Exhibit No.:

Issue(s): Cost of Service/Rate Design

Witness: Keri Roth
Sponsoring Party: MoPSC Staff
Type of Exhibit: Rebuttal Testimony

Case No.: WR-2023-0006

Date Testimony Prepared: June 29, 2023

# MISSOURI PUBLIC SERVICE COMMISSION INDUSTRY ANALYSIS DIVISION WATER, SEWER, & STEAM DEPARTMENT

# REBUTTAL TESTIMONY Cost of Service

**OF** 

#### **KERI ROTH**

CONFLUENCE RIVERS UTILITY OPERATING COMPANY, INC.

**CASE NO. WR-2023-0006** 

Jefferson City, Missouri June 2023

1		REBUTTAL TESTIMONY OF
2		KERI ROTH
3	CC	ONFLUENCE RIVERS UTILITY OPERATING COMPANY, INC.
4		CASE NO. WR-2023-0006
5	Q.	Please state your name and business address.
6	A.	My name is Keri Roth and my business address is 200 Madison Street
7	P.O. Box 360	), Jefferson City, Missouri 65102.
8	Q.	By whom are you employed and in what capacity?
9	A.	I am employed by the Missouri Public Service Commission ("Commission")
10	as a Senior	Research/Data Analyst in the Water, Sewer, & Steam Department, Industry
11	Analysis Div	ision.
12	Q.	Are you the same Keri Roth who filed direct testimony in this case or
13	June 8, 2023	?
14	A.	Yes, I am.
15	EXECUTIV	E SUMMARY
16	Q.	What is the purpose of your rebuttal testimony in this case?
17	A.	The purpose of my rebuttal testimony is to explain corrections to Staff's rate
18	design sched	ules included in direct testimony. I will also address the direct testimonies or
19	Confluence	Rivers Utility Operating Company, Inc. ("Confluence") witness Josiah Cox
20	regarding rat	e consolidation, and Confluence witness Timothy S. Lyons regarding water and
21	sewer rate de	sign.

#### STAFF COST OF SERVICE AND RATE DESIGN

- Q. Has Staff made any corrections or updates to its Cost of Service ("COS") that may have an impact on Staff's rate design proposal?
  - A. Yes.
- Q. What corrections has Staff made?
- A. On page 5 of Attachment 1, included in my direct testimony filing, the customer charge listed for Branson Cedars proposed rate was incorrectly stated. The rate listed on the bill comparison sheet was \$31.10. The correct amount should have been \$58.78. This correction has been included as an attachment to my rebuttal testimony as Schedule KR-r1.

Additionally, on page 5 of Attachment 1, included in my direct testimony filing, the current and proposed usage charges for Fawn Lake were not multiplied by Staff's estimated 5,000 gallon per month usage. This correction has also been included as an attachment to my rebuttal testimony as Schedule KR-r1.

Lastly, on page 5 of Attachment 3, included in my direct testimony filing, the number of gallons listed to calculate the commodity charge was calculated incorrectly. I inadvertently used the incorrect number of customers. This correction has also been included as an attachment to my rebuttal testimony, as Schedule KR-r2.

- Q. Has Staff made any adjustments or updates to its calculated rate design for Confluence's water or wastewater operations based on those COS corrections or updates for rebuttal testimony?
- A. Staff did not make any changes to the rate structure originally proposed in direct testimony. As Staff makes corrections and updates to its revenue requirement, rates will change

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

based on those corrections or updates; however, Staff's rate design structure proposal remains
 the same as proposed in its direct testimony.

#### **CONFLUENCE'S WATER AND SEWER RATE DESIGN**

- Q. Can you please explain Confluence's rate consolidation proposal?
- A. Yes. Confluence witness Josiah Cox explains in his direct testimony that Confluence proposes to consolidate rates for all water systems and all sewer systems across Missouri to mitigate rate impacts for systems that would see large increases in rates due to the amount of expenditures and capital investment.<sup>1</sup>
  - Q. How does Confluence's proposal differentiate from Staff's proposal?
- A. Confluence's proposal, also known as single-tariff pricing ("STP") includes one rate, plus one usage charge, for all metered water customers<sup>2</sup> and one flat rate for all non-metered water customers.<sup>3</sup> Additionally, Confluence proposes one flat rate for all sewer customers.<sup>4</sup>

Staff's proposal, also known as modified district-specific pricing ("DSP"), differs by consolidating systems into three (3) separate water districts and four (4) separate sewer districts. Each water district has its own single rate and usage charge for metered customers and its own single flat rate for non-metered customers. Each sewer district has its own single flat rate charge for sewer service.

#### DISTRICT-SPECIFIC PRICING VERSUS SINGLE-TARIFF PRICING

Q. What is the primary benefit of DSP?

<sup>&</sup>lt;sup>1</sup> Direct Testimony, Josiah Cox, page 18, lines 6 – 11.

<sup>&</sup>lt;sup>2</sup> Direct Testimony, Timothy S. Lyons, page 6, lines 11 - 17 and page 7, lines 1 - 10.

<sup>&</sup>lt;sup>3</sup> Direct Testimony, Timothy S. Lyons, page 6, lines 8 – 10.

<sup>&</sup>lt;sup>4</sup> Direct Testimony, Timothy S. Lyons, page 7, lines 19 – 21.

- A. The primary benefit of DSP is that it more closely aligns with the principles of cost causation by having the cost causers pay for their own costs of service. Stated another way, those customers who caused the cost to occur are the customers responsible for paying those costs.
  - Q. What is the primary benefit of STP?
- A. The primary benefit of STP is that it spreads out costs to a larger customer base, which helps mitigate the impact of large capital expenditures that need to be made by the Company in any particular district. This mechanism typically works best when there is a large customer base.
- Q. Wouldn't individual rates for each system be the most accurate way to have the cost causers cover their costs?
  - A. Yes.
  - Q. Then why is Staff proposing a modified DSP?
- A. As previously mentioned in direct testimony, Staff attempted to group systems together into specific districts that shared a similar cost of service to attempt to achieve reasonable rates and attempt to mitigate rate shock as much as possible. Staff's modified DSP is appropriate in this case, because the cost to serve Confluence's customers vary among each system, and each system is unique in that each system has a relatively small customer base. The cost of service for each system varies based on the size and density of the system, different usage patterns, and the cost to replace or upgrade plant and infrastructure. By utilizing a modified DSP structure, Staff is grouping systems with similar costs of service within the same districts.

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

Q.

A.

On page 20, lines 13 - 18, Josiah Cox testifies that consolidated rates reflect the

common benefits all of its Missouri customers will receive from being served by Confluence.

Does Staff agree with his argument?

Not entirely. While customers throughout the State generally benefit from

being served by Confluence, there are still physical and cost differences in each system that

promotes a modified DSP as proposed by Staff rather than the STP structure proposed by

Confluence. Staff believes that there are certain similarities in operating characteristics that

support Staff's proposal of a modified DSP structure. As previously discussed, Staff has

attempted to group systems with similar costs of service into districts together. For example,

operating characteristics are clearly not similar between the Indian Hills water system and

Cedar Green water system based on each systems cost of service; therefore, it does not make

sense for customers connected to those two systems to pay the same rate. Indian Hills is located

in east-central Missouri in Crawford County and has approximately 617 customers. Indian

Hills' cost of service is approximately \$491,042.5 Cedar Green is located further west in

Camden County and has approximately 54 customers. Cedar Green's cost of service is

approximately \$44,790.6

#### **RATE SHOCK**

18

Can you elaborate on this rate shock? Q.

19

A. For example, under Confluence's STP proposal and utilizing its own calculated

COS, Missing Well's water system and Prairie Heights' water system flat customer charges

20

21

will go from \$20.00 per month to \$82.62 per month. By grouping these two systems into a

<sup>5</sup> Direct Testimony Staff Accounting Schedules.

<sup>6</sup> Direct Testimony Staff Accounting Schedules.

<sup>7</sup> Direct Testimony, Timothy S. Lyons, Schedule TSL 4, page 1.

slightly larger district with other similarly situated systems, as Staff has proposed, the flat monthly charge will only increase to \$58.78 per month, based on Staff's calculated COS.

Additionally, under Confluence's STP proposal and utilizing its own calculated COS, water customers in Hillcrest and Port Perry would have a customer charge of \$29.19 per month and a usage charge per 1,000 gallons of water of \$9.54.8 By grouping Elm Hills, Hillcrest, and Port Perry into a slightly larger district, as Staff has proposed, the monthly customer charge for Hillcrest and Port Perry will be \$21.28 per month and the usage charge will only be \$2.66 per 1,000 gallons of usage, based on Staff's calculated COS.

Lastly, a STP structure, as Confluence has proposed, will cause sewer rates for systems such as Deer Run, DeGuire, and Missing Well to increase from \$20.00 per month to \$82.96 per month based on Confluence's COS calculation. By grouping these systems into a district with other similarly situated systems, as proposed by Staff, their rate will only increase to \$60.64 per month for sewer service, based on Staff's calculated COS. By grouping systems into a modified DSP structure, rate shock will be mitigated by future systems acquired by Confluence that already have low rates, when compared to for example Confluence's \$82.96 rate for sewer service.

- Q. Does Staff have other concerns regarding a STP structure?
- A. Yes. One of the biggest concerns with STP is that when costs are spread over an ever larger customer base, it can create a disincentive to keep construction costs as low as practicable. To be clear, Staff has found no imprudence in the upgrades and repairs Confluence has made. But Staff has this concern with any statewide single tariff rate. Confluence has

<sup>&</sup>lt;sup>8</sup> Direct Testimony, Timothy S. Lyons, Schedule TSL 4, page 2.

<sup>&</sup>lt;sup>9</sup> Direct Testimony, Timothy S. Lyons, Schedule TSL 4, page 3.

tended to target systems that are in need of major repair and updates to meet standards. It is imperative that these upgrades are conducted with both safety and cost in mind. If the costs can be spread out over more and more customers, the cost of any individual update to any individual customer is lowered, but profits are enhanced. Water and sewer costs and infrastructure are very different from other utilities, such as electric and gas. The costs to serve customers at each location can vary widely across the state depending on the environmental setting, availability of water, availability of land to construct treatment devices, etc.

- Q. Can you please summarize your rebuttal testimony?
- A. Yes. Staff continues to support its original proposal identified in direct testimony. Staff believes it is appropriate to have some rate consolidation and believes that by consolidating systems into three (3) water districts and four (4) sewer districts, reasonable rates have been achieved and rate shock has been mitigated. Due to the cost of service varying significantly between some systems, Staff believes it is not beneficial to consolidate all water systems into one district and all sewer systems into one district.
  - Q. Does this conclude your rebuttal testimony?
- 16 A. Yes it does.

#### BEFORE THE PUBLIC SERVICE COMMISSION

#### **OF THE STATE OF MISSOURI**

In the Matter of Confluence Rivers Utility

	General Rate e and Sewer	) Case No. WR-2023-0006 ) )		
	AFFIDAVIT OF KERI ROTH  ATE OF MISSOURI			
STATE OF MISSOURI	)			
COUNTY OF COLE	) 55.			
COMES NOW KERI	ROTH and on her	oath declares that she is of sound mind and lawf	ùl	
age; that she contributed to	the foregoing Reb	uttal Testimony of Keri Roth, and that the same	is	
true and correct according	to her best knowleds	ge and belief.		
Further the Affiant says	eth not.			
		1/ 1/201		

#### **JURAT**

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this \_\_\_\_\_\_\_ day of June 2023.

DIANNA L VAUGHT
Notary Public - Notary Seal
STATE OF MISSOURI
Cole County
My Commission Expires: July 18, 2023
Commission #: 15207377

Notary Public ()

## **Water Rate Making Income Statement**

Operating Revenues at Current Rates						
Tariffed Rate Revenues *	\$	229,546				
Other Operating Revenues *	<u></u> \$	-				
Total Operating Revenues	\$	229,546				

<sup>\*</sup> See "Revenues - Current Rates" for Details

Cost of Service			(	Customer	C	ommodity
Item	Amount			Charge		Charge
Total Source of Supply Expenses	\$ 1,456	1	\$	1,456	\$	-
Total Pumping Expenses	\$ 35,727	1	\$	35,727	\$	-
Total Water Treatment Expenses	\$ 192,836	0.95	\$	183,194	\$	9,642
Total Transmission & Distribution Expenses	\$ 6,005	1	\$	6,005	\$	-
Total Customer Accounts Expenses	\$ 16,990	1	\$	16,990	\$	-
Total Administration & General Expenses	\$ 62,007	1	\$	62,007	\$	-
Total Other Operating Expenses	\$ -		\$	-	\$	-
Sub-Total Operating Expenses	\$ 315,021	•	\$	305,379	\$	9,642
Property Taxes	\$ 489	1	\$	489	\$	-
Payroll Taxes (FICA)	\$ -		\$	-	\$	-
Payroll Taxes (Unemployment)	\$ -		\$	-	\$	-
Income Tax	\$ 1,691	1	\$	1,691	\$	-
Sub-Total Taxes	\$ 2,180	•	\$	2,180	\$	-
Depreciation Expense	\$ 50,000	1	\$	50,000	\$	-
Interest Expense	\$ -		\$	-	\$	-
Sub-Total Depreciation/Interest/Amortization	\$ 50,000	•	\$	50,000	\$	_
Return on Equity	\$ 68,733	1	\$	68,733	\$	-
Total Cost of Service	\$ 435,934	<u>'</u>	\$	426,292	\$	9,642
Cost to Recover in Rates	\$ 435,934	;	\$	426,292	\$	9,642
Overall Revenue Increase Needed	\$ 206,388					

## **Revenue Annualizations at Current Rates - Water**

# **Annualized Customer Counts and Customer Charge Revenues**

#### **Retail Metered Customers**

	No. of	Bills Per	Total			Annual
<b>Meter Size</b>	Customers	Year	Bills	Rate *	Revenue	
Flat Branson Cedars	58	12	696	\$ 61.99	\$	43,145
Flat Cedar Green	54	12	648	\$ 26.79	\$	17,360
3/4" Fawn Lake	29	12	348	\$ 50.00	\$	17,400
Flat Glen Meadows	233	12	2796	\$ 27.50	\$	76,890
Flat Missing Well	73	12	876	\$ 20.00	\$	17,520
Flat Prairie Heights	56	12	672	\$ 20.00	\$	13,440
Flat Spring Branch	115	12	1380	\$ 30.99	\$	42,766
Total	618		7416		\$	228,521

<sup>\*</sup> Monthly Customer Charge

#### **Annualized Commodity Sales - Volumes & Revenues**

				Α	nnual
	<b>Total Sales</b>	Rate		Revenue	
	341.765	\$	3.00	\$	1,025
	0 \$ -		-	\$	-
 Total	341.765			\$	1,025

# **Other Operating Revenues**

Total Other Revenues	\$ -
Disconnect/Reconnect	\$ -
Late Fees	\$ -

#### **Total Operating Revenues**

Customer Charge Revenues	\$ 228,521
Commodity Charge Revenues	\$ 1,025
Sub-Total Tariffed Rate Revenues	\$ 229,546
Other Operating Revenues	\$ -
<b>Total Operating Revenues</b>	\$ 229,546

# **Development of Tariffed Rates - Water**

Current Revenue \$ 229,546
Agreed-Upon Overall Revenue Increase \$ 206,388
Percentage Increase Needed \$ 90%

Metered Customer Rates								
	C	urrent	Proposed		Cı	ırrent	Proposed	
Meter	Cu	Customer		Customer		Usage		Isage
Size	C	harge	C	harge		Rate		Rate
Flat Branson Cedars	\$	61.99	\$	58.78	\$	-	\$	-
Flat Cedar Green	\$	26.79	\$	58.78	\$	-	\$	-
3/4" Fawn Lake	\$	50.00	\$	31.10	\$	3.00	\$	5.54
Flat Glen Meadows	\$	27.50	\$	58.78	\$	-	\$	-
Flat Missing Well	\$	20.00	\$	58.78	\$	-	\$	-
Flat Prairie Heights	\$	20.00	\$	58.78	\$	-	\$	-
Flat Spring Branch	\$	30.99	\$	58.78	\$	-	\$	-

Customer	Number of		Customer	Cı	oposed ustomer	
Charge	Customers	Factor	Equivalents	Charge		
5/8"	0	1	0	\$	31.10	
3/4"	29	1	29	\$	31.10	
1"	0	1.75	0	\$	54.43	
1 1/2"	0	3	0	\$	93.30	
2"	0	4	0	\$	124.41	
3"	0	10	0	\$	311.01	
4"	0	15	0	\$	466.52	
Flat Rate - Unmetered	589	1.89	1113.21	\$	58.78	

1142.21

Customer Charge Calculation: \$ 426,292 \$ 31.10

 Commodity	Gallons**	P	roposed
\$ 9,642	1740000	\$	5.54

<sup>\*\*</sup>Due to reliability concerns with Confluence's customer sales data, Staff assumes 5,000 gallons per customer per month for development of the commodity rate

# **Revenue Annualizations at Proposed Rates - Water**

## **Annualized Customer Counts and Customer Charge Revenues**

Meter	No. of	Bills Per	Total				Annual	
Size	Customers	Year	Bills	Rate *		Revenue		
5/8"	0	12	0	\$	31.10	\$	-	
3/4"	29	12	348	\$	31.10	\$	10,823	
1"	0	12	0	\$	54.43	\$	-	
1 1/2"	0	12	0	\$	93.30	\$	-	
2"	0	12	0	\$	124.41	\$	-	
3"	0	12	0	\$	311.01	\$	-	
4"	0	12	0	\$	466.52	\$	-	
Flat Rate - Unmetered	589	12	7068	\$	58.78	\$	415,469	
Total	29		7416			\$	426,292	

<sup>\*</sup> Monthly Customer Charge

#### **Annualized Commodity Sales - Volumes & Revenues**

			Δ	nnual
	<b>Total Sales</b>	Rate	Re	evenue
	1740	\$ 5.54	\$	9,642
	0		\$	-
Total	1740		\$	9,642

## **Other Operating Revenues**

#### **Total Other Revenues**

\$

## **Total Operating Revenues**

\$ 426,292
\$ 9,642
\$ 435,934
\$ -
\$ 435,934
\$ \$ <b>\$</b> <b>\$</b>

Revenue Check - Proposed Rates vs. Current Rates

Total Revenues at Proposed Rates	\$ 435,934
Total Revenues at Current Tariffed Rates	\$ 229,546
Increase in Revenues at Proposed Rates	\$ 206,388
Agreed-Upon Increase in Operating Revenues	\$ 206,388

# **Residential Customer Bill Comparison - Water**

#### **Proposed Base Customer Charge**

58.78

		MONTHLY BIL	L COMPARISON					
* Assume 5,000 usage								
<b>Branson Cedars Cu</b>	ırrent F	Rates	Cedar Green Curr	Cedar Green Current Rates				
Customer Charge	<del></del> \$	61.99	Customer Charge	<del></del> \$	26.79			
Usage Charge	\$	-	Usage Charge	\$	-			
Total Bill	\$	61.99	Total Bill	\$	26.79			
Branson Cedars Pr	oposed	l Rates	Cedar Green Prop	osed R	ates			
Customer Charge	\$	58.78	Customer Charge	<del>_</del> \$	58.78			
Usage Charge	\$	-	Usage Charge	\$	-			
Total Bill	\$	58.78	Total Bill	\$ \$	58.78			
Fawn Lake Current	t Rates		Glen MeadowsCu	rrent R	lates			
Customer Charge	\$	50.00	Customer Charge	<del></del> \$	27.50			
Usage Charge	\$	15.00	Usage Charge		-			
Total Bill	\$	65.00	Total Bill	\$ \$	27.50			
Fawn Lake Propos	ed Rate	es	Glen Meadows Pr	oposeo	d Rates			
Customer Charge	<del></del> \$		Customer Charge	<u></u> ;				
Usage Charge	\$	27.71	Usage Charge	\$	-			
Total Bill	\$	58.81	Total Bill	\$	58.78			
Missing Well Curre	ent Rat	es	Prairie Heights Cu	ırrent P	Rates			
Customer Charge	<u> </u>	20.00	Customer Charge	 \$	20.00			
Usage Charge	\$	-	Usage Charge	\$	-			
Total Bill	\$	20.00	Total Bill	\$	20.00			
Missing Well Prop	osed R	ates	Prairie Heights Pr	oposed	l Rates			
Customer Charge	<del></del>	58.78	Customer Charge	<u> </u> \$	58.78			
Usage Charge	\$	-	Usage Charge	\$	-			
Total Bill	\$	58.78	Total Bill	\$	58.78			
Spring Branch Curi	rent Ra	tes						
Customer Charge	\$	30.99						
Usage Charge	\$	-						
	<del></del>							

# **Spring Branch Proposed Rates**

**Total Bill** 

26.79

26.79

58.78

58.78

27.50

27.50

58.78

20.00

20.00

58.78

58.78

Customer Charge	\$ 58.78
Usage Charge	\$ -
Total Bill	\$ 58.78

#### **Customer Bill Increases/Decreases**

**Branson Cedars Customer Charge** 

\$ Increase \$ (3.21)% Increase -5.18%

**Branson Cedars Usage Charge** 

\$ Increase \$ % Increase N/A

**Fawn Lake Customer Charge** 

\$ Increase \$ (18.90)% Increase -37.80%

**Fawn Lake Usage Charge** 

\$ Increase 12.71 % Increase 84.71%

**Missing Well Customer Charge** 

\$ Increase \$ 38.78 % Increase 193.91%

Missing Well Usage Charge

\$ Increase % Increase N/A

**Spring Branch Customer Charge** 

\$ Increase 27.79 % Increase 89.68%

**Spring Branch Usage Charge** 

\$ Increase \$ % Increase N/A **Cedar Green Customer Charge** 

\$ Increase \$ 31.99 % Increase 119.42%

**Cedar Green Usage Charge** 

\$ Increase % Increase N/A

**Glen Meadows Customer Charge** 

\$ Increase \$ 31.28 % Increase 113.75%

**Glen Meadows Usage Charge** 

\$ Increase \$ % Increase N/A

**Prairie Heights Customer Charge** 

\$ Increase \$ 38.78 % Increase

193.91%

**Prairie Heights Usage Charge** 

\$ Increase \$ % Increase N/A

# **Water Rate Making Income Statement**

Operating Revenues at Current Rates					
Tariffed Rate Revenues *	\$	1,672,267			
Other Operating Revenues *	\$	-			
<b>Total Operating Revenues</b>	\$	1,672,267			

<sup>\*</sup> See "Revenues - Current Rates" for Details

Cost of Service		
Item		Amount
Total Source of Supply Expenses	\$	54,854
Total Pumping Expenses	\$	81,175
Total Water Treatment Expenses	\$	540,315
Total Transmission & Distribution Expenses	\$	191,438
Total Customer Accounts Expenses	\$	113,078
Total Administration & General Expenses	\$	933,006
Total Other Operating Expenses	\$	2,652
Sub-Total Operating Expenses	\$ <b>\$</b>	1,916,518
Property Taxes	\$	12,793
Payroll Taxes (FICA)	\$	-
Payroll Taxes (Unemployment)	\$	-
Income Tax	\$	8,717
Sub-Total Taxes	\$ <b>\$</b> \$	21,510
Depreciation Expense	\$	243,078
Interest Expense	\$	
Sub-Total Depreciation/Interest/Amortization	\$	243,078
Return on Equity	\$	471,090
Total Cost of Service	\$ \$ \$	2,652,196
Cost to Recover in Rates	\$	2,652,196
Overall Revenue Increase Needed	\$	979,929

	Customer	C	Commodity
	Charge		Charge
0	\$ -	\$	54,854
0	\$ -	\$	81,175
0	\$ -	\$	540,315
0	\$ -	\$	191,438
0	\$ -	\$	113,078
1	\$ 933,006	\$	-
1	\$ 2,652	\$	-
	\$ 935,658	\$	980,860
1	\$ 12,793	\$	-
	\$ -	\$	-
	\$ -	\$	-
1	\$ 8,717	\$	-
	\$ 21,510	\$	-
1	\$ 243,078	\$	-
	\$ -	\$	-
	\$ 243,078	\$	-
1	\$ 471,090	\$	-
	\$ 471,090	\$	-
	\$ 1,671,336	\$	980,860

## **Revenue Annualizations at Current Rates - Water**

# **Annualized Customer Counts and Customer Charge Revenues**

#### **Retail Metered Customers**

	No. of	Bills Per	Total			Annual
Meter Size	Customers	Year	Bills	Rate *		Revenue
3/4" Indian Hills Mtrd	617	12	7404	\$	50.90	\$ 376,864
Flat Cedar Glen	37	12	444	\$	24.76	\$ 10,993
3/4" Cedar Glen Mtrd	182	12	2184	\$	24.76	\$ 54,076
3/4" Chelsea Rose Mtrd	34	12	408	\$	24.76	\$ 10,102
Flat Cimmaron Bay	75	12	900	\$	24.76	\$ 22,284
3/4" Cimmaron Bay Mtrd	19	12	228	\$	24.76	\$ 5,645
3/4" Eaglewoods Mtrd	35	12	420	\$	24.76	\$ 10,399
3/4" TDL Res Mtrd	1326	12	15912	\$	14.85	\$ 236,293
1" TDL Res Mtrd	5	12	60	\$	37.14	\$ 2,228
2" TDL Res Mtrd	1	12	12	\$	118.85	\$ 1,426
Flat Auburn Lake	61	12	732	\$	69.63	\$ 50,969
Flat Calvey Brooks	16	12	192	\$	69.63	\$ 13,369
3/4" Eugene Mtrd	50	12	600	\$	46.42	\$ 27,852
3/4" Evergreen Lakes Mtrd	72	12	864	\$	46.42	\$ 40,107
3/4" Gladlo Mtrd	71	12	852	\$	46.42	\$ 39,550
Flat Majestic Lakes	109	12	1308	\$	69.63	\$ 91,076
3/4" Majestic Lakes Mtrd	153	12	1836	\$	46.42	\$ 85,227
Flat Roy-L Full-Time	11	12	132	\$	69.63	\$ 9,191
Flat Roy-L Part-Time	15	12	180	\$	50.64	\$ 9,115
3/4" Roy-L Mtrd	35	12	420	\$	46.42	\$ 19,496
Flat Smithview	151	12	1812	\$	71.25	\$ 129,105
Flat Willows	160	12	1920	\$	69.63	\$ 133,690
Total	3235		38820			\$ 1,379,059

<sup>\*</sup> Monthly Customer Charge

## **Annualized Commodity Sales - Volumes & Revenues**

					Annual
	<b>Total Sales</b>	Rate		F	Revenue
	16042.091	\$ 7.01		\$	112,455
3/4" Indian Hills Mtrd	160.42	\$	7.70	\$	1,235
3/4" Cedar Glen Mtrd	2046.044	\$	5.86	\$	11,990
3/4" Chelsea Rose Mtrd	1006.638	\$	5.86	\$	5,899
3/4" Cimmaron Bay Mtrd	359.841	\$	5.86	\$	2,109
3/4" Eaglewoods Mtrd	1212.995	\$	5.86	\$	7,108
3/4" TDL Res Mtrd	80191.176	\$	1.80	\$	144,344
1" TDL Res Mtrd	446.31	\$	1.80	\$	803
2" TDL Res Mtrd	4036.38	\$	1.80	\$	7,265

<sup>^</sup> Non-Metered

Other	<b>Operating</b>	<b>Revenues</b>
-------	------------------	-----------------

Late Fees \$ Disconnect/Reconnect \$ 
Total Other Revenues \$ -

## **Total Operating Revenues**

Customer Charge Revenues\$ 1,379,059Commodity Charge Revenues\$ 293,209Sub-Total Tariffed Rate Revenues\$ 1,672,267Other Operating Revenues\$ -Total Operating Revenues\$ 1,672,267

# **Development of Tariffed Rates - Water**

Current Revenue\$ 1,672,267Agreed-Upon Overall Revenue Increase\$ 979,929Percentage Increase Needed59%

Metered Customer Rates								
	C	Current	Proposed		Cı	ırrent	Proposed	
Meter	Cı	ıstomer	Customer		Usage		Usage	
Size	(	Charge	Charge		Rate		Rate	
3/4" Indian Hills Mtrd	\$	50.90	\$	38.05	\$	7.70	\$	5.05
Flat Cedar Glen	\$	24.76	\$	63.16	\$	-	\$	-
3/4" Cedar Glen Mtrd	\$	24.76	\$	38.05	\$	5.86	\$	5.05
3/4" Chelsea Rose Mtrd	\$	24.76	\$	38.05	\$	5.86	\$	5.05
Flat Cimmaron Bay	\$	24.76	\$	63.16	\$	-	\$	-
3/4" Cimmaron Bay Mtrd	\$	24.76	\$	38.05	\$	5.86	\$	5.05
3/4" Eaglewoods Mtrd	\$	24.76	\$	38.05	\$	5.86	\$	5.05
3/4" TDL Res Mtrd	\$	14.85	\$	38.05	\$	1.80	\$	5.05
1" TDL Res Mtrd	\$	37.14	\$	66.58	\$	1.80	\$	5.05
2" TDL Res Mtrd	\$	118.85	\$	152.18	\$	1.80	\$	5.05
Flat Auburn Lake	\$	69.63	\$	63.16	\$	-	\$	-
Flat Calvey Brooks	\$	69.63	\$	63.16	\$	-	\$	-
3/4" Eugene Mtrd	\$	46.42	\$	38.05	\$	7.01	\$	5.05
3/4" Evergreen Lakes Mtrd	\$	46.42	\$	38.05	\$	7.01	\$	5.05
3/4" Gladlo Mtrd	\$	46.42	\$	38.05	\$	7.01	\$	5.05
Flat Majestic Lakes	\$	69.63	\$	63.16	\$	-	\$	-
3/4" Majestic Lakes Mtrd	\$	46.42	\$	38.05	\$	7.01	\$	5.05
Flat Roy-L Full-Time	\$	69.63	\$	63.16	\$	-	\$	-
Flat Roy-L Part Time	\$	50.64	\$	63.16	\$	-	\$	-
3/4" Roy-L Mtrd	\$	46.42	\$	38.05	\$	7.01	\$	5.05
Flat Smithview	\$	71.25	\$	63.16	\$	-	\$	-
Flat Willows	\$	69.63	\$	63.16	\$	-	\$	-

Customer Charge	Number of Customers	Factor	Customer Equivalents	Cı	oposed Istomer Charge
5/8"	0	1	0	\$	38.05
3/4"	2594	1	2594	\$	38.05
1"	5	1.75	8.75	\$	66.58
1 1/2"	0	3	0	\$	114.14
2"	1	4	4	\$	152.18
3"	0	10	0	\$	380.45
4"	0	15	0	\$	570.68
Flat Rate - Unmetered	635	1.66	1054.1	\$	63.16

3235 3660.85

Customer Charge Calculation: \$ 1,671,336 \$ 38.05

 Commodity	Gallons	Pro	oposed
\$ 980,860	194100000	\$	5.05

<sup>\*\*</sup>Due to reliability concerns with Confluence's customer sales data, Staff assumes 5,000 gallons per customer per month for development of the commodity rate

# **Revenue Annualizations at Proposed Rates - Water**

#### **Annualized Customer Counts and Customer Charge Revenues**

Meter	No. of	Bills Per	Total		Annual
Size	Customers	Year	Bills	Rate *	Revenue
5/8"	0	12	0	\$ 38.05	\$ -
3/4"	2594	12	31128	\$ 38.05	\$ 1,184,273
1"	5	12	60	\$ 66.58	\$ 3,995
1 1/2"	0	12	0	\$ 114.14	\$ -
2"	1	12	12	\$ 152.18	\$ 1,826
3"	0	12	0	\$ 380.45	\$ -
4"	0	12	0	\$ 570.68	\$ -
Flat Rate - Unmetered	635	12	7620	\$ 63.16	\$ 481,242
Total	3235		38820		\$ 1,671,336

## **Annualized Commodity Sales - Volumes & Revenues**

				Annual
	<b>Total Sales</b>	Rate	F	Revenue
	194100000	\$ 5.05	\$	980,860
	0		\$	-
Total	194100000		\$	980,860

#### **Other Operating Revenues**

**Total Other Revenues** 

\$

## **Total Operating Revenues**

\$ 1,671,336
\$ 980,860.00
\$ 2,652,196
\$ -
\$ 2,652,196

Revenue Check - Proposed Rates vs. Current Rates

Total Revenues at Proposed Rates	\$ 2	2,652,196
Total Revenues at Current Tariffed Rates	\$ :	1,672,267
Increase in Revenues at Proposed Rates	\$	979,929
Agreed-Upon Increase in Operating Revenues	\$	979,929

# **Residential Customer Bill Comparison - Water**

## **MONTHLY BILL COMPARISON**

Indian Hills Mtrd C	<u>Cur</u> rent Rates	Cedar Glen Flat Curre	ent Rates	
Customer Charge	\$ 50.90	Customer Charge	\$	24.76
Usage Charge	\$ 38.50	Usage Charge	\$	-
Total Bill	\$ 89.40	Total Bill	\$	24.76
Indian Hills Mtrd P	roposed Rates	Cedar Glen Flat Prop	osed Rate	es
Customer Charge	\$ 38.05	Customer Charge	\$	63.16
Usage Charge	\$ 25.27	Usage Charge	\$	-
Total Bill	\$ 63.31	Total Bill	\$	63.16
Cedar Glen Mtrd C	urrent Rates	Chelsea Rose Mtrd C	urrent Ra	tes
Customer Charge	<del></del> \$ 24.76	Customer Charge	\$	24.76
Usage Charge	\$ 29.30	Usage Charge	\$	29.30
Total Bill	\$ 54.06	Total Bill	\$	54.06
Cedar Glen Mtrd P	roposed Rates	Cheslea Rose Mtrd P	roposed F	Rates
Customer Charge	 \$ 38.05	Customer Charge	\$	38.05
Usage Charge	\$ 25.27	Usage Charge	\$	25.27
Total Bill	\$ 63.31	Total Bill	\$	63.31
Cimmarron Bay Fla	at Current Rates	Cimmarron Bay Mtro	l Current	Rates
Customer Charge	<del></del> \$ 24.76	Customer Charge	<del></del> \$	24.76
Usage Charge	\$ -	Usage Charge	\$	29.30
Total Bill	\$ 24.76	Total Bill	\$	54.06
Cimmarron Bay Fla	at Proposed Rates	Cimmarron Bay Mtro	l Propose	d Rates
Customer Charge	\$ 63.16	Customer Charge	` \$	38.05
Usage Charge	\$ -	Usage Charge	\$	25.27
Total Bill	\$ 63.16	Total Bill	\$	63.31
Eaglewoods Mtrd	Current Rates	Terre Du Lac Mtrd Cu	ırrent Rat	es
Customer Charge	<del></del> \$ 24.76	Customer Charge	\$	14.85
Usage Charge	\$ 29.30	Usage Charge	\$ \$	9.00
Total Bill	\$ 54.06	Total Bill	\$	23.85
Eaglewoods Mtrd	Proposed Rates	Terre Du Lac Mtrd Pr	oposed R	ates
		Customer Charge	<del></del> \$	38.05
Customer Charge	Ş 36.U3	customer enarge	Y	30.03
Customer Charge Usage Charge	\$ 25.27	Usage Charge	\$ \$	25.27

Auburn Lake Flat (	Current Rates	Calvey Brooks Flat Cu	ırrent Rat	es
Customer Charge	<del></del> \$ 69.63	Customer Charge	<u> </u>	69.63
Usage Charge	\$ -	Usage Charge	\$	-
Total Bill	\$ 69.63	Total Bill	\$ \$	69.63
Auburn Lake Flat F	Proposed Rates	Calvey Brooks Flat Pr	oposed R	ates
Customer Charge	\$ 63.16	Customer Charge	\$	63.16
Usage Charge	\$ -	Usage Charge	\$	-
Total Bill	\$ 63.16	Total Bill	\$	63.16
Eugene Mtrd Curre	ent Rates	Evergreen Mtrd Curr	ent Rates	
Customer Charge	<del></del> \$ 46.42	Customer Charge	<del></del> \$	46.42
Usage Charge	\$ 35.05	Usage Charge		35.05
Total Bill	\$ 81.47	Total Bill	\$ \$	81.47
Eugene Mtrd Prop	osed Rates	Evergreen Mtrd Prop	osed Rate	es
Customer Charge	<del></del> \$ 38.05	Customer Charge	<del></del> \$	38.05
Usage Charge	\$ 25.27	Usage Charge	\$	25.27
Total Bill	\$ 63.31	Total Bill	\$	63.31
Gladlo Mtrd Curre	nt Rates	Majestic Lakes Flat C	urrent Raf	tes
Customer Charge	<del></del> \$ 46.42	Customer Charge	\$	69.63
Usage Charge	\$ 35.05	Usage Charge	\$	-
Total Bill	\$ 81.47	Total Bill	\$	69.63
Gladlo Mtrd Propo	osed Rates	Majestic Lakes Flat P	roposed R	lates
Customer Charge	<del></del>	Customer Charge	<del></del> \$	63.16
Usage Charge	\$ 25.27	Usage Charge	\$	-
Total Bill	\$ 63.31	Total Bill	\$	63.16
Majestic Lakes Mt	rd Current Rates	Roy-L Flat Current Ra	tes	
Customer Charge	<del></del> \$ 46.42	Customer Charge	<del></del> \$	69.63
Usage Charge	\$ 35.05	Usage Charge		-
Total Bill	\$ 81.47	Total Bill	\$ \$	69.63
Majestic Lakes Mt	rd Proposed Rates	Roy-L Flat Proposed I	Rates	
Customer Charge	\$ 38.05	Customer Charge	<del></del> \$	63.16
Usage Charge	\$ 25.27	Usage Charge	\$	-
Total Bill	\$ 63.31	Total Bill	\$	63.16
Roy-L Mtrd Curren	t Rates	Smithview Flat Curre	nt Rates	
Customer Charge	<del></del> \$ 46.42	Customer Charge	<del></del> \$	71.25
Usage Charge	\$ 35.05	Usage Charge		-
Total Bill	\$ 81.47	Total Bill	\$ \$	71.25

#### **Roy-L Mtrd Proposed Rates**

Customer Charge	\$ 38.05
Usage Charge	\$ 25.27
Total Bill	\$ 63.31

#### **Willows Flat Current Rates**

Customer Charge	\$ 69.63
Usage Charge	\$ -
Total Bill	\$ 69.63

#### **Willows Flat Proposed Rates**

Customer Charge	\$ 63.16
Usage Charge	\$ -
Total Bill	\$ 63.16

#### **Smithview Flat Proposed Rates**

Customer Charge	\$ 63.16
Usage Charge	\$ 
Total Bill	\$ 63.16