Public Fire		
Factor 4	0.4172	0.2279	0.1502	0.0718	0.0472	0.0205	0.0651	1.0000	hundred gallons
Factor 5	0.5179	0.1432	0.0056	0.0135	-	0.0765	0.2434	1.0000	hundred gallons
Transmission Weighting	0.2028		Average system hourly load						
Distribution Weighting	0.7972		Average system hourly load - max day with fire protection (incremental)						
Combined Allocator	0.4975	0.1604	0.0349	0.0253	0.0096	0.0651	0.2072	1.0000	

7. HYDRANTS

Item	Non Residential		Rate J	Rate B	Rate P	Rate F		Total	Units
	Residential	Residential				Private Fire	Public Fire		
Total Hydrants	-	-	-	-	-	256	11,746	12,002	
Allocator	-	-	-	-	-	0.02136	0.97864	1.00000	

Missouri-American Water Company
Cost of Service Study - Class Allocators
Case No: WR-2024-0320, SR-2024-0321

8. METERS

Item	Non Residential		Rate J	Rate B	Rate P	Rate F		Total	Weighting
	Residential	Residential				Private Fire	Public Fire		
5/8-METER	113,665	6,193	7	-	-	-	-	119,865	1.0
3/4-METER	1,569	184	1	-	-	-	-	1,754	1.5
1-METER	6,105	2,104	7	2	-	-	-	8,219	2.5
1.5-METER	153	434	-	-	-	-	-	587	5.0
2-METER	141	2,172	33	12	-	-	-	2,358	8.0
3-METER	3	101	12	4	-	-	-	120	16.0
4-METER	-	136	27	8	-	-	-	171	25.0
6-METER	-	31	23	8	-	-	-	62	50.0
8-METER	1	30	7	1	2	-	-	41	80.0
10-METER	-	3	2	-	-	-	-	5	115.0
12-METER	-	1	-	-	-	-	-	1	215.0
16-METER	-	-	-	-	-	-	-	-	320.0
Total	133,298	40,827	3,109	844	160	-	-	178,239	-----
Allocator	0.74786	0.22906	0.01745	0.00474	0.00090	-	-	1.00000	

9. SERVICES

Item	Non Residential		Rate J	Rate B	Rate P	Rate F		Total	Weighting
	Residential	Residential				Private Fire	Public Fire		
5/8-METER	113,665	6,193	7	-	-	-	-	119,865	1.0
3/4-METER	1,569	184	1	-	-	-	-	1,754	1.0
1-METER	6,105	2,104	7	2	-	-	-	8,219	2.9
1.5-METER	153	434	-	-	-	-	-	587	4.0
2-METER	141	2,172	33	12	-	100	-	2,459	5.6
3-METER	3	101	12	4	-	3	-	123	5.6
4-METER	-	136	27	8	-	352	-	523	6.4
6-METER	-	31	23	8	-	755	-	817	9.9
8-METER	1	30	7	1	2	453	-	494	9.9
10-METER	-	3	2	-	-	71	-	76	9.9
12-METER	-	1	-	-	-	21	-	22	12.2
16-METER	-	-	-	-	-	-	-	-	12.2
Total	134,604	28,438	772	236	20	15,758	-	179,829	-----
Allocator	0.74852	0.15814	0.00430	0.00131	0.00011	0.08763	-	1.00000	

10. CUSTOMERS

Item	Non Residential		Rate J	Rate B	Rate P	Rate F		Total
	Residential	Residential				Private Fire	Public Fire	
Total Customers	121,805	11,337	69	23	3	2,945	-	136,182
Allocator	0.89443	0.08325	0.00051	0.00017	0.00002	0.02162	-	1.00000

11. METERED CUSTOMERS

Missouri-American Water Company
Cost of Service Study - Class Allocators
Case No: WR-2024-0320, SR-2024-0321

Item	Residential	Non Residential	Rate J	Rate B	Rate P	Rate F Private Fire	Public Fire	Total
Total Customers	121,805	11,337	69	23	3	2,945		136,182
Allocator	0.89443	0.08325	0.00051	0.00017	0.00002	0.02162		1.00000

Missouri-American Water Company
Cost of Service Study - Allocator Summary
Case No: WR-2024-0320, SR-2024-0321

Alloc	Description	Source of Supply	Water								Total	Notes	
			Pumping	Treatment	Transmission	Distribution	Storage	Meters	Services	Customers			Hydrants
A	Source of Supply	1.00000	-	-	-	-	-	-	-	-	-	1.00000	
B	Pumping	-	1.00000	-	-	-	-	-	-	-	-	1.00000	
C	Water Treatment	-	-	1.00000	-	-	-	-	-	-	-	1.00000	
D	Transmission	-	-	-	1.00000	-	-	-	-	-	-	1.00000	
E	Distribution	-	-	-	-	1.00000	-	-	-	-	-	1.00000	
F	Storage	-	-	-	-	-	1.00000	-	-	-	-	1.00000	
G	Meters	-	-	-	-	-	-	1.00000	-	-	-	1.00000	
H	Services	-	-	-	-	-	-	-	1.00000	-	-	1.00000	
I	Customers	-	-	-	-	-	-	-	-	1.00000	-	1.00000	
J	Hydrants	-	-	-	-	-	-	-	-	-	1.00000	1.00000	
K	Mains	-	-	-	0.20283	0.79717	-	-	-	-	-	1.00000	
1	T/D Oper. Expense	-	-	-	0.13523	0.53150	-	0.33326	-	-	-	1.00000	
2	T/D Maint.. Expense	-	-	-	0.06796	0.26711	0.04195	0.08947	0.19343	-	0.34007	1.00000	
3	Fixed O&M	0.04942	0.07418	0.16497	0.05618	0.22080	0.00974	0.12033	0.04491	0.18053	0.07895	1.00000	
4	Labor	0.01153	0.11742	0.25685	0.06837	0.26870	0.00606	0.15707	0.02801	0.03693	0.04906	1.00000	
5	Net Plant (less gen. and int.)	0.05830	0.04680	0.14732	0.09458	0.37174	0.02673	0.09887	0.09972	0.01526	0.04067	1.00000	
6	Rate Base	0.06766	0.05453	0.17146	0.08531	0.33528	0.03104	0.11398	0.07866	0.01764	0.04445	1.00000	
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Alloc	Description	Residential	Non-Residential	Rate J	Rate B	Rate P	Rate F		Total
							Private Fire	Public Fire	
1	Total Usage	0.40501	0.21127	0.21694	0.10207	0.06451	0.00021	-	1.00000
2	Base/Extra Daily	0.45069	0.24516	0.16988	0.08108	0.05304	0.00015	-	1.00000
3	Base/Extra Daily w/ Fire	0.41721	0.22795	0.15018	0.07184	0.04725	0.02050	0.06508	1.00000
4	Base/Extra Hourly w/ Fire	0.51793	0.14321	0.00556	0.01349	-	0.07645	0.24337	1.00000
5	Storage	0.67574	0.17380	0.04123	0.02069	0.01510	0.01758	0.05587	1.00000
7	Hydrants	-	-	-	-	-	0.02136	0.97864	1.00000
8	Meters	0.74786	0.22906	0.01745	0.00474	0.00090	-	-	1.00000
9	Services	0.74852	0.15814	0.00430	0.00131	0.00011	0.08763	-	1.00000
10	Customers	0.89443	0.08325	0.00051	0.00017	0.00002	0.02162	-	1.00000
11	T/D Oper. Expense	0.58094	0.18328	0.02908	0.01846	0.00669	0.04341	0.13815	1.00000
12	T/D Maint.. Expense	0.40675	0.11212	0.01581	0.01003	0.00395	0.04677	0.40458	1.00000
13	Fixed O&M	0.55702	0.16528	0.06001	0.03058	0.01780	0.02928	0.14003	1.00000
14	Labor	0.51319	0.19116	0.07812	0.03964	0.02325	0.02880	0.12584	1.00000
15	Net Plant (less gen. and int.)	0.52449	0.18021	0.06149	0.03300	0.01809	0.04176	0.14096	1.00000
16	Rate Base	0.52063	0.18392	0.06710	0.03524	0.01987	0.03730	0.13593	1.00000
17	Mains	0.49750	0.16040	0.03489	0.02532	0.00958	0.06511	0.20721	1.00000

Missouri-American Water Company
Class Cost of Service Study - Functional Allocators to Customer Class
Case No: WR-2024-0320, SR-2024-0321

	Functional COS	Alloc	Description	Collection Only	Collection & Treatment	Total	Variance
Intangible	\$ 14,798	1	Wastewater Flows	\$ 8,921	\$ 5,877	\$ 14,798	\$ -
Collection	\$ 7,360,533	1	Wastewater Flows	\$ 4,437,482	\$ 2,923,050	\$ 7,360,533	\$ -
Pumping	\$ 1,899,091	1	Wastewater Flows	\$ 1,144,915	\$ 754,176	\$ 1,899,091	\$ -
Treatment & Disposal	\$ 13,286,042	3	Treatment	\$ -	\$ 13,286,042	\$ 13,286,042	\$ -
General	\$ 3,610,094	1	Wastewater Flows	\$ 2,176,436	\$ 1,433,658	\$ 3,610,094	\$ -
Customers	\$ 383,481	2	Customers	\$ 133,081	\$ 250,399	\$ 383,481	\$ -
Total	\$ 26,554,038			\$ 7,900,836	\$ 18,653,202	\$ 26,554,038	\$ -
				29.75%	70.25%	100.00%	

Rate Year Water Revenue \$ 21,193,066
Other Water Operating Revenues \$ 35,132
Increase \$ 5,325,840
Percent Increase 25.3%

Missouri-American Water Company
Class Cost of Service Study - Account Detail
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Intangible	Collection	Pumping	Treatment and Disposal	General	Customer	Total	Variance	
Intangible												
Operating Expense												
Purchased Water	\$ -	A	Intangible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Fuel and Power	\$ -	A	Intangible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Salaries and Wages	\$ -	A	Intangible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Contract Services - Other	\$ -	A	Intangible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Building Maintenance and Services	\$ -	A	Intangible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Miscellaneous	\$ -	A	Intangible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Telecommunications	\$ -	A	Intangible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Postage	\$ -	A	Intangible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Office supplies and services	\$ -	A	Intangible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Materials & Supplies	\$ -	A	Intangible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Rents-Property	\$ -	A	Intangible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Rents-Equipment	\$ -	A	Intangible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Transportation	\$ -	A	Intangible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	\$ -			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Maintenance Expense												
Salaries and Wages	\$ -	A	Intangible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Materials & Supplies	\$ -	A	Intangible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Transportation	\$ -	A	Intangible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Miscellaneous	\$ -	A	Intangible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Contract Services - Eng	\$ -	A	Intangible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Contract Services - Other	\$ -	A	Intangible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	\$ -			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total Intangible Expense	\$ -			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Collection												
Operating Expense												
Purchased Water	\$ -	B	Collection	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Fuel and Power	\$ 15,905	B	Collection	\$ -	\$ 15,905	\$ -	\$ -	\$ -	\$ -	\$ 15,905	\$ -	
Salaries and Wages	\$ -	B	Collection	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Contract Services - Other	\$ -	B	Collection	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Building Maintenance and Services	\$ 804	B	Collection	\$ -	\$ 804	\$ -	\$ -	\$ -	\$ -	\$ 804	\$ -	
Miscellaneous	\$ 442	B	Collection	\$ -	\$ 442	\$ -	\$ -	\$ -	\$ -	\$ 442	\$ -	
Telecommunications	\$ 823	B	Collection	\$ -	\$ 823	\$ -	\$ -	\$ -	\$ -	\$ 823	\$ -	
Postage	\$ 2	B	Collection	\$ -	\$ 2	\$ -	\$ -	\$ -	\$ -	\$ 2	\$ -	
Office supplies and services	\$ 597	B	Collection	\$ -	\$ 597	\$ -	\$ -	\$ -	\$ -	\$ 597	\$ -	
Materials & Supplies	\$ 5,717	B	Collection	\$ -	\$ 5,717	\$ -	\$ -	\$ -	\$ -	\$ 5,717	\$ -	
Rents-Property	\$ 19	B	Collection	\$ -	\$ 19	\$ -	\$ -	\$ -	\$ -	\$ 19	\$ -	
Rents-Equipment	\$ -	B	Collection	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Transportation	\$ -	B	Collection	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	\$ 24,310			\$ -	\$ 24,310	\$ -	\$ -	\$ -	\$ -	\$ 24,310	\$ -	
Maintenance Expense												
Salaries and Wages	\$ 24,874	B	Collection	\$ -	\$ 24,874	\$ -	\$ -	\$ -	\$ -	\$ 24,874	\$ -	
Transportation	\$ 359	B	Collection	\$ -	\$ 359	\$ -	\$ -	\$ -	\$ -	\$ 359	\$ -	
Contract Services - Eng	\$ -	B	Collection	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Contract Services - Other	\$ -	B	Collection	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Miscellaneous	\$ 2,811	B	Collection	\$ -	\$ 2,811	\$ -	\$ -	\$ -	\$ -	\$ 2,811	\$ -	
Materials & Supplies	\$ 2,857	B	Collection	\$ -	\$ 2,857	\$ -	\$ -	\$ -	\$ -	\$ 2,857	\$ -	
	\$ 30,901			\$ -	\$ 30,901	\$ -	\$ -	\$ -	\$ -	\$ 30,901	\$ -	
Total Collection Expense	\$ 55,211			\$ -	\$ 55,211	\$ -	\$ -	\$ -	\$ -	\$ 55,211	\$ -	
Pumping												
Operating Expense												
Purchased Water	\$ -	C	Pumping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Fuel and Power	\$ 80,514	C	Pumping	\$ -	\$ -	\$ 80,514	\$ -	\$ -	\$ -	\$ 80,514	\$ -	
Salaries and Wages	\$ 22,142	C	Pumping	\$ -	\$ -	\$ 22,142	\$ -	\$ -	\$ -	\$ 22,142	\$ -	

Missouri-American Water Company
Class Cost of Service Study - Account Detail
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Treatment and						Total	Variance
				Intangible	Collection	Pumping	Disposal	General	Customer		
Contract Services - Other	\$ -	C	Pumping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Building Maintenance and Services	\$ 2	C	Pumping	\$ -	\$ -	\$ 2	\$ -	\$ -	\$ -	\$ 2	\$ -
Miscellaneous	\$ -	C	Pumping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Telecommunications	\$ -	C	Pumping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Postage	\$ -	C	Pumping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Office supplies and services	\$ -	C	Pumping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Materials & Supplies	\$ 2,036	C	Pumping	\$ -	\$ -	\$ 2,036	\$ -	\$ -	\$ -	\$ 2,036	\$ -
Rents-Property	\$ -	C	Pumping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Rents-Equipment	\$ -	C	Pumping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transportation	\$ -	C	Pumping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ 104,694			\$ -	\$ -	\$ 104,694	\$ -	\$ -	\$ -	\$ 104,694	\$ -

Missouri-American Water Company
Class Cost of Service Study - Account Detail
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Intangible	Collection	Pumping	Treatment and Disposal		General	Customer	Total	Variance
Maintenance Expense												
Salaries and Wages	\$ 2,195	C	Pumping	\$ -	\$ -	\$ 2,195	\$ -	\$ -	\$ -	\$ -	\$ 2,195	\$ -
Transportation	\$ -	C	Pumping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contract Services - Eng	\$ -	C	Pumping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contract Services - Other	\$ -	C	Pumping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Miscellaneous	\$ 2,328	C	Pumping	\$ -	\$ -	\$ 2,328	\$ -	\$ -	\$ -	\$ -	\$ 2,328	\$ -
Materials & Supplies	\$ 12,825	C	Pumping	\$ -	\$ -	\$ 12,825	\$ -	\$ -	\$ -	\$ -	\$ 12,825	\$ -
	\$ 17,348			\$ -	\$ -	\$ 17,348	\$ -	\$ -	\$ -	\$ -	\$ 17,348	\$ -
Total Pumping Expense	\$ 122,041			\$ -	\$ -	\$ 122,041	\$ -	\$ -	\$ -	\$ -	\$ 122,041	\$ -
Treatment and Disposal												
Operating Expense												
Purchased Water	\$ -	D	Treatment and Disposal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fuel and Power	\$ 520,859	D	Treatment and Disposal	\$ -	\$ -	\$ -	\$ 520,859	\$ -	\$ -	\$ -	\$ 520,859	\$ -
Chemicals	\$ 127,588	D	Treatment and Disposal	\$ -	\$ -	\$ -	\$ 127,588	\$ -	\$ -	\$ -	\$ 127,588	\$ -
Waste Disposal	\$ 4,007,410	D	Treatment and Disposal	\$ -	\$ -	\$ -	\$ 4,007,410	\$ -	\$ -	\$ -	\$ 4,007,410	\$ -
Salaries and Wages	\$ 834,750	D	Treatment and Disposal	\$ -	\$ -	\$ -	\$ 834,750	\$ -	\$ -	\$ -	\$ 834,750	\$ -
Building Maintenance and Services	\$ 324,628	D	Treatment and Disposal	\$ -	\$ -	\$ -	\$ 324,628	\$ -	\$ -	\$ -	\$ 324,628	\$ -
Miscellaneous	\$ 41,263	D	Treatment and Disposal	\$ -	\$ -	\$ -	\$ 41,263	\$ -	\$ -	\$ -	\$ 41,263	\$ -
Telecommunications	\$ 448	D	Treatment and Disposal	\$ -	\$ -	\$ -	\$ 448	\$ -	\$ -	\$ -	\$ 448	\$ -
Postage	\$ 62	D	Treatment and Disposal	\$ -	\$ -	\$ -	\$ 62	\$ -	\$ -	\$ -	\$ 62	\$ -
Office supplies and services	\$ 4,010	D	Treatment and Disposal	\$ -	\$ -	\$ -	\$ 4,010	\$ -	\$ -	\$ -	\$ 4,010	\$ -
Materials & Supplies	\$ 45,022	D	Treatment and Disposal	\$ -	\$ -	\$ -	\$ 45,022	\$ -	\$ -	\$ -	\$ 45,022	\$ -
Rents-Equipment	\$ 1,438	D	Treatment and Disposal	\$ -	\$ -	\$ -	\$ 1,438	\$ -	\$ -	\$ -	\$ 1,438	\$ -
Transportation	\$ 993	D	Treatment and Disposal	\$ -	\$ -	\$ -	\$ 993	\$ -	\$ -	\$ -	\$ 993	\$ -
	\$ 5,908,472			\$ -	\$ -	\$ -	\$ 5,908,472	\$ -	\$ -	\$ -	\$ 5,908,472	\$ -
Total Treatment and Disposal Expense	\$ 6,305,472			\$ -	\$ -	\$ -	\$ 6,305,472	\$ -	\$ -	\$ -	\$ 6,305,472	\$ -
General Expense												
Operations												
Purchased Water	\$ -	E	General	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fuel and Power	\$ 46,389	E	General	\$ -	\$ -	\$ -	\$ -	\$ 46,389	\$ -	\$ -	\$ 46,389	\$ -
Chemicals	\$ -	E	General	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Waste Disposal	\$ -	E	General	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Salaries and Wages	\$ 443,408	E	General	\$ -	\$ -	\$ -	\$ -	\$ 443,408	\$ -	\$ -	\$ 443,408	\$ -
EmployFD Benefits	\$ 339,002	E	General	\$ -	\$ -	\$ -	\$ -	\$ 339,002	\$ -	\$ -	\$ 339,002	\$ -
Support Services Costs - EmployFD	\$ 146,216	E	General	\$ -	\$ -	\$ -	\$ -	\$ 146,216	\$ -	\$ -	\$ 146,216	\$ -
Support Services Costs - Admin	\$ 16,031	E	General	\$ -	\$ -	\$ -	\$ -	\$ 16,031	\$ -	\$ -	\$ 16,031	\$ -
Contract Services - Eng	\$ -	E	General	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contract Services - Other	\$ 208,906	E	General	\$ -	\$ -	\$ -	\$ -	\$ 208,906	\$ -	\$ -	\$ 208,906	\$ -
Building Maintenance and Services	\$ 123,289	E	General	\$ -	\$ -	\$ -	\$ -	\$ 123,289	\$ -	\$ -	\$ 123,289	\$ -
Miscellaneous	\$ 18,323	E	General	\$ -	\$ -	\$ -	\$ -	\$ 18,323	\$ -	\$ -	\$ 18,323	\$ -
Telecommunications	\$ 5,456	E	General	\$ -	\$ -	\$ -	\$ -	\$ 5,456	\$ -	\$ -	\$ 5,456	\$ -
Postage	\$ 98	E	General	\$ -	\$ -	\$ -	\$ -	\$ 98	\$ -	\$ -	\$ 98	\$ -
Office supplies and services	\$ 20,079	E	General	\$ -	\$ -	\$ -	\$ -	\$ 20,079	\$ -	\$ -	\$ 20,079	\$ -
Materials & Supplies	\$ 20,954	E	General	\$ -	\$ -	\$ -	\$ -	\$ 20,954	\$ -	\$ -	\$ 20,954	\$ -
Communications	\$ 3,710	E	General	\$ -	\$ -	\$ -	\$ -	\$ 3,710	\$ -	\$ -	\$ 3,710	\$ -
Rents-Property	\$ 68,933	E	General	\$ -	\$ -	\$ -	\$ -	\$ 68,933	\$ -	\$ -	\$ 68,933	\$ -
Rents-Equipment	\$ 23	E	General	\$ -	\$ -	\$ -	\$ -	\$ 23	\$ -	\$ -	\$ 23	\$ -

Missouri-American Water Company
Class Cost of Service Study - Account Detail
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Treatment and						Total	Variance
				Intangible	Collection	Pumping	Disposal	General	Customer		
Transportation	\$ 170,338	E	General	\$ -	\$ -	\$ -	\$ -	\$ 170,338	\$ -	\$ 170,338	\$ -
Uncollectible Accounts	\$ -	E	General	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Customer accounting, other	\$ -	E	General	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Regulatory Expense	\$ 2,338	E	General	\$ -	\$ -	\$ -	\$ -	\$ 2,338	\$ -	\$ 2,338	\$ -
Insurance	\$ 52,771	E	General	\$ -	\$ -	\$ -	\$ -	\$ 52,771	\$ -	\$ 52,771	\$ -
	\$ 1,686,263			\$ -	\$ -	\$ -	\$ -	\$ 1,686,263	\$ -	\$ 1,686,263	\$ -
Maintenance Expense											
Salaries and Wages	\$ -	E	General	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Materials & Supplies	\$ 14,127	E	General	\$ -	\$ -	\$ -	\$ -	\$ 14,127	\$ -	\$ 14,127	\$ -
Miscellaneous	\$ 1,703	E	General	\$ -	\$ -	\$ -	\$ -	\$ 1,703	\$ -	\$ 1,703	\$ -
Transportation	\$ 809	E	General	\$ -	\$ -	\$ -	\$ -	\$ 809	\$ -	\$ 809	\$ -
Contract Services - Eng	\$ 254	E	General	\$ -	\$ -	\$ -	\$ -	\$ 254	\$ -	\$ 254	\$ -
Contract Services - Other	\$ 232,796	E	General	\$ -	\$ -	\$ -	\$ -	\$ 232,796	\$ -	\$ 232,796	\$ -
	\$ 249,689			\$ -	\$ -	\$ -	\$ -	\$ 249,689	\$ -	\$ 249,689	\$ -
Total General Expense	\$ 1,935,952			\$ -	\$ -	\$ -	\$ -	\$ 1,935,952	\$ -	\$ 1,935,952	\$ -
Customer Accounts											
Operating Expense											
Purchased Water	\$ -	F	Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fuel and Power	\$ 933	F	Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 933	\$ 933	\$ -
Chemicals	\$ -	F	Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Waste Disposal	\$ -	F	Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Salaries and Wages	\$ 557	F	Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 557	\$ 557	\$ -
Building Maintenance and Services	\$ -	F	Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Customer accounting, other	\$ 6,941	F	Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,941	\$ 6,941	\$ -
Telecommunications	\$ -	F	Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Office supplies and services	\$ 28,205	F	Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28,205	\$ 28,205	\$ -
Materials & Supplies	\$ 1	F	Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1	\$ 1	\$ -
Rents-Equipment	\$ -	F	Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Uncollectible Accounts	\$ 247,753	F	Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 247,753	\$ 247,753	\$ -
	\$ 284,389			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 284,389	\$ 284,389	\$ -
Maintenance Expense											
Salaries and Wages	\$ -	F	Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contract Services - Eng	\$ -	F	Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contract Services - Other	\$ -	F	Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transportation	\$ -	F	Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Miscellaneous	\$ -	F	Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Materials & Supplies	\$ -	F	Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ -			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Customer Accounts Expense	\$ 284,389			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 284,389	\$ 284,389	\$ -
Total Operations & Maintenance Exp. (Wastewater)	\$ 8,703,066			\$ -	\$ 55,211	\$ 122,041	\$ 6,305,472	\$ 1,935,952	\$ 284,389	\$ 8,703,066	\$ -

Missouri-American Water Company
Class Cost of Service Study - Account Detail
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Treatment and							Total	Variance
				Intangible	Collection	Pumping	Disposal	General	Customer			
Taxes Other Than Income Tax												
Property Taxes	\$ 1,571,769	5	Net Plant (less gen. and int.)	\$ 1,799	\$ 709,585	\$ 134,600	\$ 628,910	\$ 84,238	\$ 12,637	\$ 1,571,769	\$ -	
Payroll Taxes	\$ 86,812	4	Labor	\$ -	\$ 1,571	\$ 1,537	\$ 55,667	\$ 28,002	\$ 35	\$ 86,812	\$ -	
Utility Reg Assessment	\$ 10,783	6	Rate Base	\$ 12	\$ 4,876	\$ 925	\$ 4,325	\$ 563	\$ 82	\$ 10,783	\$ -	
Other Taxes	\$ (1,250)	6	Rate Base	\$ (1)	\$ (565)	\$ (107)	\$ (501)	\$ (65)	\$ (10)	\$ (1,250)	\$ -	
	\$ 1,668,114			\$ 1,810	\$ 715,467	\$ 136,955	\$ 688,400	\$ 112,737	\$ 12,744	\$ 1,668,114	\$ -	
Total Taxes Other Than Income Taxes (Wastewater)	\$ 1,668,114			\$ 1,810	\$ 715,467	\$ 136,955	\$ 688,400	\$ 112,737	\$ 12,744	\$ 1,668,114	\$ -	
Plant Depreciation												
Intangible Plant												
Organization	\$ -	A	Intangible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Franchise & Consents	\$ -	A	Intangible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Miscellaneous Intangible Plant Studies	\$ -	A	Intangible	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Collection												
Collection Land & Land Rights	\$ -	B	Collection	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Collection Structures & Improvements	\$ 129,804	B	Collection	\$ -	\$ 129,804	\$ -	\$ -	\$ -	\$ -	\$ 129,804	\$ -	
Collections Sewers	\$ -	B	Collection	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Collections Sewers - Force	\$ 141,374	B	Collection	\$ -	\$ 141,374	\$ -	\$ -	\$ -	\$ -	\$ 141,374	\$ -	
Collections Sewers - Gravity	\$ 1,060,181	B	Collection	\$ -	\$ 1,060,181	\$ -	\$ -	\$ -	\$ -	\$ 1,060,181	\$ -	
Special Collecting Structures	\$ -	B	Collection	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Services to Customers	\$ 102,599	B	Collection	\$ -	\$ 102,599	\$ -	\$ -	\$ -	\$ -	\$ 102,599	\$ -	
Flow Measuring Devices	\$ 19,680	B	Collection	\$ -	\$ 19,680	\$ -	\$ -	\$ -	\$ -	\$ 19,680	\$ -	
Flow Measuring Installations	\$ -	B	Collection	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other Collection Plant Facilities	\$ 12,378	B	Collection	\$ -	\$ 12,378	\$ -	\$ -	\$ -	\$ -	\$ 12,378	\$ -	
Pumping												
Pumping Land & Land Rights	\$ -	C	Pumping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Pumping Structures & Improvements	\$ 102,837	C	Pumping	\$ -	\$ -	\$ 102,837	\$ -	\$ -	\$ -	\$ 102,837	\$ -	
Receiving Wells	\$ 19,768	C	Pumping	\$ -	\$ -	\$ 19,768	\$ -	\$ -	\$ -	\$ 19,768	\$ -	
Electric Pumping Equipment	\$ 481,737	C	Pumping	\$ -	\$ -	\$ 481,737	\$ -	\$ -	\$ -	\$ 481,737	\$ -	
Diesel Pumping Equipment	\$ -	C	Pumping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other Pumping Equipment	\$ 63,703	C	Pumping	\$ -	\$ -	\$ 63,703	\$ -	\$ -	\$ -	\$ 63,703	\$ -	
Treatment and Disposal												
T&D Land & Land Rights	\$ -	D	Treatment and Disposal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Water Treatment Equipment	\$ 12,052	D	Treatment and Disposal	\$ -	\$ -	\$ -	\$ 12,052	\$ -	\$ -	\$ 12,052	\$ -	
Oxidation Lagoon Land & Land Rights	\$ -	D	Treatment and Disposal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other Land & Land Rights	\$ -	D	Treatment and Disposal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Structures & Improvements	\$ 355,161	D	Treatment and Disposal	\$ -	\$ -	\$ -	\$ 355,161	\$ -	\$ -	\$ 355,161	\$ -	
Treatment and Disposal Plant Equipment	\$ 1,137,233	D	Treatment and Disposal	\$ -	\$ -	\$ -	\$ 1,137,233	\$ -	\$ -	\$ 1,137,233	\$ -	
Plant Sewers	\$ 227,534	D	Treatment and Disposal	\$ -	\$ -	\$ -	\$ 227,534	\$ -	\$ -	\$ 227,534	\$ -	
Outfall Sewer Line	\$ 16,025	D	Treatment and Disposal	\$ -	\$ -	\$ -	\$ 16,025	\$ -	\$ -	\$ 16,025	\$ -	
Other Treatment and Disposal Plant Equip	\$ -	D	Treatment and Disposal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	

Missouri-American Water Company
Class Cost of Service Study - Account Detail
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Treatment and						Total	Variance
				Intangible	Collection	Pumping	Disposal	General	Customer		
General Plant											
Transmission & Distribution Structures & Impr	\$ 210	E	General	\$ -	\$ -	\$ -	\$ -	\$ 210	\$ -	\$ 210	\$ -
Distribution Reservoirs & Standpipes	\$ 5	E	General	\$ -	\$ -	\$ -	\$ -	\$ 5	\$ -	\$ 5	\$ -
Transmission & Distribution Mains	\$ 5,535	E	General	\$ -	\$ -	\$ -	\$ -	\$ 5,535	\$ -	\$ 5,535	\$ -
Meters	\$ -	E	General	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Hydrants	\$ -	E	General	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
General Land & Land Rights	\$ -	E	General	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Stores Shops Equipment Structures	\$ 61,108	E	General	\$ -	\$ -	\$ -	\$ -	\$ 61,108	\$ -	\$ 61,108	\$ -
Office Structures	\$ 40	E	General	\$ -	\$ -	\$ -	\$ -	\$ 40	\$ -	\$ 40	\$ -
General Structures - HVAC	\$ -	E	General	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Miscellaneous Structures	\$ -	E	General	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Structures & Improvements - Leasehold	\$ 4,300	E	General	\$ -	\$ -	\$ -	\$ -	\$ 4,300	\$ -	\$ 4,300	\$ -
Office Furniture and Equipment	\$ 6,812	E	General	\$ -	\$ -	\$ -	\$ -	\$ 6,812	\$ -	\$ 6,812	\$ -
Computers & Peripheral Equipment	\$ 121,638	E	General	\$ -	\$ -	\$ -	\$ -	\$ 121,638	\$ -	\$ 121,638	\$ -
Computer Hardware & Software	\$ 41,209	E	General	\$ -	\$ -	\$ -	\$ -	\$ 41,209	\$ -	\$ 41,209	\$ -
Computer Software	\$ 329,607	E	General	\$ -	\$ -	\$ -	\$ -	\$ 329,607	\$ -	\$ 329,607	\$ -
Personal Computer Software	\$ -	E	General	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Office Equipment	\$ 7,707	E	General	\$ -	\$ -	\$ -	\$ -	\$ 7,707	\$ -	\$ 7,707	\$ -
BTS Initial Investment	\$ 159,017	E	General	\$ -	\$ -	\$ -	\$ -	\$ 159,017	\$ -	\$ 159,017	\$ -
Transportation Equipment	\$ 97,904	E	General	\$ -	\$ -	\$ -	\$ -	\$ 97,904	\$ -	\$ 97,904	\$ -
Transportation Equipment - Light Trucks	\$ 8,378	E	General	\$ -	\$ -	\$ -	\$ -	\$ 8,378	\$ -	\$ 8,378	\$ -
Transportation Equipment - Heavy Trucks	\$ -	E	General	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transportation Equipment - Cars	\$ -	E	General	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transportation Equipment - Other	\$ 13,433	E	General	\$ -	\$ -	\$ -	\$ -	\$ 13,433	\$ -	\$ 13,433	\$ -
Stores Equipment	\$ 1,235	E	General	\$ -	\$ -	\$ -	\$ -	\$ 1,235	\$ -	\$ 1,235	\$ -
Tools, Shop, & Garage Equipment	\$ 50,132	E	General	\$ -	\$ -	\$ -	\$ -	\$ 50,132	\$ -	\$ 50,132	\$ -
Laboratory Equipment	\$ 9,114	E	General	\$ -	\$ -	\$ -	\$ -	\$ 9,114	\$ -	\$ 9,114	\$ -
Power Operated Equipment	\$ 19,589	E	General	\$ -	\$ -	\$ -	\$ -	\$ 19,589	\$ -	\$ 19,589	\$ -
Communication Equipment	\$ 66,051	E	General	\$ -	\$ -	\$ -	\$ -	\$ 66,051	\$ -	\$ 66,051	\$ -
Communication Equipment (non telephone)	\$ 4,110	E	General	\$ -	\$ -	\$ -	\$ -	\$ 4,110	\$ -	\$ 4,110	\$ -
Telephone Equipment	\$ 779	E	General	\$ -	\$ -	\$ -	\$ -	\$ 779	\$ -	\$ 779	\$ -
Miscellaneous Equipment	\$ 16,503	E	General	\$ -	\$ -	\$ -	\$ -	\$ 16,503	\$ -	\$ 16,503	\$ -
Other Tangible Property	\$ 667	E	General	\$ -	\$ -	\$ -	\$ -	\$ 667	\$ -	\$ 667	\$ -
Transportation Equipment Capitalization	\$ (55,079)	E	General	\$ -	\$ -	\$ -	\$ -	\$ (55,079)	\$ -	\$ (55,079)	\$ -
Plant Depreciation (Wastewater)	\$ 4,852,069			\$ -	\$ 1,466,015	\$ 668,045	\$ 1,748,005	\$ 970,005	\$ -	\$ 4,852,069	\$ -
CIAC-Non Taxable - Mains	\$ (453,736)	6	Rate Base	\$ (520)	\$ (205,182)	\$ (38,925)	\$ (181,969)	\$ (23,682)	\$ (3,458)	\$ (453,736)	\$ -
CIAC-Non Taxable - Ext Dep	\$ (32,830)	6	Rate Base	\$ (38)	\$ (14,846)	\$ (2,816)	\$ (13,166)	\$ (1,714)	\$ (250)	\$ (32,830)	\$ -
CIAC-Non Taxable - Services	\$ (5,983)	6	Rate Base	\$ (7)	\$ (2,706)	\$ (513)	\$ (2,399)	\$ (312)	\$ (46)	\$ (5,983)	\$ -
CIAC-Non Taxable - Meters	\$ 12	6	Rate Base	\$ 0	\$ 5	\$ 1	\$ 5	\$ 1	\$ 0	\$ 12	\$ -
CIAC-Non Taxable - Hydrants	\$ -	6	Rate Base	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CIAC-Non Taxable - Other	\$ (191,573)	6	Rate Base	\$ (220)	\$ (86,630)	\$ (16,435)	\$ (76,829)	\$ (9,999)	\$ (1,460)	\$ (191,573)	\$ -
CIAC-Non Taxable - WIP	\$ -	6	Rate Base	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CIAC-Taxable - Mains	\$ (9,100)	6	Rate Base	\$ (10)	\$ (4,115)	\$ (781)	\$ (3,650)	\$ (475)	\$ (69)	\$ (9,100)	\$ -
CIAC-Taxable - Extension Deposits	\$ (444)	6	Rate Base	\$ (1)	\$ (201)	\$ (38)	\$ (178)	\$ (23)	\$ (3)	\$ (444)	\$ -
CIAC-Taxable - Services	\$ (31,825)	6	Rate Base	\$ (36)	\$ (14,391)	\$ (2,730)	\$ (12,763)	\$ (1,661)	\$ (243)	\$ (31,825)	\$ -
CIAC-Taxable - Meters	\$ -	6	Rate Base	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CIAC-Taxable - Hydrants	\$ -	6	Rate Base	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CIAC-Taxable - Other	\$ (13,281)	6	Rate Base	\$ (15)	\$ (6,006)	\$ (1,139)	\$ (5,326)	\$ (693)	\$ (101)	\$ (13,281)	\$ -
CIAC-Taxable - WIP	\$ -	6	Rate Base	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CIAC-Taxable - Services SIT	\$ -	6	Rate Base	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Amortization of CIAC (Wastewater)	\$ (738,761)			\$ (847)	\$ (334,071)	\$ (63,377)	\$ (296,277)	\$ (38,559)	\$ (5,630)	\$ (738,761)	\$ -
Wastewater Acquisition Depreciation	\$ -	6	Rate Base	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Depreciation Expense (Wastewater)	\$ 4,113,309			\$ (847)	\$ 1,131,943	\$ 604,668	\$ 1,451,728	\$ 931,446	\$ (5,630)	\$ 4,113,309	\$ -

Amortization Expense

Missouri-American Water Company
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	Post Test Year	Alloc	Description	Intangible	Collection	Pumping	Treatment and Disposal	General	Customer	Total	Variance
Property Tax Tracker	\$ 250,722	6	Rate Base	\$ 287	\$ 113,378	\$ 21,509	\$ 100,551	\$ 13,086	\$ 1,911	\$ 250,722	\$ -
Troubled Systems	\$ 52,674	6	Rate Base	\$ 60	\$ 23,819	\$ 4,519	\$ 21,125	\$ 2,749	\$ 401	\$ 52,674	\$ -
	\$ -	6	Rate Base	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Amortize MSD Arnold	\$ 982,719	6	Rate Base	\$ 1,126	\$ 444,391	\$ 84,306	\$ 394,115	\$ 51,292	\$ 7,489	\$ 982,719	\$ -
Enterprise Solutions	\$ 669	6	Rate Base	\$ 1	\$ 303	\$ 57	\$ 268	\$ 35	\$ 5	\$ 669	\$ -
	\$ -	6	Rate Base	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Low Income Costs	\$ 251	6	Rate Base	\$ 0	\$ 114	\$ 22	\$ 101	\$ 13	\$ 2	\$ 251	\$ -
Total Amortization Expense (Wastewater)	\$ 1,287,035			\$ 1,475	\$ 582,004	\$ 110,413	\$ 516,160	\$ 67,176	\$ 9,808	\$ 1,287,035	\$ -
Total Amortization Expense	\$ 1,287,035			\$ 1,475	\$ 582,004	\$ 110,413	\$ 516,160	\$ 67,176	\$ 9,808	\$ 1,287,035	\$ -

Missouri-American Water Company
Class Cost of Service Study - Account Detail
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Intangible	Collection	Pumping	Treatment and Disposal	General	Customer	Total	Variance
Income Taxes											
Federal Income Tax	\$ 525,059	6	Rate Base	\$ 602	\$ 237,434	\$ 45,044	\$ 210,573	\$ 27,405	\$ 4,001	\$ 525,059	\$ -
State Income Tax	\$ 93,240	6	Rate Base	\$ 107	\$ 42,164	\$ 7,999	\$ 37,394	\$ 4,867	\$ 711	\$ 93,240	\$ -
Deferred Income Taxes	\$ 1,060,120	6	Rate Base	\$ 1,215	\$ 479,392	\$ 90,946	\$ 425,157	\$ 55,332	\$ 8,079	\$ 1,060,120	\$ -
ITC Restored	\$ (377)	6	Rate Base	\$ (0)	\$ (171)	\$ (32)	\$ (151)	\$ (20)	\$ (3)	\$ (377)	\$ -
Total Income Taxes (Wastewater)	\$ 1,678,042			\$ 1,923	\$ 758,819	\$ 143,956	\$ 672,972	\$ 87,584	\$ 12,788	\$ 1,678,042	\$ -
Total Income Tax Expense	\$ 1,678,042			\$ 1,923	\$ 758,819	\$ 143,956	\$ 672,972	\$ 87,584	\$ 12,788	\$ 1,678,042	\$ -
Required Net Operating Income (Wastewater)	\$ 9,104,473	6	Rate Base	\$ 10,436	\$ 4,117,088	\$ 781,057	\$ 3,651,310	\$ 475,200	\$ 69,381	\$ 9,104,473	\$ -
Required Net Operating Income	\$ 9,104,473			\$ 10,436	\$ 4,117,088	\$ 781,057	\$ 3,651,310	\$ 475,200	\$ 69,381	\$ 9,104,473	\$ -
Total Revenue Requirement (Wastewater)	\$ 26,554,038			\$ 14,798	\$ 7,360,533	\$ 1,899,091	\$ 13,286,042	\$ 3,610,094	\$ 383,481	\$ 26,554,038	\$ -
Other Operating Revenue (Wastewater)	\$ (35,132)	6	Rate Base	\$ (40)	\$ (15,887)	\$ (3,014)	\$ (14,090)	\$ (1,834)	\$ (268)	\$ (35,132)	\$ -
Total Retail Revenue Requirement (Wastewater)	\$ 26,518,906			\$ 14,758	\$ 7,344,646	\$ 1,896,077	\$ 13,271,952	\$ 3,608,261	\$ 383,213	\$ 26,518,906	\$ -
Total Revenue Requirement (Wastewater)	\$ 26,554,038										
	check \$ (0)										

Missouri-American Water Company
Class Cost of Service Study - Account Detail
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Treatment and							Total	Variance
				Intangible	Collection	Pumping	Disposal	General	Customer			
Plant Account												
Intangible Plant												
Organization	\$ 95,190	A	Intangible	\$ 95,190	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 95,190	\$ -
Franchise & Consents	\$ 5,562	A	Intangible	\$ 5,562	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,562	\$ -
Miscellaneous Intangible Plant Studies	\$ 64,113	A	Intangible	\$ 64,113	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 64,113	\$ -
Collection Plant												
Collection Land & Land Rights	\$ 162,301	B	Collection	\$ -	\$ 162,301	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 162,301	\$ -
Collection Structures & Improvements	\$ 4,477,719	B	Collection	\$ -	\$ 4,477,719	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,477,719	\$ -
Collections Sewers	\$ -	B	Collection	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Collections Sewers - Force	\$ 5,393,040	B	Collection	\$ -	\$ 5,393,040	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,393,040	\$ -
Collections Sewers - Gravity	\$ 51,153,416	B	Collection	\$ -	\$ 51,153,416	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 51,153,416	\$ -
Special Collecting Structures	\$ -	B	Collection	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Services to Customers	\$ 3,205,217	B	Collection	\$ -	\$ 3,205,217	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,205,217	\$ -
Flow Measuring Devices	\$ 136,472	B	Collection	\$ -	\$ 136,472	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 136,472	\$ -
Flow Measuring Installations	\$ -	B	Collection	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Collection Plant Facilities	\$ 347,626	B	Collection	\$ -	\$ 347,626	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 347,626	\$ -
Pumping												
Pumping Land & Land Rights	\$ 182,403	C	Pumping	\$ -	\$ -	\$ 182,403	\$ -	\$ -	\$ -	\$ -	\$ 182,403	\$ -
Pumping Structures & Improvements	\$ 4,297,093	C	Pumping	\$ -	\$ -	\$ 4,297,093	\$ -	\$ -	\$ -	\$ -	\$ 4,297,093	\$ -
Receiving Wells	\$ 241,480	C	Pumping	\$ -	\$ -	\$ 241,480	\$ -	\$ -	\$ -	\$ -	\$ 241,480	\$ -
Electric Pumping Equipment	\$ 7,423,837	C	Pumping	\$ -	\$ -	\$ 7,423,837	\$ -	\$ -	\$ -	\$ -	\$ 7,423,837	\$ -
Diesel Pumping Equipment	\$ -	C	Pumping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Pumping Equipment	\$ 22,181	C	Pumping	\$ -	\$ -	\$ 22,181	\$ -	\$ -	\$ -	\$ -	\$ 22,181	\$ -
Treatment and Disposal												
T&D Land & Land Rights	\$ 1,078,562	D	Treatment and Disposal	\$ -	\$ -	\$ -	\$ 1,078,562	\$ -	\$ -	\$ -	\$ 1,078,562	\$ -
Oxidation Lagoon Land & Land Rights	\$ -	D	Treatment and Disposal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Land & Land Rights	\$ -	D	Treatment and Disposal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Structures & Improvements	\$ 12,191,350	D	Treatment and Disposal	\$ -	\$ -	\$ -	\$ 12,191,350	\$ -	\$ -	\$ -	\$ 12,191,350	\$ -
Treatment and Disposal Plant Equipment	\$ 24,734,171	D	Treatment and Disposal	\$ -	\$ -	\$ -	\$ 24,734,171	\$ -	\$ -	\$ -	\$ 24,734,171	\$ -
Plant Sewers	\$ 11,829,696	D	Treatment and Disposal	\$ -	\$ -	\$ -	\$ 11,829,696	\$ -	\$ -	\$ -	\$ 11,829,696	\$ -
Outfall Sewer Line	\$ 458,020	D	Treatment and Disposal	\$ -	\$ -	\$ -	\$ 458,020	\$ -	\$ -	\$ -	\$ 458,020	\$ -
Other Treatment and Disposal Plant Equip	\$ -	D	Treatment and Disposal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Water Treatment Structures & Improvements	\$ (5)	D	Treatment and Disposal	\$ -	\$ -	\$ -	\$ (5)	\$ -	\$ -	\$ -	\$ (5)	\$ -
Water Treatment Equipment	\$ 610,111	D	Treatment and Disposal	\$ -	\$ -	\$ -	\$ 610,111	\$ -	\$ -	\$ -	\$ 610,111	\$ -

Missouri-American Water Company
Class Cost of Service Study - Account Detail
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Treatment and							Total	Variance
				Intangible	Collection	Pumping	Disposal	General	Customer			
General Plant												
General Land & Land Rights	\$ 399,279	3	Fixed O&M	\$ -	\$ 4,021	\$ 4,248	\$ 168,736	\$ 193,280	\$ 28,994	\$ 399,279	\$ -	
Stores Shops Equipment Structures	\$ 1,861,472	3	Fixed O&M	\$ -	\$ 18,744	\$ 19,804	\$ 786,662	\$ 901,088	\$ 135,174	\$ 1,861,472	\$ -	
Office Structures	\$ 12,812	3	Fixed O&M	\$ -	\$ 129	\$ 136	\$ 5,415	\$ 6,202	\$ 930	\$ 12,812	\$ -	
General Structures - HVAC	\$ -	3	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Miscellaneous Structures	\$ (111)	3	Fixed O&M	\$ -	\$ (1)	\$ (1)	\$ (47)	\$ (54)	\$ (8)	\$ (111)	\$ -	
Structures & Improvements - Leasehold	\$ 81,125	3	Fixed O&M	\$ -	\$ 817	\$ 863	\$ 34,283	\$ 39,270	\$ 5,891	\$ 81,125	\$ -	
Office Furniture and Equipment	\$ 89,219	3	Fixed O&M	\$ -	\$ 898	\$ 949	\$ 37,704	\$ 43,189	\$ 6,479	\$ 89,219	\$ -	
Computers & Peripheral Equipment	\$ 467,472	3	Fixed O&M	\$ -	\$ 4,707	\$ 4,973	\$ 197,555	\$ 226,290	\$ 33,946	\$ 467,472	\$ -	
Computer Hardware & Software	\$ (78,983)	3	Fixed O&M	\$ -	\$ (795)	\$ (840)	\$ (33,378)	\$ (38,234)	\$ (5,735)	\$ (78,983)	\$ -	
Computer Software	\$ 4,871,320	3	Fixed O&M	\$ -	\$ 49,052	\$ 51,825	\$ 2,058,631	\$ 2,358,073	\$ 353,739	\$ 4,871,320	\$ -	
Personal Computer Software	\$ -	3	Fixed O&M	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other Office Equipment	\$ 76,735	3	Fixed O&M	\$ -	\$ 773	\$ 816	\$ 32,428	\$ 37,145	\$ 5,572	\$ 76,735	\$ -	
BTS Initial Investment	\$ 1,161,330	3	Fixed O&M	\$ -	\$ 11,694	\$ 12,355	\$ 490,781	\$ 562,168	\$ 84,332	\$ 1,161,330	\$ -	
Transportation Equipment	\$ 1,727,507	3	Fixed O&M	\$ -	\$ 17,395	\$ 18,378	\$ 730,048	\$ 836,239	\$ 125,446	\$ 1,727,507	\$ -	
Transportation Equipment - Light Trucks	\$ 109,414	3	Fixed O&M	\$ -	\$ 1,102	\$ 1,164	\$ 46,239	\$ 52,964	\$ 7,945	\$ 109,414	\$ -	
Transportation Equipment - Heavy Trucks	\$ 108,847	3	Fixed O&M	\$ -	\$ 1,096	\$ 1,158	\$ 45,999	\$ 52,690	\$ 7,904	\$ 108,847	\$ -	
Transportation Equipment - Cars	\$ 2,281,630	3	Fixed O&M	\$ -	\$ 22,975	\$ 24,274	\$ 964,222	\$ 1,104,475	\$ 165,684	\$ 2,281,630	\$ -	
Transportation Equipment - Other	\$ 148,265	3	Fixed O&M	\$ -	\$ 1,493	\$ 1,577	\$ 62,657	\$ 71,771	\$ 10,767	\$ 148,265	\$ -	
Stores Equipment	\$ (729)	3	Fixed O&M	\$ -	\$ (7)	\$ (8)	\$ (308)	\$ (353)	\$ (53)	\$ (729)	\$ -	
Tools, Shop, & Garage Equipment	\$ 904,246	3	Fixed O&M	\$ -	\$ 9,105	\$ 9,620	\$ 382,136	\$ 437,721	\$ 65,663	\$ 904,246	\$ -	
Laboratory Equipment	\$ 77,824	3	Fixed O&M	\$ -	\$ 784	\$ 828	\$ 32,889	\$ 37,672	\$ 5,651	\$ 77,824	\$ -	
Power Operated Equipment	\$ (65,708)	3	Fixed O&M	\$ -	\$ (662)	\$ (699)	\$ (27,768)	\$ (31,808)	\$ (4,772)	\$ (65,708)	\$ -	
Communication Equipment	\$ 752,151	3	Fixed O&M	\$ -	\$ 7,574	\$ 8,002	\$ 317,861	\$ 364,096	\$ 54,619	\$ 752,151	\$ -	
Communication Equipment (non telephone)	\$ 69,710	3	Fixed O&M	\$ -	\$ 702	\$ 742	\$ 29,460	\$ 33,745	\$ 5,062	\$ 69,710	\$ -	
Telephone Equipment	\$ 4,587	3	Fixed O&M	\$ -	\$ 46	\$ 49	\$ 1,938	\$ 2,220	\$ 333	\$ 4,587	\$ -	
Miscellaneous Equipment	\$ 157,390	3	Fixed O&M	\$ -	\$ 1,585	\$ 1,674	\$ 66,513	\$ 76,188	\$ 11,429	\$ 157,390	\$ -	
Other Tangible Property	\$ 126,190	3	Fixed O&M	\$ -	\$ 1,271	\$ 1,342	\$ 53,328	\$ 61,085	\$ 9,163	\$ 126,190	\$ -	
Distribution Reservoirs & Standpipes	\$ 1,803	3	Fixed O&M	\$ -	\$ 18	\$ 19	\$ 762	\$ 873	\$ 131	\$ 1,803	\$ -	
Transmission & Distribution Mains	\$ 444,113	3	Fixed O&M	\$ -	\$ 4,472	\$ 4,725	\$ 187,683	\$ 214,983	\$ 32,250	\$ 444,113	\$ -	
Transmission & Distribution Structures & Impr	\$ 12,119	3	Fixed O&M	\$ -	\$ 122	\$ 129	\$ 5,122	\$ 5,866	\$ 880	\$ 12,119	\$ -	
Meters	\$ 25	3	Fixed O&M	\$ -	\$ 0	\$ 0	\$ 11	\$ 12	\$ 2	\$ 25	\$ -	
Hydrants	\$ (5)	3	Fixed O&M	\$ -	\$ (0)	\$ (0)	\$ (2)	\$ (3)	\$ (0)	\$ (5)	\$ -	
Transportation Equipment Capitalization	\$ 148,441	3	Fixed O&M	\$ -	\$ 1,495	\$ 1,579	\$ 62,732	\$ 71,856	\$ 10,779	\$ 148,441	\$ -	
Net Utility Plant	\$ 144,059,043			\$ 164,865	\$ 65,036,394	\$ 12,336,676	\$ 57,642,196	\$ 7,720,713	\$ 1,158,198	\$ 144,059,043	\$ -	
Additions to Rate Base												
Cash Working Capital(Wastewater)	\$ (702,854)	3	Fixed O&M	\$ -	\$ (7,077)	\$ (7,477)	\$ (297,028)	\$ (340,233)	\$ (51,039)	\$ (702,854)	\$ -	
Materials and Supplies(Wastewater)	\$ 65,262	5	Net Plant (less gen. and int.)	\$ 75	\$ 29,463	\$ 5,589	\$ 26,113	\$ 3,498	\$ 525	\$ 65,262	\$ -	
Pension Asset(Wastewater)	\$ 2,191,202	5	Net Plant (less gen. and int.)	\$ 2,508	\$ 989,232	\$ 187,646	\$ 876,763	\$ 117,435	\$ 17,617	\$ 2,191,202	\$ -	
Regulatory Deferrals(Wastewater)	\$ 1,002,874	5	Net Plant (less gen. and int.)	\$ 1,148	\$ 452,754	\$ 85,882	\$ 401,279	\$ 53,748	\$ 8,063	\$ 1,002,874	\$ -	
Total Additions	\$ 2,556,484			\$ 3,730	\$ 1,464,372	\$ 271,640	\$ 1,007,128	\$ (165,551)	\$ (24,835)	\$ 2,556,484	\$ -	
Reductions to Rate Base												
Customer Advances for Construction												
Advances for Construction - NT Mains	\$ -	5	Net Plant	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Advances for Construction - NT Extension Deposits	\$ 19,232	5	Net Plant	\$ 22	\$ 8,682	\$ 1,647	\$ 7,695	\$ 1,031	\$ 155	\$ 19,232	\$ -	
Advances for Construction - NT Hydrants	\$ -	5	Net Plant	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Advances for Construction - NT WIP	\$ -	5	Net Plant	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Advances for Construction - TAX Mains	\$ -	5	Net Plant	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Advances for Construction - Reclassed to Current	\$ -	5	Net Plant	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Allocated MAWC Corporate - Customer Advances	\$ (5,899)	5	Net Plant	\$ (7)	\$ (2,663)	\$ (505)	\$ (2,360)	\$ (316)	\$ (47)	\$ (5,899)	\$ -	
CIAC												
CIAC-Non Taxable - Mains	\$ (27,602,287)	5	Net Plant	\$ (31,589)	\$ (12,461,232)	\$ (2,363,756)	\$ (11,044,475)	\$ (1,479,319)	\$ (221,915)	\$ (27,602,287)	\$ -	
CIAC-Non Taxable - Ext Dep	\$ (2,001,850)	5	Net Plant	\$ (2,291)	\$ (903,748)	\$ (171,431)	\$ (800,998)	\$ (107,287)	\$ (16,094)	\$ (2,001,850)	\$ -	
CIAC-Non Taxable - Services	\$ (208,467)	5	Net Plant	\$ (239)	\$ (94,114)	\$ (17,852)	\$ (83,414)	\$ (11,173)	\$ (1,676)	\$ (208,467)	\$ -	
CIAC-Non Taxable - Meters	\$ -	5	Net Plant	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
CIAC-Non Taxable - Hydrants	\$ -	5	Net Plant	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
CIAC-Non Taxable - Other	\$ (6,081,184)	5	Net Plant	\$ (6,959)	\$ (2,745,390)	\$ (520,770)	\$ (2,433,258)	\$ (325,916)	\$ (48,891)	\$ (6,081,184)	\$ -	

Missouri-American Water Company
Class Cost of Service Study - Account Detail
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Treatment and						Total	Variance
				Intangible	Collection	Pumping	Disposal	General	Customer		
CIAC-Non Taxable - WIP	\$ (112,889)	5	Net Plant	\$ (129)	\$ (50,964)	\$ (9,667)	\$ (45,170)	\$ (6,050)	\$ (908)	\$ (112,889)	\$ -
CIAC-Taxable - Mains	\$ (554,887)	5	Net Plant	\$ (635)	\$ (250,507)	\$ (47,518)	\$ (222,026)	\$ (29,739)	\$ (4,461)	\$ (554,887)	\$ -
CIAC-Taxable - Extension Deposits	\$ (27,068)	5	Net Plant	\$ (31)	\$ (12,220)	\$ (2,318)	\$ (10,831)	\$ (1,451)	\$ (218)	\$ (27,068)	\$ -
CIAC-Taxable - Services	\$ (1,113,754)	5	Net Plant	\$ (1,275)	\$ (502,812)	\$ (95,378)	\$ (445,645)	\$ (59,691)	\$ (8,954)	\$ (1,113,754)	\$ -
CIAC-Taxable - Meters	\$ -	5	Net Plant	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CIAC-Taxable - Hydrants	\$ -	5	Net Plant	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CIAC-Taxable - Other	\$ (421,624)	5	Net Plant	\$ (483)	\$ (190,345)	\$ (36,106)	\$ (168,704)	\$ (22,597)	\$ (3,390)	\$ (421,624)	\$ -
CIAC-Taxable - WIP	\$ -	5	Net Plant	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CIAC-Taxable - Services SIT	\$ -	5	Net Plant	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Accum Amort CIAC	\$ 24,209,941	5	Net Plant	\$ 27,706	\$ 10,929,736	\$ 2,073,249	\$ 9,687,099	\$ 1,297,510	\$ 194,642	\$ 24,209,941	\$ -
Allocated MAWC Corporate - CIAC	\$ (74,103)	5	Net Plant	\$ (85)	\$ (33,454)	\$ (6,346)	\$ (29,651)	\$ (3,971)	\$ (596)	\$ (74,103)	\$ -
										\$ -	
Deferred Income Tax (Wastewater)	\$ (15,542,052)	5	Net Plant (less gen. and int.)	\$ (17,787)	\$ (7,016,561)	\$ (1,330,963)	\$ (6,218,825)	\$ (832,962)	\$ (124,954)	\$ (15,542,052)	\$ -
Pension/OPEB Tracker (Wastewater)	\$ 512,731	4	Labor	\$ -	\$ 9,278	\$ 9,077	\$ 328,780	\$ 165,388	\$ 208	\$ 512,731	\$ -
Total Reductions	\$ (29,004,160)			\$ (33,780)	\$ (13,316,315)	\$ (2,518,639)	\$ (11,481,783)	\$ (1,416,543)	\$ (237,101)	\$ (29,004,160)	\$ -
TOTAL RATE BASE (Wastewater)	\$ 117,611,367			\$ 134,815	\$ 53,184,451	\$ 10,089,678	\$ 47,167,541	\$ 6,138,619	\$ 896,263	\$ 117,611,367	\$ -

Missouri-American Water Company
Class Cost of Service Study - Account Detail
Case No: WR-2024-0320, SR-2024-0321

	Post Test Year	Alloc	Description	Intangible	Collection	Pumping	Treatment and Disposal	General	Customer	Total	Variance
Fixed O&M	\$ 3,903,468	3		\$ -	\$ 39,306	\$ 41,528	\$ 1,649,615	\$ 1,889,563	\$ 283,457	\$ 3,903,468	
				-	0.01007	0.01064	0.42260	0.48407	0.07262	1.00000	
Labor	\$ 1,374,640	4		\$ -	\$ 24,874	\$ 24,336	\$ 881,466	\$ 443,408	\$ 557	\$ 1,374,640	
				-	0.01809	0.01770	0.64123	0.32256	0.00041	1.00000	
Net Plant	\$ 144,059,043	5		\$ 164,865	\$ 65,036,394	\$ 12,336,676	\$ 57,642,196	\$ 7,720,713	\$ 1,158,198	\$ 144,059,043	
				0.00114	0.45146	0.08564	0.40013	0.05359	0.00804	1.00000	
Rate Base	\$ 117,611,367	6		\$ 134,815	\$ 53,184,451	\$ 10,089,678	\$ 47,167,541	\$ 6,138,619	\$ 896,263	\$ 117,611,367	
				0.00115	0.45221	0.08579	0.40105	0.05219	0.00762	1.00000	
Variable Cost	\$ 4,799,598			\$ -	\$ 15,905	\$ 80,514	\$ 4,655,857	\$ 46,389	\$ 933	\$ 4,799,598	

Missouri-American Water Company
Cost of Service Study - Class Allocators
Case No: WR-2024-0320, SR-2024-0321

1. WASTEWATER FLOWS

Class	Collection Only	Collection & Treatment
Wastewater Flows	8,389,502	5,526,318
Allocator	0.6029	0.3971

2. CUSTOMERS

Class	Collection Only	Collection & Treatment
Customers	8,430	15,862
Allocator	0.3470	0.6530

3. TREATMENT

Class	Collection Only	Collection & Treatment
Allocator	-	1.0000

Missouri-American Water Company
Cost of Service Study - Allocator Summary
Case No: WR-2024-0320, SR-2024-0321

Alloc	Description	Intangible Plant	Collection	Pumping	Treatment & Disposal	General	Customer	Total	Notes
A	Intangible	1.00000	-	-	-	-	-	1.00000	
B	Collection	-	1.00000	-	-	-	-	1.00000	
C	Pumping	-	-	1.00000	-	-	-	1.00000	
D	Treatment and Disposal	-	-	-	1.00000	-	-	1.00000	
E	General	-	-	-	-	1.00000	-	1.00000	
F	Customer	-	-	-	-	-	1.00000	1.00000	
3	Fixed O&M	-	0.01007	0.01064	0.42260	0.48407	0.07262	1.00000	
4	Labor	-	0.01809	0.01770	0.64123	0.32256	0.00041	1.00000	
5	Net Plant (less gen. and int.)	0.00114	0.45146	0.08564	0.40013	0.05359	0.00804	1.00000	
6	Rate Base	0.00115	0.45221	0.08579	0.40105	0.05219	0.00762	1.00000	

Alloc	Description	Collection Only	Collection & Treatment	Total
1	Wastewater Flows	0.60288	0.39712	1.00000
2	Customers	0.34704	0.65296	1.00000
3	Treatment	-	1.00000	1.00000

Missouri-American Water Company
Case No. WR-2024-0320, SR-2024-0321
Proposed Water Rate Design

	Present Rate St Louis County	Present Rate All Other	Proposed Rate St Louis County	Proposed Rate All Other
Rates A, B Meter Charge				
5/8 - Meter	\$ 10.00	\$ 10.00	\$ 21.34	\$ 21.34
3/4 - Meter	\$ 13.61	\$ 13.61	\$ 21.34	\$ 21.34
1 - Meter	\$ 18.42	\$ 18.42	\$ 49.16	\$ 49.16
1 1/2 - Meter	\$ 30.47	\$ 30.47	\$ 80.02	\$ 80.02
2 - Meter	\$ 44.92	\$ 44.92	\$ 118.80	\$ 118.80
3 - Meter	\$ 79.00	\$ 79.00	\$ 191.84	\$ 191.84
4 - Meter	\$ 126.79	\$ 126.79	\$ 280.12	\$ 280.12
6 - Meter	\$ 247.19	\$ 247.19	\$ 534.80	\$ 534.80
8 - Meter	\$ 421.71	\$ 421.71	\$ 808.72	\$ 808.72
10 - Meter	\$ 708.57	\$ 708.57	\$ 1,128.30	\$ 1,128.30
12 - Meter	\$ 850.28	\$ 850.28	\$ 2,058.04	\$ 2,058.04
Rate J Meter Charge				
5/8 - Meter	\$ 24.53	\$ 24.53	\$ 21.34	\$ 21.34
3/4 - Meter	\$ 33.38	\$ 33.38	\$ 21.34	\$ 21.34
1 - Meter	\$ 45.19	\$ 45.19	\$ 49.16	\$ 49.16
1 1/2 - Meter	\$ 74.73	\$ 74.73	\$ 80.02	\$ 80.02
2 - Meter	\$ 110.18	\$ 110.18	\$ 118.80	\$ 118.80
3 - Meter	\$ 193.77	\$ 193.77	\$ 191.84	\$ 191.84
4 - Meter	\$ 310.98	\$ 310.98	\$ 280.12	\$ 280.12
6 - Meter	\$ 606.30	\$ 606.30	\$ 534.80	\$ 534.80
8 - Meter	\$ 1,034.36	\$ 1,034.36	\$ 808.72	\$ 808.72
10 - Meter	\$ 1,737.95	\$ 1,737.95	\$ 1,128.30	\$ 1,128.30
12 - Meter	\$ 2,085.54	\$ 2,085.54	\$ 2,058.04	\$ 2,058.04
Flat Rate - RT 1.2		\$ 43.50		\$ 62.00
Flat Rate - Table Rock		\$ 32.00		\$ 62.00
Rate A Volumetric	\$ 0.77604	\$ 0.83781	\$ 1.02544	\$ 1.02544
Rate B Volumetric	\$ 0.27176	\$ 0.27176	\$ 0.40440	\$ 0.40440
Rate J Volumetric	\$ 0.20012	\$ 0.29572	\$ -	\$ -
Rate J1 Volumetric (<450)	\$ 0.20012	\$ 0.29572	\$ 0.68363	\$ 0.68363
Rate J2 Volumetric (>450)	\$ 0.20012	\$ 0.29572	\$ 0.26583	\$ 0.36049
Triumph		\$ 0.09918		\$ 0.11939
Empire		\$ 0.32754		\$ -
C-1 Fixed Revenue	\$ 118,510		\$ 118,510	
City of Kirkwood	\$ 0.11968		\$ 0.13170	
PWSD #C-1 Jefferson	\$ 0.11732		\$ 0.12765	
O'Fallon		\$ 0.14000		\$ 0.15406
Private Fire				
2 or less - Meter	\$ 7.80	\$ 7.80	\$ 12.07	\$ 12.07
3 - Meter	\$ 25.17	\$ 25.17	\$ 38.95	\$ 38.95
4 - Meter	\$ 31.01	\$ 31.01	\$ 47.99	\$ 47.99
6 - Meter	\$ 69.81	\$ 69.81	\$ 108.03	\$ 108.03
8 - Meter	\$ 124.22	\$ 124.22	\$ 192.22	\$ 192.22
10 - Meter	\$ 194.03	\$ 194.03	\$ 300.22	\$ 300.22
12 - Meter	\$ 279.42	\$ 279.42	\$ 432.37	\$ 432.37
20 - Meter	\$ 356.83	\$ 356.83	\$ 552.17	\$ 552.17
Hydrant	\$ 69.82	\$ 69.82	\$ 108.03	\$ 108.03

Missouri-American Water Company
Case No. WR-2024-0320, SR-2024-0321
Proposed Wastewater Rate Design

Arnold	Present	Proposed
Service/Minimum Charge	\$ 39.09	\$ 41.09
Res Usage - 1st 5000 g	\$ -	\$ -
Res Usage - Over 5000 g	\$ 0.74971	\$ -
Non-Res Usage - 1st 5000 g	\$ -	\$ -
Non-Res Usage - Over 5000 g	\$ 0.74971	\$ 0.78837

Other Tariffs	Present Rate Tariff 2.1	Present Rate Tariff 3.1	Present Rate Bulk WW	Proposed Rate Tariff 2.1	Proposed Rate Tariff 3.1	Proposed Rate Bulk WW
Service Charge - Res Low Water Usage	\$ 65.36	\$ 53.83		\$ 66.12	\$ 66.12	
Service/Minimum Charge - Standard Offering	\$ 65.36	\$ 53.83		\$ 82.65	\$ 82.65	
5/8 - Meter	\$ 65.36	\$ 53.83		\$ 82.65	\$ 82.65	
3/4 - Meter	\$ 90.78	\$ 76.38		\$ 117.27	\$ 117.27	
1 - Meter	\$ 132.67	\$ 111.63		\$ 171.41	\$ 171.41	
1 1/2 - Meter	\$ 237.48	\$ 199.82		\$ 306.81	\$ 306.81	
2 - Meter	\$ 363.26	\$ 305.66		\$ 469.31	\$ 469.31	
3 - Meter	\$ 640.00	\$ 538.52		\$ 826.85	\$ 826.85	
4 - Meter	\$ 1,048.59	\$ 882.32		\$ 1,354.72	\$ 1,354.72	
6 - Meter	\$ 1,744.46	\$ 1,467.85		\$ 2,253.74	\$ 2,253.74	
8 - Meter	\$ 1,744.46	\$ 1,467.85		\$ 3,005.00	\$ 3,005.00	
Minimum Charge - Holiday Inn		\$ 400.00			\$ 400.00	
Minimum Charge - Jellystone		\$ 300.00			\$ 300.00	
Minimum Charge - Six Flags		\$ 2,500.00			\$ 2,500.00	
Usage - Route 66		\$ 0.115			\$ 0.115	
Non-Res Usage - 1st 6000 g	\$ -	\$ -		\$ -	\$ -	
Non-Res Usage - Over 6000 g	\$ 1.06846	\$ 0.76318		\$ 1.17264	\$ 1.17264	
Pilot Knob			\$ 7,740.00			\$ 7,740.00

**2024 Missouri-American Water Company General Rate Case
Residential Usage Analysis - St. Louis County**

REGRESSION MODEL

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.9116
R Square	0.8310
Adjusted R Squ	0.8084
Standard Error	0.6543
Observations	120

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	14	220.977	15.784	36.868	4.24222E-34
Residual	105	44.953	0.428		
Total	119	265.930			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	5.3642	0.2539	21.1270	0.0000	4.8607	5.8676
Jan	-0.3132	0.2933	-1.0680	0.2880	-0.8947	0.2683
Feb	-0.7055	0.2932	-2.4065	0.0179	-1.2868	-0.1242
Mar	-0.5717	0.2931	-1.9507	0.0538	-1.1529	0.0094
April	-0.7259	0.2931	-2.4767	0.0149	-1.3071	-0.1448
May	-0.3923	0.2930	-1.3390	0.1835	-0.9732	0.1886
Jun	0.9676	0.2929	3.3036	0.0013	0.3869	1.5483
Jul	1.8217	0.2928	6.2213	0.0000	1.2411	2.4022
Aug	2.6040	0.2927	8.8955	0.0000	2.0236	3.1845
Sep	3.0561	0.2927	10.4416	0.0000	2.4758	3.6364
Oct	2.1871	0.2926	7.4734	0.0000	1.6068	2.7673
Nov	0.4528	0.2926	1.5474	0.1248	-0.1274	1.0330
Trend	-0.0070	0.0021	-3.3445	0.0011	-0.0112	-0.0029
Rain (Diff)	-0.2158	0.0488	-4.4212	0.0000	-0.3126	-0.1190
COVID	0.0560	0.1634	0.3426	0.7326	-0.2680	0.3800

**2024 Missouri-American Water Company General Rate Case
Residential Usage Analysis - Non St. Louis County**

REGRESSION MODEL

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.9676
R Square	0.9363
Adjusted R Squ	0.9271
Standard Error	0.2803
Observations	120

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	15	120.039	8.003	101.860	5.25123E-55
Residual	104	8.171	0.079		
Total	119	128.209			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	3.6060	0.1095	32.9336	0.0000	3.3889	3.8232
Jan	0.3619	0.1256	2.8809	0.0048	0.1128	0.6111
Feb	-0.1774	0.1256	-1.4124	0.1608	-0.4264	0.0717
Mar	-0.1827	0.1256	-1.4548	0.1487	-0.4316	0.0663
April	0.0082	0.1256	0.0649	0.9483	-0.2408	0.2572
May	0.2406	0.1255	1.9171	0.0580	-0.0083	0.4895
Jun	1.3853	0.1255	11.0406	0.0000	1.1365	1.6341
Jul	2.4383	0.1254	19.4388	0.0000	2.1896	2.6871
Aug	2.3212	0.1254	18.5098	0.0000	2.0725	2.5699
Sep	2.0338	0.1254	16.2213	0.0000	1.7852	2.2825
Oct	1.4607	0.1254	11.6518	0.0000	1.2121	1.7093
Nov	0.2064	0.1254	1.6462	0.1027	-0.0422	0.4549
Trend	-0.0043	0.0009	-4.6956	0.0000	-0.0061	-0.0025
Rain (Diff)	-0.2278	0.0268	-8.5020	0.0000	-0.2809	-0.1747
CDD (Diff)	0.0030	0.0009	3.3154	0.0013	0.0012	0.0048
COVID	0.1656	0.0707	2.3425	0.0211	0.0254	0.3058

**2024 Missouri-American Water Company General Rate Case
Commercial Usage Analysis - St. Louis County**

REGRESSION MODEL

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.9597
R Square	0.9211
Adjusted R Squ	0.9097
Standard Error	3.5424
Observations	120

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	15	15229.991	1015.333	80.910	3.20267E-50
Residual	104	1305.087	12.549		
Total	119	16535.078			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	35.6381	1.3777	25.8685	0.0000	32.9061	38.3700
Jan	-5.2243	1.5877	-3.2905	0.0014	-8.3727	-2.0758
Feb	-5.5785	1.5872	-3.5147	0.0007	-8.7259	-2.4310
Mar	-3.0448	1.5868	-1.9189	0.0577	-6.1915	0.1018
April	-4.4450	1.5869	-2.8011	0.0061	-7.5918	-1.2982
May	-1.7845	1.5863	-1.1250	0.2632	-4.9301	1.3611
Jun	8.6235	1.5857	5.4382	0.0000	5.4789	11.7680
Jul	15.4659	1.5853	9.7561	0.0000	12.3223	18.6096
Aug	27.0417	1.5849	17.0621	0.0000	23.8988	30.1846
Sep	22.0280	1.5846	13.9013	0.0000	18.8857	25.1703
Oct	17.6835	1.5844	11.1610	0.0000	14.5416	20.8254
Nov	7.2201	1.5843	4.5573	0.0000	4.0784	10.3617
Trend	0.0088	0.0115	0.7657	0.4456	-0.0139	0.0315
Rain (Diff)	-1.0071	0.2287	-4.4031	0.0000	-1.4607	-0.5535
CDD (Diff)	0.0317	0.0120	2.6404	0.0096	0.0079	0.0555
COVID	-3.4018	0.8908	-3.8187	0.0002	-5.1683	-1.6352

**2024 Missouri-American Water Company General Rate Case
Commercial Usage Analysis - Non St. Louis County**

REGRESSION MODEL

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.9542
R Square	0.9106
Adjusted R Squ	0.8977
Standard Error	1.6004
Observations	120

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	15	2711.862	180.791	70.590	1.97828E-47
Residual	104	266.360	2.561		
Total	119	2978.222			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	22.2488	0.6240	35.6530	0.0000	21.0113	23.4863
Jan	0.0331	0.7173	0.0462	0.9633	-1.3893	1.4555
Feb	-1.2225	0.7171	-1.7048	0.0912	-2.6444	0.1995
Mar	-0.1554	0.7169	-0.2168	0.8288	-1.5770	1.2661
April	0.7508	0.7169	1.0473	0.2974	-0.6708	2.1725
May	1.0188	0.7166	1.4216	0.1581	-0.4023	2.4399
Jun	5.3572	0.7164	7.4780	0.0000	3.9365	6.7778
Jul	10.0716	0.7162	14.0630	0.0000	8.6514	11.4918
Aug	11.8845	0.7160	16.5983	0.0000	10.4646	13.3044
Sep	10.4698	0.7159	14.6253	0.0000	9.0502	11.8895
Oct	7.9945	0.7158	11.1689	0.0000	6.5750	9.4139
Nov	1.2206	0.7157	1.7054	0.0911	-0.1987	2.6399
Trend	0.0146	0.0052	2.7935	0.0062	0.0042	0.0249
Rain (Diff)	-0.4639	0.1546	-3.0017	0.0034	-0.7704	-0.1574
CDD (Diff)	0.0142	0.0052	2.7410	0.0072	0.0039	0.0245
COVID	-0.5122	0.4028	-1.2717	0.2063	-1.3109	0.2865

**2024 Missouri-American Water Company General Rate Case
OPA Usage Analysis - St. Louis County**

REGRESSION MODEL

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.9187
R Square	0.8441
Adjusted R Squ	0.8216
Standard Error	12.6464
Observations	120

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	15	90051.650	6003.443	37.538	4.3387E-35
Residual	104	16632.864	159.931		
Total	119	106684.514			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	55.5928	4.9382	11.2576	0.0000	45.8001	65.3855
Jan	-20.9105	5.6681	-3.6892	0.0004	-32.1506	-9.6705
Feb	-20.8347	5.6663	-3.6770	0.0004	-32.0711	-9.5982
Mar	-10.9180	5.6648	-1.9274	0.0567	-22.1514	0.3154
April	-21.2877	5.6653	-3.7576	0.0003	-32.5222	-10.0532
May	-8.5317	5.6630	-1.5065	0.1350	-19.7617	2.6984
Jun	21.7457	5.6611	3.8413	0.0002	10.5196	32.9719
Jul	37.2644	5.6594	6.5845	0.0000	26.0416	48.4873
Aug	58.1427	5.6581	10.2761	0.0000	46.9226	69.3629
Sep	36.6477	5.6570	6.4783	0.0000	25.4297	47.8658
Oct	31.1655	5.6562	5.5099	0.0000	19.9489	42.3820
Nov	12.8389	5.6558	2.2700	0.0253	1.6232	24.0545
Trend	0.1960	0.0414	4.7395	0.0000	0.1140	0.2780
Rain (Diff)	-3.8492	1.1525	-3.3398	0.0012	-6.1347	-1.5637
CDD (Diff)	0.0890	0.0455	1.9557	0.0532	-0.0012	0.1793
COVID	-11.3140	3.2046	-3.5306	0.0006	-17.6688	-4.9592

**2024 Missouri-American Water Company General Rate Case
OPA Usage Analysis - Non St. Louis County**

REGRESSION MODEL

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.8706
R Square	0.7579
Adjusted R Squ	0.7230
Standard Error	6.5434
Observations	120

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	15	13940.017	929.334	21.705	1.90181E-25
Residual	104	4452.887	42.816		
Total	119	18392.904			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	40.8094	2.5496	16.0059	0.0000	35.7533	45.8654
Jan	-0.2968	2.9328	-0.1012	0.9196	-6.1126	5.5189
Feb	0.5131	2.9318	0.1750	0.8614	-5.3008	6.3270
Mar	1.9569	2.9310	0.6677	0.5058	-3.8554	7.7693
April	2.1786	2.9313	0.7432	0.4590	-3.6343	7.9914
May	7.5648	2.9301	2.5818	0.0112	1.7543	13.3753
Jun	13.9895	2.9291	4.7761	0.0000	8.1810	19.7980
Jul	23.7625	2.9282	8.1149	0.0000	17.9557	29.5693
Aug	27.4961	2.9275	9.3922	0.0000	21.6907	33.3015
Sep	24.7595	2.9270	8.4590	0.0000	18.9551	30.5638
Oct	23.6977	2.9266	8.0973	0.0000	17.8941	29.5013
Nov	8.7600	2.9264	2.9935	0.0034	2.9569	14.5631
Trend	-0.0151	0.0213	-0.7065	0.4814	-0.0573	0.0272
Rain (Diff)	-1.9184	0.5404	-3.5502	0.0006	-2.9900	-0.8468
CDD (Diff)	0.0336	0.0231	1.4512	0.1497	-0.0123	0.0794
COVID	-1.4355	1.6453	-0.8725	0.3850	-4.6981	1.8272