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BEFORE THE ARIZONA CORPORATION COMMISSION

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**COMMISSIONERS**

- BOB STUMP - Chairman
- GARY PIERCE
- BRENDA BURNS
- BOB BURNS
- SUSAN BITTER SMITH

2013 NOV -8 A 11: 28

AZ CORP COMMISSION  
DOCKET CONTROL

IN THE MATTER OF THE APPLICATION OF TRUXTON CANYON WATER COMPANY, INC. FOR APPROVAL OF A RATE INCREASE.

DOCKET NO. W-02168A-11-0363

IN THE MATTER OF THE APPLICATION OF TRUXTON CANYON WATER COMPANY, INC. FOR APPROVAL OF A REVISION OF THE COMPANY'S EXISTING TERMS AND CONDITIONS OF WATER SERVICE.

DOCKET NO. W-02168A-13-0309

IN THE MATTER OF THE APPLICATION OF TRUXTON CANYON WATER COMPANY, INC. FOR AUTHORITY TO INCUR LONG-TERM DEBT.

DOCKET NO. W-02168A-13-0332

**STAFF'S NOTICE OF FILING  
DIRECT TESTIMONY**

The Utilities Division ("Staff") of the Arizona Corporation Commission ("Commission") hereby files the Direct Testimony of Staff witnesses Crystal S. Brown and Dorothy M. Hains in the above-referenced matter.

RESPECTFULLY SUBMITTED this 8<sup>th</sup> day of November, 2013.

Arizona Corporation Commission

DOCKETED

NOV 08 2013

DOCKETED BY

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1 Original and thirteen (13) copies  
2 of the foregoing filed this  
3 8<sup>th</sup> day of November, 2013 with:

4 Docket Control  
5 Arizona Corporation Commission  
6 1200 West Washington Street  
7 Phoenix, AZ 85006

8 Copy of the foregoing mailed and/or emailed  
9 this 8<sup>th</sup> day of November, 2013 to:

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25  
26  
27  
28  


**BEFORE THE ARIZONA CORPORATION COMMISSION**

BOB STUMP  
Chairman  
GARY PIERCE  
Commissioner  
BRENDA BURNS  
Commissioner  
BOB BURNS  
Commissioner  
SUSAN BITTER SMITH  
Commissioner

APPLICATION OF TRUXTON CANYON ) DOCKET NO. W-02168A-11-0363  
WATER COMPANY, INC. FOR AN )  
INCREASE IN ITS WATER RATES )

IN THE MATTER OF THE APPLICATION OF ) DOCKET NO. W-02168A-13-0309  
TRUXTON CANYON WATER COMPANY, INC. )  
FOR APPROVAL OF A REVISION OF THE )  
COMPANY'S EXISTING TERMS AND )  
CONDITIONS OF WATER SERVICE. )

IN THE MATTER OF THE APPLICATION OF ) DOCKET NO. W-02168A-13-0332  
TRUXTON CANYON WATER COMPANY, INC. )  
FOR AUTHORITY TO INCUR LONG-TERM )  
DEBT. )

DIRECT

TESTIMONY

OF

CRYSTAL S. BROWN

PUBLIC UTILITIES ANALYST V

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

NOVEMBER 8, 2013

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**EXECUTIVE SUMMARY**  
**TRUXTON CANYON WATER COMPANY**  
**DOCKET NOS. W-02168A-11-0363, W-02168A-13-0309, W-02168A-13-0332**

Truxton Canyon Water Company, Inc. ("Truxton" or "Company") is an Arizona public service corporation engaged in providing water utility services to approximately 913 residential and commercial customers in the vicinity of Kingman, Mohave County, Arizona. Truxton's current rates were approved in Decision No. 63713, dated June 6, 2001.

The Company proposes a \$300,000, or 53.96 percent revenue increase from \$555,924 to \$855,924; this increase would produce an operating income of \$95,000. The Company proposes an original cost rate base ("OCRB") of a negative \$185,698. As such, the Company is proposing an operating margin of 11.10 percent. The Company's proposed rates would increase the typical residential 3/4-inch meter bill with a median usage of 3,754 gallons from \$24.94 to \$40.39, for an increase of \$15.45 or 61.94 percent, as shown on Schedule CSB-23.

Staff recommends a \$72,750, or 13.09 percent revenue decrease from \$555,924 to \$483,174; this decrease would produce an operating income of \$50,000. Staff recommends an OCRB of a negative \$249,270 as shown on Schedule CSB-1. As such, Staff is recommending an operating income derived using the cash flow methodology which would result in an operating margin of 10.35 percent. Staff's recommended rates would decrease the typical residential 3/4-inch meter bill with a median usage of 3,754 gallons from \$24.94 to \$19.26, for a decrease of \$5.68 or 22.79 percent, as shown on Schedule CSB-23.

Staff further recommends approval of the Company's request to borrow up to \$259,280 from WIFA for the purpose of financing the construction of arsenic treatment plant. Staff recommends denial of the \$1,641,408 for the cost to acquire the wells and pipeline currently owned by the Trust. Staff further recommends:

1. That the docket in the instant matter remain open to allow implementation of a surcharge related only to the arsenic treatment plant portion of the financing application filed on September 30, 2013, Docket No. W-02168A-13-0332.
2. Approval of a WIFA Loan Surcharge mechanism that is expected to result in a surcharge of \$2.15 per month.
3. That the Company file with the Commission a WIFA loan surcharge tariff that would enable the Company to meet its principal, interest, and tax obligations on the proposed WIFA loan.
4. That the Company follow the same methodology presented on Schedule CSB-24 to calculate the additional revenue needed to meet its principal, interest, debt

reserve, and tax obligations on the proposed WIFA loan using the actual loan amount, interest rate and customer counts.

5. That the Company make a WIFA loan surcharge filing within 15 days of the loan closing.
6. That the Company place the WIFA loan surcharge proceeds in a segregated account, to be used only for making payments on the WIFA loan and the annual income taxes related to the loan as shown on CSB-24, page 1, line 39.
7. That the Company file a rate case no later than May 31, 2018 with a December 31, 2017 test year.
8. Approval of the loan and surcharge be rescinded if the Company has not drawn funds from the loan within one year of the date of the Decision resulting from this proceeding.
9. That the Company notify its customers of the WIFA Loan Surcharge by means of a bill insert in the next regularly scheduled billing after the Commission's decision in this proceeding.

Staff recommends approval of the Company's proposed Terms and Conditions with the following changes:

1. Change the rule cited in C.3 of the Terms and Conditions from A.A.C. R15-2-410.B.1.a. to R14-2-410.B.1.a.
2. Add the "After Hours" service charge and Staff's language to the Terms and Conditions.

1 **INTRODUCTION**

2 **Q. Please state your name, occupation, and business address.**

3 A. My name is Crystal S. Brown. I am a Public Utilities Analyst V employed by the Arizona  
4 Corporation Commission ("Commission") in the Utilities Division ("Staff"). My business  
5 address is 1200 West Washington Street, Phoenix, Arizona 85007.

6  
7 **Q. Briefly describe your responsibilities as a Public Utilities Analyst V.**

8 A. I am responsible for the examination and verification of financial and statistical  
9 information included in utility rate applications. In addition, I develop revenue  
10 requirements, prepare written reports, testimonies, and schedules that include Staff  
11 recommendations to the Commission. I am also responsible for testifying at formal  
12 hearings on these matters.

13  
14 **Q. Please describe your educational background and professional experience.**

15 A. I received a Bachelor of Science Degree in Business Administration from the University  
16 of Arizona and a Bachelor of Science Degree in Accounting from Arizona State  
17 University.

18  
19 Since joining the Commission in August 1996, I have participated in numerous rate cases  
20 and other regulatory proceedings involving electric, gas, water, and wastewater utilities. I  
21 have testified on matters involving regulatory accounting and auditing. Additionally, I  
22 have attended utility-related seminars sponsored by the National Association of  
23 Regulatory Utility Commissioners ("NARUC") on ratemaking and accounting designed to  
24 provide continuing and updated education in these areas.

25  
26  
27

1 **Q. What is the scope of your testimony in this case?**

2 A. I am presenting Staff's analysis and recommendations in the areas of rate base, operating  
3 revenues, expenses, rate design, financing approval, and terms and conditions of water  
4 service regarding the Truxton Canyon Water Company ("Truxton" or "Company")  
5 application for a permanent rate increase. Staff witness, Dorothy Hains, is presenting  
6 Staff's engineering analysis and recommendations.

7  
8 **Q. What is the basis of your recommendations?**

9 A. I performed a regulatory audit of the Company's application to determine whether  
10 sufficient, relevant, and reliable evidence exists to support the Company's requested rate  
11 increase. The regulatory audit consisted of examining and testing the financial  
12 information, accounting records, and other supporting documentation and verifying that  
13 the accounting principles applied were in accordance with the Commission-adopted  
14 NARUC Uniform System of Accounts ("USoA").

15  
16 **BACKGROUND**

17 **Q. Please provide a brief description of Truxton and the service it provides.**

18 A. Truxton is an Arizona public service corporation engaged in providing water utility  
19 services to approximately 913 residential and commercial customers in the vicinity of  
20 Kingman, Mohave County, Arizona. Truxton's current rates were approved in Decision  
21 No. 63713, dated June 6, 2001.

22  
23 **Q. What is the primary reason for Truxton's requested permanent rate increase?**

24 A. Truxton was ordered to file a rate case in Decision No. 72386, dated May 27, 2011.  
25  
26

1 **CONSUMER SERVICE**

2 **Q. Please provide a brief history of customer complaints received by the Commission**  
3 **regarding Truxton.**

4 A. Staff reviewed the Commission's records and found the following, for the years 2010 to  
5 2013:

- 6
- 7 • **2013** – Two complaints (one billing, one Arizona Department of Environmental
- 8 Quality question);
- 9 • **2012** – Four complaints (two billing, one deposit, one quality of service);
- 10 • **2011** – Eight complaints (two billing, three quality of service, two rate case items, one
- 11 construction); and
- 12 • **2010** – Two complaints (one billing, one new service)
- 13

14 All complaints have been resolved and closed.

15

16 **COMPLIANCE**

17 **Q. Please provide a summary of the compliance status of Truxton.**

18 A. The Company has not complied with all of the directives of the Stipulation Agreement  
19 approved in Decision No. 72386, dated May 27, 2011, which includes among other things,  
20 the directive to “acquire all water system assets necessary to provide service from the  
21 Trust no later than June 30, 2011.”<sup>1</sup> However, the Company is generally in compliance  
22 with the filings to the Docket Control Office or with the Utilities Division that are  
23 monitored by the Commission's Compliance Section.

24

25 **SUMMARY OF PROPOSED REVENUES**

26 **Q. Please summarize the Company's filing.**

27 A. The Company proposes a \$300,000, or 53.96 percent revenue increase from \$555,924 to  
28 \$855,924; this increase would produce an operating income of \$95,000. The Company  
29 proposes an original cost rate base (“OCRB”) of a negative \$185,698. Given the negative

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<sup>1</sup> The Trust referred to here is the Claude K. Neal Family Trust (“Trust”).

1 rate base, the Company is proposing an operating margin of 11.10 percent. The  
2 Company's proposed rates would increase the typical residential 3/4-inch meter bill with a  
3 median usage of 3,754 gallons from \$24.94 to \$40.39, for an increase of \$15.45 or 61.94  
4 percent, as shown on Schedule CSB-23.

5  
6 **Q. Please summarize Staff's recommended revenue.**

7 A. Staff recommends a \$72,750, or 13.09 percent revenue decrease from \$555,924 to  
8 \$483,174; this decrease would produce an operating income of \$50,000. Staff  
9 recommends an OCRB of a negative \$249,270 as shown on Schedule CSB-1. Since the  
10 Company's rate base is negative, Staff recommends that rates be set using the operating  
11 income resulting from the cash flow methodology. This operating income would produce  
12 an operating margin of 10.35 percent. Staff's recommended rates would decrease the  
13 typical residential 3/4-inch meter bill with a median usage of 3,754 gallons from \$24.94 to  
14 \$19.26, for a decrease of \$5.68 or 22.79 percent, as shown on Schedule CSB-23.

15  
16 **Q. What test year did Truxton utilize in this filing?**

17 A. Truxton's initial rate filing is based on the twelve months ended June 30, 2011, ("test  
18 year"). Truxton updated its rate application using the twelve months ending December 31,  
19 2012. Since the 2012 data reflected the most recent historical 12-month period, consistent  
20 with Commission Rules, and provided Staff with more recent information to perform its  
21 analysis, Staff updated the 2011 test year to 2012.

22  
23 **Q. Please summarize Staff's rate base and operating income adjustments for Truxton.**

24 A. My testimony discusses the following adjustments:  
25  
26  
27

1 **Rate Base Adjustments**

2 AIAC – The adjustment decreases reported AIAC by \$815,260 to reflect AIAC that, for  
3 ratemaking purposes, Staff is treating as CIAC.

4  
5 Amortization of CIAC – This adjustment increases the amortization of CIAC by \$13,533  
6 to reflect the amortization on the Staff-recommended CIAC additions.

7  
8 Customer Deposits – This adjustment decreases rate base by \$5,618 to reflect the test year  
9 customer deposits balance.

10  
11 Cash Working Capital Allowance – This adjustment decreases rate base by \$71,487 to  
12 eliminate the Company’s requested working capital component from rate base.

13  
14 **Operating Income Adjustments**

15 Purchased Water Expense – This adjustment decreases purchased water expense by  
16 \$147,409 to reflect the intent of the Commission’s Decision No. 72386, which ordered the  
17 Company to “acquire all water system assets necessary to provide service from the Trust  
18 no later than June 30, 2011.”

19  
20 Repairs and Maintenance Expense – The adjustment decreases repairs and maintenance  
21 expense by \$7,471. It removes costs that either were not supported by invoices, were not  
22 incurred within the test year, or were not needed in the provision of service.

23  
24 Outside Services Expense – This adjustment decreases outside services expense by  
25 \$202,891 to remove management and operations fees of the Trust. Staff’s proforma  
26 adjustment is consistent with the proforma adjustment made by the Company in its

1 original application to reflect the cancellation of the management and operations contract  
2 with the Trust.

3  
4 Water Testing Expense – This adjustment increases water testing expenses by \$369 to  
5 reflect Staff’s recommended annual water testing costs.

6  
7 Rents Expense – This adjustment decreases rents expense by \$1,650 to reflect the proper  
8 allocation of rents expense charged to Truxton by its affiliate.

9  
10 Transportation Expense – This adjustment decreases transportation expense by \$2,700 to  
11 remove the profit included in the monthly rental cost of a truck that is rented from an  
12 affiliate.

13  
14 Depreciation Expense – This adjustment decreases depreciation expense by \$24,892 to  
15 reflect Staff’s calculation of depreciation expense using Staff’s recommended depreciation  
16 rates and Staff’s recommended plant and CIAC balances.

17  
18 Property Tax Expense – This adjustment increases property tax expense by \$2,563 to  
19 reflect Staff’s calculation of the Company’s property tax expense.

20  
21 Income Tax Expense – This adjustment increases income tax expenses by \$42,256 to  
22 reflect the income tax obligation on Staff’s adjusted test year taxable income.

23  
24 Interest on Customer Security Deposits – This adjustment increases operating expenses by  
25 \$337 consistent with Staff’s recommendation to reflect customer deposits in rate base.

26

1 **ACQUISITION OF WATER PLANT FROM THE CLAUDE K. NEAL FAMILY TRUST**  
2 **TO TRUXTON**

3 **Q. Prior to the test year, did the Commission order Truxton to acquire wells and other**  
4 **plant from the Claude K. Neal Family Trust?**

5 A. Yes. In Decision No. 72386, dated May 27, 2011, the Commission approved a Stipulation  
6 Agreement whereby Truxton agreed to “acquire all water system assets necessary to  
7 provide service from the Trust no later than June 30, 2011.”<sup>2</sup>

8  
9 **Q. Did Staff verify the existence of the plant that was to be transferred from the Trust**  
10 **to Truxton?**

11 A. Yes, Staff witness Dorothy Hains discusses the plant, which includes the wells, in her  
12 direct testimony.

13  
14 **Q. Has the Trust transferred the wells?**

15 A. No, not to Staff’s knowledge.

16  
17 **Q. How did Staff treat the wells for ratemaking purposes?**

18 A. For ratemaking purposes, Staff treated the wells and other plant as if they had been  
19 transferred.

20  
21 **Q. What were Staff’s reasons for treating the wells and other plant as if they had**  
22 **already been transferred?**

23 Staff treated the wells as if they had been transferred because Commission Decision No.  
24 72386 ordered this transfer. The Commission’s Decision actually approved a Stipulation  
25 Agreement wherein this transfer was agreed to by Truxton. Although a rehearing was

---

<sup>2</sup> Page 11, beginning at line 4.

1 granted, this Decision was not stayed or modified, so it remains a valid and final directive  
2 of the Commission, pending a decision on re-hearing.

3  
4 **Q. Are there benefits to customers that would accompany completion of this**  
5 **Commission-ordered asset transfer?**

6 A. Yes, there are two benefits expected to accrue to ratepayers as a result of this asset  
7 transfer:

8 1. It is in the general public interest since the ACC previously reviewed and then  
9 ordered this transfer.

10  
11 2. It eliminates the need to incur purchased water expense since Truxton would not  
12 have incurred such expense after the wells were transferred to the Company as  
13 directed by the Commission.

14  
15 *Establishing a Fair Regulatory Value for the Wells and Other Plant Transferred From the Trust*  
16 *to Truxton*

17 **Q. Who currently owns the wells and other plant that provided water to Truxton's**  
18 **customers during the test year?**

19 A. The Claude K. Neal Family Trust currently owns the wells.

20  
21 **Q. Does the Trust also own Truxton?**

22 A. Yes. According to the Company's updated application filed on February 15, 2013, the  
23 Trust owns all of Truxton's stock.

24  
25  
26

1 **Q. Has the Trust specifically requested reimbursement from Truxton as a condition for**  
2 **consummating this asset transfer?**

3 **A.** A request for reimbursement of \$1.4 million can be inferred from the information  
4 contained in the Company's financing application, Docket No. W-02168A-13-0332. This  
5 financing approval Docket was consolidated with the instant rate docket within the  
6 Commission's Procedural Order dated October 21, 2013.

7

8 **Q. What does the NARUC Guidelines for Cost Allocations and Affiliate transactions**  
9 **state concerning the transfer of assets from an affiliate to the utility?**

10 **A.** The NARUC Guidelines for Cost Allocations and Affiliate transactions states:

11

12 *Generally, transfer of assets from an affiliate to the utility should be at the*  
13 *lower of prevailing market price or net book value, except as otherwise*  
14 *required by law or regulation. (Emphasis added).*

15

16 **Q. What is the net book value of the plant that the Commission ordered to be**  
17 **transferred from the Trust to Truxton?**

18 **A.** Since the plant is fully depreciated, the net book value is zero (\$0).

19

20 **Q. What is the indicated fair price of the plant that should be used to transfer the plant**  
21 **from the Trust to Truxton?**

22 **A.** Consistent with the NARUC Guidelines for Cost Allocations and Affiliate transactions,  
23 the net book value of the plant, which is \$0, should be used.

24

25

26

27

1 **RATE BASE**

2 **FAIR VALUE RATE BASE**

3 **Q. Did the Company prepare schedules showing the elements of Reconstruction Cost**  
4 **New Rate Base?**

5 A. No, the Company did not. The Company's filing treats the OCRB the same as the fair  
6 value rate base.

7

8 **RATE BASE SUMMARY**

9 **Q. Please summarize Staff's adjustments to Truxton's rate base shown on Schedules**  
10 **CSB-3 and CSB-4.**

11 A. Staff's adjustments to Truxton's rate base resulted in a net decrease of \$63,572, from a  
12 negative \$185,698 to a negative \$249,270 due to various adjustments as discussed in  
13 Staff's testimony.

14

15 **RATE BASE ADJUSTMENT NO. 1 –AIAC AND UNSUPPORTED PLANT**

16 **Q. In the instant case, did Staff request invoices to support \$865,257 in plant additions**  
17 **to Account No. 331, Transmission and Distribution Mains?**

18 A. Yes. Staff requested the invoices in data request DH 2.3. The breakdown of the \$865,257  
19 in plant is as follows:

20

Per Company's Response To Data Request DH 2.3	
Test Year End 12/31/99	\$ 63,429
2004 Additions	13,590
2005 Additions	420,343
2006 Additions	205,404
2007 Additions	148,061
2008 Additions	<u>14,430</u>
Test Year End 12/31/99	\$865,257

21

22

1 **Q. Did the Company provide the requested invoices to support the \$865,257 plant**  
2 **additions?**

3 A. No, it did not. The Company stated:

4  
5 The Company believes these additions relate to line extension  
6 agreements mostly since the timing and amounts are similar.

7

8 **Q. Since the Company indicated that the amounts invested in plant and the amounts**  
9 **received as AIAC were similar, was Staff able to identify a similar level of AIAC**  
10 **recorded on the Company's books?**

11 A. Yes. Staff found AIAC totaling \$815,260.

12

13 **Q. Did Staff request the AIAC agreements to support the Company's \$815,260 in**  
14 **reported AIAC?**

15 A. Yes.

16

17 **Q. What did the Company provide?**

18 A. The Company provided AIAC contracts for only \$314,160 of the total \$815,260 in AIAC  
19 from main line agreements. The remaining \$501,100 in AIAC was unsupported.

20

21 **Q. Were the main line extension contracts at issue here approved by the Commission?**

22 A. Staff reviewed its files and records and found no evidence that the contracts were  
23 approved by the Commission.

24

25 **Q. Are AIAC agreements required to be approved by the Utilities Division of the**  
26 **Commission?**

27 A. Yes, Arizona Administrative Code R14-2-406 M states:

28

1 All agreements under this rule shall be filed with and approved by  
2 the Utilities Division of the Commission. No agreement shall be  
3 approved unless accompanied by a Certificate of Approval to  
4 Construct as issued by the Arizona Department of Health Services.  
5 *Where agreements for main extensions are not filed and approved*  
6 *by the Utilities Division, the refundable advance shall be*  
7 *immediately due and payable to the person making the advance.*  
8 *Emphasis added.*

9  
10 **Q. How did Staff treat the AIAC?**

11 A. Since the Company could not provide documentation showing that (1) \$314,160 in plant  
12 financed with AIAC was actually approved by the Commission and (2) the Company  
13 could not provide any documentation to support the remaining \$501,100 in AIAC and (3)  
14 in 2011 the Commission had ordered the Company to file its AIAC agreements for  
15 approval by the Commission and, to date, the Company has not complied, Staff treated all  
16 of the \$815,260 as CIAC.

17  
18 **Q. What is Staff's recommendation?**

19 A. Staff recommends decreasing the AIAC by \$815,260 for ratemaking purposes in order to  
20 treat the AIAC as CIAC as shown on Schedules CSB-4 and CSB-5.

21  
22 **RATE BASE ADJUSTMENT NO. 2 – CONTRIBUTIONS IN AID OF CONSTRUCTION**  
23 **(“CIAC”)**

24 **Q. What did the Company propose for CIAC?**

25 A. The Company proposed \$63,429 for CIAC.

26  
27 **Q. What adjustment did Staff make to the CIAC account?**

28 A. For ratemaking purposes, Staff reflected \$815,260 in unsupported and/or unapproved  
29 AIAC as CIAC as discussed in Rate Base Adjustment No. 1, “AIAC.”

1 **Q. What is Staff's recommendation?**

2 Staff recommends increasing CIAC by \$815,260 to reflect the AIAC that should be  
3 transferred to CIAC as shown on Schedules CSB-4 and CSB-6.

4

5 **RATE BASE ADJUSTMENT NO. 3 – AMORTIZATION OF CIAC**

6 **Q. Did Staff make any adjustments to the amortization of CIAC account?**

7 A. Yes.

8

9 **Q. What was the adjustment?**

10 A. Staff reflected the amortization of CIAC on the Staff recommended CIAC additions.

11

12 **Q. What is Staff's recommendation?**

13 A. Staff recommends increasing the amortization of CIAC by \$13,533, as shown on  
14 Schedules CSB-4 and CSB-7.

15

16 **RATE BASE ADJUSTMENT NO. 4 – CUSTOMER DEPOSITS**

17 **Q. Did Truxton capture customer deposits in its rate base calculation?**

18 A. No, it did not.

19

20 **Q. Are customer deposits normally treated as a reduction to rate base?**

21 A. Yes. Customer deposits are a reduction in the calculation of rate base.

22

23 **Q. Why are customer deposits normally a reduction to rate base?**

24 A. Customer deposits are a reduction to rate base in order to recognize non-investor provided  
25 capital.

26

27

1 **Q. What is Staff's recommendation?**

2 A. Staff recommends decreasing rate base by \$5,618, as shown on Schedules CSB-4 and  
3 CSB-8.

4

5 **RATE BASE ADJUSTMENT NO. 5 – CASH WORKING CAPITAL ALLOWANCE**

6 **Q. What are the components of working capital?**

7 A. The components of working capital are cash working capital ("CWC"), materials and  
8 supplies, and prepaid expenses.

9

10 **Q. Can total working capital be a negative amount that is deducted from rate base?**

11 A. Yes, this can happen when CWC is negative and is larger than the sum of the average  
12 investment made in materials and supplies, and prepayments.

13

14 **Q. In Staff's opinion, does the Company's proposal to include only prepayments in its  
15 working capital allowance represent an inequitable adjustment to rate base?**

16 A. Yes. The Company chose not to conduct a lead-lag study, and accordingly, failed to  
17 reflect any customer-provided capital as part of its working capital requirement.

18

19 It is inequitable for a utility the size of Truxton to calculate its working capital allowance  
20 by ignoring its CWC position. This approach guarantees a positive working capital result  
21 for Truxton. Had a lead-lag study been conducted, it might have shown that the  
22 Company's total net working capital allowance was actually negative, which would have  
23 resulted in a reduction to rate base.

24

25

1 **Q. Has the Commission recently adopted Staff's recommendation to remove the**  
2 **working capital from a Class C water company's rate base because it had not**  
3 **performed a lead-lag study?**

4 A. Yes, the Commission in Decision No. 72429 dated June 24, 2011, (page 7, beginning at  
5 line 16), adopted Staff's recommendation to remove Southland Utilities Company's  
6 working capital because it had not performed a lead-lag study.

7  
8 **Q. What is Staff's recommendation?**

9 A. Staff recommends removing \$71,487 from working capital, as shown on Schedules CSB-4  
10 and CSB-9.

11  
12 **OPERATING INCOME**

13 **OPERATING INCOME SUMMARY**

14 **Q. What are the results of Staff's analysis of test year revenues, expenses and operating**  
15 **income?**

16 A. As shown on Schedules CSB-10 and CSB-11, Staff's analysis resulted in test year  
17 revenues of \$555,294, expenses of \$461,833 and operating income of \$94,091.

18  
19 *Related Party Transactions Related to Operating Expenses*

20 **Q. Mr. Brown, you previously discussed the NARUC Accounting Guidelines related to**  
21 **affiliate transactions involving assets transfers. Do these NARUC Guidelines also**  
22 **related to the costs paid to affiliates for operating expense support?**

23 A. Yes. Generally, the price for such services provided to a related party should be valued at  
24 the lower of fully allocated cost or prevailing market prices. Profits should never be a  
25 recoverable cost. Many of Staff's expense recommendations give consideration to the  
26 affiliate relationship that exists between Truxton and the Trust and to the NARUC  
27 Guidelines related to valuing services being provided through an affiliate.

1 **Q. What is a related party transaction?**

2 A. In general, a related party transaction refers to a company and any other party with which  
3 the company does business where one party has the ability to influence the other to the  
4 extent that one party of the transaction may not pursue its own separate best interest. It is  
5 not an arm's-length bargaining of parties of opposing interests.

6

7 **OPERATING INCOME ADJUSTMENT NO. 1 – PURCHASED WATER EXPENSE**

8 **Q. What amount did Truxton pay to the Trust for purchased water during the test**  
9 **year?**

10 A. During the updated test year (i.e. 2012), Truxton paid the Trust \$147,409 for purchased  
11 water.

12

13 **Q. What adjustment did Staff make to purchased water expense?**

14 A. Consistent with Staff's treatment of the wells as already transferred, discussed in the  
15 "Transfer of Wells" section of Staff's testimony, Staff removed the cost of all water  
16 purchased from operating expenses.

17

18 **Q. What is Staff's recommendation?**

19 A. Staff recommends decreasing purchased water expense by \$147,409 as shown on  
20 Schedules CSB-11 and CSB-12.

21

22 **OPERATING INCOME ADJUSTMENT NO. 2 – REPAIR AND MAINTENANCE**  
23 **EXPENSE**

24 **Q. What was the test year in the Company's original filing?**

25 A. The test year was the year ending June 30, 2011.

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**Q. Was the Company's test year subsequently updated?**

A. Yes, the Company's test year was subsequently updated to the year ending December 31, 2012.

**Q. What was the increase in repair and maintenance expense from the June 30, 2011 test year end to the December 31, 2012 test year end?**

A. Repairs and Maintenance expense increased by \$15,780, from \$21,700 in 2011 to \$37,480 in 2012.

**Q. In addition to providing invoices over \$1,000 for repairs and maintenance for the original test year (CSB 1.18), did the Company provide a general ledger and invoices for the updated test year (i.e. 12/31/2012)?**

A. Yes. However, the Company did not provide all of the required invoices.

**Q. Why are invoices needed?**

A. Invoices are needed:

- To determine that an expense was actually incurred;
- To determine whether a plant cost (e.g., pumping equipment) was incorrectly recorded as a repairs and maintenance expense;
- To determine if the amount on the invoice is the same as the amount included in the repairs and maintenance expense total; and
- To determine that the date of the invoice was within the test year.

1 **Q. Did Staff review the general ledger and supporting invoices for the updated test**  
2 **year?**

3 A. Yes, Staff reviewed the general ledger and supporting invoices and found that the  
4 Company did not provide the invoice for a \$5,962 repairs and maintenance expense  
5 recorded in the general ledger. Therefore, Staff disallowed the amount.  
6

7 **Q. Did Staff have any other audit concerns?**

8 A. Yes, Staff identified a \$175 amount for Sirius Radio which is not needed in the provision  
9 of service. Further, one of the invoices, a \$1,433 Adan Repair invoice, provided in  
10 support of the updated test year repairs and maintenance expense was not incurred within  
11 the updated test year.  
12

13 **Q. What is Staff's recommendation?**

14 A. Staff recommends decreasing repairs and maintenance expense by \$7,471 as shown on  
15 Schedules CSB-11 and CSB-13.  
16

17 **OPERATING INCOME ADJUSTMENT NO. 3 – OUTSIDE SERVICES EXPENSE**

18 **Q. In the original application filed on September 30, 2011, did the Company indicate**  
19 **that it had transitioned the management and operation from the Trust to Truxton?**

20 A. Yes, the Company indicated on page 3, line 23 and page 4, line 2 and line 10 of the  
21 original application that a number of the proforma adjustments were due to the  
22 cancellation of the management contract with the Trust.  
23

24 **Q. Does Staff agree that the management contract with the Trust should be canceled?**

25 A. Yes, due to the many errors and irregularities cited in Decision No. 72386.  
26

1 **Q. What were some of the pro forma adjustments that the Company proposed due to**  
2 **the cancellation of the management contract with the Trust?**

3 A. Under the original filing, the Company proposed to increase Salaries and Wages expense  
4 by approximately \$126,000 and to decrease Outside Services expense by approximately  
5 \$126,000.

6  
7 **Q. How did (1) the Outside Service Expense and (2) the Salaries and Wages Expense**  
8 **that the Company proposed in its June 30, 2011 test year compare to the same**  
9 **expenses in the updated test year?**

10 A. Salaries and wages decreased by \$24,832 and Outside Services increased by \$251,801 as  
11 shown in the table:

12

Comparison of Company Proposed Amounts for June 30, 2011 Test Year and December 31, 2012 Test Year			
	June 30, 2011 Test Year (Original Filing)	Difference	December 31, 2012 (Updated TY)
Salaries & Wages	\$128,952	\$< 24,834>	\$104,118
Outside Services	\$ 14,482	\$ 251,801	\$266,283

13  
14 **Q. Did Staff review the \$266,238 in Outside Services expense reported for the updated**  
15 **test year?**

16 A. Yes. Staff reviewed the general ledger transactions for the Outside services expense.

17  
18 **Q. What did Staff find?**

19 A. Staff found that \$202,891 (or 72.6 percent) of the total \$266,238 outside services charges  
20 were billed from the Trust.

21

1 **Q. Did Staff make a conforming adjustment to outside services expense to reflect the**  
2 **cancellation of the management contract with the Trust as the Company proposed in**  
3 **its original application?**

4 A. Yes, Staff removed \$202,891.

5  
6 **Q. What is Staff's recommendation?**

7 A. Staff recommends decreasing outside services expense by \$202,891 as shown on  
8 Schedules CSB-11 and CSB-14.

9  
10 **OPERATING INCOME ADJUSTMENT NO. 4 – WATER TESTING EXPENSE**

11 **Q. What was the water testing expense for the updated test year?**

12 A. The water testing expense was \$4,846.

13  
14 **Q. What adjustment did Staff make?**

15 A. Staff adjusted annual water testing costs to reflect Staff's recommended \$5,215 water  
16 testing expense as discussed in greater detail by Staff witness Dorothy Hains.

17  
18 **Q. What is Staff's recommendation?**

19 A. Staff recommends increasing water testing expense by \$369 as shown on Schedules CSB-  
20 11 and CSB-15.

21  
22 **OPERATING INCOME ADJUSTMENT NO. 5 – RENTS EXPENSE**

23 **Q. What was the rents expense for the updated test year?**

24 A. The rents expense was \$6,600.

25  
26 **Q. What is the Company's rents expense?**

27 A. The Company's rents expense is \$550 per month or \$6,600 annually.

1 **Q. Did the Company allocate 75 percent of the \$6,600 rents expense to Truxton in its**  
2 **original application filed on September 30, 2011?**

3 A. Yes, Schedule C-2e shows that 75 percent of the \$6,600 rents expense was allocated to  
4 Truxton and 25 percent was allocated to Cerbat.

5  
6 **Q. Did Staff make a 75 percent allocation to Truxton for the updated test year?**

7 A. Yes.

8  
9 **Q. What is Staff's recommendation?**

10 A. Staff's recommends decreasing rents expense by \$1,650 as shown on Schedules CSB-11  
11 and CSB-16.

12  
13 **Operating Income Adjustment No. 6 – Transportation Expense**

14 **Q. Does Truxton lease trucks from the Trust?**

15 A. Yes.

16  
17 **Q. What did the Company propose for Transportation Expense in its original**  
18 **application filed on September 30, 2011?**

19 A. The Company proposed \$35,906 for transportation expense. The amount is composed of  
20 \$13,168 in actual test year (i.e. 2011) expense and a \$22,738 pro forma adjustment.

21  
22 **Q. Did Staff have concerns about the calculation of the \$22,738 pro forma adjustment**  
23 **shown on Schedule C-2f?**

24 A. Yes, Staff is concerned about the profit included in the vehicle lease payments made to the  
25 Trust for one of the trucks made available to the Company. According to the Company's  
26 response to CSB 3.20, the Company leases three trucks from the Trust: a 2011 Dodge  
27 Ram 2500 Mega Cab; a 2008 Dodge Ram 2500 Mega Cab; and a 2005 Chevrolet

1 Silverado. Two of the three trucks have loan balances owed; the 2011 and 2008 Dodge  
2 Rams. The third vehicle, the 2005 Chevrolet Silverado, appears to be fully paid for.  
3 Continuing to require Truxton to make lease payments on a vehicle that has been fully  
4 paid for could lead to overpayment for this vehicle and to the receipt of profit on the  
5 investment originally made in this vehicle.

6  
7 Profit is the difference between the fully allocated cost of an item and the amount in which  
8 it is sold (or leased). Consequently, Staff is concerned because the Trust has little or no  
9 cost associated with the 2005 Chevrolet Silverado because there is no balance owed.  
10 Moreover, Truxton is responsible for all repairs, maintenance, fuel, registration costs and  
11 any other expense related to the truck. The Commission generally disallows affiliate  
12 profit as a parent company's allowed rate of return from its investment in a regulated  
13 utility could be increased by the level of profit that is included in its regulated affiliate's  
14 operating expenses.

15  
16 **Q. What adjustment did Staff make?**

17 A. Staff removed the lease cost for the 2005 Chevy Silverado.

18  
19 **Q. What is Staff's recommendation?**

20 A. Staff recommends decreasing transportation expense by \$2,700, as shown on Schedules  
21 CSB-11 and CSB-17.

22  
23 **OPERATING INCOME ADJUSTMENT NO. 7 – DEPRECIATION EXPENSE**

24 **Q. What is Truxton proposing for depreciation expense?**

25 A. Truxton is proposing depreciation expense of \$34,471.  
26  
27

1 **Q. What adjustment did Staff make to depreciation expense?**

2 A. Staff adjusted depreciation expense to reflect Staff's calculation of depreciation expense  
3 using Staff's recommended depreciation rates, plant balances, and CIAC balances. Staff's  
4 calculation is shown on Schedule CSB-18.

5  
6 **Q. What is Staff's recommendation?**

7 A. Staff recommends decreasing depreciation expense by \$24,892, as shown on Schedules  
8 CSB-11 and CSB-18.

9  
10 **OPERATING INCOME ADJUSTMENT NO. 8 – PROPERTY TAXES**

11 **Q. What is Truxton proposing for property taxes?**

12 A. Truxton is proposing \$16,240 for property taxes.

13  
14 **Q. Did Staff make any adjustment to the property taxes?**

15 A. Yes. Staff's adjustment reflects Staff's calculation of the property tax expense using the  
16 modified Arizona Department of Revenue Methodology applied to Staff's recommended  
17 revenues, as shown on Schedule CSB-19.

18  
19 **Q. What is Staff's recommendation?**

20 A. Staff recommends increasing property tax expense by \$2,563 as shown on Schedules  
21 CSB-11 and CSB-19.

22  
23 **OPERATING INCOME ADJUSTMENT NO. 9 – INCOME TAXES**

24 **Q. What is Truxton proposing for test year income tax expense?**

25 A. Truxton is proposing no income tax expense.  
26  
27

1 **Q. Did Staff make any adjustments to test year income tax expense?**

2 A. Yes. Staff's adjustment reflects Staff's calculation of the income tax expense based upon  
3 Staff's adjusted test year taxable income.

4  
5 **Q. What is Staff's recommendation?**

6 A. Staff recommends increasing income tax expense by \$42,451 as shown on Schedules  
7 CSB-11 and CSB-20.

8  
9 **OPERATING INCOME ADJUSTMENT NO. 10 – INTEREST EXPENSE ON**  
10 **CUSTOMER DEPOSITS**

11 **Q. Does the Arizona Administrative Code require that regulated water companies pay**  
12 **interest expense on customer deposits?**

13 A. Yes. Arizona Administrative Code R-14-2-403(B) requires regulated water companies to  
14 pay interest expense on customer deposits.

15  
16 **Q. Did Staff make an adjustment to provide for this requirement?**

17 A. Yes.

18  
19 **Q. What is Staff's recommendation?**

20 A. Staff recommends increasing interest expense on customer deposits by \$337 as shown on  
21 Schedules CSB-11 and CSB-21.

22  
23 **FINANCING**

24 **Q. Did the Company file a financing application?**

25 A. Yes, the Company is seeking Commission approval of a \$1,819,208 loan from the Water  
26 Infrastructure Financing Authority ("WIFA"). This financing application was assigned  
27 Docket No. 13-0332.

1 **Q. Was the financing application consolidated with the rate application?**

2 A. Yes, as previously noted, the financing application was consolidated with the rate  
3 application by Procedural Order dated October 21, 2013.

4  
5 **Q. What is the stated purpose of this \$1,819,208 loan?**

6 A. The purpose of the loan, as indicated in the application, is (1) to obtain approximately  
7 \$419,208 for the cost of acquiring and installing arsenic treatment plant and (2) to obtain  
8 \$1,400,000 to fund the acquisition of wells and pipeline currently owned by the Trust.

9  
10 **Q. What portion of the loan does Staff recommend approval?**

11 A. Staff recommends approval of \$259,280 of the loan related to the construction of the  
12 arsenic treatment plant as discussed in greater detail by Staff witnesses, Dorothy Hains.

13  
14 **Q. Are the final details of the WIFA loan known at this time?**

15 A. No, the final details of the WIFA loan will not be known until after the Company has  
16 closed on the loan; therefore, Staff is recommending the approval of a surcharge  
17 mechanism.

18  
19 **Q. What is the surcharge mechanism and how is it implemented?**

20 A. The surcharge mechanism establishes the methodology for calculating the surcharge  
21 amount. To collect the surcharge, the Company would submit a surcharge application to  
22 the Commission under this Docket, using the methodology Staff has defined in this  
23 Report, once Truxton has closed on the loan and has drawn funds to begin construction of  
24 the plant.

25

26

1 **Q. Has Staff calculated an estimated surcharge based upon the preliminary details and**  
2 **customer counts?**

3 A. Yes, Staff calculated a surcharge of \$2.15<sup>3</sup> for a ¾-Inch meter customer. Staff  
4 recommends that the Company calculate the surcharge needed to provide funds for the  
5 debt service on this \$259,280 loan as shown on Schedule CSB-24.

6  
7 **Q. What are Staff's recommendations concerning the surcharge mechanism?**

8 A. Staff's recommendations are as follows:

- 9  
10 1. Approval of the Company's request to borrow up to \$259,280 from WIFA for the  
11 purpose of financing the construction of arsenic treatment plant.  
12  
13 2. Approval of a WIFA Loan Surcharge mechanism that is expected to result in a  
14 surcharge of \$2.15 per month.  
15  
16 3. That the Company file with the Commission a WIFA loan surcharge tariff that would  
17 enable the Company to meet its principal, interest, and tax obligations on the proposed  
18 WIFA loan.  
19  
20 4. That the Company follow the same methodology presented on Schedule CSB-24 to  
21 calculate the additional revenue needed to meet its principal, interest, debt reserve, and  
22 tax obligations on the proposed WIFA loan using the actual loan amount, interest rate  
23 and customer counts.  
24  
25 5. That the Company make a WIFA loan surcharge filing within 15 days of the loan  
26 closing.  
27  
28 6. That the Company place the WIFA loan surcharge proceeds in a segregated account,  
29 to be used only for making payments on the WIFA loan and the annual income taxes  
30 related to the loan as shown on CSB-24, page 1, line 39.  
31  
32 7. That the Company file a rate case no later than May 31, 2018 with a December 31,  
33 2017 test year.  
34  
35 8. Approval of the loan and surcharge be rescinded if the Company has not drawn funds  
36 from the loan within one year of the date of the Decision resulting from this  
37 proceeding.  
38

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<sup>3</sup> based upon preliminary loan details and customer counts

1           9. That the Company notify its customers of the WIFA Loan Surcharge by means of a  
2           bill insert in the next regularly scheduled billing after the Commission's decision in  
3           this proceeding.  
4

5           **Q.    What is Staff recommending with regards to the Company's request to borrow \$1.4**  
6           **million to fund the purchase of wells and pipelines currently owned by the Trust?**

7           A.    Staff recommends that this portion of the Truxton financing approval request be denied.  
8

9           **Q.    What is the basis for Staff's denial recommendation?**

10          A.    The basis for Staff's denial recommendation is centered on the fact that the underlying  
11          wells and pipeline investments have been used to provide utility service to Truxton's  
12          current customer base for many years and these assets are fully depreciated, and  
13          requirement ratepayers to fund these investments a second time through the direct or  
14          indirect repayment of this new loan would represent a double recovery from ratepayers.  
15

16          **INTERIM MANAGER**

17          **Q.    What did Decision No. 72386 state concerning appointment of an interim manager**  
18          **for Truxton Canyon?**

19          A.    Decision No. 72386, on page 11, line 3 ½, states

20                                 Staff may appoint an Interim Manager for Truxton, without further  
21                                 action by the Commission, if Truxton is not fully in compliance  
22                                 with all Commission and ADEQ rules and regulations by  
23                                 September 30, 2011, or the compliance deadlines established in the  
24                                 ADEQ Consent Order, whichever comes later.  
25

26  
27          **Q.    Does Staff recommend appointment of an interim manager at this time?**

28          A.    No, not at this time. However, Staff recommends that the opportunity for Staff to appoint  
29          an interim manager without further action by the Commission be reaffirmed for future  
30          application.  
31

1 **REVENUE REQUIREMENT**

2 **Q. Did Staff use the rate base/rate of return methodology to determine the Company's**  
3 **revenue requirement?**

4 A. No. The Company has a negative rate base which would result in a negative return on rate  
5 base. A negative return on rate base is not meaningful and, therefore, Staff did not use the  
6 rate base/rate of return methodology.

7  
8 **Q. What methodology did Staff use?**

9 A. Staff used the cash flow methodology as the owner's investment in Truxton's water  
10 system plant is not sufficient to provide the revenue needed to pay for a reasonable level  
11 of contingencies. Staff's total revenue requirement of \$483,174 provides the Company  
12 with sufficient cash flow to pay operating expenses and contingencies.

13  
14 **RATE DESIGN**

15 **Q. Has Staff prepared a schedule summarizing the present, Company proposed, and**  
16 **Staff recommended rates and service charges?**

17 A. Yes. Schedule CSB-22 provides a summary of the Company's present, Company's  
18 proposed, and Staff's recommended rates.

19  
20 **Q. Please summarize the present rate design.**

21 A. Customer class is distinguished by meter size. The monthly minimum charges vary by  
22 meter size and include no gallons. The commodity rates are based on an inverted three-  
23 tier rate design.

24  
25 **Q. Please summarize the Company's proposed rate design.**

26 A. Customer class is distinguished by meter size. The monthly minimum charges vary by  
27 meter size and include no gallons. The commodity rates are based on an inverted three-

1 tier rate design. The Company's proposed rates would increase the typical residential 3/4-  
2 inch meter bill with a median usage of 3,754 gallons from \$24.94 to \$40.39, for an  
3 increase of \$15.45 or 61.94 percent, as shown on Schedule CSB-23.

4  
5 **Q. Please summarize Staff's recommended rate design.**

6 A. Customer class is distinguished by meter size. The monthly minimum charges vary by  
7 meter size and include no gallons. The commodity rates are based on an inverted three-  
8 tier rate design. Staff's recommended rates would decrease the typical residential 3/4-inch  
9 meter bill with a median usage of 3,754 gallons from \$24.94 to \$19.26, for a decrease of  
10 \$5.68 or 22.79 percent, as shown on Schedule CSB-23.

11  
12 **Q. Did the Company propose any changes to its Meter and Service Line Charges?**

13 A. Yes, and Staff recommends approval. Both the Company proposed and the Staff  
14 recommended changes are shown on Schedule CSB-22 and are discussed in greater detail  
15 in the testimony of Staff witness, Dorothy Hains.

16  
17 **SERVICE CHARGES**

18 **Q. Did the Company propose any changes to the service charges?**

19 A. Yes. The Company proposes to increase the Establishment charge from \$45.00 to \$50.00;  
20 eliminate the Establishment (After Hours) charge; increase the Reconnection (Delinquent)  
21 charge from \$65.00 to \$70.00; eliminate the Reconnection (Delinquent/After Hours)  
22 charge; increase the Meter Test (If Correct) charge from \$35.00 to \$40.00; eliminate the  
23 Re-establishment (Delinquent/After Hours) charge; increase the NSF Check charge from  
24 \$15.00 to \$25.00; increase the Meter Re-Read (If Correct) charge from \$15.00 to \$25.00;  
25 increase the Call Out charge from \$25.00 to \$35.00; add an After Hours Service Charge of  
26 \$25.00; and to eliminate its fire sprinkler service charges.

1 **Q. Does Staff agree with the Company proposed increase to its Call Out service charge?**

2 **A.** No. Staff recommends that the Call Out service charge be eliminated as the services  
3 currently provided by the Call Out service charge will now be covered under the *new*  
4 After Hours Service Charge thus eliminating the possibility of duplicate charges.

5  
6 **Q. Does Staff agree with the Company proposed elimination of the Establishment (After**  
7 **Hours) charge; the Reconnection (Delinquent/After Hours) charge; and the Re-**  
8 **establishment (Delinquent/After Hours) charge?**

9 **A.** Yes. Staff recommends that the Establishment (After Hours) charge; the Reconnection  
10 (Delinquent/After Hours) charge; and the Re-establishment (Delinquent/After Hours)  
11 charge should be eliminated.

12  
13 **Q. Does Staff agree with the Company proposed addition of the After Hours Service**  
14 **Charge?**

15 **A.** Yes, Staff agrees that an After-Hours charge should be added. However, Staff  
16 recommends a charge of \$30, rather than the Company proposed charge of \$25. Staff  
17 agrees that an additional fee for service provided after normal business hours is  
18 appropriate when such service is at the customer's request. Such a tariff compensates the  
19 utility for additional expenses incurred from providing after-hours service.

20  
21 Moreover, Staff concludes that it is appropriate to apply an after-hours service charge in  
22 addition to the charge for any utility service provided after hours at the customer's request.  
23 For example, under Staff's proposal, a customer would be subject to a \$45.00  
24 Establishment fee if it is done during normal business hours, but would pay an additional  
25 \$30.00 after-hours fee if the customer requested that the establishment be done after  
26 normal business hours.

27

- 1     **Q.     Does Staff agree with the Company proposed Meter Test (If Correct) charge of \$40?**
- 2     **A.     No, Staff recommends a Meter Test (If Correct) charge of \$25.00 as it is within the range**  
3     **of established charges for similar water utilities.**
- 4
- 5     **Q.     Does Staff agree with the Company-proposed Meter Re-read (If Correct) charge of**  
6     **\$25?**
- 7     **A.     No, Staff recommends a Meter Re-read (If Correct) charge of \$20.00 as it is within the**  
8     **range of established charges for similar water utilities.**
- 9
- 10    **Q.     Does Staff agree with the Company proposed Establishment charge of \$50.00?**
- 11    **A.     No, Staff does not. Staff recommends continuation of the Company's present charge of**  
12    **\$45.00 as it is within the range of established charges for similar water utilities.**
- 13
- 14    **Q.     Does Staff agree with the Company proposed Reconnection (Delinquent) charge of**  
15    **\$70?**
- 16    **A.     No, Staff does not. Staff recommends a charge of \$45.00 (i.e., the same as the**  
17    **Establishment Charge) since the amount of work needed to perform a reconnection is less**  
18    **than that required to perform an establishment of service.**
- 19
- 20    **Q.     Does Staff agree with the Company proposed NSF Check charge of \$25.00?**
- 21    **A.     No, Staff does not. Staff recommends continuation of the Company's present charge of**  
22    **\$15.00 as the Company was unable to provide documentation from its bank to support the**  
23    **increase.**
- 24
- 25
- 26
- 27

1 **Q. Does Staff agree with the Company proposed elimination of its fire sprinkler rates?**

2 A. No, Staff does not. Providing Fire Sprinkler service is in the public interest and  
3 continuation of the fire sprinkler tariff would allow the Company to recover the cost  
4 associated with providing that service.

5  
6 **Q. What is Staff's recommended fire sprinkler rate?**

7 A. Staff's recommended fire sprinkler rate is two percent of the monthly minimum for  
8 comparable sized meters, but not less than \$10.00 per month. Staff's recommendation  
9 reflects the increase in cost of providing this service to customers

10

11 **TERMS AND CONDITIONS**

12 **Q. Did the Company file for approval of a revision of its existing Terms and Conditions**  
13 **of water service?**

14 A. Yes, the Company filed an application to revise its existing Terms and Conditions on  
15 October 11, 2013.

16

17 **Q. Has Staff reviewed the Company's proposed Terms and Conditions?**

18 A. Yes.

19

20 **Q. Did the Company cite an incorrect rule in section C.3 of its Terms and Conditions?**

21 A. Yes. The Company cited rule A.A.C. R15-2-410.B.1.a in section C.3, which is incorrect.  
22 The correct rule is R14-2-410.B.1.a. Staff recommends that the Company make this  
23 correction.

24

25

26

1 **Q. Should the Company add the After Hours service charge definition and Staff's**  
2 **language to the Terms and Conditions?**

3 A. Yes, the Company should add the After Hours service charge definition. Further Staff's  
4 language should be added in order to explain how the charge is to be implemented.

5  
6 **Q. What language does Staff recommend?**

7 A. Staff recommends the following language be added to the Company's Terms and  
8 Conditions of Service Tariff under III insert B. After-Hours Service Charge:

9  
10 The After-Hours Service Charge fee is for service provided after  
11 normal business hours and appropriate when such service is at the  
12 customer's request or for the customer's convenience. Such a tariff  
13 compensates the utility for additional expenses incurred from  
14 providing after-hours service. For example, a customer would be  
15 subject to an Establishment fee if work is done during normal  
16 business hours, but would pay an additional After-Hours Service  
17 Charge if the customer requested the establishment be done after  
18 normal business hours.

19  
20 **Does this conclude Staff's direct testimony?**

21 A. Yes, it does.

**REVENUE REQUIREMENT**

LINE NO.	DESCRIPTION	[A] COMPANY ORIGINAL COST	[B] STAFF ORIGINAL COST
1	Adjusted Rate Base	\$ (185,698)	\$ (249,270)
2	Adjusted Operating Income (Loss)	\$ (247,201)	\$ 94,091
3	Current Rate of Return (L2 / L1)	Not Meaningful	Not Meaningful
4	Current Operating Margin Percentage	Not Meaningful	Not Applicable
5a	Proposed Operating Margin - Per Company	\$ 95,000	Not Applicable
5b	Operating Income (Cash Flow Methodology) - Per Staff	Not Applicable	\$ 50,000
6	Operating Income Deficiency/(Excess) (L5 - L2)	*Not Updated	\$ (44,091)
7	Gross Revenue Conversion Factor	*Not Updated	1.65000
8	Increase (Decrease) In Gross Revenue (L7 * L6)	\$ 300,000	\$ (72,750)
9	Adjusted Test Year Revenue	\$ 555,924	\$ 555,924
10	Proposed Annual Revenue (L8 + L9)	\$ 855,924	\$ 483,174
11	Required Increase/(Decrease in Revenue) (%) (L8/L9)	53.96%	-13.09%
12	Proposed Operating Margin	11.10%	10.35%
13	Depreciation Expense	\$ 34,471	\$ 9,579
14a	Cash Flow (L5a + 13)	\$ 129,471	Not Applicable
14b	Cash Flow (L5b + 13)	Not Applicable	\$ 59,579

\*The Company did not update information when it filed updates to its application on February 15, 2013.

References:

Column [A]: Company's Application, Pages 15 and 19.  
Column [B]: Staff Schedules CSB-2, CSB-3, & CSB-9

**GROSS REVENUE CONVERSION FACTOR**

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)																																																												
<u>Calculation of Gross Revenue Conversion Factor:</u>																																																																	
1	Revenue	100.0000%																																																															
2	Uncollectible Factor (Line 11)	0.0000%																																																															
3	Revenues (L1 - L2)	100.0000%																																																															
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	39.3938%																																																															
5	Subtotal (L3 - L4)	60.6062%																																																															
6	<b>Revenue Conversion Factor (L1 / L5)</b>	<b>1.649996</b>																																																															
<u>Calculation of Uncollectible Factor:</u>																																																																	
7	Unity	100.0000%																																																															
8	Combined Federal and State Tax Rate (Line 17)	38.6789%																																																															
9	One Minus Combined Income Tax Rate (L7 - L8)	61.3211%																																																															
10	Uncollectible Rate	0.0000%																																																															
11	Uncollectible Factor (L9 * L10)	0.0000%																																																															
<u>Calculation of Effective Tax Rate:</u>																																																																	
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%																																																															
13	Arizona State Income Tax Rate	6.9680%																																																															
14	Federal Taxable Income (L12 - L13)	93.0320%																																																															
15	Applicable Federal Income Tax Rate (Line 53)	34.0860%																																																															
16	Effective Federal Income Tax Rate (L14 x L15)	31.7109%																																																															
17	Combined Federal and State Income Tax Rate (L13 +L16)		38.6789%																																																														
<u>Calculation of Effective Property Tax Factor</u>																																																																	
18	Unity	100.0000%																																																															
19	Combined Federal and State Income Tax Rate (L17)	38.6789%																																																															
20	One Minus Combined Income Tax Rate (L18-L19)	61.3211%																																																															
21	Property Tax Factor	1.1659%																																																															
22	Effective Property Tax Factor (L20*L21)		0.7149%																																																														
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			39.3938%																																																													
24	Required Operating Income	\$ 50,000																																																															
25	Adjusted Test Year Operating Income (Loss)	94,091																																																															
26	Required Increase in Operating Income (L24 - L25)		\$ (44,091)																																																														
27	Income Taxes on Recommended Revenue (Col. [C], L52)	\$ 14,640																																																															
28	Income Taxes on Test Year Revenue (Col. [A], L52)	42,451																																																															
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		(27,811)																																																														
30	Recommended Revenue Requirement	\$ 483,174																																																															
31	Uncollectible Rate (Line 10)	0.0000%																																																															
32	Uncollectible Expense on Recommended Revenue (L30*L31)	\$ -																																																															
33	Adjusted Test Year Uncollectible Expense	\$ -																																																															
34	Required Increase in Revenue to Provide for Uncollectible Exp. (L32-L33)																																																																
35	Property Tax with Recommended Revenue	\$ 17,955																																																															
36	Property Tax on Test Year Revenue	18,803																																																															
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		(848)																																																														
38	Total Required Increase in Revenue (L26 + L29 + L34 + L37)		<u>\$ (72,750)</u>																																																														
<table border="0" style="width: 100%;"> <thead> <tr> <th></th> <th style="text-align: right;">Staff Test Year Adjusted Rev</th> <th></th> <th style="text-align: right;">Staff Adjusted</th> </tr> </thead> <tbody> <tr> <td>39</td> <td style="text-align: right;">\$ 555,924</td> <td style="text-align: right;">\$ (72,750)</td> <td style="text-align: right;">\$ 483,174</td> </tr> <tr> <td>40</td> <td style="text-align: right;">\$ 419,045</td> <td style="text-align: right;">\$ (848)</td> <td style="text-align: right;">\$ 418,197</td> </tr> <tr> <td>41</td> <td style="text-align: right;">\$ -</td> <td></td> <td style="text-align: right;">\$ -</td> </tr> <tr> <td>42</td> <td style="text-align: right;">\$ 136,879</td> <td></td> <td style="text-align: right;">\$ 64,977</td> </tr> <tr> <td>43</td> <td style="text-align: right;">6,9680%</td> <td></td> <td style="text-align: right;">6,9680%</td> </tr> <tr> <td>44</td> <td style="text-align: right;">\$ 9,538</td> <td></td> <td style="text-align: right;">\$ 4,528</td> </tr> <tr> <td>45</td> <td style="text-align: right;">\$ 127,341</td> <td></td> <td style="text-align: right;">\$ 60,450</td> </tr> <tr> <td>46</td> <td style="text-align: right;">\$ 7,500</td> <td></td> <td style="text-align: right;">\$ 7,500</td> </tr> <tr> <td>47</td> <td style="text-align: right;">\$ 6,250</td> <td></td> <td style="text-align: right;">\$ 2,612</td> </tr> <tr> <td>48</td> <td style="text-align: right;">\$ 8,500</td> <td></td> <td style="text-align: right;">\$ -</td> </tr> <tr> <td>49</td> <td style="text-align: right;">\$ 10,663</td> <td></td> <td style="text-align: right;">\$ -</td> </tr> <tr> <td>50</td> <td style="text-align: right;">\$ -</td> <td></td> <td style="text-align: right;">\$ -</td> </tr> <tr> <td>51</td> <td style="text-align: right;">\$ 32,913</td> <td></td> <td style="text-align: right;">\$ 10,112</td> </tr> <tr> <td>52</td> <td style="text-align: right;">\$ 42,451</td> <td></td> <td style="text-align: right;">\$ 14,640</td> </tr> </tbody> </table>							Staff Test Year Adjusted Rev		Staff Adjusted	39	\$ 555,924	\$ (72,750)	\$ 483,174	40	\$ 419,045	\$ (848)	\$ 418,197	41	\$ -		\$ -	42	\$ 136,879		\$ 64,977	43	6,9680%		6,9680%	44	\$ 9,538		\$ 4,528	45	\$ 127,341		\$ 60,450	46	\$ 7,500		\$ 7,500	47	\$ 6,250		\$ 2,612	48	\$ 8,500		\$ -	49	\$ 10,663		\$ -	50	\$ -		\$ -	51	\$ 32,913		\$ 10,112	52	\$ 42,451		\$ 14,640
	Staff Test Year Adjusted Rev		Staff Adjusted																																																														
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52	\$ 42,451		\$ 14,640																																																														
53	Applicable Federal Income Tax Rate [Col. [C], L51 - Col. [A], L51] / [Col. [C], L45 - Col. [A], L45]			34.0860%																																																													
<u>Calculation of Interest Synchronization:</u>																																																																	
54	Rate Base	\$ (249,270)																																																															
55	Weighted Average Cost of Debt	0.0000%																																																															
56	Synchronized Interest (L45 X L46)	\$ -																																																															

**RATE BASE - ORIGINAL COST**

LINE NO.		(A)	(B)	ADJ NO.	(C)
		COMPANY AS FILED	STAFF ADJUSTMENTS		STAFF AS ADJUSTED
1	Plant in Service	\$ 1,167,400	\$ -		\$ 1,167,400
2	Less: Accumulated Depreciation	552,737	-		552,737
3	Net Plant in Service	<u>\$ 614,663</u>	<u>\$ -</u>		<u>\$ 614,663</u>
<u>LESS:</u>					
4	Advances in Aid of Construction (AIAC)	\$ 815,260	\$ (815,260)	1	\$ -
5	Service Line and Meter Advances	\$ 56,588	\$ -		\$ 56,588
6	Total AIAC	<u>\$ 871,848</u>	<u>\$ (815,260)</u>		<u>\$ 56,588</u>
7	Contributions in Aid of Construction (CIAC)	\$ 63,429	\$ 815,260	2	\$ 878,689
8	Less: Accumulated Amortization	63,429	13,533	3	76,962
9	Net CIAC	<u>\$ -</u>	<u>801,727</u>		<u>\$ 801,727</u>
10	Total Advances and Contributions	\$ 871,848	\$ (13,533)		\$ 858,315
11	Customer Deposits	\$ -	\$ 5,618	4	\$ 5,618
12	Accumulated Deferred Income Taxes	\$ -	\$ -		\$ -
<u>ADD:</u>					
13	Cash Working Capital Allowance	\$ 71,487	\$ (71,487)	5	\$ (0)
14	Materials and Supplies Inventories	\$ -	\$ -		\$ -
15	Prepayments	\$ -	\$ -		\$ -
16	<b>Total Rate Base</b>	<u>\$ (185,698)</u>	<u>\$ (63,572)</u>		<u>\$ (249,270)</u>

References:

Column [A] Company's Application, Pages 14, 15, 22, 24, & 25  
Column [B]: Schedule CSB-4  
Column [C]: Column [A] + Column [B]

SUMMARY OF RATE BASE ADJUSTMENTS

LINE NO.	PLANT IN SERVICE	[A]	[B]	[C]	[D]	[E]	[F]	[G]
		COMPANY AS FILED	Adj No. 1 AIAC Ref: Sch CSB-5	Adj No. 2 CIAC Ref: Sch CSB-6	Adj No. 3 Amortization of CIAC Ref: Sch CSB-7	Adj No. 4 Customer Deposits Ref: Sch CSB-8	Adj No. 5 Cash Working Capital Allowance Ref: Sch CSB-9	STAFF AS ADJUSTED
1	301 Organization	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2	303 Land and Land Rights	20	-	-	-	-	-	20
3	304 Structures and Improvements	159	-	-	-	-	-	159
4	305 Collecting and Impound Reservoirs	-	-	-	-	-	-	-
5	307 Wells and Springs	19,791	-	-	-	-	-	19,791
6	309 Supply Mains	-	-	-	-	-	-	-
7	311 Pumping Equipment	11,462	-	-	-	-	-	11,462
8	320.1 Water Treatment Plants	-	-	-	-	-	-	-
9	320.2 Water Treatment, Solution Chemical Feeders	-	-	-	-	-	-	-
10	330 Distribution Reservoirs and Standpipes	-	-	-	-	-	-	-
11	331 Transmission and Distribution Mains	865,257	-	-	-	-	-	865,257
12	333 Services	64,236	-	-	-	-	-	64,236
13	334 Meters and Meter Installations	206,069	-	-	-	-	-	206,069
14	335 Hydrants	-	-	-	-	-	-	-
15	336 Backflow Prevention Devices	-	-	-	-	-	-	-
16	339 Other Plant and Miscellaneous Equipment	406	-	-	-	-	-	406
17	340 Office Furniture and Equipment	-	-	-	-	-	-	-
18	340.1 Computers and Software	-	-	-	-	-	-	-
19	341 Transportation Equipment	-	-	-	-	-	-	-
20	343 Tools, Shop, and Garage Equipment	-	-	-	-	-	-	-
21	345 Power Operated Equipment	-	-	-	-	-	-	-
22	346 Communication Equipment	-	-	-	-	-	-	-
23	347 Miscellaneous Equipment	-	-	-	-	-	-	-
24	Rounding	-	-	-	-	-	-	-
25	Total Plant in Service	\$ 1,167,400	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,167,400
26	Less: Accumulated Depreciation	\$ 552,737	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 552,737
27	Net Plant in Service	\$ 614,663	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 614,663
28								
29	<u>LESS:</u>							
30	Advances in Aid of Construction (AIAC)	\$ 815,260	\$ (815,260)	\$ -	\$ -	\$ -	\$ -	\$ -
31	Meter Deposits - Service Line & Meter Advances	\$ 56,588	-	-	-	-	-	\$ 56,588
32	Total AIAC	\$ 871,848	\$ (815,260)	\$ -	\$ -	\$ -	\$ -	\$ 56,588
33								
34	Contributions in Aid of Construction (CIAC)	\$ 63,429	-	815,260	-	-	-	\$ 878,689
35	Less: Accumulated Amortization of CIAC	\$ 63,429	-	-	13,533	-	-	\$ 76,962
36	Net CIAC	\$ -	\$ -	\$ 815,260	\$ (13,533)	\$ -	\$ -	\$ 801,727
37								
38	Total Advances and Net Contributions	\$ 871,848	\$ (815,260)	\$ 815,260	\$ (13,533)	\$ -	\$ -	\$ 858,315
39								
40	Customer Deposits	\$ -	-	-	-	5,618	-	\$ 5,618
41	Accumulated Deferred Taxes	\$ -	-	-	-	-	-	\$ -
42								
43	<u>ADD:</u>							
44	Cash Working Capital Allowance	\$ 71,487	-	-	-	-	(71,487)	\$ (0)
45	Materials and Supplies Inventories	\$ -	-	-	-	-	-	\$ -
46	Prepayments	\$ -	-	-	-	-	-	\$ -
47	Total Rate Base	\$ (185,698)	\$ 815,260	\$ (815,260)	\$ 13,533	\$ (5,618)	\$ (71,487)	\$ (249,270)

RATE BASE ADJUSTMENT NO. 1 - AIAC

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	AIAC	\$ 815,260	\$ -	\$ 815,260
2	To Transfer Unapproved AIAC to CIAC	\$ -	\$ (815,260)	\$ (815,260)
3	Total	\$ 815,260	\$ (815,260)	\$ -

References:

- Column [A]: Company's Updated Rate Case Data (Page 24 of Application)
- Column [B]: Testimony, CSB
- Column [C]: Column [A] + Column [B]

RATE BASE ADJUSTMENT NO. 2 - CIAC

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	CIAC	\$ 63,429	\$ -	\$ 63,429
2	To Treat Unapproved AIAC as CIAC	\$ -	\$ 815,260	\$ 815,260
3	<b>Total</b>	<b>\$ 63,429</b>	<b>\$ 815,260</b>	<b>\$ 878,689</b>

References:

- Column [A]: Company's Updated Rate Case Data (Page 22 of Application)
- Column [B]: Testimony, CSB
- Column [C]: Column [A] + Column [B]

**RATE BASE ADJUSTMENT NO. 3 - AMORTIZATION OF CIAC**

LINE NO.	DESCRIPTION	[A]	[B]	[C]	
		Per Company	Staff's Adjustment	Per Staff	
1	Amortization for Existing CIAC	\$ 63,429	\$ -	\$ 63,429	
2	Amortization for AIAC treated as CIAC	-	13,533	13,533	
3	<b>Total</b>	<b>\$ 63,429</b>	<b>\$ 13,533</b>	<b>\$ 76,962</b>	
4					
5					
6	<b>CALCULATION OF AMORTIZATION OF CIAC</b>				
7		Year	Number	CIAC	
8	<b>Schedule</b>	Unapproved	Transferred	Amortization Rate	Amortization of
9	<b>Reference</b>	AIAC	<b>To CIAC</b>	<b>Sch B-2.1, P.12</b>	<b>CIAC</b>
10	Schedule CSB-6	\$ 815,260	2011	0.5	3.32% \$ 13,533

References:

- Column A: Company's Application, Page 24
- Column B: Testimony, CSB
- Column C: Column [A] + Column [B]

**RATE BASE ADJUSTMENT NO. 4 - CUSTOMER DEPOSITS**

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		Per Company	Staff's Adjustment	Per Staff
1	Customer Deposits	\$ -	\$ -	\$ -
2	To Reflect Customer Deposits	\$ -	\$ 5,618	\$ 5,618
3	Total	\$ -	\$ 5,618	\$ 5,618

References:

- Column A: Company's Updated Rate Application, Page 22
- Column B: Testimony, CSB
- Column C: Column [A] + Column [B]

**RATE BASE  
ADJUSTMENT NO. 5 - CASH WORKING CAPITAL ALLOWANCE**

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		PER COMPANY	ADJUSTMENT	PER STAFF
1	Cash Working Capital Allowance	\$ 71,487	\$ (71,487)	\$ -

References:

- Column A: Company Schedule B-2 updated with 2012 data
- Column B: Testimony, CSB
- Column C: Column [A] + Column [B]

**OPERATING INCOME - TEST YEAR AND STAFF RECOMMENDED**

Line No.	Acct. No.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR ADJ AS NO. ADJUSTED	[D] STAFF PROPOSED CHANGES	[E] STAFF ADJUSTED
1		<b>REVENUES:</b>					
2	461	Metered Water Revenue	\$ 540,429	\$ -	\$ 540,429	\$ (72,750)	\$ 467,679
3	460	Unmetered Water Revenue	-	-	-	-	-
4	474	Other Water Revenues	15,495	-	15,495	-	15,495
5		<b>Total Revenues</b>	<u>\$ 555,924</u>	<u>\$ -</u>	<u>\$ 555,924</u>	<u>\$ (72,750)</u>	<u>\$ 483,174</u>
6							
7		<b>EXPENSES:</b>					
8	601	Salaries and Wages	\$ 104,118	\$ -	\$ 104,118	\$ -	\$ 104,118
9	610	Purchased Water	147,409	(147,409)	-	-	-
10	615	Purchased Power	77,582	-	77,582	-	77,582
11	618	Chemicals	1,838	-	1,838	-	1,838
12	620	Repairs & Maint	37,480	(7,471)	30,009	-	30,009
13	621	Office Supplies & Expenses	17,720	-	17,720	-	17,720
14	630	Outside Services	266,283	(202,891)	63,392	-	63,392
15	635	Water Testing	4,846	369	5,215	-	5,215
16	641	Rents	6,600	(1,650)	4,950	-	4,950
17	650	Transportation Expenses	42,123	(2,700)	39,423	-	39,423
18	657	Insurance - General Liability	7,716	-	7,716	-	7,716
19	659	Insurance - Health and Life	-	-	-	-	-
20	666	Reg. Comm. Exp. - Rate Case	14,615	-	14,615	-	14,615
21	670	Bad Debt Expense	-	-	-	-	-
22	675	Miscellaneous Expense	8,172	-	8,172	-	8,172
23	403	Depreciation	34,471	(24,892)	9,579	-	9,579
24	408	Taxes Other Than Income	15,912	-	15,912	-	15,912
25	408.1	Property Taxes	16,240	2,563	18,803	(848)	17,955
26	409	Income Taxes	-	42,451	42,451	(27,811)	14,640
27	427.4	Interest on Customer Security Deposits	-	337	337	-	337
28		<b>Total Operating Expenses</b>	<u>803,125</u>	<u>(341,629)</u>	<u>461,833</u>	<u>(28,659)</u>	<u>433,174</u>
29							
30		<b>Operating Income (Loss)</b>	<u>\$ (247,201)</u>	<u>\$ 341,629</u>	<u>\$ 94,091</u>	<u>\$ (44,091)</u>	<u>\$ 50,000</u>

**References:**

- Column (A): Company's Application, Page 19
- Column (B): Schedule CSB-10
- Column (C): Column (A) + Column (B)
- Column (D): Schedules CSB-1 and CSB-2
- Column (E): Column (C) + Column (D)

Trixton Canyon Water Company  
 Docket No. W-02168A-11-0363  
 Test Year Ended Dec. 31, 2011 Updated to Dec. 31, 2012

**SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR**

Line No.	Acct. No.	DESCRIPTION	(A) COMPANY AS FILED	(B) ADJ #1 Water Purchased Expense	(C) ADJ #2 Repairs & Maintenance Expense	(D) ADJ #3 Outside Services Expense	(E) ADJ #4 Testing Water Expense	(F) ADJ #5 Rents Expense	(G) ADJ #6 Transportation Expense	(H) ADJ #7 Depreciation Expense	(J) ADJ #8 Property Taxes	(K) ADJ #9 Income Taxes	(L) ADJ #10 Interest on Deposits	(M) STAFF ADJUSTED
			Ref. Sch CSB-12	Ref. Sch CSB-13	Ref. Sch CSB-14	Ref. Sch CSB-15	Ref. Sch CSB-16	Ref. Sch CSB-17	Ref. Sch CSB-18	Ref. Sch CSB-19	Ref. Sch CSB-20	Ref. Sch CSB-21		
1		REVENUES:												
2	461	Metered Water Revenue	\$ 540,429	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 540,429
3	460	Unmetered Water Revenue	-	-	-	-	-	-	-	-	-	-	-	-
4	474	Other Water Revenues	15,495	-	-	-	-	-	-	-	-	-	-	-
5		<b>Total Revenues</b>	\$ 555,924	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 555,924
6		OPERATING EXPENSES:												
7		Salaries and Wages	\$ 104,118	-	-	-	-	-	-	-	-	-	-	\$ 104,118
8	601	Purchased Water	147,409	(147,409)	-	-	-	-	-	-	-	-	-	-
9	610	Purchased Water	77,582	-	-	-	-	-	-	-	-	-	-	77,582
10	615	Purchased Power	1,838	-	-	-	-	-	-	-	-	-	-	1,838
11	618	Chemicals	37,480	-	-	-	-	-	-	-	-	-	-	30,009
12	620	Repairs & Maint	17,720	(7,471)	-	-	-	-	-	-	-	-	-	17,720
13	621	Office Supplies & Expenses	266,283	-	-	(202,891)	-	-	-	-	-	-	-	63,392
14	630	Outside Services	4,846	-	-	-	-	-	-	-	-	-	-	5,215
15	635	Water Testing	6,800	-	-	-	(1,650)	-	-	-	-	-	-	4,950
16	641	Rents	42,123	-	-	-	-	(2,700)	-	-	-	-	-	39,423
17	650	Transportation Expenses	7,716	-	-	-	-	-	-	-	-	-	-	7,716
18	657	Insurance - General Liability	-	-	-	-	-	-	-	-	-	-	-	-
19	659	Insurance - Health and Life	-	-	-	-	-	-	-	-	-	-	-	-
20	666	Reg. Comm. Exp. - Rate Case	14,615	-	-	-	-	-	-	-	-	-	-	14,615
21	670	Bad Debt Expense	-	-	-	-	-	-	-	-	-	-	-	-
22	675	Miscellaneous Expense	8,172	-	-	-	-	-	-	-	-	-	-	8,172
23	403	Depreciation	34,471	-	-	-	-	-	(24,892)	-	-	-	-	9,579
24	408	Taxes Other Than Income	15,912	-	-	-	-	-	-	-	-	-	-	15,912
25	408.1	Property Taxes	16,240	-	-	-	-	-	-	-	2,563	-	-	18,803
26	409	Income Taxes	-	-	-	-	-	-	-	-	-	42,451	-	42,451
27	427.4	Interest on Customer Security Deposit	-	-	-	-	-	-	-	-	-	-	337	337
28		<b>Total Operating Expenses</b>	\$ 803,125	\$ (147,409)	\$ (7,471)	\$ (202,891)	\$ 369	\$ (1,650)	\$ (2,700)	\$ (24,892)	\$ 2,563	\$ 42,451	\$ 337	\$ 461,833
29		<b>Operating Income (Loss)</b>	\$ (247,201)	\$ 147,409	\$ 7,471	\$ 202,891	\$ (369)	\$ 1,650	\$ 2,700	\$ 24,892	\$ (2,563)	\$ (42,451)	\$ (337)	\$ 94,091

**OPERATING INCOME ADJUSTMENT NO. 1 - PURCHASED WATER EXPENSE**

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS (Col C - Col A)	STAFF AS ADJUSTED
1	Purchased Water	\$ 147,409	\$ (147,409)	\$ -

References:

- Column A: Company Income Statement, Page 19 of application
- Column B: Testimony, CSB; Data Request CSB 2.10
- Column C: Column [A] + Column [B]

**OPERATING INCOME ADJUSTMENT NO. 2 - REPAIRS AND MAINTENANCE EXPENSE**

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Repairs and Maintenance Expense	\$ 37,480	\$ -	\$ 37,480
2	To Remove Unsupported Cost	\$ -	\$ (5,863)	\$ (5,863)
3	To Remove Cost Not Incurred Within Updated	\$ -	\$ (1,433)	\$ (1,433)
4	To Remove Cost for Sirius Radio	\$ -	\$ (175)	\$ (175)
5	Total	\$ 37,480	\$ (7,471)	\$ 30,009

References:

- Column A: Company Income Statement, Page 19 of application
- Column B: Testimony, CSB; Data Request CSB 2.10
- Column C: Column [A] + Column [B]

**OPERATING INCOME ADJUSTMENT NO. 3 - OUTSIDE SERVICES EXPENSE**

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS (Col C - Col A)	STAFF AS ADJUSTED
1	Outside Services	\$ 266,283	\$ -	\$ 266,283
2	To Remove Costs from Trust	\$ -	\$ (202,891)	\$ (202,891)
3	Total	\$ 266,283	\$ (202,891)	\$ 63,392

From 2012 General Ledger		
Date	Description	Amount
1/10/2012	Claude K. Neal Family Trust	\$ 4,000
1/23/2012	Claude K. Neal Family Trust	\$ 4,000
1/25/2012	Claude K. Neal Family Trust	\$ 750
2/3/2012	Claude K. Neal Family Trust	\$ 1,000
2/7/2012	Claude K. Neal Family Trust	\$ 2,000
2/21/2012	Claude K. Neal Family Trust	\$ 1,500
2/22/2012	Claude K. Neal Family Trust	\$ 600
3/7/2012	Claude K. Neal Family Trust	\$ 1,929
3/20/2012	Claude K. Neal Family Trust	\$ 3,500
3/28/2012	Claude K. Neal Family Trust	\$ 1,123
4/7/2012	Claude K. Neal Family Trust	\$ 8,000
4/7/2012	Claude K. Neal Family Trust	\$ 2,000
4/18/2012	Claude K. Neal Family Trust	\$ 3,000
4/27/2012	Claude K. Neal Family Trust	\$ 300
5/3/2012	Claude K. Neal Family Trust	\$ 2,780
5/31/2012	Claude K. Neal Family Trust	\$ 2,572
6/4/2012	Claude K. Neal Family Trust	\$ 1,200
6/5/2012	Claude K. Neal Family Trust	\$ 1,200
6/13/2012	Claude K. Neal Family Trust	\$ 3,744
7/11/2012	Claude K. Neal Family Trust	\$ 3,715
7/12/2012	Claude K. Neal Family Trust	\$ 11,743
7/12/2012	Claude K. Neal Family Trust	\$ 7,209
7/12/2012	Claude K. Neal Family Trust	\$ 7,796
7/12/2012	Claude K. Neal Family Trust	\$ 11,743
7/12/2012	Claude K. Neal Family Trust	\$ 19,232
7/12/2012	Claude K. Neal Family Trust	\$ 11,888
7/12/2012	Claude K. Neal Family Trust	\$ 15,541
7/12/2012	Claude K. Neal Family Trust	\$ 11,796
7/12/2012	Claude K. Neal Family Trust	\$ 11,849
7/12/2012	Claude K. Neal Family Trust	\$ 8,097
7/24/2012	Claude K. Neal Family Trust	\$ 3,520
8/8/2012	Claude K. Neal Family Trust	\$ 4,000
8/28/2012	Claude K. Neal Family Trust	\$ 3,200
9/18/2012	Claude K. Neal Family Trust	\$ 900
9/20/2012	Claude K. Neal Family Trust	\$ 3,262
10/5/2012	Claude K. Neal Family Trust	\$ 2,618
10/5/2012	Claude K. Neal Family Trust	\$ 637
10/12/2012	Claude K. Neal Family Trust	\$ 2,770
10/18/2012	Claude K. Neal Family Trust	\$ 4,375
11/15/2012	Claude K. Neal Family Trust	\$ 4,200
11/28/2012	Claude K. Neal Family Trust	\$ 4,000
12/13/2012	Claude K. Neal Family Trust	\$ 3,600
		\$ 202,891

References:

- Column A: Company Income Statement, Page 19 of application
- Column B: Testimony, CSB
- Column C: Column [A] + Column [B]

**OPERATING INCOME ADJUSTMENT NO. 4 - WATER TESTING EXPENSE**

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS (Col C - Col A)	STAFF AS ADJUSTED
1	Water Testing	\$ 4,846	\$ 369	\$ 5,215

References:

- Column A: Company Income Statement, Page 19 of application
- Column B: Testimony, CSB
- Column C: Column [A] + Column [B]

**OPERATING INCOME ADJUSTMENT NO. 5 - RENTS EXPENSE**

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Rents Expense	\$ 6,600	\$ -	\$ 6,600
2	Allocation of Rents Exp to Cerbat	-	(1,650)	(1,650)
3		<u>\$ 6,600</u>	<u>\$ (1,650)</u>	<u>\$ 4,950</u>
4				
5				
6				
7	Company Proposed Rents Expense			\$ 6,600
8	Company Proposed Allocation Percentage			<u>75%</u>
9	Rents Expense Allocated To Truxton			\$ 4,950
10	Less: Company Proposed Rents Expense			<u>6,600</u>
11	Staff's Adjustment (i.e to reflect allocation to Cerbat)			\$ (1,650)

References:

- Column A: Company Income Statement, Page 19 of application
- Column B: Testimony, CSB; Schedule C-2e of Original Application
- Column C: Column [A] + Column [B]

**OPERATING INCOME ADJUSTMENT NO. 6 - TRANSPORTATION EXPENSE**

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Transportation Expense	\$ 28,623	\$ -	\$ 28,623
2	To Remove Affiliate Profit on Fully Paid Vehicle	13,905	(2,700)	11,205
3		\$ 42,528	\$ (2,700)	\$ 39,828
4				
5				
6				
7				
8				
9				
10	2011 Dodge Ram 2500 Mega Cab	\$ 735.00	\$ -	\$ 735.00
11	2008 Dodge Ram 2500 Mega Cab	\$ 510.00	\$ -	\$ 510.00
12	2005 Chevrolet Silverado	\$ 300.00	\$ (300.00)	\$ -
13		\$ -	\$ -	\$ -
14		\$ 1,545	\$ (300)	\$ 1,245
15	Multiplied by 12 Months	12	12	12
16		\$ 18,540	\$ (3,600)	\$ 14,940
17		x 75%	x 75%	x 75%
18		\$ 13,905	\$ (2,700)	\$ 11,205

References:

- Column A: Company Income Statement, Page 19 of application
- Column B: Testimony, CSB;
- Column C: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 7 - DEPRECIATION EXPENSE ON TEST YEAR PLANT

LINE NO.	DESCRIPTION	[A] PLANT In SERVICE Per Staff	[B] NonDepreciable or Fully Depreciated PLANT	[C] DEPRECIABLE PLANT (Col A - Col B)	[D] DEPRECIATION RATE	[E] DEPRECIATION EXPENSE (Col C x Col D)
1	301 Organization	\$ -	\$ -	\$ -	0.00%	\$ -
2	303 Land and Land Rights	20	20	-	0.00%	-
3	304 Structures and Improvements	159	-	159	3.33%	5
4	305 Collecting and Impound Reservoirs	-	-	-	2.50%	-
5	307 Wells and Springs	19,791	-	19,791	3.33%	659
6	309 Supply Mains	-	-	-	2.00%	-
7	311 Pumping Equipment	11,462	-	11,462	12.50%	1,433
8	320.1 Water Treatment Equipment	-	-	-	3.33%	-
9	320.2 Water Treatment Plant, Solution Chemical Feeders	-	-	-	20.00%	-
10	330 Distribution Reservoirs and Standpipes	-	-	-	2.22%	-
11	331 Transmission and Distribution Mains	865,257	-	865,257	2.00%	17,305
12	333 Services	64,236	-	64,236	3.33%	2,139
13	334 Meters and Meter Installations	206,069	-	206,069	8.33%	17,166
14	335 Hydrants	-	-	-	2.00%	-
15	336 Backflow Prevention Devices	-	-	-	6.67%	-
16	339 Other Plant and Miscellaneous Equipment	406	-	406	6.67%	27
17	340 Office Furniture and Equipment	-	-	-	6.67%	-
18	340.1 Computers and Software	-	-	-	20.00%	-
19	341 Transportation Equipment	-	-	-	20.00%	-
20	343 Tools, Shop, and Garage Equipment	-	-	-	5.00%	-
21	345 Power Operated Equipment	-	-	-	5.00%	-
22	346 Communication Equipment	-	-	-	10.00%	-
23	347 Miscellaneous Equipment	-	-	-	10.00%	-
24						
25	Total Plant	\$ 1,167,400	\$ -	\$ 1,167,380		\$ 38,734
26						
27						
28						
29	Composite Depreciation Rate (Depr Exp / Depreciable Plant):			3.32%		
30	CIAC: \$	878,689				
31	Amortization of CIAC (Line 29 x Line 30): \$	29,155				
32						
33	Depreciation Expense Before Amortization of CIAC: \$	38,734				
34	Less Amortization of CIAC: \$	29,155				
35	Test Year Depreciation Expense - Staff: \$	9,579				
36	Depreciation Expense - Company:	34,471				
37	Staff's Total Adjustment: \$	(24,892)				

References:

- Column [A]: Schedule CSB-4
- Column [B]: From Column [A]
- Column [C]: Column [A] - Column [B]
- Column [D]: Engineering Staff Report
- Column [E]: Column [C] x Column [D]

**OPERATING INCOME ADJUSTMENT NO. 8 - PROPERTY TAX EXPENSE**

LINE NO.	Property Tax Calculation	[A] STAFF AS ADJUSTED	[B] STAFF ADJUSTED TO DECREASE
1	Staff Adjusted Test Year Revenues	\$ 555,924	\$ 555,924
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	1,111,848	\$ 1,111,848
4	Staff Recommended Revenue, Per Schedule CSB-1	555,924	\$ 483,174
5	Subtotal (Line 3 + Line 4)	1,667,772	1,595,022
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	555,924	\$ 531,674
8	Department of Revenue Mutilplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	1,111,848	\$ 1,063,348
10	Plus: 10% of CWIP -	-	-
11	Less: Net Book Value of Licensed Vehicles ( <b>See Note 1</b> )	36,639	\$ 36,639
12	Full Cash Value (Line 9 + Line 10 - Line 11)	1,075,209	\$ 1,026,709
13	Assessment Ratio	20.0%	20.0%
14	Assessment Value (Line 12 * Line 13)	215,042	\$ 205,342
15	Composite Property Tax Rate	8.7440%	8.7440%
16	Staff Test Year Adjusted Property Tax (Line 14 * Line 15)	\$ 18,803	\$ -
17	Company Proposed Property Tax	16,240	
18	Staff Test Year Adjustment (Line 16-Line 17)	\$ 2,563	
19	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)		\$ 17,955
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		\$ 18,803
21	Increase in Property Tax Expense Due to Increase in Revenue Requirement		\$ (848)
22	Increase to Property Tax Expense		\$ (848)
23	Increase in Revenue Requirement		(72,750)
24	Increase to Property Tax per Dollar Increase in Revenue (Line19/Line 20)		1.165867%
25			
26	<b>Note 1:</b>		
27	The Company has four leased vehicles. Staff assumed		
28	that three of the four were fully depreciated. Staff calculated		
29	the net book value of the 2011 Dodge Ram 2500 Mega Cab		

**OPERATING INCOME ADJUSTMENT NO. 9 - TEST YEAR INCOME TAXES**

LINE NO.	DESCRIPTION	(A)	(B)
<u>Calculation of Income Tax:</u>		<u>Test Year</u>	
1	Revenue	\$ 555,924	
2	Less: Operating Expenses - Excluding Income Taxes	\$ 419,045	
3	Less: Synchronized Interest (L17)	\$ -	
4	Arizona Taxable Income (L1- L2 - L3)	\$ 136,879	
5	Arizona State Income Tax Rate	6.968%	
6	Arizona Income Tax (L4 x L5)		\$ 9,538
7	Federal Taxable Income (L4 - L6)	\$ 127,341	
8	Federal Tax on First Income Bracket (\$1 - \$50,000) @ 15%	\$ 7,500	
9	Federal Tax on Second Income Bracket (\$51,001 - \$75,000) @ 25%	\$ 6,250	
10	Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34%	\$ 8,500	
11	Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 39%	\$ 10,663	
12	Federal Tax on Fifth Income Bracket (\$335,001 - \$10,000,000) @ 34%	\$ -	
13	Total Federal Income Tax		\$ 32,913
14	Combined Federal and State Income Tax (L6 + L13)		<u>\$ 42,451</u>
 <u>Calculation of Interest Synchronization:</u>			
15	Rate Base	\$ (249,270)	
16	Weighted Average Cost of Debt	0.00%	
17	Synchronized Interest (L16 x L17)	<u>\$ -</u>	
18	Income Tax - Per Staff	\$ 42,451	
19	Income Tax - Per Company	\$ -	
20	Staff Adjustment	<u>\$ 42,451</u>	

**OPERATING INCOME ADJUSTMENT NO. 10 - INTEREST ON CUSTOMER DEPOSITS**

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Interest on Customer Deposits	-	\$ 337	\$ 337
2				
3				
4				
5			Interest on Customer Deposits	
6			\$ 5,618	
7		Multiplied by	0.06	
8			\$ 337	

References:

- Column A: Company Income Statement, Page 19 of application
- Column B: Testimony, CSB; Data Request CSB 2.14
- Column C: Column [A] + Column [B]

Monthly Minimum Charge	Present	Company Proposed Rates	Staff Recommended Rates
<u>Meter Size (All Classes):</u>			
5/8 x 3/4 Inch	\$ 19.50	\$ 29.50	\$ 14.00
3/4 Inch	19.50	29.50	14.00
1 Inch	32.50	73.75	28.28
1 1/2 Inch	65.00	147.50	56.55
2 Inch	104.00	236.00	90.48
3 Inch	195.00	472.00	194.88
4 Inch	325.00	737.50	304.50
6 Inch	650.00	1,475.00	565.50
<b>Gallons Included In Monthly Minimum Charge</b>	0	0	0
<u>Commodity Charge - Per 1,000 Gallons</u>			
<u>5/8" x 3/4" and 3/4" Meters</u>			
First 5,000 gallons	\$ 1.2000	N/A	N/A
5,001 to 10,000 gallons	1.4000	N/A	N/A
Over 10,000 gallons	1.6000	N/A	N/A
First 3,000 gallons	N/A	2.5000	\$ 1.2000
3,001 to 10,000 gallons	N/A	4.5000	2.2000
Over 10,000 gallons	N/A	6.3500	3.7640
<u>1" Meter</u>			
First 5,000 gallons	\$ 1.2000	N/A	N/A
5,001 to 10,000 gallons	1.4000	N/A	N/A
Over 10,000 gallons	1.6000		
First 25,000 gallons	N/A	2.5800	N/A
Over 25,000 gallons	N/A	3.2000	N/A
First 16,000 gallons	N/A	N/A	2.2000
Over 16,000 gallons	N/A	N/A	3.7640
<u>1 1/2" Meter</u>			
First 5,000 gallons	\$ 1.2000	N/A	N/A
5,001 to 10,000 gallons	1.4000	N/A	N/A
Over 10,000 gallons	1.6000		
First 50,000 gallons	N/A	2.5800	N/A
Over 50,000 gallons	N/A	3.2000	N/A
First 30,000 gallons	N/A	N/A	2.2000
Over 30,000 gallons	N/A	N/A	3.7640

2" Meter

First 5,000 gallons	\$	1.2000	N/A	N/A
5,001 to 10,000 gallons		1.4000	N/A	N/A
Over 10,000 gallons		1.6000		
First 80,000 gallons		N/A	2.5800	N/A
Over 80,000 gallons		N/A	3.2000	N/A
First 48,000 gallons		N/A	N/A	2.2000
Over 48,000 gallons		N/A	N/A	3.7640

3" Meter

First 5,000 gallons	\$	1.2000	N/A	N/A
5,001 to 10,000 gallons		1.4000	N/A	N/A
Over 10,000 gallons		1.6000		
First 160,000 gallons		N/A	2.5800	N/A
Over 160,000 gallons		N/A	3.2000	N/A
First 58,000 gallons		N/A	N/A	2.2000
Over 58,000 gallons		N/A	N/A	3.7640

4" Meter

First 5,000 gallons	\$	1.2000	N/A	N/A
5,001 to 10,000 gallons		1.4000	N/A	N/A
Over 10,000 gallons		1.6000		
First 250,000 gallons		N/A	2.5800	N/A
Over 250,000 gallons		N/A	3.2000	N/A
First 95,000 gallons		N/A	N/A	2.2000
Over 95,000 gallons		N/A	N/A	3.7640

6" Meter

First 5,000 gallons	\$	1.2000	N/A	N/A
5,001 to 10,000 gallons		1.4000	N/A	N/A
Over 10,000 gallons		1.6000		
First 50,000 gallons		N/A	2.5800	N/A
Over 50,000 gallons		N/A	3.2000	N/A
First 340,000 gallons		N/A	N/A	2.2000
Over 340,000 gallons		N/A	N/A	3.7640

Bulk Water

Per 1,000 gallons	\$	2.5000	6.3500	3.7640
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Valley Vista Property Owners Association

Per 1,000 gallons	\$	1.4500	N/A	1.2000
First 15,000,000 gallons		N/A	1.7000	N/A
Over 15,000,000 gallons		N/A	1.9000	N/A

**Other Service Charges**

Establishment	\$ 45.00	\$ 50.00	\$ 45.00
Establishment (After Hours)	\$ 55.00	Eliminate	Eliminate
Reconnection (Delinquent)	\$ 65.00	\$ 70.00	\$ 45.00
Reconnection (Delinquent/After Hours)	\$ 75.00	Eliminate	Eliminate
Meter Test (If Correct)	\$ 35.00	\$ 40.00	\$ 25.00
Deposit	*	*	*
Deposit Interest	*	*	*
Reestablishment (Within 12 Months)	**	**	**
Reestablishment (Delinquent/After Hours)	**+\$10	Eliminate	Eliminate
NSF Check	\$ 15.00	\$ 25.00	\$ 15.00
Deferred Payment	1.5% per month	1.5% per month	1.5% per month
Meter Re-read (If Correct)	\$ 15.00	\$ 25.00	\$ 20.00
Late Fee	\$ 5.00	\$ 5.00	\$ 5.00
Call Out (At Customer's Request)	\$ 25.00	\$ 35.00	Eliminate
After Hours Charge	No Tariff	\$ 25.00	\$ 30.00
Monthly Fire Sprinkler Charge	***	Eliminate	****

\* Per Commission Rule A.A.C. R-14-2-403(B)

\*\* Number of months off system times monthly minimum per A.A.C. R-14-2-403(D)

\*\*\* 1% of monthly minimum for a comparable sized meter connection, but not less than \$5.00 per month. The service charge for fire sprinklers is only applicable for service lines separate and distinct from the primary water service line.

\*\*\*\* 2% of monthly minimum for a comparable sized meter connection, but not less than \$10.00 per month. The service charge for fire sprinklers is only applicable for service lines separate and distinct from the primary water service line.

In addition to the collection of regular rates, the utility will collect from its customers a proportionate share of any privilege, sales, use, and franchise tax. Per commission rule 14-2-409D(5).

**Service and Meter Installation Charges**

	Total Present Charge	Proposed Service Line Charge	Proposed Meter Installation Charge	Total Proposed Charge	Recommended Service Line Charge	Recommended Meter Installation Charge	Total Recommended Charge
5/8" x 3/4" Meter	\$ 450	\$ 445	\$ 155	\$ 600	\$ 445	\$ 155	\$ 600
3/4" Meter	\$ 500	\$ 445	\$ 255	\$ 700	\$ 445	\$ 255	\$ 700
1" Meter	\$ 550	\$ 495	\$ 315	\$ 810	\$ 495	\$ 315	\$ 810
1 1/2" Meter	\$ 775	\$ 550	\$ 525	\$ 1,075	\$ 550	\$ 525	\$ 1,075
2" Meter	\$ 1,305	\$ 830	\$ 1,045	\$ 1,875	\$ 830	\$ 1,045	\$ 1,875
2" Compound Meter	\$ 1,900	\$ 830	\$ 1,890	\$ 2,720	\$ 830	\$ 1,890	\$ 2,720
3" Meter	\$ 1,815	\$ 1,045	\$ 1,670	\$ 2,715	\$ 1,045	\$ 1,670	\$ 2,715
3" Compound Meter	\$ 2,490	\$ 1,165	\$ 2,545	\$ 3,710	\$ 1,165	\$ 2,545	\$ 3,710
4" Meter	\$ 2,860	\$ 1,490	\$ 2,670	\$ 4,160	\$ 1,490	\$ 2,670	\$ 4,160
4" Compound Meter	\$ 3,615	\$ 1,670	\$ 3,645	\$ 5,315	\$ 1,670	\$ 3,645	\$ 5,315
6" Meter	\$ 5,275	\$ 2,210	\$ 5,025	\$ 7,235	\$ 2,210	\$ 5,025	\$ 7,235
6" Compound Meter	\$ 6,810	\$ 2,330	\$ 6,920	\$ 9,250	\$ 2,330	\$ 6,920	\$ 9,250

Typical Bill Analysis  
Residential 3/4-Inch Meter

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	5,392	\$ 27.73	\$ 47.76	\$ 20.03	72.25%
Median Usage	3,754	24.94	40.39	\$ 15.45	61.94%
<b>Staff Recommended</b>					
Average Usage	5,392	\$ 27.73	\$ 22.86	\$ (4.87)	-17.55%
Median Usage	3,754	24.94	19.26	\$ (5.68)	-22.79%

Present & Proposed Rates (Without Taxes)  
Residential 3/4-Inch Meter

Gallons	Present		Company Proposed		Staff Recommended	
	Rates	3/4"	Rates	3/4"	Rates	3/4"
Consumption	Rates		Rates	Increase	Rates	Increase
-	\$ 19.50		\$ 29.50	51.28%	\$ 14.00	-28.21%
1,000	20.95		32.00	52.74%	15.20	-27.45%
2,000	22.40		34.50	54.02%	16.40	-26.79%
3,000	23.85		37.00	55.14%	17.60	-26.21%
4,000	25.30		41.50	64.03%	19.80	-21.74%
5,000	26.75		46.00	71.96%	22.00	-17.76%
6,000	29.25		50.50	72.65%	24.20	-17.26%
7,000	31.75		55.00	73.23%	26.40	-16.85%
8,000	34.25		59.50	73.72%	28.60	-16.50%
9,000	36.75		64.00	74.15%	30.80	-16.19%
10,000	39.25		68.50	74.52%	33.00	-15.92%
11,000	41.75		74.85	79.28%	36.76	-11.94%
12,000	44.25		81.20	83.50%	40.53	-8.41%
13,000	46.75		87.55	87.27%	44.29	-5.26%
14,000	49.25		93.90	90.66%	48.06	-2.42%
15,000	51.75		100.25	93.72%	51.82	0.14%
16,000	54.25		106.60	96.50%	55.58	2.46%
17,000	56.75		112.95	99.03%	59.35	4.58%
18,000	59.25		119.30	101.35%	63.11	6.52%
19,000	61.75		125.65	103.48%	66.88	8.30%
20,000	64.25		132.00	105.45%	70.64	9.95%
25,000	72.25		163.75	126.64%	89.46	23.82%
30,000	80.25		195.50	143.61%	108.28	34.93%
35,000	88.25		227.25	157.51%	127.10	44.02%
40,000	96.25		259.00	169.09%	145.92	51.61%
45,000	104.25		290.75	178.90%	164.74	58.02%
50,000	112.25		322.50	187.31%	183.56	63.53%
75,000	152.25		481.25	216.09%	277.66	82.37%
100,000	192.25		640.00	232.90%	371.76	93.37%

**WIFA LOAN SURCHARGE CALCULATION - EXAMPLE**

1 Loan Amount: **\$259,280**  
 2 Term: **20 Years**  
 3 Interest Rate Before Subsidy **5.25%**  
 4 WIFA Subsidy Rate: **100%**  
 5 WIFA Interest rate : **5.25%** If interest rate is not found on TABLE A, use the next highest percentage

**Step 1 - Find the Annual Payment on Loan**

8 \$259,280 Total Amount of Loan  
 9 **0.0809** TABLE A, Conversion Factor Table, Column B  
 10 \$20,965.72 Annual Principle and Interest Payment

**Step 2 - Find the Annual Interest Payment on Loan**

13 \$259,280 Total Amount of Loan  
 14 **0.0518** TABLE A, Conversion Factor Table, Column C  
 15 \$13,432.65 Annual Interest Payment on Debt

**Step 3 - Find the Annual Principal Payment on Loan**

18 \$259,280 Total Amount of Loan  
 19 **0.0291** TABLE A, Conversion Factor Table, Column D  
 20 \$7,533.07 Annual Principal and Interest Payment

**Step 4 - Find the Gross Revenue Conversion Factor**

23 **1.649996016**

**Step 5 - Find the Incremental Income Tax Factor**

26 1.65000 minus 1 = 0.65000

**Step 6 - Find the Annual Income Tax Component of Surcharge Revenue**

29 0.65000 Incremental Income Tax Factor (from Step 5)  
 30 \$7,533.07 Multiplied by: Annual Principal Payment on Loan (from Step 3)  
 31 \$4,896.46 Annual Income Tax Component of the Annual Surcharge Revenue

**Step 7 - Find the Debt Service Component of the Annual Surcharge Revenue**

34 \$13,432.65 Annual Interest Payment on Debt (from Step 2)  
 35 \$7,533.07 Plus: Annual Principal Payment (from Step 3)  
 36 \$20,965.72 Debt Service Component of the Annual Surcharge Revenue

**Step 8 - Find the Annual Surcharge Revenue Requirement Needed for the Loan**

39 \$4,896.46 Annual Income Tax Component of the Annual Surcharge Revenue (from Step 6)  
 40 \$20,965.72 Plus: Debt Service Component of the Annual Surcharge Revenue (from Step 7)  
 41 \$25,862.18 Total Annual Surcharge Revenue Requirement for the Loan

**Step 9 - Find the Equivalent Bills**

Col A	Col B	Col C	Col D	Col E
Meter Size	NARUC Multiplier	Number of Customers	Number of Months in Year	Equivalent Bills Col B x C x D
5/8" x 3/4" Meter	1	0	12	-
3/4" Meter	1.5	916	12	16,488
1" Meter	2.5	5	12	150
1 1/2" Meter	5	0	12	-
2" Meter	8	2	12	192
3" Meter	15	0	12	-
4" Meter	25	0	12	-
6" Meter	50	2	12	1,200
		<u>925</u>		<u>18,030</u>

**Step 10 - Find the Monthly Surcharge for the 5/8" x 3/4" Meter Size Customers**

60 \$25,862.18 Total Annual Surcharge Revenue Requirement for the Loan (from Step 8)  
 61 18,030 Divided by: Total Number of Equivalent Bills  
 62 \$ 1.43 Monthly Surcharge for 3/4" Customers

**Step 11 - Find the Monthly Surcharge for the Remaining Meter Size Customers**

Col A	Col B	Col C	Col D
Meter Size	NARUC Multiplier	5/8" x 3/4" Customers' Surcharge	Surcharge by Meter Size Col B x C
5/8" x 3/4" Meter	1	\$ 1.43	\$ 1.43
3/4" Meter	1.5	\$ 1.43	\$ 2.15
1" Meter	2.5	\$ 1.43	\$ 3.59
1 1/2" Meter	5	\$ 1.43	\$ 7.17
2" Meter	8	\$ 1.43	\$ 11.48
3" Meter	15	\$ 1.43	\$ 21.52
4" Meter	25	\$ 1.43	\$ 35.86
6" Meter	50	\$ 1.43	\$ 71.72

**TABLE A**  
**Conversion Factor Table (Based on a 20-year Loan)**

Line No.	<u>Column A</u>	<u>Column B</u>	<u>Column C</u>	<u>Column D</u>
	Annual Interest	Annual Payment	Annual Interest Payment	Annual Principal Payment
		Conversion Factor	Conversion Factor	Conversion Factor
1	3.50%	0.0696	0.0344	0.0352
2	3.75%	0.0711	0.0369	0.0342
3	4.00%	0.0727	0.0394	0.0333
4	4.25%	0.0743	0.0419	0.0324
5	4.50%	0.0759	0.0444	0.0316
6	4.75%	0.0775	0.0468	0.0307
7	5.00%	0.0792	0.0493	0.0299
<b>8</b>	<b>5.25%</b>	<b>0.0809</b>	<b>0.0518</b>	<b>0.0291</b>
9	5.50%	0.0825	0.0543	0.0283
10	5.75%	0.0843	0.0568	0.0275
11	6.00%	0.0860	0.0593	0.0267
12	6.25%	0.0877	0.0618	0.0259
13	6.50%	0.0895	0.0643	0.0252
14	6.75%	0.0912	0.0668	0.0245
15	7.00%	0.0930	0.0692	0.0238
16	7.25%	0.0948	0.0717	0.0231
17	7.50%	0.0967	0.0742	0.0224
18	7.75%	0.0985	0.0767	0.0218
19	8.00%	0.1004	0.0792	0.0211

**BEFORE THE ARIZONA CORPORATION COMMISSION**

BOB STUMP -Chairman  
GARY PIERCE  
BRENDA BURNS  
BOB BURNS  
SUSAN BITTER-SMITH

IN THE MATTER OF THE APPLICATION OF ) DOCKET NO. W-02168A-11-0363  
TRUXTON CANYON WATER COMPANY, INC. )  
AN ARIZONA CORPORATION, INC. FOR )  
AN INCREASES IN ITS WATER RATES )

IN THE MATTER OF THE APPLICATION OF ) DOCKET NO. W-02168A-13-0332  
TRUXTON CANYON WATER COMPANY, INC. )  
AN ARIZONA CORPORATION, INC. FOR )  
AUTHORITY TO INCUR LONG-TERM DEBT. )

DIRECT TESTIMONY

OF

DOROTHY HAINS, P. E.

UTILITIES ENGINEER

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

NOVEMBER 8, 2013

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Engineering Report for Truxton Canyon Water Company, Inc.....	DMH-1
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1 **INTRODUCTION**

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

3 A. My name is Dorothy Hains. My business address is 1200 West Washington Street,  
4 Phoenix, Arizona 85007.

5  
6 **Q. By whom and in what position are you employed?**

7 A. I am employed by the Arizona Corporation Commission ("Commission" or "ACC") as a  
8 Utilities Engineer - Water/Wastewater in the Utilities Division.

9  
10 **Q. How long have you been employed by the Commission?**

11 A. I have been employed by the Commission since January 1998.

12  
13 **Q. What are your responsibilities as a Utilities Engineer - Water/Wastewater?**

14 A. My main responsibilities are to inspect, investigate and evaluate water and wastewater  
15 systems. This includes obtaining data, preparing reconstruction cost new and/or original  
16 cost studies, investigative reports, interpreting rules and regulations, and to suggest  
17 corrective action and provide technical recommendations on water and wastewater system  
18 deficiencies. I also provide written and oral testimony in rate cases and other cases before  
19 the Commission.

20  
21 **Q. How many companies have you analyzed for the Utilities Division?**

22 A. I have analyzed more than 90 companies fulfilling these various responsibilities for  
23 Commission Utilities Division Staff ("Staff").

24  
25 **Q. Have you previously testified before this Commission?**

26 A. Yes, I have testified on numerous occasions before this Commission.

1 **Q. What is your educational background?**

2 A. I graduated from the University of Alabama in Birmingham in 1987 with a Bachelor of  
3 Science degree in Civil Engineering.

4  
5 **Q. Briefly describe your pertinent work experience.**

6 A. Before my employment with the Commission, I was an Environmental Engineer for the  
7 Arizona Department of Environmental Quality (“ADEQ”) for ten years. Prior to that time,  
8 I was an Engineering Technician with C. F. Hains, Hydrology in Northport, Alabama for  
9 approximately five years.

10  
11 **Q. Please state your professional membership, registrations, and licenses.**

12 A. I have been a registered Civil Engineer in Arizona since 1990. I am a member of the  
13 American Society of Civil Engineering, American Water Works Association and Arizona  
14 Water Association.

15  
16 **PURPOSE OF TESTIMONY**

17 **Q. What was your assignment in this rate proceeding?**

18 A. My assignment was to provide Staff’s engineering evaluation for the subject Truxton  
19 Canyon Water Company, Inc. (“Company” or “Truxton”) rate proceeding. On September  
20 30, 2011, the Company filed a rate application and on September 30, 2013 the Company  
21 filed a financing application.

22  
23 **Q. What is the purpose of your testimony in this proceeding?**

24 A. To present the findings of Staff’s engineering evaluation of the operations for the  
25 Company. The findings are contained in the Engineering Report that I have prepared for  
26 this proceeding, the reports are included as Exhibit DMH-1 in this pre-filed testimony.

1 **ENGINEERING REPORT**

2 **Q. Would you briefly describe what was involved in preparing your Engineering Report**  
3 **for this rate and finance proceeding?**

4 A. After reviewing the applications, I physically inspected the water system in Truxton to  
5 evaluate their operation and to determine if any plant items were not used and useful. I  
6 contacted ADEQ to determine if the water system was in compliance with the Safe  
7 Drinking Water Act water quality requirements. I also contacted the Arizona Department  
8 of Water Resources ("ADWR") to determine if the water system was in compliance with  
9 ADWR's requirements governing water providers and/or community water systems.  
10 After I obtained information from Truxton regarding plant improvements, chemical testing  
11 expenses, water usage data and tariffs, I analyzed that information. I also contacted  
12 ADEQ's Engineering Review Section to obtain the documents that approved Truxton's  
13 proposed arsenic treatment plant to verify the plant had been approved by ADEQ. Based  
14 on all the above, I prepared the attached Engineering Report.

15  
16 **Q. Please describe the information contained in your Engineering Report.**

17 A. The Report is divided into three general sections: 1) *Executive Summary*;  
18 2) *Engineering Report Discussion*, and 3) *Engineering Report Exhibit*. *The Engineering*  
19 *Report Discussion* can be further divided into eleven subsections: A) Purpose of Report  
20 And Introduction, B) Location of System; C) Description of System; D) Water Usage; E)  
21 Growth Projection; F) ADEQ Compliance; G) ADWR Compliance; H) ACC Compliance;  
22 I) Water Testing Expenses; J) Financing application (Docket No. W-02168A-13-0332); K)  
23 Depreciation Rates; L) Other Issues. These subsections provide information about the  
24 water system serving Truxton.

1 **RECOMMENDATIONS AND CONCLUSIONS**

2 **Q. What are Staff's conclusions and recommendations regarding the Company's**  
3 **operations?**

4 A. Staff's conclusions and recommendations regarding the Company's operations are listed  
5 below.

6  
7 **Recommendations:**

8  
9 I. Staff recommends the depreciation rates by individual National Association of Regulatory  
10 Utility Commissioners ("NARUC") category, as delineated in Figure 6 in Exhibit DMH-1.

11  
12 II. Staff recommends the meter and service line installation charges listed in the right-hand  
13 columns of Table 6 in Exhibit DMH-1 be adopted.

14  
15 III. Staff recommends estimated annual water testing costs of \$5,215.00 be used for this  
16 proceeding.

17  
18 IV. Staff recommends that the Company immediately begin to monitor the gallons of water  
19 pumped and the gallons of water sold on a monthly basis. The Company should  
20 coordinate when it reads the "source" meters each month with when it reads the  
21 "customer" meters so that an accurate accounting of the water pumped and the water  
22 delivered to customers can be determined. Staff further recommends that the Company  
23 file its first water usage report in the Company's 2014 Annual Report filed with the  
24 Commission. If the reported water loss is greater than 10%, Staff further recommends that  
25 the Company shall prepare a report containing a detailed analysis and plan to reduce water  
26 loss to 10 percent or less. If the Company believes it is not cost effective to reduce the

1 water loss to less than 10 percent, it should submit a detailed cost benefit analysis to  
2 support its opinion. In no case shall the Company allow water loss to be greater than 15  
3 percent.

4  
5 V. Staff recommends that any increase in rates approved by the Commission not become  
6 effective until the Company files documentation from ADEQ that it is now in compliance  
7 for the monitoring of chlorine residual and nitrates.

8  
9 VI. Staff recommends that the Company file a curtailment tariff with the Commission's  
10 Docket Control as a compliance item in this docket as soon as possible, but no later than  
11 forty-five days after the effective date of the Commission's Decision in this matter. The  
12 tariff shall be docketed as a compliance item under this docket number for the review and  
13 certification of Staff. Staff further recommends that the tariff shall generally conform to  
14 the sample standard non-consecutive water system tariff found on the Commission's web  
15 site at [www.cc.state.az.us](http://www.cc.state.az.us). Staff recognizes that the Company may need to make minor  
16 modifications according to its specific management, operational, and design requirements  
17 as necessary and appropriate.

18  
19 VII. Staff recommends that the Company file with Docket Control, as a compliance item in this  
20 docket and within 45 days of the effective date of a decision in this proceeding, at least  
21 five (5) Best Management Practice ("BMPs") in the form of tariffs that substantially  
22 conform to the templates created by Staff for Commission's review and consideration.  
23 The templates created by Staff are available on the Commission's website at  
24 <http://www.azcc.gov/Divisions/Utilities/forms.asp>. Staff further recommends that a  
25 maximum of two BMPs may come from the "Public Awareness/Public Relations" or

1           “Education and Training” categories. The Company may request cost recovery of the  
2           actual costs associated with the BMPs implemented in its next general rate application.

3  
4           VIII. Staff recommends that the Commission approve \$259,800 to fund the installation of a 250  
5           GPM arsenic treatment plant. Staff concludes that the listed system improvements in  
6           Table 5 are appropriate and the costs as adjusted by Staff reasonable. No "used and  
7           useful" determination of the proposed plant was made, and no conclusions should be  
8           inferred for future rate making or rate base purposes. Staff recommends that the Company  
9           file with Docket Control, as a compliance item in this docket, by December 31, 2015, a  
10          copy of the Certificate of Approval of Construction for installation of the 250 GPM  
11          arsenic treatment plant. (See §J of report for discussion and details).

12  
13           **Conclusions:**

14  
15          I.       Truxton is not in compliance with ADEQ operational requirements and has monitoring  
16          and reporting deficiencies. ADEQ stated that it cannot determine if the system is currently  
17          delivering water that meets water quality standards required by 40 CFR 141 (National  
18          Primary Drinking Water Regulations) and Arizona Administrative Code, Title 18, Chapter  
19          4.

20  
21          II.       Truxton is not located in any ADWR Active Management Area (“AMA”) and is not  
22          subject to AMA reporting and conservation rules. ADWR reported that Truxton is  
23          currently compliant with department requirements governing water providers and/or  
24          community water systems.

1 III. Truxton has adequate production and storage capacities to serve existing customers and  
2 reasonable growth.

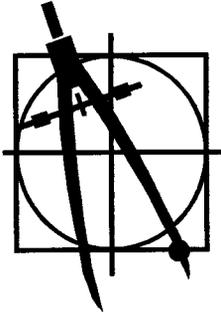
3

4 IV. Truxton is not in compliance with Commission orders because it has not transferred the  
5 wells and assets in compliance with Decision No. 72386. A check of the Commission's  
6 Utilities Division Compliance Section database indicated that there were no other  
7 delinquent compliance items for Truxton (Per status check dated September 4, 2013).

8

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

10 A. Yes, it does.



**Engineering Report  
Truxton Canyon Water Company, Inc.  
Docket No. W-02168A-11-0363 (Rates)  
Docket No. W-02168A-13-0332 (Financing)**

**By Dorothy Hains, P. E.**

**November 1, 2013**

**EXECUTIVE SUMMARY**

**Recommendations:**

1. Arizona Corporation Commission (“ACC” or “Commission”) Utilities Division Staff (“Staff”) recommends that Truxton Canyon Water Company (“Truxton” or “Company”) use depreciation rates by individual National Association of Regulatory Utility Commissioners (“NARUC”) category, as delineated in Figure 6. (See §J and Figure 6 for a discussion and a tabulation of the recommended rates).
2. Staff’s recommends the meter and service line installation charges listed in the right-hand columns of Table 6 be adopted. (See §K of report for discussion and details).
3. Staff recommends annual water testing expense of \$5,215.00 be used for this proceeding. (See §I and Tables 4 for discussion and details).
4. Staff recommends that the Company immediately begin to monitor the gallons of water pumped and the gallons of water sold on a monthly basis. The Company should coordinate when it reads the “source” meters each month with when it reads the “customer” meters so that an accurate accounting of the water pumped and the water delivered to customers can be determined. Staff further recommends that the Company file its first water usage report in the Company’s 2014 Annual Report filed with the Commission. If the reported water loss is greater than 10%, Staff further recommends that the Company shall prepare a report containing a detailed analysis and plan to reduce water loss to 10% or less. If Truxton believes it is not cost effective to reduce the water loss to less than 10%, it should submit a detailed cost benefit analysis to support its opinion. In no case shall Truxton allow water loss to be greater than 15%. (See §D for discussion and details).
5. Staff recommends that any increase in rates approved by the Commission not become effective until the Company files documentation from Arizona Department of Environmental Quality (“ADEQ”) that it is now in compliance for the monitoring of chlorine residual and nitrates.

6. Staff recommends that the Company file a curtailment tariff with the Commission's Docket Control as a compliance item in this docket as soon as possible, but no later than forty-five days after the effective date of the final Commission Decision in this matter. The tariff shall be docketed as a compliance item under this docket number for the review and certification of Staff. Staff further recommends that the tariff shall generally conform to the sample standard non-consecutive water system tariff found on the Commission's web site at [www.cc.state.az.us](http://www.cc.state.az.us). Staff recognizes that the Company may need to make minor modifications according to its specific management, operational, and design requirements as necessary and appropriate. (See §K of report for discussion and details).
7. Staff recommends that the Company file with Docket Control, as a compliance item in this docket and within 45 days of the effective date of a decision in this proceeding, at least five (5) Best Management Practice ("BMPs") in the form of tariffs that substantially conform to the templates created by Staff for Commission's review and consideration. The templates created by Staff are available on the Commission's website at <http://www.azcc.gov/Divisions/Utilities/forms.asp>. Staff further recommends that a maximum of two BMPs may come from the "Public Awareness/Public Relations" or "Education and Training" categories. The Company may request cost recovery of the actual costs associated with the BMPs implemented in its next general rate application. (See §K of report for discussion and details).
8. Staff recommends that the Commission approve \$259,800 to fund the installation of a 250 GPM arsenic treatment plant. Staff concludes that the listed system improvements in Table 5 are appropriate and the costs as adjusted by Staff reasonable. No "used and useful" determination of the proposed plant was made, and no conclusions should be inferred for future rate making or rate base purposes. Staff recommends that the Company file with Docket Control, as a compliance item in this docket, by December 31, 2015, a copy of the Certificate of Approval of Construction for installation of the 250 GPM arsenic treatment plant. (See §J of report for discussion and details).

**Conclusions:**

1. Truxton is not in compliance with Commission orders because ownership of the wells and assets has not been transferred to the Company in Compliance with Decision No. 72386. A check of the Commission's Utilities Division Compliance Section database indicated that there were no other delinquent compliance items for Truxton (Per status check dated September 4, 2013). (See §H of report for discussion and details).
2. Truxton is not compliant with ADEQ operational requirements and has monitoring and reporting deficiencies. ADEQ stated that it cannot determine if the system is currently delivering water that meets water quality standards required by 40 CFR 141 (National Primary Drinking Water Regulations) and Arizona Administrative Code, Title 18, Chapter 4. (See §F of report for discussion and details).

3. Truxton is not located in any Arizona Department of Water Resources ("ADWR") Active Management Area ("AMA") and is not subject to AMA reporting and conservation rules. ADWR reported that Truxton is currently compliant with department requirements governing water providers and/or community water systems. (See §G of report for discussion and details).
4. Staff concludes that the Truxton has adequate production and storage capacities to serve existing customers and reasonable growth. (See §C of report for discussion and details).

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**FIGURES**

FIGURE 1: TRUXTON CANYON CERTIFICATE SERVICE AREA .....12

FIGURE 2: LOCATION OF TRUXTON CANYON SERVICE AREA .....13

FIGURE 3A: SYSTEMATIC DRAWING .....14

FIGURE 3B: SYSTEMATIC DRAWING .....15

FIGURE 3C: SYSTEMATIC DRAWING .....16

FIGURE 3D: SYSTEMATIC DRAWING .....17

FIGURE 4: WATER USAGE IN TRUXTON CANYON SERVICE AREA .....18

FIGURE 5: ACTUAL AND PROJECTED GROWTH IN TRUXTON CANYON SERVICE AREA 19

FIGURE 6: DEPRECIATION RATES (TRUXTON).....20

**ENGINEERING REPORT**  
**TRUXTON CANYON WATER COMPANY, INC.**  
**DOCKET NO. W-02391A-10-0218 (RATES)**  
**DOCKET NO. W-02391A-13-0332 (FINANCING)**

**A. PURPOSE OF REPORT AND INTRODUCTION**

This report was prepared in response to the rate application filed by Truxton Canyon Water Company (“Truxton” or “Company”) with the Arizona Corporation Commission (“ACC” or “the Commission”) on September 30, 2011.

On October 30, 2011, the Commission’s Utilities Division Staff (“Staff”) informed the Company that the application met the sufficiency requirements outlined in the Arizona Administrative Code R-14-2-103.B.7. Staff classified Truxton as a Class C utility.

On November 2 and 3, 2011, Staff Engineer, Dorothy Hains conducted an inspection of the Company’s system accompanied by Michael Neal, the Company’s Manager.

On February 15, 2013, the Company filed its updated rate case data using a 2012 test year ending on December 31, 2012.

On March 5, 2013, Staff performed a follow-up inspection with Michael Neal, after reviewing the updated rate case data.

On September 30, 2013, the Company filed its \$1,819,208 financing application to seek funds (1) to install one 250 gallons per minute (“GPM”) arsenic treatment plant, (2) to purchase wells and pipelines from the Claude K. Neal Family (“Trust”).

**B. LOCATION OF SYSTEM**

The Company is located northeast of the City of Kingman in Mohave County. Attached Figures 1 and 2 detail the location of the service area in relation to other Commission-regulated companies in Mohave County and in the immediate area. The Company serves an area approximately five and one-half square miles in size.

**C. DESCRIPTION OF SYSTEM**

*I. System Description*

In Decision No. 72386, the Commission ordered the Company to acquire all water system assets necessary to provide service from the Trust no later than June 30, 2011. Although the Company has not complied with this requirement, for its engineering analysis and review Staff will treat this application as if the Company owns and operates all water system assets necessary to provide service independent from the Trust.

The Company operates a water system (“System”) that consists of five active wells, 580,000 gallons storage capacity and a distribution system. The Company also has three inactive wells and one inactive 20,000 gallon storage tank. Arizona Department of Environmental Quality (“ADEQ”) regulates the System under the Public Water System Identification (“PWS”) No. 08-035. The Company served approximately 930 metered customers during the test year; the majority of which are residential. Figures 3A, 3B, 3C and 3D are schematic drawings of the System. A detailed listing of the Company’s water system facilities are as follows:

**Table 1 Truxton Plant Data (in PWS #08-035)**

**Inactive Wells**

ADWR No.	Year Drilled	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)	Location
55-624989 (Jacuzzi Well, capped)	1944	16	260	N/A	N/A	N/A	North of Davis 2 Well
55-624983 (Reda Well, not in service over ten years and disconnected in 2013.)	1944	12	300	1	3	25	North of Davis 2 Well

**Distribution Mains in Truxton CC&N Area**

Diameter (inches)	Material	Length (feet)
4	polyvinyl chloride (“PVC”)	89,200
6	PVC	57,880
8	PVC	1,660

**Meters in Truxton**

Size (inches)	Quantity
$\frac{5}{8}$ x $\frac{3}{4}$	N/A
$\frac{3}{4}$	880
1	3
1½	N/A
2	2
3 (comp)	N/A

Inactive Storage, Pumping

Location	Structure or equipment	Capacity
Valle Vista Tank site (Sec 11, T23N, R15W (along HWY 66))	Steel Storage Tank	One 20,000 gal
Valle Vista Tank site (Sec 11, T23N, R15W (along HWY 66))	booster pump station	Two 15-HP
Valle Vista Tank site (Sec 11, T23N, R15W (along HWY 66))	Pressure tank	One 3,000 gal

Active Wells (Source Wells) To Be Transferred to Truxton

ADWR No.	Year Drilled	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)	Location	Active or Inactive
55-564988 (29 Well)	1943	16	593	8	50	250	Hackberry Rd/ Spring Valley Rd	Active
55-624985 (Davis 1 Well)	1962	16	1,072	n/a	20	250	Main St/ Hackberry Rd	Active
55-624986 (Davis 2 Well)	1944	16	355	n/a	60	450	12051 Main St.	inactive
55-624984 (Little Hackberry Well)	1962	10	685	n/a	20	52	Main St. 1 mi west from Hackberry Rd.	inactive
55-624999 (Walapai 1 Well)	1964	20	1,059	n/a	300	850	3.3 miles west from HWY 66 in T23N, R15W, Sec 8	Active
55-624997	1972		805	n/a	n/a	100	N/A	inactive

Storage, Pumping (To Be Transferred to Truxton)

Location	Structure or equipment	Capacity	Active or Inactive
Lake Mead Ranchos Subdivision Sec 31, T24N, R14W (near HWY 66)	Underground concrete Storage Tank	One 500,000 gal	Active
Walapai 1 Well site	Storage Tank (28' height)	Two 40,000 gal	Active
Arizona West Pump Station (near Valle Vista subdivision and HWY 66)	booster pump station	Two 7½-HP	Inactive
Arizona West Pump Station (near Valle Vista subdivision and HWY 66)	Pressure tank	One 5,000 gal	Inactive

*II. System Analysis*

Truxton has adequate production and storage capacities to serve the present customer base and reasonable growth.

**D. WATER USAGE**

Table 2 summarizes water usage in Truxton’s service area. Figure 4 is a graph that shows water consumption data in gallons per day (“GPD”) per customer for the system during the 2012 test year.

**Table 2 Water Usage in Truxton (PWS #08-035) CC&N Area**

Month	Number of Customers	Water Sold (in gallons)	Water pumped (in gallons)	Water purchased (in gallons)	Daily Average (in GPD/connection )
Jan 12	911	5,700,000	0	5,700,000	202
Feb 12	912	8,387,000	0	8,387,000	328
Mar 12	926	11,284,000	0	11,284,000	393
Apr 12	929	14,750,000	0	14,750,000	529
May 12	930	23,599,000	0	23,599,000	819
Jun 12	930	30,441,000	0	30,441,000	1,091
Jul 12	930	27,929,000	0	27,929,000	969
Aug 12	932	23,735,000	0	23,735,000	822
Sep 12	933	21,168,000	0	21,168,000	756
Oct 12	927	22,411,000	0	22,411,000	780
Nov 12	934	10,856,000	0	10,856,000	387
Dec 12	924	5,354,000	0	5,354,000	187
total		205,614,000	0	205,614,000	
Average					605

*I. Water Sold*

Based on information provided by the Company, during the test year, the Company experienced an overall daily average use of 605 GPD per customer, a high use of 1,091 GPD per customer in June, and a low use of 187 GPD per customer in December. The highest total monthly use occurred in June, when a total of 30,441,000 gallons were sold to 930 customers. The lowest total monthly use occurred in March, when 5,354,000 gallons were sold to 924 customers.

*II. Non-account Water*

Non-account water should be 10 percent or less and never more than 15 percent. It is important to be able to reconcile the difference between the water sold and the water produced by the source. A water balance will allow a water company to identify water and revenue losses due to

leakage, theft, and flushing.

The Company reported 205,614,000 gallons of water sold, and 205,614,000 gallons purchased during the test year this equates to a zero percent water loss which calls into question the validity of the water use data reported for the system. A zero water loss is impossible since all water system's experience losses due to breaks, flushing of lines and other non-metered use.

Staff recommends that the Company immediately begin to monitor the gallons of water pumped and the gallons of water sold on a monthly basis. The Company should coordinate when it reads the "source" meters each month with when it reads the "customer" meters so that an accurate accounting of the water pumped and the water delivered to customers can be determined. Staff further recommends that the Company file its first water usage report in the Company's 2014 Annual Report filed with the Commission. If the reported water loss is greater than 10%, Staff further recommends that the Company shall prepare a report containing a detailed analysis and plan to reduce water loss to 10% or less. If Truxton believes it is not cost effective to reduce the water loss to less than 10%, it should submit a detailed cost benefit analysis to support its opinion. In no case shall Truxton allow water loss to be greater than 15%.

#### E. GROWTH PROJECTION

Based on the service meter data contained in the Company's annual reports filed with the Commission, the number of customers increased from 567 at the end of 1999 to 924 at the end of 2012, which results in an average growth rate of 16 customers per year for the period. Based on the linear regression analysis, the Company could serve approximately 1,012 customers by end of 2017. The following table summarizes both actual and projected growth in the Company's certificated service area.

**Table 3 Actual and Projected Growth in Truxton Service Area**

Year	Nos. of Customers	
1999	567	Reported
2000	617	Reported
2001	678	Reported
2002	607	Reported
2003	617	Reported
2004	658	Reported
2005	725	Reported
2006	868	Reported
2007	873	Reported
2008	986	Reported
2009	862	Reported
2010	885	Reported
2011	878	Reported
2012	924	Reported
2013	948	Estimated

2014	964	Estimated
2015	980	Estimated
2016	996	Estimated
2017	1012	Estimated

**F. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (“ADEQ”) COMPLIANCE**

Staff received a compliance status report from ADEQ dated April 17, 2013, in which ADEQ stated that the system (PWS No. 08-035) has major deficiencies due to following reasons:

- (1) Truxton fails to monitor chlorine residual in the water;
- (2) Arsenic in the water exceeds the standard. Truxton does not have an ADEQ approved arsenic reduction plan; and has not installed an approved arsenic removal plant.
- (3) Truxton fails to monitor its nitrate levels.

Therefore, Truxton is not in compliance with ADEQ operational requirements and has monitoring and reporting deficiencies. ADEQ stated that it cannot determine if the system is currently delivering water that meets water quality standards required by 40 CFR 141 (National Primary Drinking Water Regulations) and Arizona Administrative Code, Title 18, Chapter 4.

Staff recommends that any increase in rates approved by the Commission not become effective until the Company files documentation from ADEQ that it is now in compliance for the monitoring of chlorine residual and nitrates.

**G. ARIZONA DEPARTMENT OF WATER RESOURCES (“ADWR”) COMPLIANCE**

Truxton is not located in any Active Management Area (“AMA”) as designated by ADWR, and is not subject to AMA reporting and conservation rules. Staff received an ADWR compliance status report dated March 19, 2013, in which ADWR reported that Truxton Canyon is currently compliant with department requirements governing water providers and/or community water systems.

**H. ACC COMPLIANCE**

In Decision No. 72386, the Commission ordered the Company to acquire all water system assets necessary to provide service from the Trust no later than June 30, 2011. Truxton has not complied with this requirement and is therefore out of compliance with Decision No. 72386. A check of the Commission’s Utilities Division Compliance Section database indicated that there were no other delinquent compliance items for Truxton (Per status check dated September 4, 2013).

**I. WATER TESTING EXPENSES**

Truxton is subject to mandatory participation in the ADEQ Monitoring Assistance Program (“MAP”). Staff calculated the testing costs based on the following assumptions:

1. MAP will do baseline testing on everything except copper, lead, bacteria, and disinfection by-products.
2. ADEQ testing is performed in 3-year compliance cycles. Therefore, monitoring costs are estimated for a 3-year compliance period and then presented on an annualized basis.
3. The MAP fee listed below in Table 4 is per the ADEQ MAP fee invoice issued for 2012.
4. All monitoring expenses are based on Staff’s best knowledge of lab costs and methodology and one point of entry.
5. The estimated water testing expenses represent a minimum cost based on no “hits” other than lead and copper, and assume compositing of well samples. If any constituents were found, then the testing costs could dramatically increase.

Water testing expenses should be adjusted to Staff’s annual expense amount of **\$5,215** (rounded) shown in Table 4.

**Table 4 Water Testing Cost (Truxton)**

Tests per 3 years, unless noted. Monitoring – 2 POE (6 wells) (Tests per 3 years, unless noted.)	Cost* per test	No. of tests per three year period	Total cost per three year period	Annual Cost
Bacteriological – monthly	\$20	216	\$4,320	\$1,440
Inorganics – Priority Pollutants	\$300	MAP	MAP	MAP
Radiochemical – (1/ 4 yr)	\$60	MAP	MAP	MAP
Phase II and V:				
IOC’s, SOC’s, VOC’s	\$2,805	MAP	MAP	MAP
Nitrites	\$25	MAP	MAP	MAP
Nitrates – annual	\$25	MAP	MAP	MAP
Asbestos – per 9 years	\$180	2 $\frac{1}{3}$	MAP	MAP
Lead & Copper – annual**	\$45	10	\$450	\$150
Arsenic	\$25	24	\$600	\$200

TTHM/HHA5***	\$310	6	\$1,860	\$620
MAP fees (annual)				\$2805.32
Total				\$5,215.32

Note: \*. The unit costs come from Company selected lab, Mohave Environmental Lab ("Lab").  
\*\*. Based on the Lab, testing copper is \$20/sample and testing lead is \$25/sample. ADEQ reduced the sampling requirement to 10 samples per 3 years.  
\*\*\*. Based on the Lab, testing TTHM is \$100/sample and testing HHA5 is \$210/sample. The Company has to test two samples per year.

**J. FINANCING APPLICATION (DOCKET NO. W-02168A-13-0332)**

On September 30, 2013, the Company submitted a finance application for authority to incur long term debt in the amount of \$1,819,208 from the Water Infrastructure Finance Authority ("WIFA") of Arizona to fund water system improvements. Included in its loan authorization request is \$419,208 to pay for the cost of installing a 250 GPM arsenic removal treatment plant. This section only addresses Staff's technical evaluation of the Company's proposal to purchase and install an arsenic removal treatment plant.

Staff evaluated the Company's arsenic removal project based on information obtained during Staff's field visit and ADEQ approved construction plans. ADEQ issued a Certificate of Approval To Construct for the proposed project on March 28, 2013. Staff's estimated cost for the arsenic removal project totals \$259,280 as summarized in the Table below:

**Table 5 Truxton Arsenic Treatment Plant Installation Cost Estimates**

	Plant Item	Company's Estimate (\$)	Staff's Estimates (\$)	Staff's Recommendation (\$)
1	Treatment Plant and Rerouting well	193,652		
	ADEQ Permit fee	N/A	2,000	2,000
	Engineering	N/A	20,000 <sup>1</sup>	20,000 <sup>1</sup>
	3 Flow meters/Control meters	N/A	4,500	4,500
	Piping	N/A	73,000	73,000
	Media (estimated 76 cubic feet @ \$250/cubic ft) <sup>2</sup>	N/A	19,000	19,000
	Vessel (three fiberglass tanks of 4' diameter, 6' in height) <sup>2</sup>	N/A	10,000	10,000
	One 6,500 gal HDPE tank for recycling water storage	N/A	3,000	3,000
	One 2,000 gal HDPE tank for backwashing water storage <sup>2</sup>	N/A	1,000	1,000
	300' 6" PVC line inflow line from	N/A	12,000	12,000

	distribution line to the treatment plant (estimated \$40/ft including material, labor, equipment rental and survey) <sup>2</sup>			
	300' 6" PVC line discharge line from the treatment plant to the distribution system line (estimated \$40/ft including material, labor, equipment rental and survey) <sup>2</sup>	N/A	12,000	12,000
	Concrete, fencing, earthwork	N/A	0 <sup>3</sup>	0 <sup>3</sup>
	<b>subtotal</b>	<b>193,652</b>	<b>156,500</b>	<b>156,500</b>
2	Electrical Controls and Instrument Changeover	127,000		
	Control Panel Installation	N/A	50,000	50,000
	Electric Power Line upgrade ( from single phase line to 3 phase line, estimate 1,000' between Davis 1 Well and the treatment plant site)	N/A	10,000	10,000
	<b>subtotal</b>	<b>127,000</b>	<b>60,000</b>	<b>60,000</b>
3	Replacing Transmission Line (1 mile)	98,556	0 <sup>4</sup>	0 <sup>4</sup>
	<b>subtotal</b>	<b>98,556</b>	<b>0</b>	<b>0</b>
	<b>Total</b>	<b>419,208</b>	<b>216,500</b>	<b>216,500</b>
	Administration fee (5%)	0	10,825	10,825
	Contingency (15%)	0	32,475	32,475
	<b>Total</b>	<b>419,208</b>	<b>259,800</b>	<b>259,800</b>

Notes:

1. Item includes design fee, water testing cost and survey cost.
2. Based on the construction plan approved by ADEQ on March 28, 2013.
3. Per the ADEQ approved construction plan the treatment plant will be installed inside an existing warehouse, therefore, no concrete pad, fencing, etc. will be necessary.
4. No explanation was provided by the Company as to why this transmission line was needed

Staff concludes that the listed system improvements are appropriate and the costs as adjusted by Staff reasonable. No "used and useful" determination of the proposed plant was made, and no conclusions should be inferred for future rate making or rate base purposes. Staff recommends that the Company file with Docket Control, as a compliance item in this docket, by December 31, 2015, a copy of the Certificate of Approval of Construction for installation of the 250 GPM arsenic treatment plant.

**K. DEPRECIATION RATES**

Staff has developed typical and customary depreciation rates within the range of anticipated equipment life. These rates are presented in Figure 6, and should be used to calculate the annual depreciation expense for the Company in this application. It is recommended that the Company use depreciation rates by individual National Association of Regulatory Utility Commissioners (“NARUC”) category, as delineated in Figure 6.

**L. OTHER ISSUES**

*I. Service Line and Meter Installation Charges*

The Company is proposing to revise its meter and service line installation charges. These charges are refundable advances and the Company’s proposed charges are within Staff’s experience of what are reasonable and customary charges. Separate service line and meter charges were proposed by the Company in its application. Staff recommends approval of the meter and service line installation charges proposed by the Company and listed under the columns labeled “Staff Recommendation” in Table 6 below.

**Table 6 Service Line and Meter Installation Charges (Truxton)**

Meter Size (inches)	Current Meter & Service Line installation charges (per Decision #63713)	Company Proposed Service Line installation charges	Company Proposed Meter installation charges	Company Proposed Total charges	Staff Recommended Service Line installation charges	Staff Recommended Meter installation charges	Staff Recommended Total charges
5/8 x 3/4	\$450	\$445	\$155	\$600	\$445	\$155	\$600
3/4	\$500	\$445	\$255	\$700	\$445	\$255	\$700
1	\$550	\$495	\$315	\$810	\$495	\$315	\$810
1½	\$775	\$550	\$525	\$1,075	\$550	\$525	\$1,075
2 (Turbine)	\$1,305	\$830	\$1,045	\$1,875	\$830	\$1,045	\$1,875
2 (Compound)	\$1,900	\$830	\$1,890	\$2,720	\$830	\$1,890	\$2,720
3 (Turbine)	\$1,815	\$1,045	\$1,670	\$2,715	\$1,045	\$1,670	\$2,715
3 (Compound)	\$2,490	\$1,165	\$2,545	\$3,710	\$1,165	\$2,545	\$3,710
4 (Turbine)	\$2,860	\$1,490	\$2,670	\$4,160	\$1,490	\$2,670	\$4,160
4 (Compound)	\$3,615	\$1,670	\$3,645	\$5,315	\$1,670	\$3,645	\$5,315
6 (Turbine)	\$5,275	\$2,210	\$5,025	\$7,235	\$2,210	\$5,025	\$7,235
6 (Compound)	\$6,810	\$2,330	\$6,920	\$9,250	\$2,330	\$6,920	\$9,250

*II. Curtailment Tariff*

The Company does not have an approved curtailment tariff on file with the Commission. A curtailment tariff is an effective tool to allow a water company to manage its resources during periods of shortages due to pump breakdowns, droughts, or other unforeseeable events. Since the Company does not have a curtailment tariff, this application provides an opportune time to prepare and file such a tariff. Staff recommends that the Company file a curtailment tariff as soon as possible, but no later than forty-five days after the effective date of the final Decision and Order in this matter. The tariff shall be docketed as a compliance item under this docket number for the review and certification by Staff.

Staff further recommends that the tariff shall generally conform to the sample standard non-consecutive water system tariff found on the Commission's web site at [www.cc.state.az.us](http://www.cc.state.az.us). Staff recognizes that the Company may need to make minor modifications according to its specific management, operational, and design requirements as necessary and appropriate.

*III. Cross Connection/Backflow Prevention Tariff*

The Company has an approved backflow prevention tariff on file with the Commission.

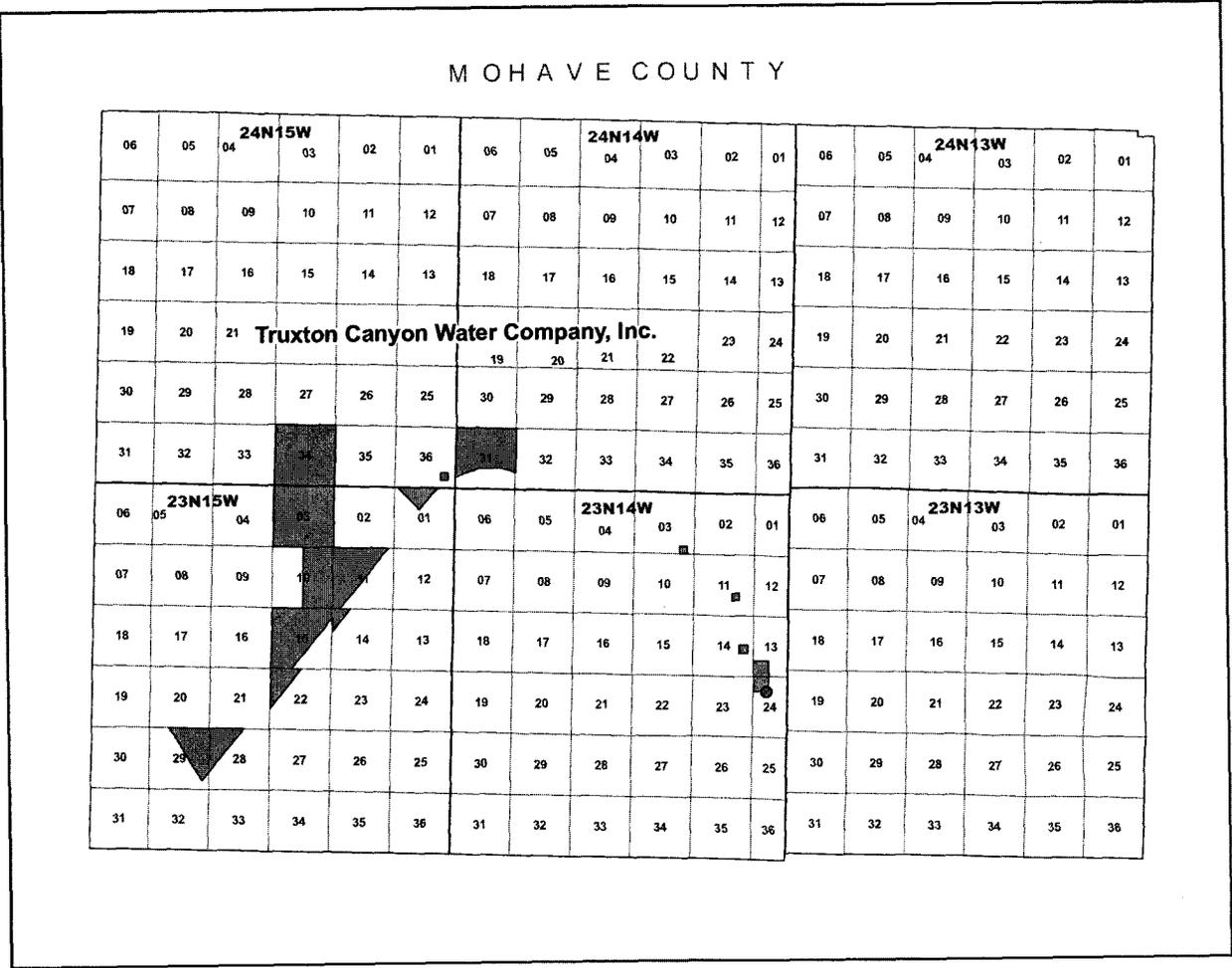
*VI. Best Management Practices ("BMP") Tariffs*

Staff recommends that the Company file with Docket Control, as a compliance item in this docket and within 45 days of the effective date of a decision in this proceeding, at least five (5) BMPs in the form of tariffs that substantially conform to the templates created by Staff for Commission's review and consideration. The templates created by Staff are available on the Commission's website at <http://www.azcc.gov/Divisions/Utilities/forms.asp>.

Staff further recommends that a maximum of two BMPs may come from the "Public Awareness/Public Relations" or "Education and Training" categories. The Company may request cost recovery of the actual costs associated with the BMPs implemented in its next general rate application.

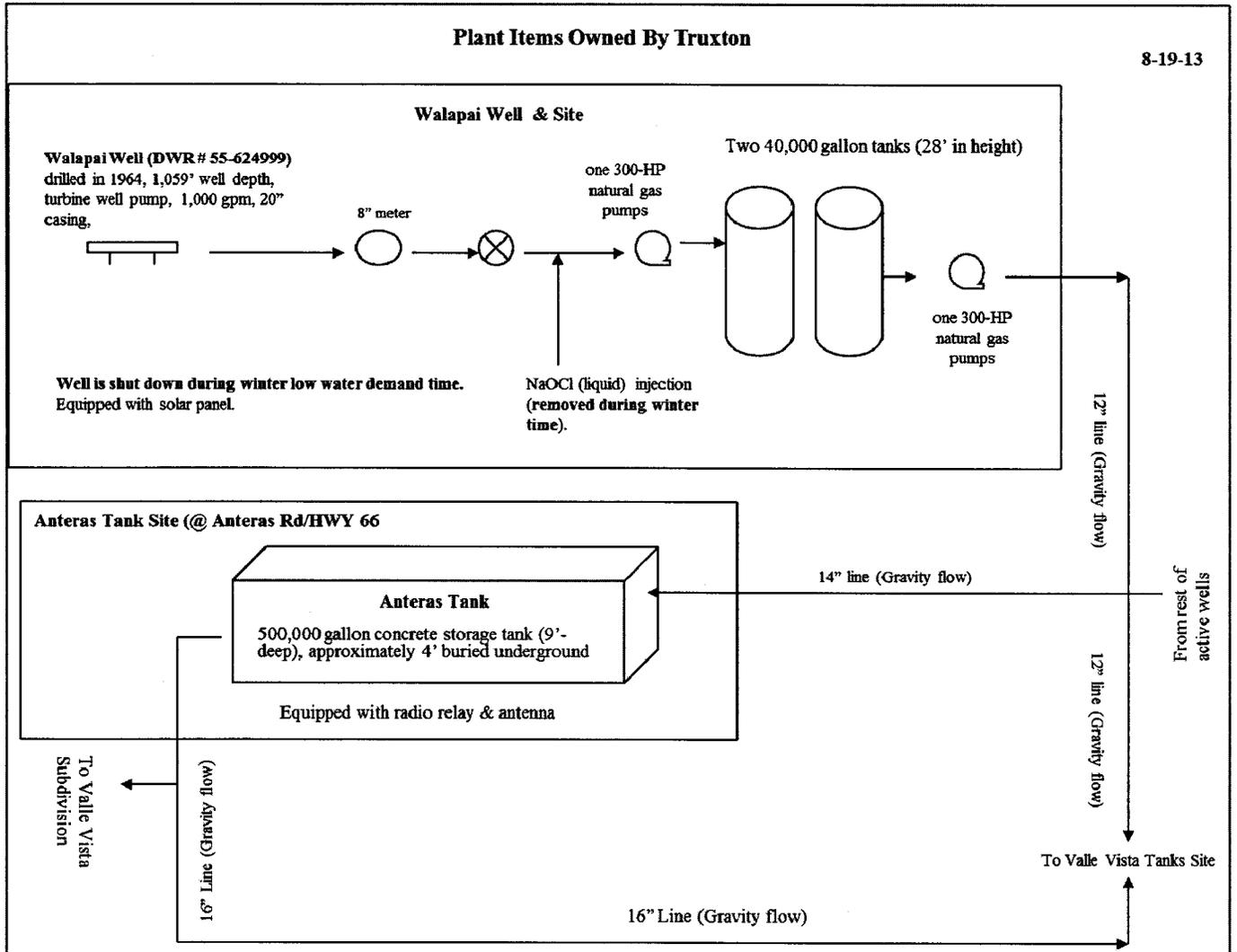
**FIGURE 1**

**Truxton Canyon Certificate Service Area**

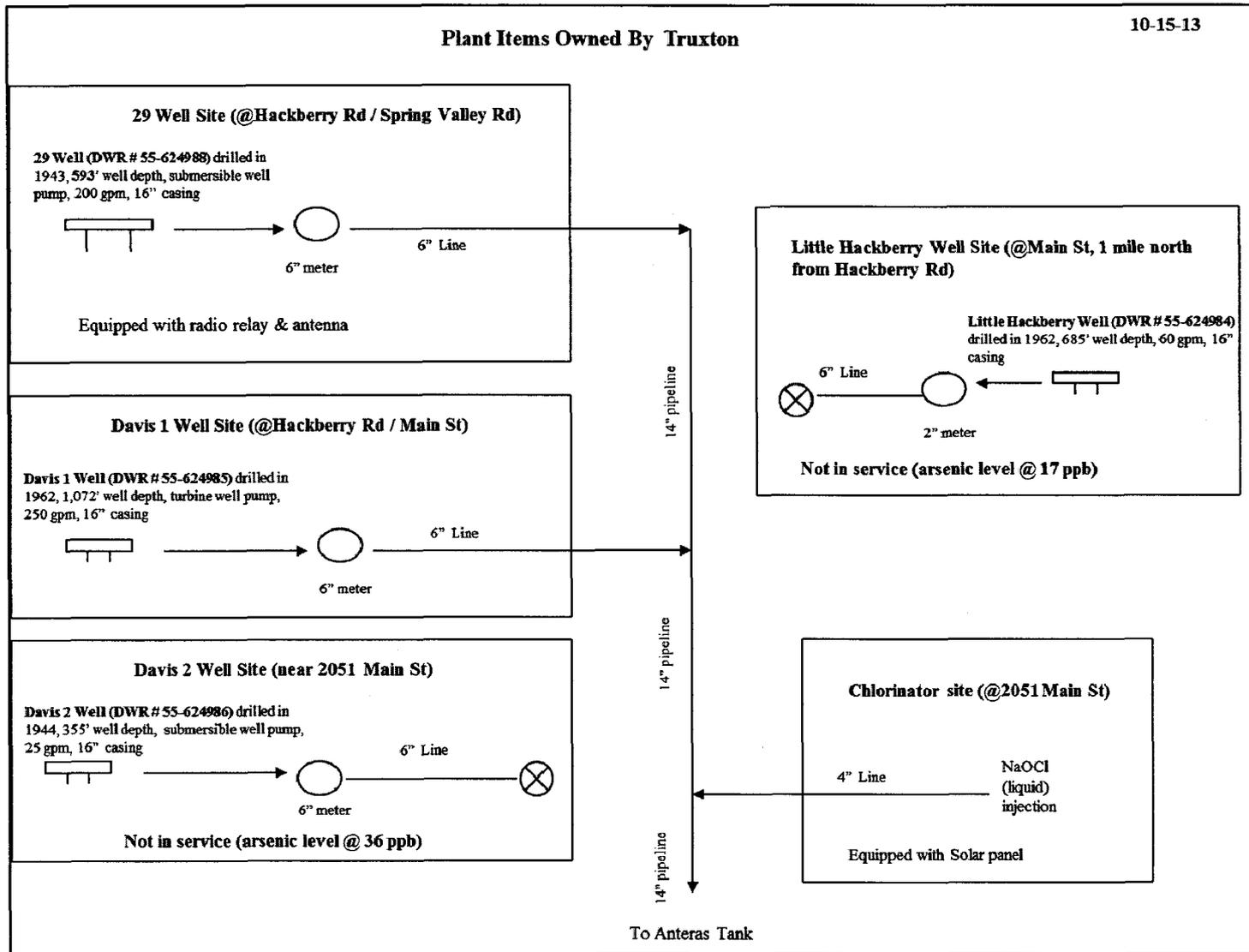




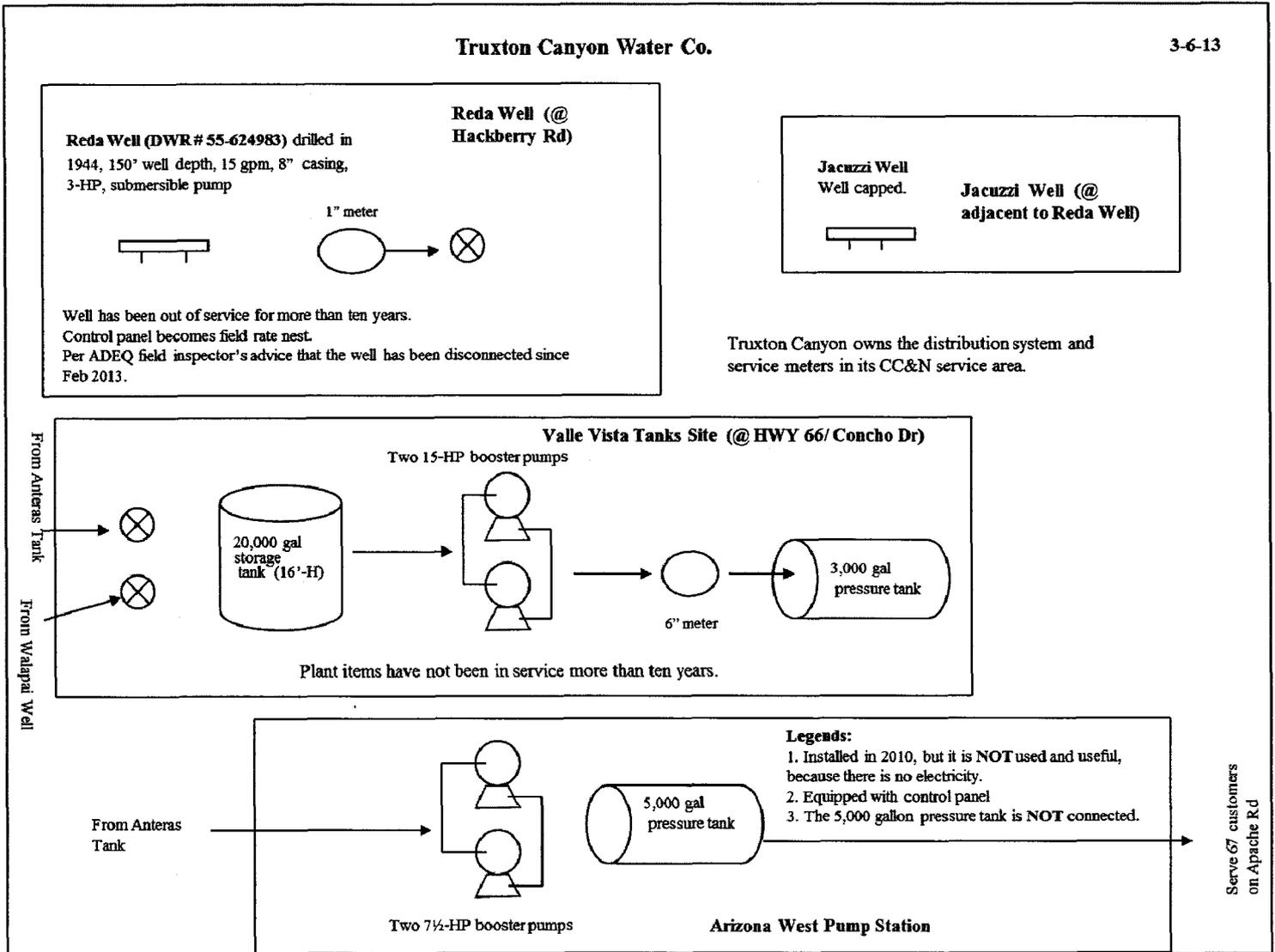
**FIGURE 3A**  
**SYSTEMATIC DRAWING**



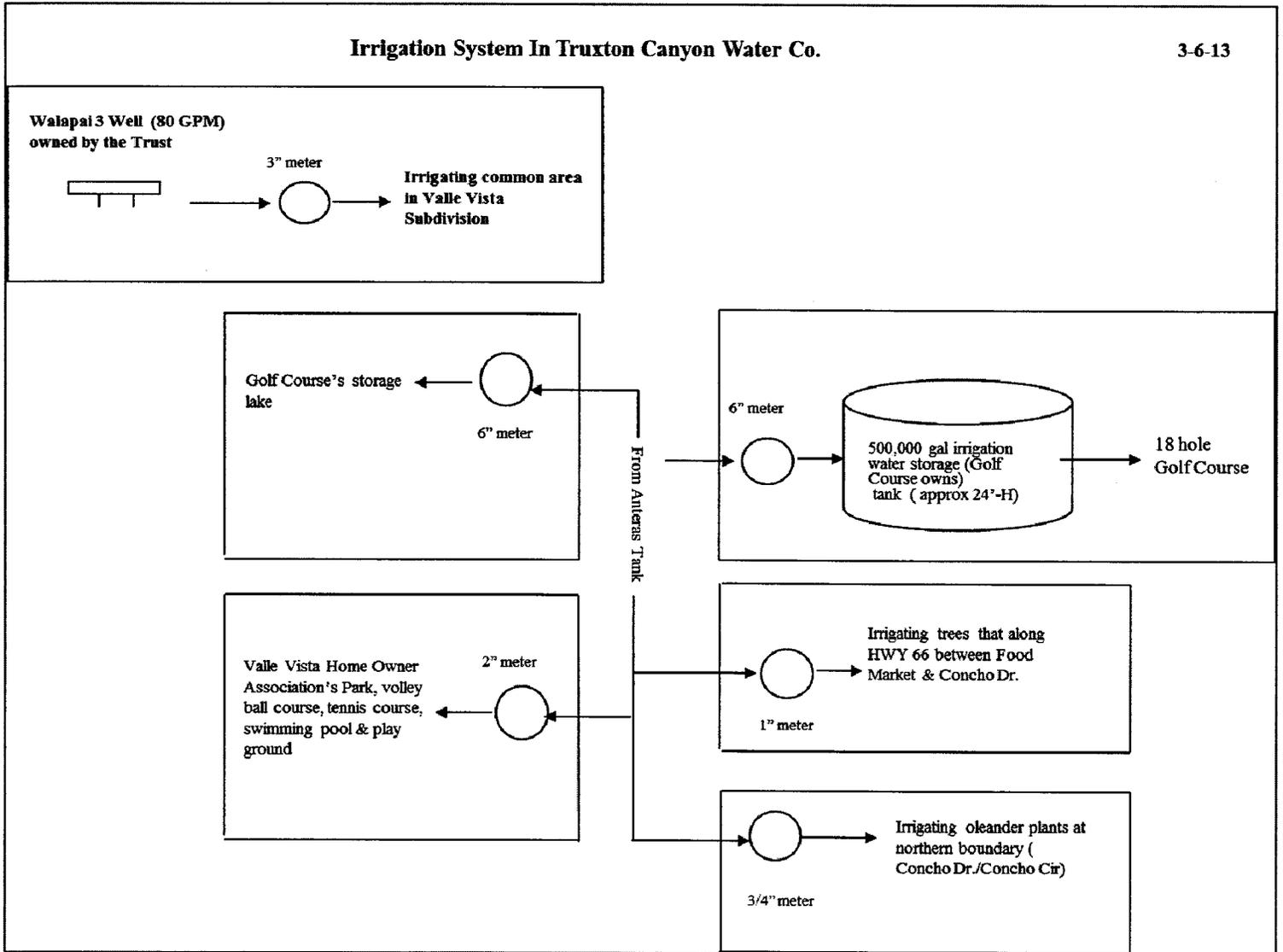
**FIGURE 3B  
 SYSTEMATIC DRAWING**



**FIGURE 3C  
 SYSTEMATIC DRAWING**

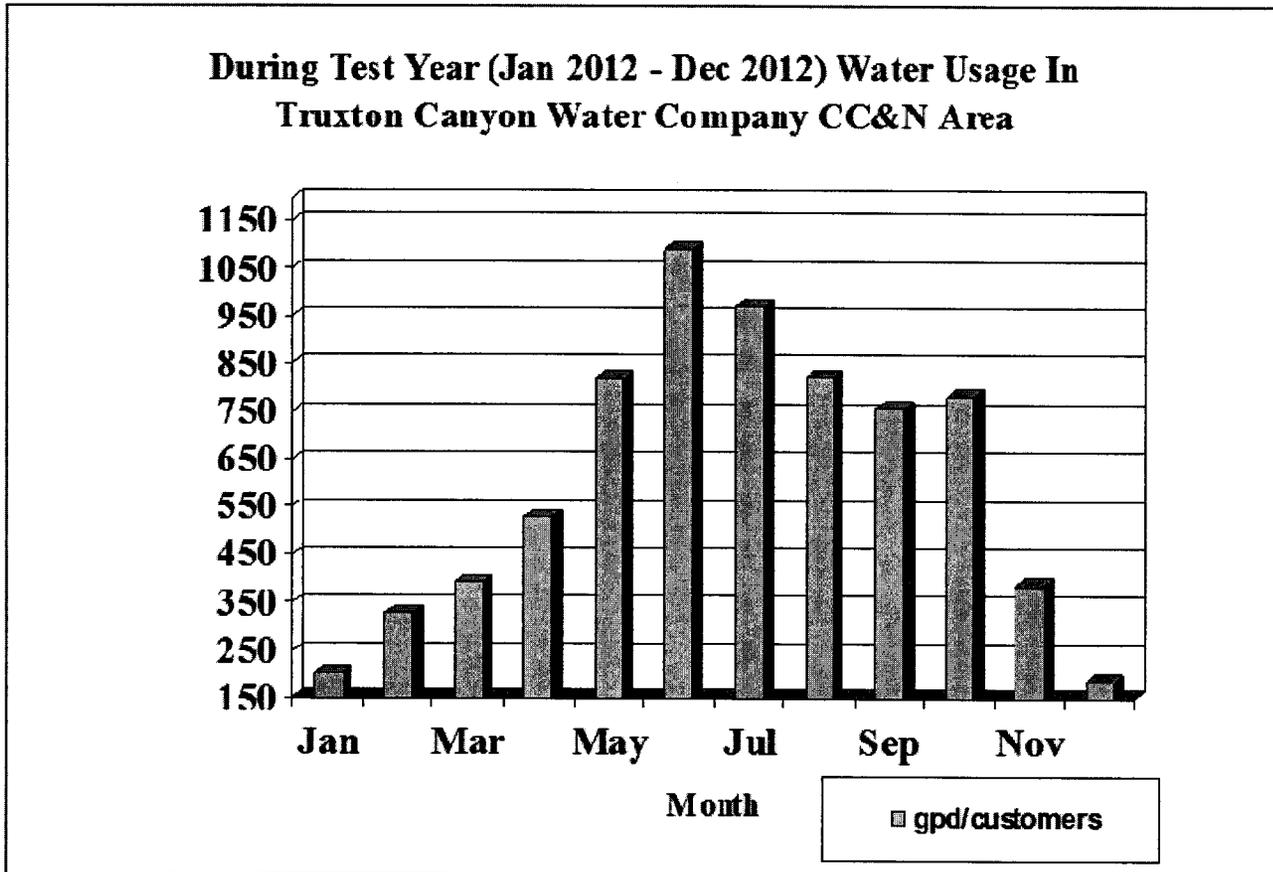


**FIGURE 3D**  
**SYSTEMATIC DRAWING**



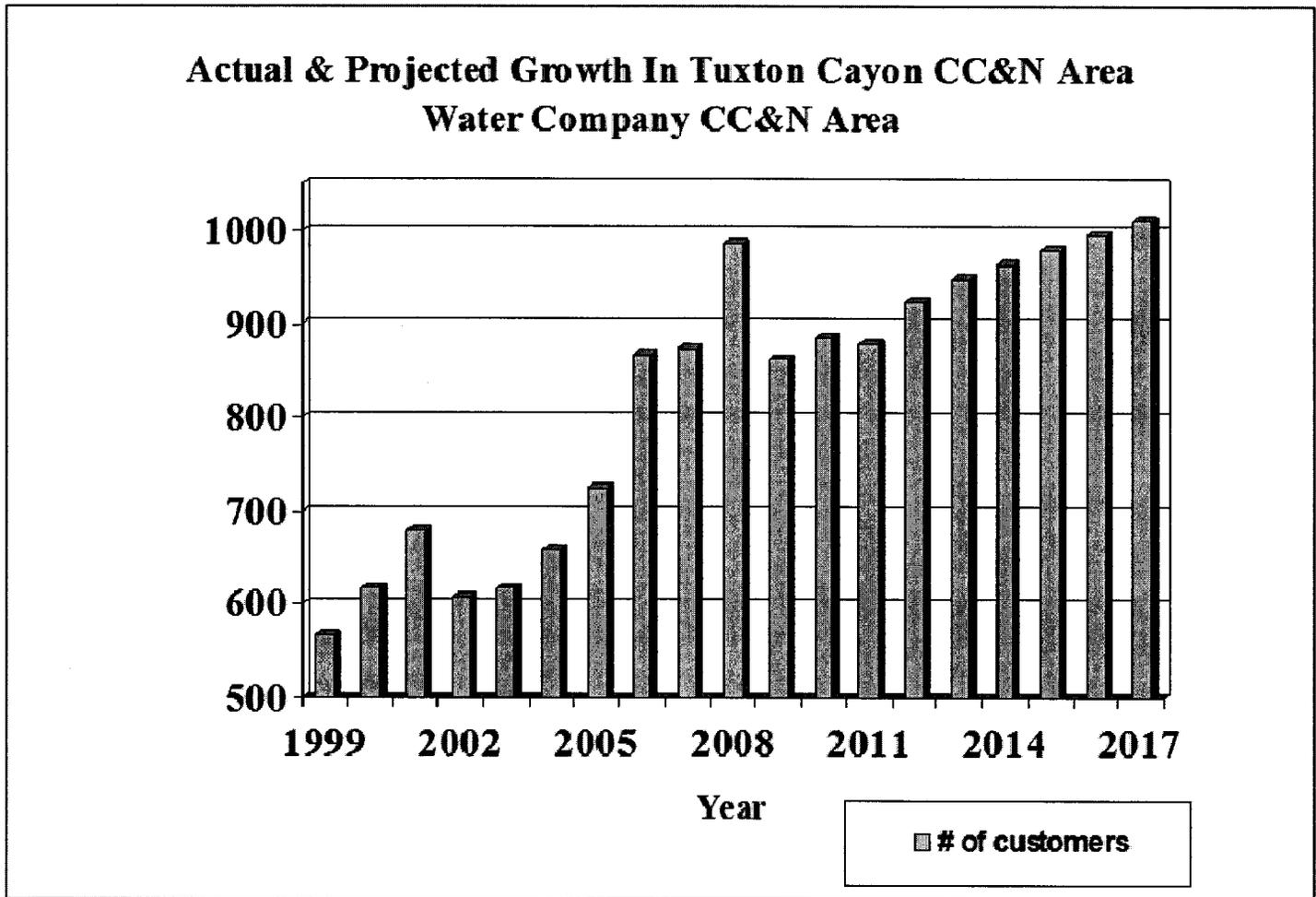
**FIGURE 4**

**WATER USAGE IN THE TRUXTON CANYON SERVICE AREA**



**FIGURE 5**

**ACTUAL AND PROJECTED GROWTH IN TRUXTON CANYON SERVICE AREA**



**FIGURE 6**

**Depreciation Rates (Truxton)**

Acct. No.	Depreciable Plant	Approved Rate (%) (Decision # 63713)	Proposed Rate (%)	Staff Recommended Rate (%)
301	Organization	5	0	0
302	Franchises		n/a	0
303	Land and Land Rights	5	0	0
304	Structures & Improvements	5	3.33	3.33
305	Collecting & Impounding Reservoirs		n/a	2.50
306	Lake, River, Canal Intakes		n/a	2.50
307	Wells & Springs	5	3.33	3.33
308	Infiltration Galleries		n/a	6.67
309	Raw Water Supply Mains		n/a	2.00
310	Power Generation Equipment		n/a	5.00
311	Pumping Equipment	5	12.50	12.5
320	Water Treatment Equipment	5		
320.1	Water Treatment Plants		3.33	3.33
320.2	Solution Chemical Feeders		20.00	20.0
330	Distribution Reservoirs & Standpipes	5	2.22	
330.1	Storage Tanks		2.22	2.22
330.2	Pressure Tanks		5.00	5.00
331	Transmission & Distribution Mains	5	2.00	2.00
333	Services	5	3.33	3.33
334	Meters	5	8.33	8.33
335	Hydrants	5	2.00	2.00
336	Backflow Prevention Devices		n/a	6.67
339	Other Plant & Misc Equipment	5	6.67	6.67
340	Office Furniture & Equipment		6.67	6.67
340.1	Computers & Software		20.00	20.00
341	Transportation Equipment	5	20.00	20.00
342	Stores Equipment		n/a	4.00
343	Tools, Shop & Garage Equipment	5	5.00	5.00
345	Power Operated Equipment	5	5.00	5.00
348	Other Tangible Plant	5	0.00	----