

**ORIGINAL**



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**BEFORE THE ARIZONA CORPORATION COMMISSION**

2 **COMMISSIONERS**

- 3 KRISTIN K. MAYES - Chairman
- 4 GARY PIERCE
- 5 PAUL NEWMAN
- 6 SANDRA D. KENNEDY
- 7 BOB STUMP

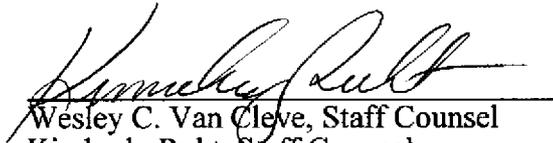
8 **IN THE MATTER OF THE APPLICATION  
9 OF SAHUARITA WATER COMPANY, LLC  
10 FOR A RATE INCREASE.**

**DOCKET NO. W-03718A-09-0359**

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

11 Staff of the Arizona Corporation Commission ("Staff") hereby files the Direct Testimony of  
12 Staff Witnesses Jeffrey Michlik, Juan Manrique and Marlin Scott, Jr. in the above-referenced matter.

13 **RESPECTFULLY SUBMITTED** this 22<sup>nd</sup> day of April, 2010.

14 

15 Wesley C. Van Cleve, Staff Counsel  
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18 Arizona Corporation Commission  
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22 Original and thirteen (13) copies  
23 of the foregoing filed this  
24 22<sup>nd</sup> day of April, 2010, with:

25 Docket Control  
26 Arizona Corporation Commission  
27 1200 West Washington Street  
28 Phoenix, Arizona 85007

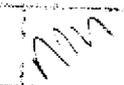
Copy of the foregoing mailed this  
22<sup>nd</sup> day of April, 2010, to:

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Arizona Corporation Commission

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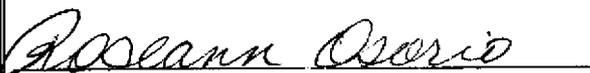
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**DIRECT  
TESTIMONY**

**OF**

**JEFFREY M. MICHLIK  
JUAN C. MANRIQUE  
MARLIN SCOTT, JR.**

**DOCKET NO. W-03718A-09-0359**

**IN THE MATTER OF THE APPLICATION OF  
SAHUARITA WATER COMPANY, L.L.C.  
FOR A RATE INCREASE**

**APRIL 22, 2010**

BEFORE THE ARIZONA CORPORATION COMMISSION

KRISTIN K. MAYES  
Chairman  
GARY PIERCE  
Commissioner  
PAUL NEWMAN  
Commissioner  
SANDRA D. KENNEDY  
Commissioner  
BOB STUMP  
Commissioner

IN THE MATTER OF THE APPLICATION OF ) DOCKET NO. W-03718A-09-0359  
SAHUARITA WATER COMPANY, L.L.C. )  
("SWC") FOR AN OPINION AND ORDER OF )  
THE COMMISSION (i) DETERMINING THE )  
FAIR VALUE OF THE UTILITY PROPERTY )  
OF SWC FOR RATEMAKING PURPOSES, (ii) )  
FIXING A JUST AND REASONABLE RATE )  
OF RETURN THEREON, (iii) APPROVING )  
RATES AND CHARGES DESIGNED TO )  
PRODUCE REVENUES SUFFICIENT TO )  
RECOVER SWC'S COST OF SERVICE AND )  
AUTHORIZED RATE OF RETURN, AND (iv) )  
PROVIDING FOR THE RECOVERY OF )  
CERTAIN FINANCINGS AND OPERATING )  
EXPENSES THROUGH A SURCHARGE AND )  
A PASS-THROUGH TARIFF, RESPECTIVELY )

DIRECT

TESTIMONY

OF

JEFFREY M. MICHLIK

PUBLIC UTILITIES ANALYST V

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

APRIL 22, 2010

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**EXECUTIVE SUMMARY  
SAHUARITA WATER COMPANY, LLC  
DOCKET NO. W-03718A-09-0359**

Sahuarita Water Company, LLC ("SWC" or "Company") is an Arizona Limited Liability Company. The Company is engaged in the business of providing water utility services in Sahuarita, Arizona. The Company served approximately 4,700 water customers during the test year ended December 31, 2008. The Company's current rates were approved in its original Certificate of Convenience and Necessity Application, Decision No. 59431, dated December 28, 1995.

**Rate Application:**

The Company proposes rates that would increase operating revenue by \$1,162,216 to produce operating revenue of \$3,377,359 resulting in operating income of \$890,209, or a 52.47 percent increase over test year revenue of \$2,215,143. The Company also proposes a fair value rate base ("FVRB") of \$7,418,410, which is its original cost rate base ("OCRB"), and a 12.00 percent rate of return on the FVRB.

Staff recommends rates that would increase operating revenue by \$262,416 to produce operating revenue of \$2,477,559 resulting in operating income of \$783,842, or an 11.85 percent increase over adjusted test year revenue of \$2,215,143. Staff recommends an OCRB of \$8,709,357 which is its FVRB, and a 9.00 percent rate of return on the FVRB.

**Central Arizona Ground Water Replenishment District ("CAGRDR"):**

Staff recommends approval of a CAGRDR adjustor mechanism, subject to certain conditions.

**Accounting Order:**

Staff recommends denial of the Company's request for an accounting order related to arsenic media costs for future consideration in a rate case.

1     **INTRODUCTION**

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

3     A.     My name is Jeffrey M. Michlik. I am a Public Utilities Analyst V employed by the  
4           Arizona Corporation Commission (“ACC” or “Commission”) in the Utilities Division  
5           (“Staff”). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

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

8     A.     In my capacity as a Public Utilities Analyst V, I analyze and examine accounting,  
9           financial, statistical and other information and prepare reports based on my analyses that  
10          present Staff’s recommendations to the Commission on utility revenue requirements, rate  
11          design and other matters. I also provide expert testimony on these same issues.

12  
13    **Q.     Please describe your educational background and professional experience.**

14    A.     In 2000, I graduated from Idaho State University, receiving a Bachelor of Business  
15          Administration Degree in Accounting and Finance, and I am a Certified Public  
16          Accountant with the Arizona State Board of Accountancy. I have attended the National  
17          Association of Regulatory Utility Commissioners’ (“NARUC”) Utility Rate School,  
18          which presents general regulatory and business issues.

19  
20          I joined the Commission as a Public Utilities Analyst in May of 2006. Prior to  
21          employment with the Commission, I worked four years for the Arizona Office of the  
22          Auditor General as a Staff Auditor, and one year in public accounting as a Senior Auditor.

23  
24    **Q.     What is the scope of your testimony in this case?**

25    A.     I am presenting Staff’s analysis and recommendations regarding Sahuarita Water  
26          Company, LLC’s (“SWC” or “Company”) application for a permanent increase in its rates

1 and charges for water utility service within Pima County, Arizona. I am presenting  
2 testimony and schedules addressing rate base, operating revenues and expenses, revenue  
3 requirement, and rate design. Staff witness Juan Manrique is presenting Staff's cost of  
4 capital. Mr. Marlin Scott Jr. is presenting Staff's engineering analysis and related  
5 recommendations.

6  
7 **Q. What is the basis of your testimony in this case?**

8 A. I performed a regulatory audit of the Company's application and records. The regulatory  
9 audit consisted of examining and testing financial information, accounting records, and  
10 other supporting documentation and verifying that the accounting principles applied were  
11 in accordance with the Commission-adopted NARUC Uniform System of Accounts  
12 ("USOA").

13  
14 **BACKGROUND**

15 **Q. Please review the background of this application.**

16 A. The Company is an Arizona limited liability company. The Company is engaged in the  
17 business of providing water utility services in Sahuarita, Arizona. The Company served  
18 approximately 4,700 water customers during the test year ended December 31, 2009. The  
19 Company's current rates were approved in its original Certificate of Convenience and  
20 Necessity application, Decision No. 59431, dated December 28, 1995.

21

1     **CONSUMER SERVICES**

2     **Q.     Please provide a brief history of customer complaints received by the Commission**  
3           **regarding the Company.  Additionally, please discuss customer responses to the**  
4           **Company's proposed rate increase.**

5     A.     A review of the Commission's Consumer Services database for the Company from  
6           January 1, 2007 to April 7, 2010, revealed the following:

7  
8           2007 – Zero complaints, inquiries and opinions.

9           2008 – Three complaints (two billing, one disconnect/termination), zero inquires and  
10          opinions.

11          2009 – Zero complaints, inquires and opinions.

12          2010 – Zero complaints, inquires, and three opinions opposed to the rate increase.

13          All complaints and inquiries have been resolved and closed.

14  
15     **COMPLIANCE**

16     **Q.     Please provide a summary of the compliance status of the Company.**

17     A.     A check of the ACC's Compliance database indicates that there are currently no  
18          delinquencies for the Company.

19  
20     **SUMMARY OF FILING, RECOMMENDATIONS, AND ADJUSTMENTS**

21     **Q.     Please summarize the Company's proposals in this filing.**

22     A.     The Company proposes rates that would increase operating revenues by \$1,162,216 to  
23          produce operating revenue of \$3,377,359 resulting in operating income of \$890,209, or a  
24          52.47 percent increase over test year revenue of \$2,215,143.  The Company also proposes  
25          a fair value rate base ("FVRB") of \$7,418,410 which is its original cost rate base  
26          ("OCRB"), and a 12.00 percent rate of return on the FVRB.

1 **Q. Please summarize Staff's recommendations.**

2 A. Staff recommends rates that would increase operating revenue by \$262,416 to produce  
3 operating revenue of \$2,477,559 resulting in operating income of \$783,842, or an 11.85  
4 percent increase over adjusted test year revenue of \$2,215,143. Staff recommends an  
5 OCRB of \$8,709,357 which is its FVRB, and a 9.00 percent rate of return on the FVRB.  
6

7 **Q. What test year did the Company use in this filing?**

8 A. The Company's rate filing is based on the twelve months ended December 31, 2008 ("test  
9 year").  
10

11 **Q. Please summarize the rate base adjustments addressed in your testimony.**

12 A. My testimony addresses the following issues:  
13

14 Post-Test Year Plant – This adjustment increases Plant in Service by \$2,850,253 and the  
15 associated funding source by \$1,877,809.  
16

17 Plant Not Used and Useful – This adjustment decreases Plant in Service by \$327,565 and  
18 the associated funding source by \$76,082.  
19

20 Accumulated Depreciation – This adjustment decreases accumulated depreciation by  
21 \$327,565 based upon the adjustments Staff made to plant in service.  
22

23 Customer Deposits – This adjustment increases customer deposits by \$96,204 to include  
24 customer deposits.  
25

1           Accumulated Deferred Income Taxes – This adjustment decreases Accumulated Deferred  
2           Income Taxes by \$338,625 to reverse the Company’s pro-forma adjustment since the  
3           Company does not pay income taxes.

4  
5           **Q. Please summarize the operating revenue and expense adjustments addressed in your**  
6           **testimony.**

7           A. My testimony addresses the following issues:

8  
9           Affiliate Management Fees Expense – This adjustment decreases outside service expense  
10           by \$189,628 to remove overhead and affiliate profit related to the unregulated affiliate’s  
11           business operations.

12  
13           Beverage Expenses – This adjustment decreases outside service expense by \$751 to  
14           remove expenses not necessary to the provision of water services.

15  
16           Water Testing Expense – This adjustment increases water testing expense by \$1,632 to  
17           reflect the amount recommended by Staff.

18  
19           Rental Expense – This adjustment decreases rental expense by \$11,299 to reflect a known  
20           and measurable change in the Company’s rental contract.

21  
22           Rate Case Expense – This adjustment decreases rate case expense by \$30,000 to reflect  
23           Staff’s normalization over 5 years.

24  
25           Depreciation Expense – This adjustment decreases depreciation expenses by \$1,592 to  
26           adjust depreciation based on Staff’s recommended plant in service balances.

1           Property Tax Expense – This adjustment decreases property tax expense by \$14,219 to  
2           adjust property taxes to Staff's adjusted test year and recommended revenues.

3  
4           Income Tax Expense – This adjustment decreases income tax expense by \$104,948 to  
5           reflect the fact that the Company does not pay income taxes, as it is classified by the  
6           Internal Revenue Service as a pass-through entity.

7  
8           **RATE BASE**

9           *Fair Value Rate Base*

10          **Q.     Did the Company prepare a schedule showing the elements of Reconstruction Cost**  
11          **New Rate Base?**

12          A.     No, the Company did not. The Company's filing treats the OCRB the same as the FVRB.

13  
14          *Rate Base Summary*

15          **Q.     Please summarize Staff's adjustments to the Company's rate base shown on**  
16          **Schedules JMM-2 and JMM-3.**

17          A.     Staff's adjustments to the Company's rate base resulted in a net increase of \$1,290,947,  
18               from \$7,418,410 to \$8,709,357. This net increase was primarily due to: (1) the addition of  
19               post-test year arsenic treatment plant, (2) the removal of post test year plant and plant that  
20               was not used and useful, (3) an adjustment to accumulated depreciation, (4) an adjustment  
21               to customer deposits, and (5) an adjustment to remove accumulated deferred income taxes.

22  
23          *Rate Base Adjustment No. 1 – Post-Test Year Plant*

24          **Q.     Did the Company propose to include certain post test year plant in rate base?**

25          A.     Yes. The Company proposed inclusion of \$1,844,270 for the costs related to Well #23.

26

1 **Q. Did Staff make an adjustment to the proposed post-test year plant in rate base?**

2 A. Yes. Staff increased post-test year plant by \$2,850,253, from \$1,844,270 to \$4,694,523,  
3 as shown on Schedule JMM-4.  
4

5 **Q. Did Staff actually make two distinct adjustments related to post-test year plant?**

6 A. Yes, Staff removed the original \$1,844,270 that the Company requested for Well #23, but  
7 added \$4,694,523 for the arsenic treatment facility.  
8

9 **Q. Does Staff typically allow the inclusion of plant that was completed after the end of  
10 the test year?**

11 A. No. Staff has historically only recommended the inclusion of post test year plant in  
12 unusual circumstances.  
13

14 **Q. Why did Staff remove the \$1,844,270 that the Company proposed?**

15 A. Marlin Scott, Jr., Staff's Engineer, inspected the entire system and determined that the test  
16 year well and storage capacities were sufficient and, therefore, concluded that Well No. 23  
17 was not needed. (See Staff Engineering Report, Section I, Post-Test Year Plant).  
18

19 **Q. Is the \$1,844,270 related to the cost of the arsenic treatment plant?**

20 A. No, it is not.  
21

22 **Q. Did the Company request that the \$4,694,523 for the post-test year arsenic treatment  
23 facility be included in rate base in this rate case?**

24 A. No. However, the Company is seeking an Arsenic Cost Recovery Surcharge Mechanism  
25 ("ACRSM") to cover the debt service on the Water Infrastructure Finance Authority  
26 ("WIFA") loan obtained to finance the construction of the facility.

1 **Q. Is Staff familiar with the ACRSM adjustor mechanism that the Company is seeking?**

2 A. No. The Commission has approved two different methodologies to assist water utilities in  
3 recovering the costs of constructing arsenic remediation facilities and the operating  
4 expenses directly attributed to arsenic remediation. These methodologies are the arsenic  
5 cost recovery mechanism ("ACRM") and the arsenic remedial surcharge mechanism  
6 ("ARSM"). The benefits to water utilities provided by these two methodologies are  
7 mutually exclusive and cannot be combined without potential harm to ratepayers.

8  
9 **Q. As an alternative to an ACRM and ARSM, does Staff recommend including the**  
10 **\$4,694,523 in post-test year arsenic remediation plant in rate base?**

11 A. Yes. In this case, construction of the treatment facility has been completed and the plant  
12 is currently in service, treating drinking water for the existing customers. Further, the  
13 plant is necessary in order for the Company to meet the safe drinking water mandates of  
14 the Environmental Protection Agency. Therefore, under these circumstances, Staff  
15 recommends the plant's inclusion in rate base.

16  
17 **Q. Did the Company receive federal assistance in financing the arsenic treatment plant?**

18 A. Yes. The Company was awarded a 40 percent forgiveness of principal on its WIFA loan.

19  
20 **Q. Did Staff make a corresponding adjustment of 40 percent, or \$1,877,809, to the**  
21 **\$4,694,523 loan amount?**

22 A. Yes. Staff has classified the 40 percent forgiveness amount as a contribution in aid of  
23 construction ("CIAC").

24

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

2 A. Staff recommends increasing post-test year plant in rate base by \$2,850,253, from  
3 \$1,844,270 to \$4,694,523, and increasing CIAC by \$1,877,809, as shown on Schedules  
4 JMM-3 and JMM-4.  
5

6 *Rate Base Adjustment No. 2 – Plant Not Used and Useful*

7 **Q. Did Staff make an adjustment for plant that was deemed not used and useful?**

8 A. Yes. Staff identified \$327,565 in plant that was not used and useful, as shown on  
9 Schedule JMM-5.  
10

11 **Q. Why did Staff make this adjustment?**

12 A. Staff inspected the entire system and identified certain individual plant items that were not  
13 serving customers during the test year. (See Staff Engineering Report, Section H, Plant  
14 Not Used and Useful).  
15

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

17 A. Staff recommends decreasing plant in service account 307 wells and springs by \$251,483,  
18 account 331 transmission and distribution mains by \$30,250, account 333 services by  
19 \$30,159, and account 335 hydrants by \$15,673, for a total adjustment of \$327,565, and the  
20 associated AIAC by \$76,082, from \$9,334,999 to \$9,258,917, as shown on Schedules  
21 JMM-3 and JMM-5.  
22

23 *Rate Base Adjustment No. 3 – Accumulated Depreciation*

24 **Q. Did Staff make an adjustment to accumulated depreciation?**

25 A. Yes. Staff adjusted accumulated depreciation to reflect the application of depreciation to  
26 the Staff-recommended plant balances.

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

2 A. Staff recommends decreasing accumulated depreciation by \$327,565, from \$1,680,847 to  
3 \$1,353,282, as shown on Schedules JMM-3 and JMM-6.

4

5 *Rate Base Adjustment No. 4 – Customer Deposits*

6 **Q. Did Staff make an adjustment to customer deposits?**

7 A. Yes. Staff increased customer deposits by \$96,204.

8

9 **Q. Why did Staff make this adjustment?**

10 A. The Company did not include customer deposits in its rate base. Customer deposits are  
11 normally treated as a reduction to rate base to recognize capital provided by non-investors.

12

13 **Q. Is Staff's position supported by NARUC and other literature related to accounting  
14 for public utilities?**

15 A. Yes. Customer deposits represent funds received from ratepayers as security against  
16 potential losses arising from failure to pay for service. These funds are similar in nature to  
17 customer advances for construction. Both represent a liability to repay the funds received  
18 either after a specified period or upon satisfaction of certain requirements. Like customer  
19 advances, the deposits are available to the utility for use in support of its rate base  
20 investment (Source: Accounting for Public Utilities, by Robert L. Hane, Gregory E. Aliff,  
21 and Deloitte & Touche LLP).

22

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

24 A. Staff recommends increasing customer deposits by \$96,204, from \$0 to \$96,204, as shown  
25 on Schedules JMM-3 and JMM-7.

26

1 *Rate Base Adjustment No. 5 – Accumulated Deferred Income Taxes*

2 **Q. Did Staff make an adjustment to rate base for accumulated deferred income taxes?**

3 A. Yes. Staff removed the Company's pro-forma adjustment.

4  
5 **Q. What is a deferred tax liability?**

6 A. A deferred tax liability represents the increase in taxes payable in *future years* as a result  
7 of temporary taxable differences existing at the end of the current year.

8  
9 **Q. Does the Company pay income taxes to the Internal Revenue Service ("IRS")?**

10 A. No. The Company has chosen to be recognized as a limited liability company. It is  
11 considered a "pass-through" entity for income tax purposes; therefore, it pays no income  
12 taxes to the IRS.

13  
14 **Q. If the Company does not pay income taxes, can there be a deferred tax liability?**

15 A. No, there cannot. This is a violation of Generally Accepted Accounting Principles (FASB  
16 ASC 740-10, formerly FAS 109).

17  
18 **Q. Was this issue addressed in a recent Commission Decision?**

19 A. Yes. Decision No. 71445,<sup>1</sup> in addressing this same issue for an "S-corporation," another  
20 type of pass-through entity, states, "[B]ecause allowing recovery of accumulated deferred  
21 income tax ("ADIT") as an addition to rate base . . . would be inconsistent with the  
22 disallowance of recovery of income tax expense, we also will not allow the proposed  
23 addition of \$143,632 in ADIT to Sunrise's rate base."

24  

---

<sup>1</sup> Docket No. W-02069A-08-0406, Dec. No. 71445 at 37 (issued December 28, 2009).

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

2 A. Staff recommends decreasing accumulated deferred income taxes by \$338,625, from  
3 \$338,625 to \$0, as shown on Schedules JMM-3 and JMM-8 (and consistent with the  
4 disallowance of income tax expense below).

5  
6 **OPERATING INCOME**

7 *Operating Income Summary*

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

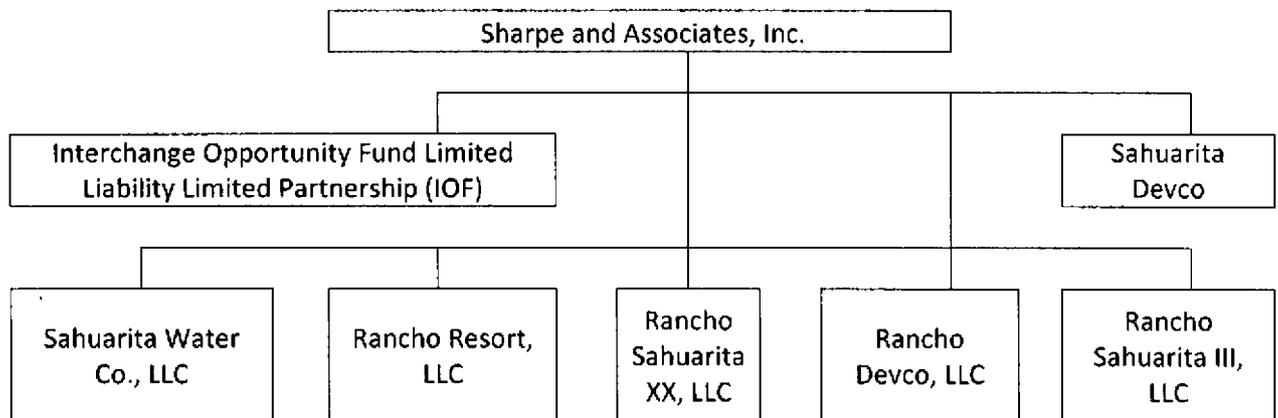
10 A. Staff's analysis resulted in adjusted test year operating revenues of \$2,215,143, operating  
11 expenses of \$1,693,717 and operating income of \$521,426, as shown on Schedules JMM-  
12 9 and JMM-10. Staff made eight adjustments to operating expenses.

13  
14 *Operating Income Adjustment No. 1 – Management Fees*

15 **Q. Who are Sharpe and Associates, Inc.?**

16 A. Sharpe and Associates, Inc., the ultimate parent of the Company, is an unregulated  
17 company whose primary business activity is real estate. In response to Staff data request  
18 2.7, the Company provided Staff with the following organization chart:

19



20

1 **Q. Who are the officers of Sharpe and Associates, Inc.?**

2 A. The following persons are officers of Sharpe and Associates, Inc.:

3 President – Robert M Sharpe

4 Vice President – Deborah N Sharpe

5 Treasurer – Robert M Sharpe

6 Secretary – Deborah N Sharpe

7

8 **Q. Please identify the member, managers, officers, or partners of the other entities that**  
9 **appear in the organization chart.**

10 A. The members, managers, or partners for each entity are as follows:

11

12 Interchange Opportunity Fund Limited Liability Limited Partnership

13 General Partner - Sharpe and Associates, Inc.

14 Sahuarita Devco

15 Manager – Sharpe and Associates, Inc.

16 Member – Interchange Opportunity Fund

17 Member – Sharpe and Associates, Inc.

18

19 Rancho Sahuarita III, LLC

20 Member – SKM Consulting

21 Member – Sahuarita Devco

22

23 Rancho Devco, LLC

24 Manager and Member – Interchange Opportunity Fund Limited Liability Limited  
25 Partnership

26

1  
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Rancho Sahuarita XX, LLC

Member – Interchange Opportunity Fund Limited Liability Limited Partnership.

Member – Sharpe and Associates, Inc.

Rancho Resort XX, LLC

Member -- Interchange Opportunity Fund Limited Liability Limited Partnership.

General Partner – Sharpe and Associates, Inc.

President – Robert M. Sharpe

Secretary -- Deborah N. Sharpe

**Q. Who are the members, managers, or partners of the Company?**

A. The members, managers, or partners of the Company are as follows:

Manager – Sharpe and Associates, Inc.

Member – Sharpe and Associates, Inc.

Member – Interchange Opportunity Fund Limited Liability Limited Partnership

Member – Mission peaks 4000 LLC

**Q. Who provides management services to the Company?**

A. Rancho Sahuarita Management Company (“Management Company”).

**Q. Does the Company consider the Management Company to be an affiliate?**

A. No. The Company has stated:

*Please note that Rancho Sahuarita Management Company is not an affiliate of the Company. Rancho Sahuarita Management Company is managed by MKS Equitas Investment Group, Ltd and Fred Lewis is 100% shareholder of MKS Equitas Investment Group, Ltd.*

1 **Q. Who are the members, managers, or partners of the Management Company?**

2 A. The Management Company has one Member – MKS Equitas Investment Group, Ltd.

3

4 **Q. Who are the officers or directors of MKS Equitas Investment Group, Ltd?**

5 A. President – Fred Lewis

6 Director – Fred Lewis

7 Director – Deborah Sharpe

8

9 **Q. Is Deborah Sharpe, the Director of MKS Equitas Investment Group, Ltd., also the**  
10 **secretary and vice president for the parent company, Sharpe and Associates, Inc?**

11 A. Yes.

12

13 **Q. In addition, was Robert M. Sharpe also a former Director of MKS Equitas**  
14 **Investment Group, Ltd?**

15 A. Yes.

16

17 **Q. How does the Commission define an affiliate?**

18 A. According to Rule 14-2-801(1) of the Arizona Administrative Code (“A.A.C.”):

19

20 *“Affiliate,” with respect to the public utility, shall mean any other entity*  
21 *directly or indirectly controlling or controlled by, or under direct or*  
22 *indirect common control with, the public utility. For purposes of this*  
23 *definition, the term “control” (including the correlative meanings of the*  
24 *terms “controlled by” and “under common control with”), as used with*  
25 *respect to any entity, shall mean the power to direct the management*  
26 *policies of such entity, whether through ownership of voting securities, or*  
27 *by contract, or otherwise.*

28

1 **Q. Isn't it true that A.A.C. R14-2-801 et seq only apply to Class A utilities?**

2 A. Yes. However, even though the rules don't technically apply, the principles set forth in  
3 those rules, as well as the standards under Generally Accepted Accounting Principles  
4 ("GAAP"), are relevant in this case because of the organizational relationships between  
5 the Company, its parent, and the management company.

6  
7 **Q. How is a related party defined under GAAP?**

8 A. A related party includes a party that "can significantly influence the management or  
9 operating policies of the transacting parties or if it has an ownership interest in one of the  
10 transacting parties and can significantly influence the other to an extent that one or more  
11 of the transacting parties might be prevented from fully pursuing its own separate  
12 interests."

13  
14 **Q. What treatment does GAAP give to transactions between such parties?**

15 A. GAAP states:

16  
17 *Transactions involving related parties cannot be presumed to be carried*  
18 *out on an arm's-length basis, as the requisite conditions of competitive,*  
19 *free-market dealings may not exist. Representations about transactions*  
20 *with related parties, if made, shall not imply that the related party*  
21 *transactions were consummated on terms equivalent to those that prevail*  
22 *in arm's-length transactions unless such representations can be*  
23 *substantiated.<sup>2</sup>*  
24

25 **Q. In Staff's opinion is the Management Company an affiliate?**

26 A. Yes. Since Deborah Sharpe has an ownership or management position with Sharpe and  
27 Associates, Inc., as well as with MKS Equitas Investment Group, Ltd, which in turn owns  
28 the Management Company, Staff concludes that there exists some "common control" or

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<sup>2</sup> Accounting Standards Codification 850-10-50-5.

1 “power to direct the management policies” between the Company and the Management  
2 Company.

3  
4 **Q. Is there anything else that would indicate the Management Company is an affiliate?**

5 A. Yes. Staff asked the Company to identify all affiliates for whom the Management  
6 Company provides services. The Company responded that the Management Company  
7 provides accounting services for all affiliates, i.e., Rancho Resort, LLC, Rancho Sahuarita  
8 XX, LLC, and Sharpe and Associates, Inc.<sup>3</sup>

9  
10 **Q. Did the President of the Company, Mark J. Seamans, refer to the Management  
11 Company as an affiliate?**

12 A. Yes. In his Direct Testimony, at page 3, Mr. Seamans states that “the Company utilizes a  
13 staff level of 10 who are direct employees of an affiliated entity (Rancho Sahuarita  
14 Management Company).”

15  
16 **Q. Does the Company have employees?**

17 A. No. The Company uses an outside service that is owned and operated by its affiliate, the  
18 Management Company.

19  
20 **Q. Did the Company select the affiliate management company through a competitive  
21 bidding process?**

22 A. No, it did not.  
23

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<sup>3</sup> In its response, the Company also reiterated its position that the Management Company itself is not an affiliate.

1 **Q. Is the affiliate an unregulated for-profit company?**

2 A. Yes. The Management Company is an unregulated for-profit company that provided day  
3 to day services to operate and manage the Company during the test year.  
4

5 **Q. In which account are the charges for the affiliate management recorded?**

6 A. The charges for the affiliate management fees are recorded in Outside Services account  
7 634.8.  
8

9 **Q. How much did the expenses for management fees increase from 2006 to 2007?**

10 A. The management fees increased from \$430,995 to \$609,868, an increase of \$178,873 or  
11 41.50 percent.  
12

13 **Q. How much has the Company requested in management fees for the test year?**

14 A. \$637,012 (i.e. \$596,512 management fee amount in test year, plus the pro-forma  
15 adjustment of \$40,500).  
16

17 **Q. Should a higher standard of evidence be placed on affiliate or related-party  
18 transactions that are not subject to a competitive bidding process?**

19 A. Yes. For affiliate or related-party transactions, a mere showing that costs were incurred is  
20 not sufficient evidence to demonstrate that the costs are appropriately valued. Such  
21 transactions cannot be presumed to be carried out on an arm's length basis and, therefore,  
22 give rise to the potential for additional charges. Using a competitive bidding process  
23 provides evidence that the best quality service at the lowest price is obtained. Also, a  
24 competitive bidding process provides incentive to the outside service to run as efficiently  
25 as possible in order to keep costs low.  
26

1 **Q. Did Staff ask the Company about any affiliate profit that might be contained in the**  
2 **management fees?**

3 A. Yes. Staff asked the Company to state the return or "profit" included in affiliate billings  
4 and to provide the amounts and supporting calculations by account by year.  
5

6 **Q. What was the Company's response?**

7 A. The Company replied that there is no return or "profit" component included in the billings  
8 of each affiliate.  
9

10 **Q. Did Staff ask the Company if there were any expense accounts that might include**  
11 **overhead costs (e.g., management fees)?**

12 A. Yes.  
13

14 **Q. What was the Company's response?**

15 A. The Company responded that there are no such expense accounts because no overhead  
16 costs are included.  
17

18 **Q. Did Staff examine the contract between the Company and the Management**  
19 **Company (see attachment)?**

20 A. Yes. The contract indicates that the management fees are subject to a 25 percent mark-up  
21 to cover overhead and profit.  
22

23 **Q. In light of this contract term, did Staff re-submit the data request to the Company?**

24 A. Yes. The Company responded:

25  
26 *Schedule 1 does refer to a 25% mark-up to cover general overhead and*  
27 *profit. However, in actual practice, Rancho Sahuarita Management*  
28 *Company does not charge any overhead and/or profit for services*

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*provided to the Company. Attached is a detailed schedule listing each paycheck for Water Company employees (with ADP Payroll Registers as support) to show that Rancho Sahuarita Management Company was reimbursed only for wages, taxes, employer paid benefits and 401K matching benefits.*

**Q. What is Staff's conclusion?**

A. Since the 25 percent mark-up is a term of the management contract, Staff concludes that the overhead and profit are likely already included in the salaries.

**Q. Does Staff recommend adjusting the Outside Services expense?**

A. Yes. The Company has no employees and did not utilize a competitive bidding process to select the outside service that manages and operates the Company. Rather, the Company has disregarded the price safeguard that a competitive bid would afford and contracted solely with its unregulated for-profit affiliate. This affiliate can continually raise its prices without fear of losing the Company as a customer.

The Company has not demonstrated purchasing policies and safeguards to ensure that ratepayers are not being disadvantaged.

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

A. Staff recommends two adjustments:

- 1) Staff recommends that the \$40,500 pro-forma adjustment to salary be eliminated, and
- 2) Staff recommends that the test year management fee be reduced by 25 percent.

As a result, Staff has reduced management fee expense by \$189,628, from \$770,603 to \$580,975, as shown on Schedules JMM-10 and JMM-11.

1 *Operating Income Adjustment No. 2 – Beverages Expense*

2 **Q. Did Staff make an adjustment for beverage expense?**

3 A. Yes. Staff decreased outside services by \$751.

4  
5 **Q. Why did Staff make this adjustment?**

6 A. Beverage expenses are not necessary to the provision of water services.

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

9 A. Staff recommends decreasing outside service expense by \$751, from \$580,975 (after  
10 Staff's adjustment to management fees) to \$580,224, as shown on Schedules JMM-10 and  
11 JMM-12.

12  
13 *Operating Income Adjustment No. 3 – Water Testing Expense*

14 **Q. Did Staff make an adjustment for water testing expense?**

15 A. Yes. Staff increased water testing expense by \$1,632.

16  
17 **Q. Why did Staff make this adjustment?**

18 A. Staff increased water testing expense based on the determination contained in the Staff  
19 Engineering Report.

20  
21 **Q. What is Staff's recommendation?**

22 A. Staff recommends increasing water testing expense by \$1,632, from \$8,750 to \$10,382, as  
23 shown on Schedules JMM-10 and JMM-13.

24

1 *Operating Income Adjustment No. 4 – Rental Expense*

2 **Q. Did Staff make an adjustment for rental expense?**

3 A. Yes. Staff decreased rental expense by \$11,299.

4

5 **Q. Why did Staff make this adjustment?**

6 A. During the test year the Company signed a lease agreement with Rancho Sahuarita XX,  
7 LLC, an affiliate. The new rent expense represents a known and measurable change.

8

9 **Q. Why is Staff treating this affiliate transaction, differently than the outside services  
10 affiliate transaction with the Management Company?**

11 A. In this instance, the affiliate transaction resulted in a monthly rental expense of \$128.13,  
12 which is less than the \$1,530 per month with the previous rental agreement, providing  
13 some assurance that the affiliate charge does not represent an inflated amount.

14

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

16 A. Staff recommends decreasing rental expense by \$11,299, from \$13,195 to \$1,896, as  
17 shown on Schedules JMM-10 and JMM-14.

18

19 *Operating Income Adjustment No. 5 – Rate Case Expense*

20 **Q. What did the Company propose for rate case expense?**

21 A. The Company proposed annual rate case expense of \$75,000, calculated by normalizing  
22 the expense over 3 years.

23

24 **Q. Did Staff make an adjustment to rate case expense?**

25 A. Yes.

26

1 **Q. Why did Staff make this adjustment?**

2 A. Staff usually normalizes rate case expense over a 3 to 5 year period. In this case, the  
3 Company has not been in for a rate case in 14 years; therefore, Staff concludes that  
4 normalizing the rate case expense over 5 years is more appropriate.

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

7 A. Staff recommends decreasing rate case expense by \$30,000, from \$75,000 to \$45,000, as  
8 shown on Schedules JMM-10 and JMM-15, to reflect normalization over 5 years.

9  
10 *Operating Income Adjustment No. 6 – Depreciation Expense*

11 **Q. Did Staff make an adjustment to depreciation expense?**

12 A. Yes. As a result of adjustments made to plant in service, Staff also adjusted the associated  
13 depreciation expense.

14  
15 **Q. What is Staff's recommendation?**

16 A. Staff's adjustment decreases depreciation expense by \$1,592, from \$610,853 to \$609,261.  
17 Please see Schedule JMM-10 and JMM-16 for Staff's calculation.

18  
19 *Operating Income Adjustment No. 7 – Property Tax Expense*

20 **Q. Did Staff make an adjustment to property tax expense?**

21 A. Yes. Staff recomputed property taxes, based on Staff's revenue requirement.

22  
23 **Q. What adjustment does Staff recommend for test year property tax expense?**

24 A. Staff's adjustment decreases property tax expense by \$14,219, from \$122,230 to  
25 \$108,011, based upon Staff's revenue requirement. Please see Schedule JMM-10 and  
26 Schedule JMM-17.

1 *Operating Income Adjustment No. 8 – Income Tax Expense*

2 **Q. Did Staff make an adjustment to income tax expense?**

3 A. Yes.

4  
5 **Q. What adjustment did Staff make and why?**

6 A. Staff's adjustment removes the Company's pro forma adjustment and decreases income  
7 tax expense by \$104,948, from \$104,948 to \$0. As will be further explained in the  
8 revenue requirement section, Staff removed income taxes because the Company is  
9 classified as a limited liability company and, therefore, does not report income taxes at the  
10 corporate level, but passes this income through to its shareholders. Staff's adjustment is  
11 shown on Schedules JMM-10 and JMM-18.

12  
13 **Q. Has the Commission recently ruled on the appropriateness of utility companies that  
14 are pass-through entities, such as limited liability companies or Sub Chapter S  
15 corporations, claiming income tax expense?**

16 A. Yes. In the recent Sunrise Water Company Case, referenced above, the Commission  
17 decided that Sub Chapter S corporations, as well as limited liability companies, that are  
18 not subject to tax by the Internal Revenue Service, should not receive income taxes for  
19 rate making purposes.

20  
21 That decision stated, "The Commission has established a long-standing policy of denying  
22 recovery of income tax expenses for pass-thru entities and apparently has varied from it, at  
23 least in recent years, only as an exception made under unique circumstances or as an  
24 inadvertent error."<sup>4</sup>

25  

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<sup>4</sup> Docket No. W-02069A-08-0406, Dec. No. 71445 at 36 (issued December 28, 2009).

1 **Q. Has there also been a more recent Commission Decision on this topic?**

2 A. Yes. In Decision No. 71510, dated March 17, 2010, the Commission again decided that  
3 Sub Chapter S corporations and limited liability companies that are not subject to tax by  
4 the Internal Revenue Service should not receive income taxes for rate making purposes.  
5

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

7 A. Staff recommends the removal of all income tax expense.  
8

9 **OTHER MATTERS**

10 *Central Arizona Ground Water Replenishment District ("CAGRDR")*

11 **Q. What treatment is the Company proposing regarding the CAGRDR fees?**

12 A. The Company is proposing that these fees be authorized as a pass-through expense similar  
13 to a privilege or sales tax.  
14

15 **Q. Does Staff believe the CAGRDR Fees are directly analogous to privilege, sales or use  
16 taxes?**

17 A. No. As stated in Decision No. 64598, Staff still is of the opinion that the CAGRDR  
18 assessment cannot be treated as a pass-through tax under the Arizona Administrative Code  
19 R14-2-409.D.5 because it is not a "privilege, sales or use tax" and it is not based directly  
20 on one factor, such as revenues.  
21

22 **Q. Why is this CAGRDR assessment more properly classified as an adjustor.**

23 A. A true pass-through, like a sales tax for example, is one which is known and measurable  
24 and easily calculated and assigned. The CAGRDR assessment fee, on the other hand,  
25 entails a complicated calculation involving several variables which are based on prior  
26 years' data.

1 Also more like an adjustor, the assessment represents a significant annual expense for the  
2 Company, which is anticipated to progressively increase. In order to keep its membership  
3 in CAGR, the Company must pay this fee.

4  
5 **Q. Did the Company provide an example of how the CAGR pass-through would**  
6 **work?**

7 A. Yes. It is similar to the one that Johnson Utilities proposed (Docket No. WS-02987A-08-  
8 0180).

9  
10 This method is described on pages 35-36 of Mr. Bourassa's Direct Testimony and is  
11 essentially as follows (corrected for erroneous references):

12  
13 *The commodity based fee would be computed on a per 1,000 gallon basis*  
14 *and billed to customers based on their usage. Using 2008 figures, for*  
15 *example, the commodity based fee would be \$0.279 per 1,000 gallons,*  
16 *computed as follows:*

17  
18 [1] Total 2008 CAGR fees \$114,619  
19 [2] 2008 Gallons Sold (in 1,000's) 411,304  
20 [3] CAGR fee per 1,000 gallons ([1] divided by [2]) \$ 0.279

21  
22 *The average 5/8-inch residential customer using 5,424 would pay \$1.51 in*  
23 *CAGR fees (5.424 units times \$0.279).*

24  
25 *Obviously, going forward, the base gallons sold for computation of the*  
26 *current year fee will be the prior year gallons sold. To prevent over or*  
27 *under recovery of the CAGR fees, an annual true-up will be performed.*  
28 *Any over or under recovery would be included in the next years*  
29 *computation.*

30  
31 **Q. Does Staff agree with this methodology?**

32 A. Yes. However, Staff also recommends that the following conditions with regard to the  
33 CAGR fee be applied to the Company as a compliance item in this docket:

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1. The adjustor fee shall apply to all water sold after October 1, 2010, or shall become effective on the date new rates from this case become effective, whichever is later.
2. The Company shall, on a monthly basis, place all CAGR D monies collected from customers in a separate, interest-bearing account ("CAGR D Account").
3. The only time the Company can withdraw money from the CAGR D Account is to pay the annual CAGR D fee to the CAGR D, which is due on October 15th of each year.
4. The Company must provide to Staff a semi-annual report of the CAGR D Account and CAGR D use fees collected from customers and paid to the CAGR D, with the reports due during the last week of October and the last week of April of each year.
5. The Company must provide to Staff, every even-numbered year, (first year being 2010) by June 30th, the new firm rates set by the CAGR D for the next two years.
6. The total CAGR D fees for the most current year in the Pima Active Management Area (AMA) shall be divided by the gallons sold in that year to determine a CAGR D fee per 1,000 gallons. This information shall be given to Staff, 30 days prior to when the Company requests the adjustor to take effect. In addition, the Company will provide Staff with supporting documentation from the relevant state agencies, and gallons sold data. Failure to provide this information to Staff shall result in the immediate cessation of the CAGR D adjustor fee.

1           7.     By August 25th of each year, beginning in 2011, the Company shall submit its  
2                     proposed CAGR D adjustor fee for the Pima AMA for consideration by the  
3                     Commission, with the Commission-approved amount becoming effective the  
4                     following October 1st.

5  
6           8.     If the CAGR D changes its current method of assessing fees, (i.e. based on the  
7                     current volume of water used by customers) to some other method, such as, but not  
8                     limited to, future projection of water usage, or total water allocated to the  
9                     Company, the Company's collection from customers of CAGR D fees shall cease.

10  
11          9.     As a compliance item, the Company shall submit yearly, a new tariff reflecting the  
12                     reset adjustor amount.

13  
14     *Accounting Order*

15     **Q.     What is an accounting order?**

16     A.     An accounting order is authorization by the Commission that allows a company to treat a  
17             cost differently than how the cost is normally treated under the NARUC USOA.

18  
19     **Q.     When is an accounting order appropriate?**

20     A.     In general, an accounting order is appropriate when the magnitude of the cost relative to  
21             the utility's total revenue is such that not having the accounting order would jeopardize  
22             the utility's financial health or when a utility is coping with an unusual or extraordinary  
23             cost and is seeking certain assurances from the Commission regarding the cost.

24

1 **Q. Is the Company requesting an accounting order to allow the Company to defer**  
2 **arsenic media regeneration costs for consideration in a future rate case?**

3 A. Yes. The Company is proposing to include the costs of one or more accounting periods  
4 into the cost of a different accounting period. This would have the affect of violating the  
5 matching principle which is inherent in the NARUC USOA prescribed by the  
6 Administrative Code.

7

8 **Q. What reasons did the Company give in support of the accounting order?**

9 A. The Company indicated that the "media regeneration is projected to cost nearly \$124,000"  
10 and that the "media is expected to last from 12-15 months, which would require  
11 significant capital outlays between the instant and the next rate case." (Bourassa's Direct  
12 Testimony at page 39, emphasis added).

13

14 **Q. Is this a known and measureable cost?**

15 A. No, it's a projection.

16

17 **Q. Would not including this amount in the revenue requirement place the Company in**  
18 **financial jeopardy?**

19 A. No.

20

21 **Q. Under the Company's proposal, would customers be subject to larger rate increase**  
22 **than they would if the Company filed rate applications more frequently?**

23 A. Yes, because the costs included for media regeneration would not be offset by other costs  
24 that may have decreased during any given year.

25

- 1 **Q. What is the typical way for a Company to recover an increase in operating expenses?**
- 2 A. The usual remedy for a Company seeking to recover an increase in its operating and
- 3 maintenance expenses is to file a rate application. A provision to allow recovery of
- 4 increased arsenic media expenses outside of a rate proceeding is tantamount to single-
- 5 issue rate-making.
- 6
- 7 **Q. Is an accounting order appropriate in this case?**
- 8 A. No, it is not. The Company would not be placed in financial jeopardy without the
- 9 accounting order. The matching principle which is inherent in NARUC USOA would be
- 10 violated. Decreased costs that could offset the arsenic media regeneration costs have been
- 11 ignored. The Company would be engaging in single-issue rate-making.
- 12
- 13 **Q. Does this conclude your Direct Testimony?**
- 14 A. Yes, it does.

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY FAIR VALUE	(B) STAFF FAIR VALUE
1	Adjusted Rate Base	\$ 7,418,410	\$ 8,709,357
2	Adjusted Operating Income (Loss)	\$ 170,618	\$ 521,426
3	Current Rate of Return (L2 / L1)	2.30%	5.99%
4	Required Rate of Return	12.00%	9.00%
5	Required Operating Income (L4 * L1)	\$ 890,209	\$ 783,842
6	Operating Income Deficiency (L5 - L2)	\$ 719,591	\$ 262,416
7	Gross Revenue Conversion Factor	1.6151	1.0000
8	Required Revenue Increase (L7 * L6)	\$ 1,162,216	<b>\$ 262,416</b>
9	Adjusted Test Year Revenue	\$ 2,215,143	\$ 2,215,143
10	Proposed Annual Revenue (L8 + L9)	\$ 3,377,359	\$ 2,477,559
11	Required Increase in Revenue (%)	52.47%	11.85%

References:

Column (A): Company Schedule A-1

Column (B): Staff Schedules JMM-2 and JMM-9

RATE BASE - ORIGINAL COST

LINE NO.	(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	Adj. No.	(C) STAFF AS ADJUSTED
1	Plant in Service	\$ 20,957,540	1,2	\$ 23,480,228
2	Less: Accumulated Depreciation	1,680,847	3	1,353,282
3	Net Plant in Service	<u>\$ 19,276,693</u>		<u>\$ 22,126,946</u>
<u>LESS:</u>				
4	Contributions in Aid of Construction (CIAC)	\$ 2,436,455		\$ 4,314,264
5	Less: Accumulated Amortization	251,796		\$ 251,796
6	Net CIAC	<u>2,184,659</u>		<u>\$ 4,062,468</u>
7	Advances in Aid of Construction (AIAC)	9,334,999	1	9,258,917
8	Customer Deposits	-	4	96,204
9	Deferred Income Tax Credits	338,625	5	-
<u>ADD:</u>				
9	Unamortized Debt Issuance Costs	-		-
10	Deffered Regulatory Assets	-		-
11	<b>Original Cost Rate Base</b>	<u>\$ 7,418,410</u>		<u>\$ 8,709,357</u>

References:

Column [A]: Company as Filed  
Column [B]: Schedule JMM-3  
Column [C]: Column (A) + Column (B)

Sahuarita Water Company, LLC  
 Docket No. W-03718A-09-0359  
 Test Year Ended December 31, 2008

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	ACCT. NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) ADJ #1 Post-Test Year Plant	(C) ADJ #2 Plant Not Used And Useful	(D) ADJ #3 Accumulated Depreciation	(E) ADJ #4 Customer Deposits	(F) ADJ #5 Deferred Income Taxes	(G) STAFF ADJUSTED
			Ref. Sch JMM-4	Ref. Sch JMM-5	Ref. Sch JMM-6	Ref. Sch JMM-7	Ref. Sch JMM-8		
1		PLANT IN SERVICE:							
2	301	Organization Cost	7,541						7,541
3	302	Franchise Cost	350,861						350,861
4	303	Land and Land Rights	13,636						13,636
5	304	Structures and Improvements	171,671						171,671
6	305	Collecting and Impounding Res.	-						-
7	306	Lake River and Other Intakes	-						-
8	307	Wells and Springs	-	(251,483)					548,913
9	308	Infiltration Galleries and Tunnels	-						-
10	309	Supply Mains	-						-
11	310	Power Generation Equipment	335,668						335,668
12	311	Electric Pumping Equipment	43,912						43,912
13	320	Water Treatment Equipment	18,694						18,694
14	320	Water Treatment Plant	-						-
15	330	Distribution Reservoirs & Standpipe	1,811,988						1,811,988
16	331	Transmission and Distribution Mains	10,162,557	(30,250)					10,132,307
17	333	Services	2,081,553	(30,159)					2,051,394
18	334	Meters	1,222,335						1,222,335
19	335	Hydrants	672,037	(15,673)					656,364
20	336	Backflow Prevention Devices	816						816
21	339	Other Plant and Miscellaneous Equipment	283,991						283,991
22	340	Office Furniture and Fixtures	146,129						146,129
23	341	Transportation Equipment	-						-
24	342	Stores Equipment	13,856						13,856
25	343	Tools and Work Equipment	132						132
26	344	Laboratory Equipment	-						-
27	345	Power Operated Equipment	11,818						11,818
28	346	Communications Equipment	695						695
29	347	Miscellaneous Equipment	962,974						962,974
30	348	Other Tangible Plant	-						-
31		Total Plant in Service - Actual	19,113,270						18,785,705
32		Post-Test-Year Plant	1,844,270	2,850,253					4,694,523
33		Total Plant in Service	20,957,540						23,480,228
34		Less: Accumulated Depreciation	1,690,847		(327,565)	(327,565)			1,353,282
35		Net Plant in Service	19,276,693		(327,565)	327,565			22,126,946
37		LESS:							
38		Contributions in Aid of Construction (CIAC)	2,496,455	1,877,809					4,314,264
39		Less: Accumulated Amortization	251,796						251,796
40		Net CIAC (L25 - L26)	2,184,659	1,877,809					4,062,468
41		Advances in Aid of Construction (AIAC)	9,334,999		(76,082)				9,258,917
42		Customer Deposits	-			96,204			96,204
43		Deferred Income Taxes	338,625				(338,625)		-
44									
45									
46									
47		ADD:							
48		Unamortized Debt Issuance Costs	-						-
49		Deferred Regulatory Assets	-						-
50									
51		Original Cost Rate Base	7,418,409	(1,877,809)	(251,483)	327,565	(96,204)	338,625	8,709,357

RATE BASE ADJUSTMENT NO. 1 - POST-TEST YEAR PLANT

LINE NO.	ACCT NO.	DESCRIPTION	[A]	[B]	[C]
			COMPANY PROPOSED	STAFF ADJUSTMENTS	STAFF RECOMMENDED
1		Post-Test Year Plant	\$ 1,844,270	\$ 2,850,253	\$ 4,694,523

Based on Staff Engineering Report Table I-1.

Remove Post-Test Year Plant (Based on Staff Engineering Report Table I-1)	\$ (1,844,270)
Add Post-Test Year Plant (Arsenic Treatment Facility)	\$ 4,694,523
	\$ 2,850,253

DESCRIPTION	[A]	[B]	[C]
	COMPANY AIAC AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
Contributions in Aid of Construction	\$ 2,436,455	\$ 1,877,809	\$ 4,314,264

Loan forgiveness amount 40% of \$4,694,523 = \$1,877,809

**REFERENCES:**

- Column [A]: Company Filing
- Column [B]: Testimony JMM
- Column [C]: Column [A] + Column [B]

RATE BASE ADJUSTMENT NO. 2 - PLANT NOT USED AND USEFUL

LINE NO.	ACCT NO.	DESCRIPTION	[A]	[B]	[C]
			COMPANY PROPOSED	STAFF ADJUSTMENTS	STAFF RECOMMENDED
1	307	Wells & Springs	\$ 800,396	\$ (251,483)	\$ 548,913
2	331	Transmission & Distribution Mains	\$ 10,162,557	\$ (30,250)	\$ 10,132,307
3	333	Services	\$ 2,081,553	\$ (30,159)	\$ 2,051,394
4	335	Hydrants	\$ 672,037	\$ (15,673)	\$ 656,364
5			<u>\$ 13,716,543</u>	<u>\$ (327,565)</u>	<u>\$ 13,388,978</u>

6  
 7 Based on Staff Engineering Report Table H-1.  
 8  
 9

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AIAC AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
10				
11				
12				
13	Advances in Aid of Construction (AIAC)	\$ 9,334,999	\$ (76,082)	\$ 9,258,917
14				

REFERENCES:

- Column [A]: Company Filing
- Column [B]: Testimony JMM
- Column [C]: Column [A] + Column [B]

Sahuarita Water Company, LLC  
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Schedule JMM-6

**RATE BASE ADJUSTMENT NO. 3 - ACCUMULATED DEPRECIATION**

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Accumulated Depreciation	\$ 1,680,847	\$ (327,565)	\$ 1,353,282

References:

- Column [A]: Company Application
- Column [B]: Testimony JMM
- Column [C]: Column [A] + Column [B]

Sahuarita Water Company, LLC  
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Schedule JMM-7

RATE BASE ADJUSTMENT NO. 4 - CUSTOMER DEPOSITS

LINE NO.	ACCT NO.	DESCRIPTION	[A]	[B]	[C]
			COMPANY PROPOSED	STAFF ADJUSTMENTS	STAFF RECOMMENDED
1		Customer Deposits	\$ -	\$ 96,204	\$ 96,204

REFERENCES:

- Column [A]: Company Filing
- Column [B]: Testimony JMM
- Column [C]: Column [A] + Column [B]

RATE BASE ADJUSTMENT NO. 5 - DEFERRED INCOME TAXES

LINE NO.	ACCT NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1		Deferred Income Taxes	\$ 338,625	\$ (338,625)	\$ -

To Remove Deferred Income Taxes

REFERENCES:

Column [A]: Company Filing

Column [B]: Testimony JMM

Column [C]: Column [A] + Column [B]

OPERATING INCOME STATEMENT - ADJUSTED TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY ADJUSTED TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	Adj. No.	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF PROPOSED CHANGES	[E] STAFF RECOMMENDED
1	<b>REVENUES:</b>						
2	Metered Water Sales	\$ 2,057,901	\$ -		\$ 2,057,901	\$ 262,416	\$ 2,320,317
3	Water Sales-Unmetered	-	-		-	-	-
4	Other Operating Revenue	157,242	-		157,242	-	157,242
5	Intentionally Left Blank	-	-		-	-	-
6	<b>Total Operating Revenues</b>	<b>\$ 2,215,143</b>	<b>\$ -</b>		<b>\$ 2,215,143</b>	<b>\$ 262,416</b>	<b>\$ 2,477,559</b>
7							
8	<b>OPERATING EXPENSES:</b>						
9	Salaries and Wages	\$ -	\$ -		\$ -	\$ -	\$ -
10	Purchased Wastewater Treatment	4,256	-		4,256	-	4,256
11	Sludge Removal Expense	147,364	-		147,364	-	147,364
12	Purchased Power	-	-		-	-	-
13	Fuel for Power Production	11,866	-		11,866	-	11,866
14	Chemicals	75,423	-		75,423	-	75,423
15	Materials & Supplies	30,131	-		30,131	-	30,131
16	Contractual Services, Legal&Engr	770,603	(190,379)	1 & 2	580,224	-	580,224
17	Contractual Sevices - Other	-	-		-	-	-
18	Contractual Services - Testing	-	-		-	-	-
19	Equipment Rental	8,750	1,632	3	10,382	-	10,382
20	Rents - Building	13,195	(11,299)	4	1,896	-	1,896
21	Transportation	22,358	-		22,358	-	22,358
22	General Liability Insurance	21,111	-		21,111	-	21,111
23	Insurance - Other	-	-		-	-	-
24	Regulatory Commission Expense	-	-		-	-	-
25	Regulatory Commission Expense - Rate Case	75,000	(30,000)	5	45,000	-	45,000
26	Misceallenous Exp	14,724	-		14,724	-	14,724
27	Bad Debt Expense	109	-		109	-	109
28	Depreciation Expense	610,853	(1,592)	6	609,261	-	609,261
29	Depreciation	-	-		-	-	-
30	Taxes other than Income	11,602	-		11,602	-	11,602
31	Property Taxes	122,230	(14,219)	7	108,011	-	108,011
32	Income Taxes	104,948	(104,948)	8	-	-	-
33	Intentionally Left Blank	-	-		-	-	-
34	<b>Total Operating Expenses</b>	<b>\$ 2,044,524</b>	<b>\$ (350,806)</b>		<b>\$ 1,693,717</b>	<b>\$ -</b>	<b>\$ 1,693,717</b>
35	<b>Operating Income (Loss)</b>	<b>\$ 170,618</b>	<b>\$ 350,806</b>		<b>\$ 521,426</b>	<b>\$ 262,416</b>	<b>\$ 783,842</b>

**References:**

- Column (A): Company Schedule C-1
- Column (B): Schedule JMM-10
- Column (C): Column (A) + Column (B)
- Column (D): Schedules JMM-1
- Column (E): Column (C) + Column (D)

SUMMARY OF OPERATING INCOME STATEMENT ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) Affiliate Management Fee	(C) Beverage Expense	(D) Water Testing Expense	(E) Rent Expense	(F) Rate Case Expense	(G) Depreciation Expense	(H) Property Tax Expense	(I) Income Tax Expense	(J) STAFF ADJUSTED
		Ref. Sch JMM-11	Ref. Sch JMM-12	Ref. Sch JMM-13	Ref. Sch JMM-14	Ref. Sch JMM-15	Ref. Sch JMM-16	Ref. Sch JMM-17	Ref. Sch JMM-18	Ref. Sch JMM-17	Ref. Sch JMM-18
1	REVENUES:										
2	Metered Water Sales	\$2,057,901									2,057,901
3	Water Sales-Unmetered										
4	Other Operating Revenue	157,242									157,242
5	Intentionally Left Blank										
6	Total Operating Revenues	\$2,215,143									2,215,143
7											
8	OPERATING EXPENSES:										
9	Salaries and Wages										
10	Purchased Water	4,256									4,256
11	Purchased Power	147,364									147,364
12	Fuel for Power Production										
13	Chemicals	11,866									11,866
14	Repairs and Maintenance	75,423									75,423
15	Materials and Supplies	30,131									30,131
16	Outside Services	770,603	(189,628)	(751)							580,224
17	Outside Services - Other										
18	Outside Services - Legal										
19	Water Testing	8,750		1,632							10,382
20	Rents	13,195			(11,289)						1,896
21	Transportation Expenses	22,358									22,358
22	Insurance - General Liability	21,111									21,111
23	Insurance - Health and Life										
24	Regulatory Commission Expense										
25	Regulatory Commission Expense - Rate Case	75,000					(30,000)				45,000
26	Miscellaneous Expense	14,724									14,724
27	Bad Debt Expense	109									109
28	Depreciation Expense	610,853						(1,592)			609,261
29	Amortization of CIAC										
30	Taxes Other than Income	11,602									11,602
31	Property Taxes	122,230									122,230
32	Income Taxes	104,948							(14,219)		90,729
33	Intentionally Left Blank										
34	Total Operating Expenses	\$2,044,524	(189,628)	(751)	1,632	(11,289)	(30,000)	(1,592)	(14,219)	(104,948)	1,693,719
35	Operating Income (Loss)	\$ 170,618	\$ 189,628	\$ 751	\$ (1,632)	\$ 11,289	\$ 30,000	\$ 1,592	\$ 14,219	\$ 104,948	\$ 521,424

Sahuarita Water Company, LLC  
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Schedule JMM-11

OPERATING INCOME ADJUSTMENT NO. 1 - MANAGEMENT FEES

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY PROPOSED	STAFF ADJUSTMENTS	STAFF RECOMMENDED
1	Outside Service	\$ 770,603	\$ (189,628)	\$ 580,975
2				
3	Staff Calculation:			
4	Test Year Salary	\$ 596,512		
5	Remove 25% of Office Employees Salaries for inadequate support:	0.25		
6	Adjustment	\$ 149,128		
7				
8	Remove Pro-forma Adjustment	\$ 40,500		
9				
10	Total Adjustment lines 6 and 8	\$ 189,628		

References:

Column (A): Company Schedule C-1  
 Column (B): Testimony JMM  
 Column (C): Column (A) + Column (B)

Sahuarita Water Company, LLC  
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Schedule JMM-12

OPERATING INCOME ADJUSTMENT NO. 2 - BEVERAGE EXPENSES

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Outside Service	\$ 580,975	\$ (751)	\$ 580,224

References:

Column (A), Company Schedule C-1

Column (B): Testimony JMM

Column (C): Column (A) + Column (B)

Sahuarita Water Company, LLC  
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Schedule JMM-13

OPERATING INCOME ADJUSTMENT NO. 3 - WATER TESTING EXPENSE

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY PROPOSED	STAFF ADJUSTMENTS	STAFF RECOMMENDED
1	Water Testing Expense	\$ 8,750	\$ 1,632	\$ 10,382

References:

Column (A), Company Schedule C-1

Column (B): Testimony JMM

Column (C): Column (A) + Column (B)

OPERATING INCOME ADJUSTMENT NO. 4 - RENT EXPENSE

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY PROPOSED	STAFF ADJUSTMENTS	STAFF RECOMMENDED
1	Rents	\$ 13,195	\$ (11,299)	\$ 1,896

Staff Calculation:

Remove Rental Expense of RR HOA		
8 months x \$1,530	\$	12,240
Remove Temporary Fence Rental	\$	84
Plus 8 months of Rent at New Facility		
8 months x \$128.13	\$	(1,025)
Adjustment	\$	<u>11,299</u>

References:

- Column (A), Company Schedule C-1
- Column (B): Testimony JMM
- Column (C): Column (A) + Column (B)

OPERATING INCOME ADJUSTMENT NO. 5 - RATE CASE EXPENSE

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY PROPOSED	STAFF ADJUSTMENTS	STAFF RECOMMENDED
1	Rate Case Expense	\$ 75,000	\$ (30,000)	\$ 45,000

Staff Calculation:

Estimated Rate Case Cost	\$	225,000
Normalized Over Five Years		<u>5</u>
		<u>45,000</u>

References:

- Column (A), Company Schedule C-1
- Column (B): Testimony JMM
- Column (C): Column (A) + Column (B)

OPERATING INCOME ADJUSTMENT NO. 6 - DEPRECIATION EXPENSE ON TEST YEAR PLANT

LINE NO.	ACCT NO.	DESCRIPTION	[A]	[B]	[C]	[D]	[E]
			PLANT In SERVICE Per Staff	NonDepreciable or Fully Depreciated PLANT	DEPRECIABLE PLANT (Col A - Col B)	DEPRECIATION RATE	DEPRECIATION EXPENSE (Col C x Col D)
1	301	Organization Cost	\$ 7,541	\$ 7,541	\$ -	0.00%	\$ -
2	302	Franchise Cost	\$ 350,861	\$ 350,861	\$ -	0.00%	\$ -
3	303	Land and Land Rights	\$ 13,636	\$ 13,636	\$ -	0.00%	\$ -
4	304	Structures and Improvements	\$ 171,671	\$ -	\$ 171,671	3.33%	\$ 5,717
5	305	Collecting and Impounding Res.	\$ -	\$ -	\$ -	2.50%	\$ -
6	306	Lake River and Other Intakes	\$ -	\$ -	\$ -	2.50%	\$ -
7	307	Wells and Springs	\$ 548,913	\$ -	\$ 548,913	3.33%	\$ 18,279
8	308	Infiltration Galleries and Tunnels	\$ -	\$ -	\$ -	6.67%	\$ -
9	309	Supply Mains	\$ -	\$ -	\$ -	2.00%	\$ -
10	310	Power Generation Equipment	\$ 335,668	\$ -	\$ 335,668	5.00%	\$ 16,783
11	311	Electric Pumping Equipment	\$ 43,912	\$ -	\$ 43,912	12.50%	\$ 5,489
12	320	Water Treatment Equipment	\$ 18,694	\$ -	\$ 18,694	3.33%	\$ 623
13	320	Water Treatment Plant	\$ -	\$ -	\$ -	3.33%	\$ -
14	330	Distribution Reservoirs & Standpipe	\$ 1,811,998	\$ -	\$ 1,811,998	2.22%	\$ 40,226
15	331	Transmission and Distribution Mains	\$ 10,132,307	\$ -	\$ 10,132,307	2.00%	\$ 202,646
16	333	Services	\$ 2,051,394	\$ -	\$ 2,051,394	3.33%	\$ 68,311
17	334	Meters	\$ 1,222,335	\$ -	\$ 1,222,335	6.33%	\$ 101,821
18	335	Hydrants	\$ 656,364	\$ -	\$ 656,364	2.00%	\$ 13,127
19	336	Backflow Prevention Devices	\$ 816	\$ -	\$ 816	6.67%	\$ 54
20	339	Other Plant and Miscellaneous Equipment	\$ -	\$ -	\$ -	6.67%	\$ -
21	340	Office Furniture and Fixtures	\$ 283,991	\$ -	\$ 283,991	6.67%	\$ 18,942
22	341	Transportation Equipment	\$ 146,129	\$ -	\$ 146,129	20.00%	\$ 29,226
23	342	Stores Equipment	\$ -	\$ -	\$ -	4.00%	\$ -
24	343	Tools and Work Equipment	\$ 13,856	\$ -	\$ 13,856	5.00%	\$ 693
25	344	Laboratory Equipment	\$ 132	\$ -	\$ 132	10.00%	\$ 13
26	345	Power Operated Equipment	\$ -	\$ -	\$ -	5.00%	\$ -
27	346	Communications Equipment	\$ 11,818	\$ -	\$ 11,818	10.00%	\$ 1,182
28	347	Miscellaneous Equipment	\$ 695	\$ -	\$ 695	10.00%	\$ 70
29	348	Other Tangible Plant	\$ 962,974	\$ -	\$ 962,974	10.00%	\$ 96,297
30		Sub Total	\$ 18,785,705	\$ 372,038	\$ 18,413,667		\$ 619,499
31							
32		Post Test Year Plant					
33	320	Water Treatment Plant	\$ 2,686,523	\$ -	\$ 2,686,523	3.33%	\$ 89,461
34	331	Transmission and Distribution Mains	\$ 2,008,000	\$ -	\$ 2,008,000	2.00%	\$ 40,160
35		Total Plant	\$ 23,480,228	\$ -	\$ 23,108,190		\$ 749,120
36							
37		Composite Depreciation Rate (Depr Exp / Depreciable Plant):	3.24%				
38		CIAC: \$	4,314,264				
39		Amortization of CIAC (Line 32 x Line 33):	\$ 139,860				
40							
41		Depreciation Expense Before Amortization of CIAC:	\$ 749,120				
42		Less Amortization of CIAC:	\$ 139,860				
43		<b>Test Year Depreciation Expense - Staff:</b>	<b>\$ 609,261</b>				
44		Depreciation Expense - Company:	\$ 610,853				
44		<b>Staff's Total Adjustment:</b>	<b>\$ (1,592)</b>				

References:

- Column [A]: Schedule JMM-3
- 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. 7 - PROPERTY TAX EXPENSE**

LINE NO.	Property Tax Calculation	STAFF AS ADJUSTED
1	Staff Adjusted Test Year Revenues	\$ 2,215,143
2	Weight Factor	<u>2</u>
3	Subtotal (Line 1 * Line 2)	4,430,286
4	Staff Recommended Revenue, Per Schedule JMM-1	2,477,559
5	Subtotal (Line 4 + Line 5)	6,907,845
6	Number of Years	3
7	Three Year Average (Line 5 / Line 6)	2,302,615
8	Department of Revenue Multiplier	2
9	Revenue Base Value (Line 7 * Line 8)	4,605,230
10	Plus: 10% of CWIP -	-
11	Less: Net Book Value of Licensed Vehicles	48,652
12	Full Cash Value (Line 9 + Line 10 - Line 11)	4,556,578
13	Assessment Ratio	20.0%
14	Assessment Value (Line 12 * Line 13)	911,316
15	Composite Property Tax Rate (Per Company Schedule)	<u>11.8522%</u>
16		
17	Staff Test Year Adjusted Property Tax (Line 14 * Line 15)	\$ 108,011
18	Company Proposed Property Tax	<u>122,230</u>
19		
20	Staff Test Year Adjustment (Line 16-Line 17)	<u>\$ (14,219)</u>

Sahuarita Water Company, LLC  
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Schedule JMM-18

OPERATING INCOME ADJUSTMENT NO. 8 - INCOME TAX EXPENSE

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY PROPOSED	STAFF ADJUSTMENTS	STAFF RECOMMENDED
1	Income Tax Expense	\$ 104,948	\$ (104,948)	\$ -

References:

- Column (A), Company Schedule C-1
- Column (B): Testimony JMM
- Column (C): Column (A) + Column (B)

# **Attachment 1**

**MANAGEMENT SERVICES AGREEMENT**  
**(Rancho Sahuarita Water Co.)**

This Management Services Agreement ("Agreement") is dated, for reference purposes only, as of June 1, 2007 ("Effective Date"), by and between Rancho Sahuarita Water Co., LLC, an Arizona limited liability company ("Owner"), and Rancho Sahuarita Management Company, L.L.C., an Arizona limited liability company, or its assignee ("Contractor"), in recognition of the following facts and intentions:

A. Owner operates a private water utility business ("Business") in the Town of Sahuarita, Pima County, State of Arizona.

B. Contractor owns and operates a business that includes providing employees and record-keeping support and services.

C. The parties desire to enter into a contractual relationship on the terms and conditions hereinafter.

NOW, THEREFORE, in consideration of the mutual promises of the parties, the parties agree as follows:

1. Independent Contractor Engagement. Owner hereby engages Contractor as an independent contractor and Contractor hereby accepts said engagement by Owner upon the terms and conditions hereinafter set forth.

2. Relationship. The parties agree that the relationship of Contractor to Owner shall be that of an independent contractor, rather than a Contractor. Contractor shall have no power or authority to act for, represent or bind Owner in any manner.

3. Control, Hours and Outside Activities. Owner shall not control or direct, or have the right to control or direct, the details, manner or means by which Contractor performs its obligations under this Agreement. Contractor shall devote such time, attention and energies to its obligations hereunder as are reasonably necessary. Contractor shall be free to engage in any activities, in addition to those required under this Agreement, so long as such activities do not interfere with the performance of its obligations hereunder.

4. Term. The term of this Agreement shall commence on the Effective Date, and shall terminate on the earlier of (a) May 31, 2012, or (b) sixty (60) days after Owner shall deliver to Contractor written notice of Owner's election to terminate this Agreement ("Termination Date").

5. Services. Contractor shall provide to Owner such employees and record-keeping support and services in connection with the Business as Owner may request, from time to time, as Owner shall deem reasonably advisable and in the best interest of the Business. Contractor shall deliver to Owner written reports, upon the request of Owner from time to time (but no more frequently than monthly), with respect to the foregoing employees and record-keeping support and services. Notwithstanding anything in this Agreement to the contrary, the employees to be provided by Contractor to provide services for Owner shall be deemed to be employees of Contractor and not

of Owner to the maximum extent permitted by law. Without limiting the generality of the foregoing, Contractor and not Owner shall be solely responsible to pay before delinquent to all applicable governmental authorities any and all employment related taxes and to file before delinquent to all applicable governmental authorities any and all employment related reports and other documents.

6. Consideration. In consideration for providing the foregoing employees and record-keeping support and services, Owner agrees that Contractor shall be entitled to receive from Owner payment of the compensation set forth on Schedule 1 attached hereto and incorporated herein by this reference. Such compensation shall be due and payable by Owner to Contractor no later than five (5) business days after invoice from Contractor.

7. Taxes. Contractor shall be responsible to file and/or pay all taxes that may be incurred by Contractor in connection with the performance of this Agreement. In addition, Contractor shall cooperate with Owner in completing such tax forms (including, but not limited to, Forms 1099-MISC and 1096) upon the reasonable request of Owner from time to time.

8. Contractor Business Expenses. Subject to Section 6 above, Contractor shall be liable to pay for the necessary business expenses that may be incurred by Contractor in its performance of this Agreement.

9. Contractor Insurance and Indemnification Requirements.

9.1 Contractor Insurance Requirements. During the time of this Agreement, Contractor shall secure and maintain in force, at Contractor's sole expense, such employment practices liability insurance coverage in connection with the employees to be provided under this Agreement by Contractor to Owner in such amounts of coverage as Contractor may determine as reasonable from time to time and consistent with Contractor's other employment practices liability insurance requirements or practices. To the extent possible, all such insurance shall name Owner as an additional insured, and shall provide that Owner shall receive notice from the respective insurance carrier no later than thirty (30) days prior to cancellation of any such policy. Such policy shall be issued by such insurance company or companies as Contractor shall reasonably approve. Contractor shall deliver to Owner copies of all such insurance policies or certificates of such insurance upon the execution of this Agreement by Contractor and delivery of same to Owner, and Contractor shall deliver to Owner copies of all renewals, extensions and endorsements of and to all such insurance policies upon Contractor's receipt of same.

9.2 Contractor Indemnification Requirements. Contractor shall indemnify, defend (with legal counsel selected by Owner) and hold Owner harmless for, from and against any and all liability, loss, cost, damage or expense, including but not limited to court costs and reasonable attorneys' fees, which from or are in connection with Contractor's performance of its obligations under this Agreement and/or which arise from or are in connection with the actions or omissions of the employees to be provided under this Agreement by Contractor to Owner, except to the extent of the negligence or willful misconduct of Owner, which indemnification obligation shall survive a termination of this Agreement for a period of two (2) years.

10. Waiver. No waiver or modification of this Agreement or of any covenant, modification or limitation herein contained shall be valid unless in writing and duly executed by the party to be charged therewith. The waiver by Owner of a breach of any provision of this Agreement by Contractor shall not operate or be construed as a waiver of any subsequent breach by Contractor. The waiver by Contractor of a breach of any provision of this Agreement by Owner shall not operate or be construed as a waiver of any subsequent breach by Owner.

11. Governing Law and Venue. This Agreement shall be governed by and construed in accordance with the laws of the State of Arizona. In the event of any dispute, venue shall be the state court located in Pima County, Arizona.

12. Attorneys' Fees. Should it be necessary for any party hereto to institute any proceeding to enforce this Agreement by reason of failure of the other party to comply with the terms and conditions set forth herein, the prevailing party shall be entitled, in addition to all other relief, to reasonable attorneys' fees and related expenses as may be determined by the court or arbitrator.

13. Assignability. Contractor shall be permitted assign any or all of its right, title or interest in and to this Agreement to any third party with notice of such assignment given to Owner.

14. Successor Clause. This Agreement shall be binding upon and shall inure to the benefit of the heirs, personal representatives, successors and assigns of the respective parties hereto.

15. Entire Agreement. This Agreement contains the entire agreement between Owner and Contractor with respect to the subject matter hereof, and supersedes all prior written or oral negotiations, commitments or agreements, if any, between Owner and Contractor.

16. Notices. All notices required to be given hereunder shall be in writing and shall be conveyed by (a) personal delivery, (b) U.S. Mail by certified or registered mail, postage prepaid, with return receipt requested or (c) facsimile transmission (provided that such notice by another approved method hereunder simultaneously), as follows:

If to Owner:                    4549 East Ft. Lowell Road  
    Tucson, Arizona 85712  
    Attention: Cort Chalfant  
    FAX: (520) 529-3137

If to Contractor:            4549 East Ft. Lowell Road

Tucson, Arizona 85712  
Attention: Fred Lewis  
FAX: (520) 529-3137

Each party may designate from time to time another address in place of the address set forth above by notifying the other party in the same manner as provided in this Section 16.

17. Time of Essence. Time is of the essence of each and every provision hereof.

18. Severability. Each and every provision contained in this Agreement is severable and, in the event that any provision herein shall be determined to be invalid or unenforceable by any court or arbitrator of competent jurisdiction, this Agreement shall be interpreted as if such invalid or unenforceable provision was not contained in this Agreement.

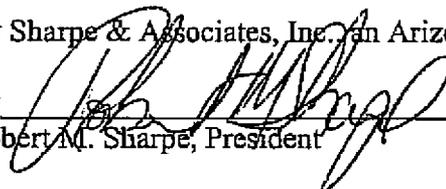
19. Interpretation. Contractor and Owner enter into this Agreement freely and voluntarily, after having received independent legal advice from counsel of their own choosing concerning the legal requirements and effects of this Agreement. Although counsel for Owner prepared this Agreement, this Agreement shall not be construed against Owner in any manner or to any degree.

IN WITNESS WHEREOF, the parties have executed this Agreement to be effective as of the date first written above.

**OWNER:**

Rancho Sahuarita Water Co., LLC, an Arizona limited liability company

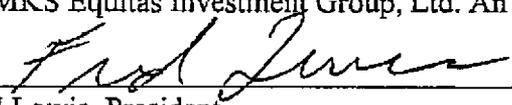
By Sharpe & Associates, Inc., an Arizona corporation, its Manager

By   
Robert M. Sharpe, President

**CONTRACTOR:**

Rancho Sahuarita Management Company, L.L.C., an Arizona limited liability company

By MKS Equitas Investment Group, Ltd. An Arizona corporation, Member

By:   
Fred Lewis, President

SCHEDULE 1

COMPENSATION TO CONTRACTOR

Employee Name	Employee Pay Rate	Employee Pay Frequency	Status	Responsibility
Cindy Gauntt	\$ 252.29	Bi-weekly	Not dedicated	Human Resources
Fred Lewis	\$ 1,636.55	Bi-weekly	Not dedicated	RSMC Controller
Cort Chalfant	\$ 2,730.91	Bi-weekly	Not dedicated	Senior Manager
Hortencia Lopez	\$ 406.29	Bi-weekly	Not dedicated	File Clerk
Rita Lugo	\$ 219.29	Bi-weekly	Not dedicated	Accounts Payable
Mike Bowman	\$ 1,633.68	Bi-weekly	Not dedicated	Land Development
Ray Gauthier	\$ 2,283.29	Bi-weekly	Dedicated	Operations Manager
Mark Seamans	\$ 4,274.13	Bi-weekly	Dedicated	General Manager
Jenna Allen	\$ 1,599.51	Bi-weekly	Dedicated	Customer Service Rep.
Diana McKenzie	\$ 2,667.78	Bi-weekly	Dedicated	Customer Service Mgr.
Alejandro Novoa	\$ 1,718.19	Bi-weekly	Dedicated	Laborer
Paul Martinez	\$ 2,695.20	Bi-weekly	Dedicated	Water Quality Mgr.
Fred Rodriguez	\$ 1,774.80	Bi-weekly	Dedicated	Mechanic
Marian Homlak	\$ 2,538.90	Bi-weekly	Dedicated	Controller
Raul Maldonado	\$ 1,774.80	Bi-weekly	Dedicated	Water Operator II

The bi-weekly payrates shown herein include FICA, employer paid health insurance, and 401K matching expense plus a 25% markup to cover general overhead and profit. This schedule of values is representative of the level of compensation occurring bi-weekly as of the date hereof but is subject to change as actual staff hours are added or deducted based on the demands of Owner. Actual compensation shall be based on the actual costs for labor incurred by Contractor (inclusive of full-time dedicated water personnel plus allocated staff not dedicated to water operations) plus 25% for Overhead and Profit. In addition, this schedule of values does not reflect year-end employee bonuses which shall be passed through by Contractor to Owner in the same manner as regular monthly billings.

**BEFORE THE ARIZONA CORPORATION COMMISSION**

KRISTIN K. MAYES  
Chairman  
GARY PIERCE  
Commissioner  
SANDRA D. KENNEDY  
Commissioner  
PAUL NEWMAN  
Commissioner  
BOB STUMP  
Commissioner

IN THE MATTER OF THE APPLICATION OF ) DOCKET NO. W-03718A-09-0359  
SAHUARITA WATER COMPANY, L.L.C. )  
("SWC") FOR AN OPINION AND ORDER OF )  
THE COMMISSION (i) DETERMINING THE )  
FAIR VALUE OF THE UTILITY PROPERTY )  
OF SWC FOR RATEMAKING PURPOSES, (ii) )  
FIXING A JUST AND REASONABLE RATE )  
OF RETURN THEREON, (iii) APPROVING )  
RATES AND CHARGES DESIGNED TO )  
PRODUCE REVENUES SUFFICIENT TO )  
RECOVER SWC'S COST OF SERVICE AND )  
AUTHORIZED RATE OF RETURN, AND (iv) )  
PROVIDING THE RECOVERY OF CERTAIN )  
FINANCING AND OPERATING EXPENSES )  
THROUGH A SURCHARGE AND A PASS- )  
THROUGH TARIFF, RESPECTIVELY )

DIRECT

TESTIMONY

OF

JUAN C. MANRIQUE

PUBLIC UTILITIES ANALYST I

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

APRIL 22, 2010

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**EXECUTIVE SUMMARY  
SAHUARITA WATER COMPANY, L.L.C.  
DOCKET NO. W-03718A-09-0359**

The Direct Testimony of Staff witness Juan C. Manrique addresses the following issues:

Capital Structure – Staff recommends that the Commission adopt a capital structure for Sahuarita Water Company, L.L.C. (“Applicant”) for this proceeding consisting of 17.8 percent debt and 82.2 percent equity.

Cost of Equity – Staff recommends that the Commission adopt a 10.1 percent return on equity (“ROE”) for the Applicant. Staff’s estimated ROE for the Applicant is based on cost of equity estimates for the sample companies ranging from 9.9 percent for the discounted cash flow method (“DCF”) to 10.2 percent for the capital asset pricing model (“CAPM”).

Cost of Debt – Staff recommends that the Commission adopt the Company-proposed 4.2 percent cost of debt.

Overall Rate of Return – Staff recommends that the Commission adopt a 9.0 percent overall rate of return (“ROR”).

Mr. Bourassa’s Testimony – The Commission should reject the Company-proposed 12.0 percent ROE for the following reasons:

Mr. Bourassa’s DCF estimates rely heavily on analyst’s forecasts and provide little weight to historical dividend per share growth rates.

1 **I. INTRODUCTION**

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

3 A. My name is Juan C. Manrique. I am a Public Utilities Analyst employed by the Arizona  
4 Corporation Commission ("ACC" or "Commission") in the Utilities Division ("Staff").  
5 My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

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

8 A. In my position as a Public Utilities Analyst, I perform studies to estimate the cost of  
9 capital component in rate filings to determine the overall revenue requirement and analyze  
10 requests for financing authorizations.

11  
12 **Q. Please describe your educational background and professional experience.**

13 A. I graduated from Arizona State University and received a Bachelor of Science degree in  
14 Finance. My course of studies included courses in corporate and international finance,  
15 investments, accounting, statistics, and economics. I began employment as a Staff Public  
16 Utilities Analyst in October 2008. My professional experience includes two years as a  
17 Loan Officer with a homebuilder and as an Associate for an Investor Relations firm.

18  
19 **Q. What is the scope of your testimony in this case?**

20 A. My testimony provides Staff's recommended capital structure, return on equity ("ROE")  
21 and overall rate of return ("ROR") for establishing the revenue requirements for Sahuarita  
22 Water Company, L.L.C.'s ("SWC" or "Applicant") pending rate application.

23

1 **Q. Please provide a brief description of SWC.**

2 A. SWC is a for-profit Arizona Limited Liability Corporation that is engaged in the business  
3 of providing public water (approximately 4,700 customers) utility service in and around  
4 the community of Sahuarita within Pima County, Arizona.

5  
6 *Summary of Testimony and Recommendations*

7 **Q. Briefly summarize how Staff's cost of capital testimony is organized.**

8 A. Staff's cost of capital testimony is presented in ten sections. Section I is this introduction.  
9 Section II discusses the concept of weighted average cost of capital ("WACC"). Section  
10 III presents the concept of capital structure and presents Staff's recommended capital  
11 structure for SWC in this proceeding. Section IV discusses the concepts of ROE and risk.  
12 Section V presents the methods employed by Staff to estimate SWC's ROE. Section VI  
13 presents the findings of Staff's ROE analysis. Section VII presents Staff's final cost of  
14 equity estimates for SWC. Section VIII presents Staff's ROR recommendation. Section  
15 IX presents Staff's comments on the Direct Testimony of the Applicant's witness, Mr.  
16 Thomas J. Bourassa. Finally, Section X presents the conclusions.

17  
18 **Q. Have you prepared any exhibits to accompany your testimony?**

19 A. Yes. I prepared nine schedules (JCM-1 to JCM-9) that support Staff's cost of capital  
20 analysis.

21  
22 **Q. What is Staff's recommended rate of return for SWC?**

23 A. Staff recommends a 9.0 percent overall ROR, as shown in Schedule JCM-1. Staff's ROR  
24 recommendation is based on cost of equity estimates for SWC that range from 9.9 percent  
25 using the discounted cash flow method ("DCF") to 10.2 percent using the capital asset  
26 pricing model ("CAPM").

1 *SWC's Proposed Overall Rate of Return*

2 **Q. Briefly summarize SWC's proposed capital structure, cost of debt, return on equity**  
3 **and overall rate of return for this proceeding.**

4 A. Table 1 summarizes the Applicant's proposed capital structure, cost of debt, return on  
5 equity and overall rate of return in this proceeding:

6  
7 **Table 1**

	<b>Weight</b>	<b>Cost</b>	<b>Weighted Cost</b>
Long-term Debt	17.2%	4.2%	0.7%
Common Equity	82.8%	12.0%	<u>9.9%</u>
<b>Cost of Capital/ROR</b>			<b>10.7%</b>

8  
9 SWC is proposing an overall rate of return of 10.7 percent.

10  
11 **II. THE WEIGHTED AVERAGE COST OF CAPITAL**

12 **Q. Briefly explain the cost of capital concept.**

13 A. The cost of capital is the opportunity cost of choosing one investment over others with  
14 equivalent risk. In other words, the cost of capital is the return that stakeholders expect  
15 for investing their financial resources in a determined business venture over another  
16 business venture.

17  
18 **Q. What is the overall cost of capital?**

19 A. The cost of capital to a company issuing a variety of securities (i.e., stock and  
20 indebtedness) is an average of the cost rates on all issued securities adjusted to reflect the  
21 relative amounts for each security in the company's entire capital structure. Thus, the  
22 overall cost of capital is the WACC.

1 **Q. How is the WACC calculated?**

2 A. The WACC is calculated by adding the weighted expected returns of a firm's securities.  
3 The WACC formula is:

4 Equation 1.

5  
6 
$$\text{WACC} = \sum_{i=1}^n W_i * r_i$$
  
7

8 In this equation,  $W_i$  is the weight given to the  $i^{\text{th}}$  security (the proportion of the  $i^{\text{th}}$  security  
9 relative to the portfolio) and  $r_i$  is the expected return on the  $i^{\text{th}}$  security.

10  
11 **Q. Can you provide an example demonstrating application of Equation 1?**

12 A. Yes. For this example, assume that an entity has a capital structure composed of 60  
13 percent debt and 40 percent equity. Also, assume that the embedded cost of debt is 6.0  
14 percent and the expected return on equity, i.e. the cost of equity, is 10.5 percent.  
15 Calculation of the WACC is as follows:

16 
$$\text{WACC} = (60\% * 6.0\%) + (40\% * 10.5\%)$$

17 
$$\text{WACC} = 3.60\% + 4.20\%$$

18 
$$\text{WACC} = 7.80\%$$
  
19

20 The weighted average cost of capital in this example is 7.80 percent. The entity in this  
21 example would need to earn an overall rate of return of 7.80 percent to cover its cost of  
22 capital.  
23

1 **III. CAPITAL STRUCTURE**

2 *Background*

3 **Q. Please explain the capital structure concept.**

4 A. The capital structure of a firm is the relative proportions of each type of security--short-  
5 term debt, long-term debt (including capital leases), preferred stock and common stock--  
6 that are used to finance the firm's assets.

7  
8 **Q. How is the capital structure expressed?**

9 A. The capital structure of a company is expressed as the percentage of each component of  
10 the capital structure (capital leases, short-term debt, long-term debt, preferred stock and  
11 common stock) relative to the entire capital structure.

12  
13 As an example, the capital structure for an entity that is financed by \$20,000 of capital  
14 leases, \$85,000 of long-term debt, \$15,000 of preferred stock and \$80,000 of common  
15 stock is shown in Table 2.

16  
17 **Table 2**

Component			%
Capital Leases	\$20,000	(\$20,000/\$200,000)	10.0%
Long-Term Debt	\$85,000	(\$85,000/\$200,000)	42.5%
Preferred Stock	\$15,000	(\$15,000/\$200,000)	7.5%
Common Stock	\$80,000	(\$80,000/\$200,000)	40.0%
Total	\$200,000		100%

1 The capital structure in this example is composed of 0.0 percent short-term debt, 10.0  
2 percent capital leases, 42.5 percent long-term debt, 7.5 percent preferred stock and 40.0  
3 percent common stock.

4  
5 *SWC's Capital Structure*

6 **Q. What capital structure does SWC propose?**

7 A. The Applicant proposes a capital structure composed of 17.17 percent debt and 82.83  
8 percent common equity.

9  
10 **Q. How does SWC's proposed capital structure compare to capital structures of the  
11 publicly-traded water utilities?**

12 A. SWC's capital structure is composed of 17.17 percent debt and 82.83 percent equity.  
13 Schedule JCM-4 shows the capital structures of six publicly traded water companies  
14 ("sample water companies") as of September 2009. The average capital structure for the  
15 sample water utilities is comprised of approximately 51.0 percent debt and 49.0 percent  
16 equity.

17  
18 *Staff's Capital Structure*

19 **Q. What is Staff's recommended capital structure for SWC?**

20 A. Staff recommends a capital structure composed of 17.8 percent debt and 82.2 percent  
21 equity.

22  
23 **Q. Why does Staff's recommended capital structure differ from the Company's  
24 proposed capital structure?**

25 A. Staff used the most updated capital structure, as of February 23, 2010, provided by the  
26 Company in response to Staff Data Request 3.1.

1 **IV. RETURN ON EQUITY**

2 *Background*

3 **Q. Please define the term “cost of equity capital.”**

4 A. The cost of equity is the rate of return that investors expect to earn on their investment in a  
5 business entity given its risk. In other words, the cost of equity to the entity is the  
6 investors’ expected rate of return on other investments of similar risk. As investors have a  
7 wide selection of stocks to choose from, they will choose stocks with similar risks but  
8 higher returns. Therefore, the market determines the entity’s cost of equity.

9

10 **Q. Is there a correlation between interest rates and the cost of equity?**

11 A. Yes. The cost of equity tends to move in the same direction as interest rates. This  
12 relationship is part of the CAPM formula. The CAPM is a market-based model employed  
13 by Staff for estimating the cost of equity. The CAPM is further discussed in Section V of  
14 this testimony.

15

16 **Q. What has been the general trend of interest rates in recent years?**

17 A. A chronological chart of interest rates is a good tool to show interest rate history and  
18 identify trends. Chart 1 graphs intermediate U.S. treasury rates from November 1999 to  
19 November 2009.

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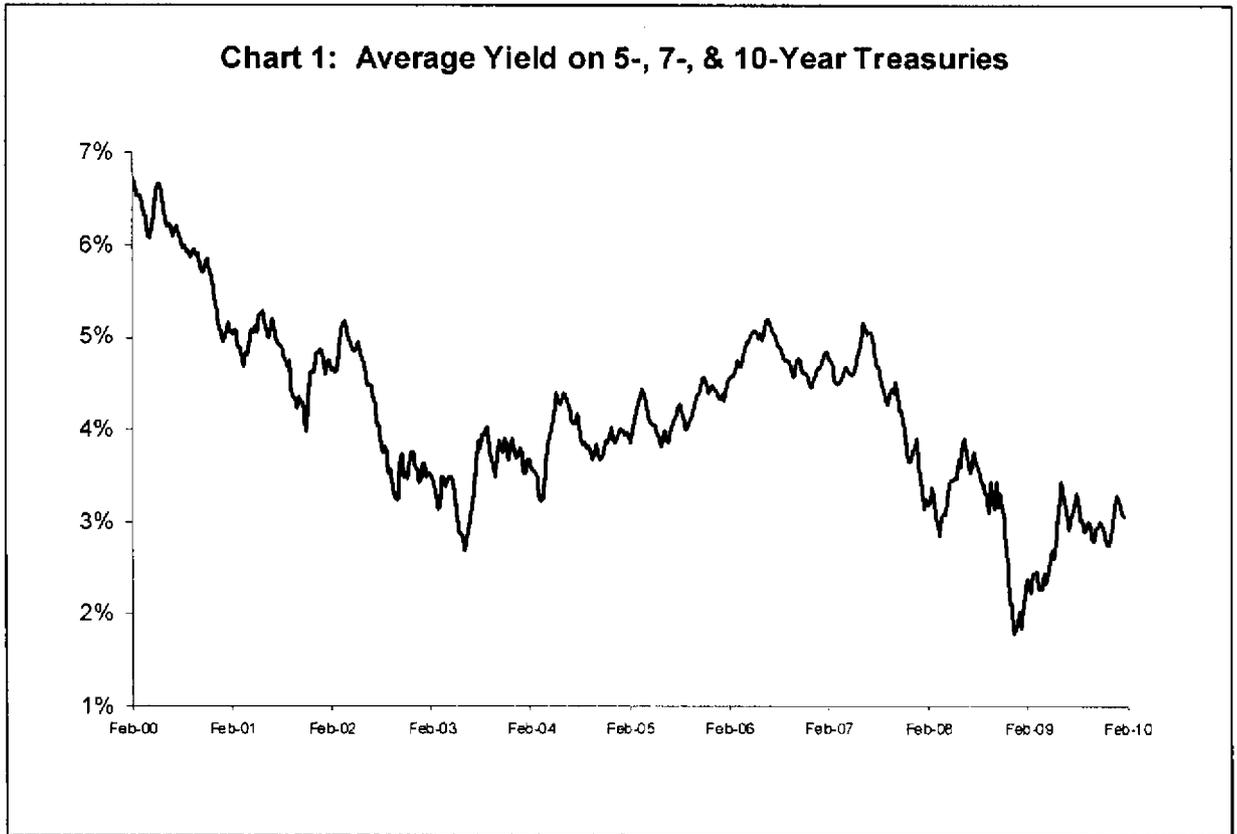
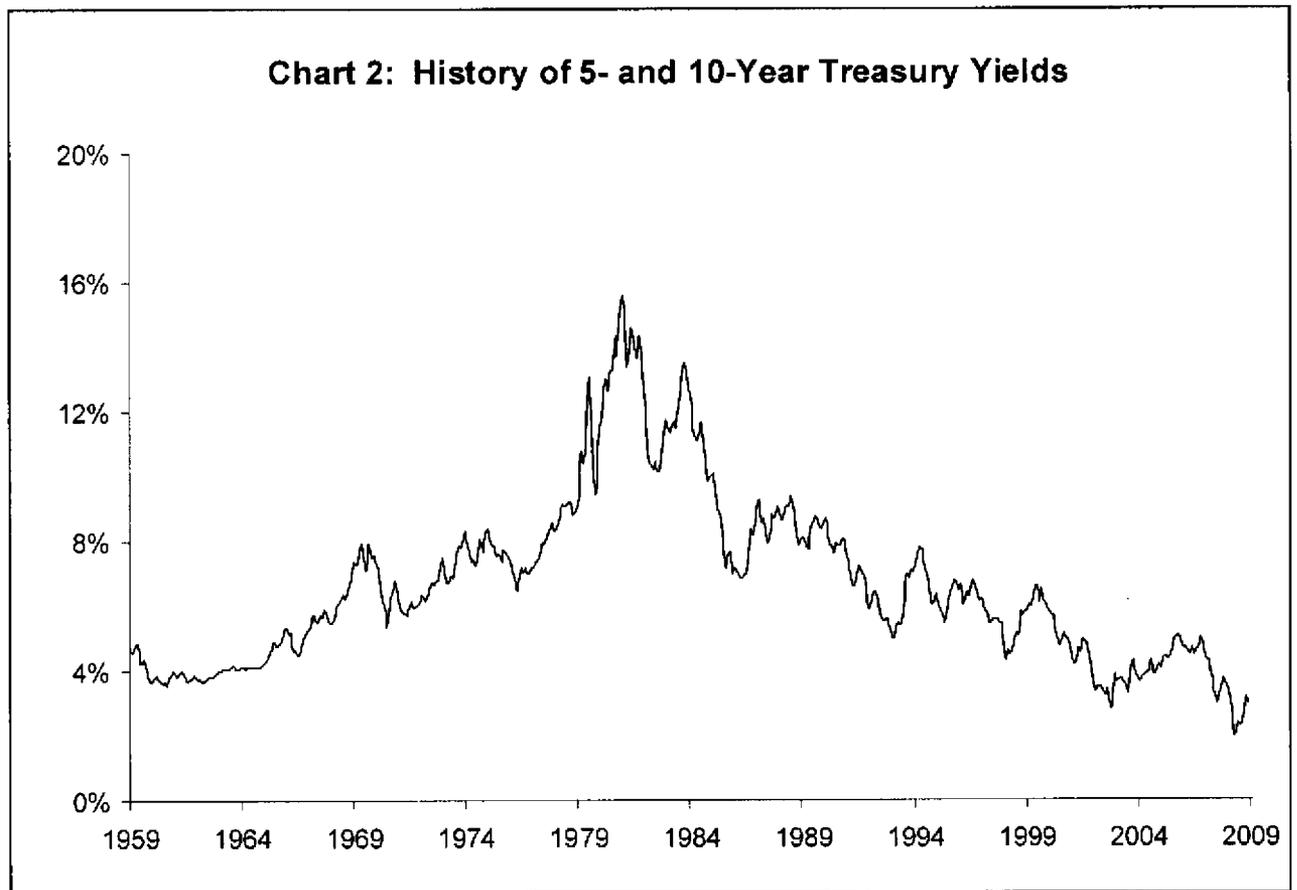


Chart 1 shows that intermediate interest rates trended downward from 2000 to mid-2003 then turned slightly upward until mid-2007, trended downward through early-2009 and have trended upward in the past year.

**Q. What has been the general trend in interest rates longer term?**

A. U.S. Treasury rates from 1959 to present are shown in Chart 2. The chart shows that interest rates trended upward through the mid-1980s and have trended downward over the last 25 years.

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**Q. Do these trends suggest anything in terms of cost of equity?**

A. Yes. As previously discussed, interest rates and cost of equity tend to move in the same direction. The implication is that the cost of equity has declined in the past 25 years.

**Q. Do actual returns represent the cost of equity?**

A. No. The cost of equity represents investors' *expected* returns and not realized returns.

1 **Q. Is there any information available that leads to an understanding of the relationship**  
2 **between the equity returns required for a regulated water utility and those required**  
3 **in the market as a whole?**

4 A. Yes. A comparison of betas, a component of the CAPM discussed in Section V, for the  
5 water utility industry and the market provide insight into this relationship. The average  
6 beta (0.79)<sup>1</sup> for a water utility is lower than the theoretical average beta for all stocks (1.0).  
7 According to the CAPM formula, the cost of equity capital moves in the same direction as  
8 beta. Since the beta for the water utility industry is lower than the beta for the market, the  
9 implication is that the required return on equity for a regulated water utility is below the  
10 average required return on the market.

11  
12 *Risk*

13 **Q. Please define risk in relation to cost of capital.**

14 A. Risk, as it relates to an investment, is the variability or uncertainty of the returns on a  
15 particular security. Investors are risk averse and require a greater potential return to invest  
16 in relatively greater risk opportunities, i.e., investors require compensation for taking on  
17 additional risk. Risk is generally separated into two components. Those components are  
18 market risk (systematic risk) and non-market risk (diversifiable risk or firm-specific risk).

19  
20 **Q. What is market risk?**

21 A. Market risk or systematic risk is the risk of an investment that cannot be reduced through  
22 diversification. Market risk stems from factors that affect all securities such as recessions,  
23 war, inflation and high interest rates. Since these factors affect the entire market they  
24 cannot be eliminated through diversification. Market risk does not impact each security to

---

<sup>1</sup> See Schedule JCM-7

1 the same degree. The degree to which any security's returns is affected by the market can  
2 be measured using Beta. Beta reflects the business risk and the financial risk of a security.

3

4 **Q. Please define business risk.**

5 A. Business risk is the fluctuation of earnings inherent in a firm's operations and environment  
6 such as competition and adverse economic conditions that may impair its ability to  
7 provide returns on investment. Companies in the same or similar line of business tend to  
8 experience the same fluctuations in business cycles.

9

10 **Q. Please define financial risk.**

11 A. Financial risk is the fluctuation of earnings inherent in using debt financing by a firm that  
12 may impair its ability to provide adequate return. The more a company uses debt  
13 financing, the more the company becomes exposed to financial risk.

14

15 **Q. Do business risk and financial risk affect the cost of equity?**

16 A. Yes.

17

18 **Q. Is a firm subject to any other risk?**

19 A. Yes. Firms are also subject to unsystematic or firm-specific risk. Examples of  
20 unsystematic risk include losses caused by labor problems, nationalization of assets, loss  
21 of a big client or weather conditions. Investors can eliminate firm-specific risk by holding  
22 a diverse portfolio; thus, it is not of concern to diversified investors.

23

1 **Q. How does SWC's financial risk compare to the sample water companies' financial**  
2 **risk from the perspective of an investor?**

3 A. From an investor's perspective SWC's capital structure is less risky than the sample water  
4 companies. Schedule JCM-4 shows the capital structures of the six publicly-traded water  
5 companies ("sample water companies") as of September 2009, as well as SWC's actual  
6 capital structure. As of June 2009, the sample water utilities were capitalized with  
7 approximately 51.0 percent debt and 49.0 percent equity, while SWC's actual capital  
8 structure consists of approximately 17.8 percent debt and 82.2 percent equity. Thus,  
9 SWC's shareholders bear less financial risk than the shareholders of the sample  
10 companies.

11  
12 **Q. Is firm-specific risk measured by beta?**

13 A. No. Firm-specific risk is not measured by beta.

14  
15 **Q. Is the cost of equity affected by firm-specific risk?**

16 A. No. Since firm-specific risk can be eliminated through diversification, it does not affect  
17 the cost of equity.

18  
19 **Q. Can investors expect additional returns for firm-specific risk?**

20 A. No. Investors who hold diversified portfolios can eliminate firm-specific risk, and  
21 consequently, do not require any additional return. Since investors who choose to be less  
22 than fully diversified must compete in the market with fully diversified investors, the  
23 former cannot expect to be compensated for unique risk.

24

1 **V. ESTIMATING THE COST OF EQUITY**

2 *Introduction*

3 **Q. Did Staff directly estimate the cost of equity for SWC?**

4 A. No. Since SWC is not a publicly-traded company, Staff is unable to directly estimate the  
5 Company's cost of equity due to the unavailability of financial information. Instead, Staff  
6 uses an average of a representative sample group to reduce the sample error resulting from  
7 random fluctuations in the market at the time the information is gathered.

8  
9 **Q. What companies did Staff select as proxies or comparables for SWC?**

10 A. Staff's sample consists of the following six publicly-traded water utilities: American  
11 States Water, California Water, Connecticut Water Services, Middlesex Water, Aqua  
12 America and SJW Corp. Staff chose these companies because they are publicly traded  
13 and receive the majority of their earnings from regulated operations.

14  
15 **Q. What models did Staff implement to estimate SWC's cost of equity?**

16 A. Staff used two market-based models to estimate the cost of equity for SWC: the DCF and  
17 the CAPM.

18  
19 **Q. Please explain why Staff chose the DCF and CAPM models.**

20 A. Staff chose to use the DCF and CAPM models because they are widely recognized  
21 market-based models and have been used extensively to estimate the cost of equity. An  
22 explanation of the DCF and CAPM models follows.

1 *Discounted Cash Flow Model Analysis*

2 **Q. Please provide a brief summary of the theory upon which the DCF method of**  
3 **estimating the cost of equity is based.**

4 A. The DCF method of stock valuation is based on the theory that the value of an investment  
5 is equal to the sum of the future cash flows generated from the aforementioned investment  
6 discounted to the present time. This method uses expected dividends, market price and  
7 dividend growth rate to calculate the cost of capital. Professor Myron Gordon pioneered  
8 the DCF method in the 1960s. The DCF method has become widely used to estimate the  
9 cost of equity for public utilities due to its theoretical merit and its simplicity. Staff used  
10 the financial information for the relevant six sample companies in the DCF model and  
11 averaged the results to determine an estimated cost of equity for the sample companies.

12  
13 **Q. Does Staff use more than one version of the DCF Model?**

14 A. Yes. Staff uses two versions of the DCF model: the constant-growth DCF Model and the  
15 multi-stage or non-constant growth DCF. The constant-growth DCF Model assumes that  
16 an entity's dividends will grow indefinitely at the same rate. The multi-stage growth DCF  
17 model assumes the dividend growth rate will change at some point in the future.

18  
19 The Constant-Growth DCF

20 **Q. What is the mathematical formula used in Staff's constant-growth DCF analysis?**

21 A. The constant-growth DCF formula used in Staff's analysis is:

Equation 2 :

$$K = \frac{D_1}{P_0} + g$$

where :      $K$      =   the cost of equity  
               $D_1$     =   the expected annual dividend  
               $P_0$     =   the current stock price  
               $g$      =   the expected infinite annual growth rate of dividends

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Equation 2 assumes that the entity has a constant earnings retention rate and that its earnings are expected to grow at a constant rate. According to Equation 2, a stock with a current market price of \$10 per share, an expected annual dividend of \$0.45 per share and an expected dividend growth rate of 3.0 percent per year has a cost of equity to the entity of 7.5 percent reflected by the sum of the dividend yield ( $\$0.45 / \$10 = 4.5$  percent) and the 3.0 percent annual dividend growth rate.

**Q. How did Staff calculate the dividend yield component ( $D_1/P_0$ ) of the constant-growth DCF formula?**

A. Staff calculated the yield component of the DCF formula by dividing the expected annual dividend<sup>2</sup> ( $D_1$ ) by the spot stock price ( $P_0$ ) after the close of the market February 3, 2010, as reported by the website *MSN Money*.

**Q. Why did Staff use the February 3, 2010, spot price rather than a historical average stock price to calculate the dividend yield component of the DCF formula?**

A. Current, rather than historic, market stock price is used in order to be consistent with finance theory, i.e., the efficient market hypothesis. The efficient market hypothesis

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<sup>2</sup> Value Line Summary & Index. 2-12-10

1 asserts that the current stock price reflects all available information on a stock including  
2 investors' expectations of future returns. Use of a historical average of stock prices  
3 illogically discounts the most recent information in favor of less recent information. The  
4 latter is stale and is representative of underlying conditions that may have changed.

5  
6 **Q. How did Staff estimate the dividend growth (g) component of the constant-growth**  
7 **DCF model represented by Equation 2?**

8 A. The dividend growth component used by Staff is determined by the average of six  
9 different estimation methods, as shown in Schedule JCM-8. Staff calculated historical and  
10 projected growth estimates on dividend-per-share ("DPS"),<sup>3</sup> earnings-per-share ("EPS")<sup>4</sup>  
11 and sustainable growth bases.

12  
13 **Q. Why did Staff examine EPS growth to estimate the dividend growth component of**  
14 **the constant-growth DCF model?**

15 A. Historic and projected EPS growth are used because dividends are related to earnings.  
16 Dividend distributions may exceed earnings in the short run but cannot continue  
17 indefinitely. In the long term, dividend distributions are dependent on earnings.

18  
19 **Q. How did Staff estimate historical DPS growth?**

20 A. Staff estimated historical DPS growth by calculating the average rate of growth in DPS of  
21 the sample water companies from 1998 to 2008. The results of that calculation are shown  
22 in Schedule JCM-5. Staff calculated an average historical DPS growth rate of 3.1 percent  
23 for the sample water utilities for the aforementioned period.

24  

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<sup>3</sup> Derived from information provided by *Value Line*

<sup>4</sup> Derived from information provided by *Value Line*

1 **Q. How did Staff estimate the projected DPS growth?**

2 A. Staff calculated an average of the projected DPS growth rates for the sample water utilities  
3 from *Value Line*. The average projected DPS growth rate is 4.1 percent, as shown in  
4 Schedule JCM-5.

5  
6 **Q. How did Staff calculate the historical EPS growth rate?**

7 A. Staff estimated historical EPS growth by calculating the average rate of growth in EPS of  
8 the sample water companies from 1998 to 2008. Staff calculated an average historical  
9 EPS growth rate of 3.3 percent for the sample water utilities for the aforementioned  
10 period, as shown in Schedule JCM-5.

11  
12 **Q. How did Staff estimate the projected EPS growth?**

13 A. Staff calculated an average of the projected EPS growth rates for the sample water utilities  
14 from *Value Line*. The average projected EPS growth rate is 9.7 percent, as shown in  
15 Schedule JCM-5.

16  
17 **Q. How does Staff calculate its historical and projected sustainable growth rates?**

18 A. Historical and projected sustainable growth rates are calculated by adding their respective  
19 retention growth rate terms (br) to their respective stock financing growth rate terms (vs)  
20 as shown in Schedule JCM-6.

21  
22 **Q. What is retention growth?**

23 A. Retention growth is the growth in dividends due to the retention of earnings. The  
24 retention growth concept is based on the theory that dividend growth cannot be achieved  
25 unless the company retains and reinvests some of its earnings. The retention growth is  
26 used in Staff's calculation of sustainable growth shown in Schedule JCM-6.

1 **Q. What is the formula for the retention growth rate?**

2 A. The retention growth rate is the product of the retention ratio and the book/accounting  
3 return on equity. The retention growth rate formula is:

4

Equation 3 :

$$\text{Retention Growth Rate} = br$$

where :  $b$  = the retention ratio (1 – dividend payout ratio)  
 $r$  = the accounting/book return on common equity

5

6 **Q. How did Staff calculate the average historical retention growth rate (br) for the**  
7 **sample water utilities?**

8 A. Staff calculated the historical retention rates by averaging the retention rates for the  
9 sample water companies from 1999 to 2008. The historical average retention (br) growth  
10 for the sample water utilities is 3.1 percent, as shown in Schedule JCM-6.

11

12 **Q. How did Staff determine projected retention growth rate (br) for the sample water**  
13 **utilities?**

14 A. Staff used the retention growth projections for the sample water utilities for the period  
15 2012 to 2014 from *Value Line*. The projected average retention growth rate for the sample  
16 water utilities is 6.1 percent, as shown in Schedule JCM-6.

17

18 **Q. When can retention growth provide a reasonable estimate of future dividend**  
19 **growth?**

20 A. The retention growth rate is a reasonable estimate of future dividend growth when the  
21 retention ratio is reasonably constant and the entity's market price to book value ("market-  
22 to-book ratio") is expected to be 1.0. The average retention ratio has been reasonably

1 constant in recent years. However, the market-to-book ratio for the sample water utilities  
2 is 1.7, notably higher than 1.0, as shown in Schedule JCM-7.  
3

4 **Q. Is there any financial implication of a market-to-book ratio greater than 1.0?**

5 A. Yes. A market-to-book ratio greater than 1.0 implies that investors expect an entity to  
6 earn an accounting/book return on its equity that exceeds its cost of equity. The  
7 relationship between required returns and expected cash flows is readily observed in the  
8 fixed securities market. For example, assume an entity contemplating issuance of bonds  
9 with a face value of \$10 million at either 6 percent or 8 percent, and thus, paying annual  
10 interest of \$600,000 or \$800,000, respectively. Regardless of investors' required return on  
11 similar bonds, investors will be willing to pay more for the bonds if issued at 8 percent  
12 than if the bonds are issued at 6 percent. For example, if the current interest rate required  
13 by investors is 6 percent, then they would bid \$10 million for the 6 percent bonds and  
14 more than \$10 million for the 8 percent bonds. Similarly, if equity investors require a 9  
15 percent return and expect an entity to earn accounting/book returns of 13 percent, the  
16 market will bid up the price of the entity's stock to provide the required return of 9  
17 percent.  
18

19 **Q. How has Staff generally recognized a market-to-book ratio exceeding 1.0 in its cost of  
20 equity analyses in recent years?**

21 A. Staff has assumed that investors expect the market-to-book ratio to remain greater than  
22 1.0. Given that assumption, Staff has added a stock financing growth rate (vs) term to the  
23 retention ratio (br) term to calculate its historical and projected sustainable growth rates.  
24

1 Q. Do the historical and projected sustainable growth rates Staff uses to develop its  
2 DCF cost of equity in this case continue to include a stock financing growth rate  
3 term?

4 A. Yes.

5  
6 Q. What is stock financing growth?

7 A. Stock financing growth is the growth in an entity's dividends due to the sale of stock by  
8 that entity. Stock financing growth is a concept derived by Myron Gordon and discussed  
9 in his book *The Cost of Capital to a Public Utility*.<sup>5</sup> Stock financing growth is the product  
10 of the fraction of the funds raised from the sale of stock that accrues to existing  
11 shareholders ( $v$ ) and the fraction resulting from dividing the funds raised from the sale of  
12 stock by the existing common equity ( $s$ ).

13  
14 Q. What is the mathematical formula for the stock financing growth rate?

15 A. The mathematical formula for stock financing growth is:

16

Equation 4 :

$$\text{Stock Financing Growth} = vs$$

where :  $v$  = Fraction of the funds raised from the sale of stock that accrues  
to existing shareholders

$s$  = Funds raised from the sale of stock as a fraction of the existing  
common equity

17

18 Q. How is the variable  $v$  presented above calculated?

19 A. Variable  $v$  is calculated as follows:

---

<sup>5</sup> Gordon, Myron J. *The Cost of Capital to a Public Utility*. MSU Public Utilities Studies, Michigan, 1974. pp 31-35.

Equation 5 :

$$v = 1 - \left( \frac{\text{book value}}{\text{market value}} \right)$$

1

2

For example, assume that a share of stock has a \$30 book value and is selling for \$45.

3

Then, to find the value of  $v$ , the formula is applied:

$$v = 1 - \left( \frac{30}{45} \right)$$

4

In this example,  $v$  is equal to 0.33.

5

6

**Q. How is the variable  $s$  presented above calculated?**

7

A. Variable  $s$  is calculated as follows:

8

Equation 6:

9

$$s = \frac{\text{Funds raised from the issuance of stock}}{\text{Total existing common equity before the issuance}}$$

10

11

12

For example, assume that an entity has \$150 in existing equity, and it sells \$30 of stock.

13

Then, to find the value of  $s$ , the formula is applied:

$$s = \left( \frac{30}{150} \right)$$

14

In this example,  $s$  is equal to 20.0 percent.

15

16

**Q. What is the  $vs$  term when the market-to-book ratio is equal to 1.0?**

17

A. A market-to-book ratio equal to 1.0 reflects that investors expect an entity to earn a book/accounting return on their equity investment equal to the cost of equity. When the market-to-book ratio is equal to 1.0, none of the funds raised from the sale of stock by the

18

19

1 entity accrues to the benefit of existing shareholders, i.e., the term  $v$  is equal to zero (0.0).  
2 Consequently, the  $vs$  term is also equal to zero (0.0). When stock financing growth is  
3 zero, dividend growth depends solely on the  $br$  term.  
4

5 **Q. What is the effect of the  $vs$  term when the market-to-book ratio is greater than 1.0?**

6 A. A market-to-book ratio greater than 1.0 reflects that investors expect an entity to earn a  
7 book/accounting return on their equity investment greater than the cost of equity.  
8 Equation 5 shows that when the market-to-book ratio is greater than 1.0 the  $v$  term is also  
9 greater than zero. The excess by which new shares are issued and sold over book value  
10 per share of outstanding stock is a contribution that accrues to existing stockholders in the  
11 form of a higher book value. The resulting higher book value leads to higher expected  
12 earnings and dividends. Continued growth from the  $vs$  term is dependent upon the  
13 continued issuance and sale of additional shares at a price that exceeds book value per  
14 share.  
15

16 **Q. What  $vs$  estimate did Staff calculate from its analysis of the sample water utilities?**

17 A. Staff estimated an average stock financing growth of 2.1 percent for the sample water  
18 utilities, as shown in Schedule JCM-6.  
19

20 **Q. What would occur if an entity had a market-to-book ratio greater than 1.0 as a result  
21 of investors expecting earnings to exceed the cost of equity capital and the entity  
22 subsequently experienced newly-authorized rates equal to its cost of equity capital?**

23 A. Market pressure on the entity's stock price to reflect the change in future expected cash  
24 flows would cause the market-to-book ratio to move toward 1.0.  
25

1 **Q. Is inclusion of the *vs* term necessary if the average market-to-book ratio of the**  
2 **sample water utilities falls to 1.0 due to authorized ROEs equaling the cost of equity?**

3 A. No. As discussed above, when the market-to-book ratio is equal to 1.0, none of the funds  
4 raised from the sale of stock by the entity accrues to the benefit of existing shareholders  
5 because the *v* term equals to zero, and consequently, the *vs* term also equals zero. When  
6 the market-to-book ratio equals 1.0, dividend growth depends solely on the *br* term.  
7 Staff's inclusion of the *vs* term assumes that the market-to-book ratio continues to exceed  
8 1.0 and that the water utilities will continue to issue and sell stock at prices above book  
9 value with the effect of benefitting existing shareholders.

10

11 **Q. What are Staff's historical and projected sustainable growth rates?**

12 A. Staff's estimated historical sustainable growth rate is 5.2 percent based on an analysis of  
13 earnings retention for the sample water companies. Staff's projected sustainable growth  
14 rate is 9.1 percent based on retention growth projected by *Value Line*. Schedule JCM-6  
15 presents Staff's estimates of the sustainable growth rate.

16

17 **Q. What is Staff's expected infinite annual growth rate in dividends?**

18 A. Staff's expected infinite annual growth rate in dividends is 5.8 percent which is the  
19 average of historical and projected DPS, EPS, and sustainable growth estimates. Staff's  
20 calculation of the expected infinite annual growth rate in dividends is shown in Schedule  
21 JCM-8.

22

23 **Q. What is Staff's constant-growth DCF estimate for the sample utilities?**

24 A. Staff's constant-growth DCF estimate is 9.5 percent, as shown in Schedule JCM-3.

25

1 The Multi-Stage DCF

2 **Q. Why did Staff implement the multi-stage DCF model to estimate SWC's cost of**  
3 **equity?**

4 A. Staff generally uses the multi-stage DCF model to consider the assumption that dividends  
5 may not grow at a constant rate. The multi-stage DCF uses two stages of growth. The  
6 first stage is four years followed by the second constant growth stage.

7  
8 **Q. What is the mathematical formula for the multi-stage DCF?**

9 A. The multi-stage DCF formula is shown in the following equation:

Equation 7 :

$$P_0 = \sum_{t=1}^n \frac{D_t}{(1+K)^t} + \frac{D_n(1+g_n)}{K-g_n} \left[ \frac{1}{(1+K)} \right]^n$$

Where :  $P_0$  = current stock price  
 $D_t$  = dividends expected during stage 1  
 $K$  = cost of equity  
 $n$  = years of non - constant growth  
 $D_n$  = dividend expected in year n  
 $g_n$  = constant rate of growth expected after year n

10  
11 **Q. What steps did Staff take to implement its multi-stage DCF cost of equity model?**

12 A. First, Staff projected future dividends for each of the sample water utilities using near-  
13 term and long-term growth rates. Second, Staff calculated the rate (cost of equity) which  
14 equates the present value of the forecasted dividends to the current stock price for each of  
15 the sample water utilities. Lastly, Staff calculated an average of the individual sample  
16 company cost of equity estimates.

17

1 **Q. How did Staff calculate near-term (stage-1) growth?**

2 A. The stage-1 growth rate is based on *Value Lines*'s projected dividends for the next twelve  
3 months, when available, and on the average dividend growth rate (5.8 percent) calculated  
4 in Staff's constant DCF analysis for the remainder of the stage.

5  
6 **Q. How did Staff estimate long-term (stage-2) growth?**

7 A. Staff calculated the stage-2 growth rate using the arithmetic mean rate of growth in GDP  
8 from 1929 to 2008.<sup>6</sup> Using the GDP growth rate assumes that the water utility industry is  
9 expected to grow at the same rate as the overall economy.

10  
11 **Q. What is the historical GDP growth rate that Staff used to estimate stage-2 growth?**

12 A. Staff used 6.6 percent to estimate the stage-2 growth rate.

13  
14 **Q. What is Staff's multi-stage DCF estimate for the sample utilities?**

15 A. Staff's multi-stage DCF estimate is 10.2 percent, as shown in Schedule JCM-3.

16  
17 **Q. What is Staff's overall DCF estimate for the sample utilities?**

18 A. Staff's overall DCF estimate is 9.9 percent. Staff calculated the overall DCF estimate by  
19 averaging the constant growth DCF (9.5%) and multi-stage DCF (10.2%) estimates, as  
20 shown in Schedule JCM-3.

21  
22 *Capital Asset Pricing Model*

23 **Q. Please describe the CAPM.**

24 A. The CAPM is used to determine the prices of securities in a competitive market. The  
25 CAPM model describes the relationship between a security's investment risk and its

---

<sup>6</sup> [www.bea.doc.gov](http://www.bea.doc.gov)

1 market rate of return. Under the CAPM an investor requires the expected return of a  
2 security to equal the rate on a risk-free security plus a risk premium. If the investor's  
3 expected return does not meet or beat the required return, the investment is not  
4 economically justified. The model also assumes that investors will sufficiently diversify  
5 their investments to eliminate any non-systematic or unique risk.<sup>7</sup> In 1990, Professors  
6 Harry Markowitz, William Sharpe, and Merton Miller earned the Nobel Prize in  
7 Economic Sciences for their contribution to the development of the CAPM.

8  
9 **Q. Did Staff use the same sample water utilities in its CAPM and DCF cost of equity**  
10 **estimation analyses?**

11 A. Yes. Staff's CAPM cost of equity estimation analysis uses the same sample water  
12 companies as its DCF cost of equity estimation analysis.

13  
14 **Q. What is the mathematical formula for the CAPM?**

15 A. The mathematical formula for the CAPM is:

16  
Equation 8:

$$K = R_f + \beta (R_m - R_f)$$

where:  $R_f$  = risk free rate  
 $R_m$  = return on market  
 $\beta$  = beta  
 $R_m - R_f$  = market risk premium  
 $K$  = expected return

17  

---

<sup>7</sup> The CAPM makes the following assumptions: 1) single holding period; 2) perfect and competitive securities market; 3) no transaction costs; 4) no restrictions on short selling or borrowing; 5) the existence of a risk-free rate; and 6) homogeneous expectations.

1           The equation shows that the expected return ( $K$ ) on a risky asset is equal to the risk-free  
2           interest rate ( $R_f$ ) plus the product of the market risk premium ("Rp") ( $R_m - R_f$ ) multiplied  
3           by beta ( $\beta$ ) where beta represents the riskiness of the investment relative to the market.

4  
5           **Q.    What is the risk free rate?**

6           A.    The risk free rate is the rate of return of an investment with zero risk.

7  
8           **Q.    What does Staff use as surrogates to represent estimations of the risk-free rates of**  
9           **interest in its historical and current market risk premium CAPM methods?**

10          A.    Staff uses separate parameters as surrogates for the estimations of the risk-free rates of  
11          interest for the historical market risk premium CAPM cost of equity estimation and the  
12          current market risk premium CAPM cost of equity estimation. Staff uses the average of  
13          three (five-, seven-, and ten-year) intermediate-term U.S. Treasury securities' spot rates in  
14          its historical market risk premium CAPM cost of equity estimation, and the 30-year U.S.  
15          Treasury bond spot rate in its current market risk premium CAPM cost of equity  
16          estimation. U.S. Treasuries are largely verifiable and readily available.

17  
18          **Q.    What does beta measure?**

19          A.    Beta measures the volatility, or systematic risk, of a security relative to the market. Since  
20          systematic risk cannot be diversified away, it is the only risk that is relevant when  
21          estimating a security's required return. Using a baseline market beta of 1.0, a security  
22          with a beta less than 1.0 will be less volatile than the market. A security with a beta  
23          greater than 1.0 will be more volatile than the market.

24

1 **Q. How did Staff estimate SWC's beta?**

2 A. Staff used the average of the *Value Line* betas for the sample water utilities as a proxy for  
3 SWC's beta. Schedule JCM-7 shows the *Value Line* betas for each of the sample water  
4 utilities. The 0.79 average beta for the sample water utilities is Staff's estimated beta for  
5 SWC. A security with a 0.79 beta has less volatility than the market.

6  
7 **Q. Please describe expected market risk premium ( $R_m - R_f$ )?**

8 A. The expected market risk premium is the expected return on the market above the risk free  
9 rate. Simplified, it is the return an investor expects as compensation for market risk.

10  
11 **Q. What did Staff use for the market risk premium?**

12 A. Staff uses separate calculations for the market risk premium in its historical and current  
13 market risk premium CAPM methods.

14  
15 **Q. How did Staff calculate an estimate for the market risk premium in its historical  
16 market risk premium CAPM method?**

17 A. Staff uses the intermediate-term government bond income returns published in the  
18 Ibbotson Associates' *Stocks, Bonds, Bills, and Inflation 2008 Yearbook* to calculate the  
19 historical market risk premium. Ibbotson Associates calculates the historical risk  
20 premium by averaging the historical arithmetic differences between the S&P 500 and the  
21 intermediate-term government bond income returns for the period 1926-2008. Staff's  
22 historical market risk premium estimate is 6.9 percent, as shown in Schedule JCM-3.

23

1 **Q. How did Staff calculate an estimate for the market risk premium in its current**  
2 **market risk premium CAPM method?**

3 A. Staff solves equation 8 above to arrive at a market risk premium using a DCF derived  
4 expected return (K) of 13.68 (2.1 + 11.58<sup>8</sup>) percent using the expected dividend yield (2.1  
5 percent over the next twelve months) and the annual per share growth rate (11.58 percent)  
6 that *Value Line* projects for all dividend-paying stocks under its review<sup>9</sup> along with the  
7 current long-term risk-free rate (30-year Treasury note at 4.62 percent) and the market's  
8 average beta of 1.0. Staff calculated the current market risk premium as 9.06<sup>10</sup> as shown  
9 in Schedule JCM-3.

10

11 **Q. What is the result of Staff's historical market risk premium CAPM and current**  
12 **market risk premium CAPM cost of equity estimations for the sample utilities?**

13 A. Staff's cost of equity estimates are 8.6 percent using the historical market risk premium  
14 CAPM and 11.8 using the current market risk premium CAPM.

15

16 **Q. What is Staff's overall CAPM estimate for the sample utilities?**

17 A. Staff's overall CAPM cost of equity estimate is 10.2 percent which is the average of the  
18 historical market risk premium CAPM (8.6 percent) and the current market risk premium  
19 CAPM (11.8 percent) estimates, as shown in Schedule JCM-3.

20

---

<sup>8</sup> The three to five year price appreciation is 55%.  $1.55^{0.25} - 1 = 11.58\%$

<sup>9</sup> February 12, 2010 issue date.

<sup>10</sup>  $13.68\% = 4.62\% + (1) (9.06\%)$

1 **VI. SUMMARY OF STAFF'S COST OF EQUITY ANALYSIS**

2 **Q. What is the result of Staff's constant-growth DCF analysis to estimate of the cost of**  
3 **equity to the sample water utilities?**

4 **A.** Schedule JCM-3 shows the result of Staff's constant-growth DCF analysis. The result of  
5 Staff's constant-growth DCF analysis is as follows:

6  $k = 3.7\% + 5.8\%$

7  
8  $k = 9.5\%$

9  
10 Staff's constant-growth DCF estimate of the cost of equity to the sample water utilities is  
11 9.5 percent.

12  
13 **Q. What is the result of Staff's multi-stage DCF analysis to estimate of the cost of equity**  
14 **for the sample utilities?**

15 **A.** Schedule JCM-9 shows the result of Staff's multi-stage DCF analysis. The result of  
16 Staff's multi-stage DCF analysis is:

17

<b>Company</b>	<b>Equity Cost Estimate (k)</b>
American States Water	9.8%
California Water	9.9%
Aqua America	10.0%
Connecticut Water	10.8%
Middlesex Water	10.9%
SJW Corp	<u>9.7%</u>
<b>Average</b>	<b>10.2%</b>

28

29 Staff's multi-stage DCF estimate of the cost of equity for the sample water utilities is 10.2  
30 percent.

1 **Q. What is Staff's overall DCF estimate of the cost of equity for the sample utilities?**

2 A. Staff's overall DCF estimate of the cost of equity for the sample utilities is 9.9 percent.  
3 Staff calculated an overall DCF cost of equity estimate by averaging Staff's constant  
4 growth DCF (9.5 percent) and Staff's multi-stage DCF (10.2 percent) estimates, as shown  
5 in Schedule JCM-3.

6  
7 **Q. What is the result of Staff's historical market risk premium CAPM analysis to**  
8 **estimate of the cost of equity for the sample utilities?**

9 A. Schedule JCM-3 shows the result of Staff's CAPM analysis using the historical risk  
10 premium estimate. The result is as follows:

11  $k = 3.1\% + 0.79 * 6.9\%$

12  $k = 8.6\%$

13  
14 Staff's CAPM estimate (using the historical market risk premium) of the cost of equity to  
15 the sample water utilities is 8.6 percent.

16  
17 **Q. What is the result of Staff's current market risk premium CAPM analysis to**  
18 **estimate the cost of equity for the sample utilities?**

19 A. Schedule JCM-3 shows the result of Staff's CAPM analysis using the current market risk  
20 premium estimate. The result is:

21  $k = 4.6\% + 0.79 * 9.1\%$

22  $k = 11.8\%$

23  
24 Staff's CAPM estimate (using the current market risk premium) of the cost of equity to the  
25 sample water utilities is 11.8 percent.

26

1 **Q. What is Staff's overall CAPM estimate of the cost of equity for the sample utilities?**

2 A. Staff's overall CAPM estimate for the sample utilities is 10.2 percent. Staff's overall  
3 CAPM estimate is the average of the historical market risk premium CAPM (8.6 percent)  
4 and the current market risk premium CAPM (11.8 percent) estimates, as shown in  
5 Schedule JCM-3.

6  
7 **Q. Please summarize the results of Staff's cost of equity analysis for the sample utilities.**

8 A. The following table shows the results of Staff's cost of equity analysis:

9  
10

**Table 2**

<b>Method</b>	<b>Estimate</b>
Average DCF Estimate	9.9%
Average CAPM Estimate	10.2%
<b>Overall Average</b>	<b>10.1%</b>

11

12 Staff's average estimate of the cost of equity to the sample water utilities is 10.1 percent.

13

14 **VII. FINAL COST OF EQUITY ESTIMATES FOR SWC**

15 **Q. Please compare SWC's capital structure to that of the six sample water companies.**

16 A. The average capital structure for the sample water utilities is composed of 49.0 percent  
17 equity and 51.0 percent debt, as shown in Schedule JCM-4. SWC's capital structure is  
18 composed of 82.2 percent equity and 17.8 percent debt. In this case, since SWC's capital  
19 structure is less leveraged than that of the average sample water utilities' capital structure,  
20 its stockholders bear less financial risk than the sample water utilities. Accordingly,  
21 SWC's cost of equity is lower than that of the sample water utilities.

22

1 **Q. What is Staff's ROE estimate for SWC?**

2 A. Staff determined an ROE estimate of 10.1 percent for the Applicant based on cost of  
3 equity estimates for the sample companies ranging from 9.9 percent for the DCF to 10.2  
4 percent for the CAPM.

5

6 **Q. Why does Staff not use a financial risk adjustment to calculate the effect on the cost  
7 of equity capital of the different financial risks posed by SWC versus the sample  
8 companies?**

9 A. In this case, Staff does not use a financial risk adjustment because SWC is not a publicly-  
10 traded company, and thus, it does not have access to the capital markets.

11

12 **VIII. RATE OF RETURN RECOMMENDATION**

13 **Q. What overall rate of return did Staff determine for SWC?**

14 A. Staff determined a 9.0 percent ROR for the Applicant as shown in Schedule JCM-1 and  
15 the following table:

16

17

**Table 3**

	<b>Weight</b>	<b>Cost</b>	<b>Weighted Cost</b>
Long-term Debt	17.8%	4.2%	0.7%
Common Equity	82.2%	10.1%	<u>8.3%</u>
<b>Overall ROR</b>			<b><u>9.0%</u></b>

18

19 **IX. STAFF RESPONSE TO APPLICANT'S COST OF CAPITAL WITNESS MR.  
20 THOMAS J. BOURASSA**

21 **Q. Please summarize Mr. Bourassa's analyses and recommendations.**

22 A. Mr. Bourassa recommends a 12.0 percent ROE based on analyses for two constant growth  
23 DCF models (Past and Future Growth and Future Only Growth), as well as historical and

1 current market risk premium CAPM for the same sample of water companies selected by  
2 Staff. Mr. Bourassa also asserts that SWC faces additional risks not captured by the  
3 market models, such as regulatory and financial risk, and he concludes that a 12.0 percent  
4 ROE presents a reasonable balance resulting from his analyses. Mr. Bourassa proposes  
5 10.66 percent for the overall ROR with a capital structure consisting of 82.83 percent  
6 equity and 17.17 percent debt.

7  
8 *Constant-Growth DCF*

9 **Q. Does Mr. Bourassa give equal weight to historical data and analysts' projections to**  
10 **estimate the growth component of his DCF cost of equity estimate?**

11 A. No. Mr. Bourassa's DCF cost of equity estimate is based on the midpoint of his (1) Past  
12 and Future Growth estimate and (2) Future Growth estimate. Half of the Past and Future  
13 Growth estimate relies on analysts' projections of earnings growth and the entire Future  
14 Growth estimate relies on analysts' projections of earnings growth. Thus, choosing the  
15 midpoint of the two methods provides analysts' projections with 75 percent of the weight  
16 compared to 25 percent for historical data. In addition, Mr. Bourassa's Past and Future  
17 Growth estimate provides equal weight to stock price, book value per share, earnings per  
18 share and dividends per share. Thus, only one-eighth (12.5 percent) of his method of  
19 estimating the dividend growth relies on the growth in dividends per share.

20  
21 **Q. Does Staff have any comments on Mr. Bourassa's heavy reliance on analysts'**  
22 **forecasts to estimate DPS growth in his constant growth DCF estimates?**

23 A. Yes. Generally, analysts' forecasts are known to be overly optimistic. Heavy use of  
24 analysts' forecasts to calculate the growth in dividends (g), will cause inflated growth, and  
25 consequently, inflated cost of equity estimates unless investors give the same strong  
26 weight to analysts' forecasts. Also, heavy reliance on analysts' forecasts of earnings

1 growth to forecast DPS is inappropriate because it assumes that investors discount other  
2 relevant information such as past dividend and earnings growth.

3  
4 **Q. Does Staff have any evidence to support its assertion that heavy reliance on analysts'**  
5 **forecasts of earnings growth in the DCF model would result in inflated cost of equity**  
6 **estimates?**

7 A. Yes. Experts in the financial community have commented on the optimism in analysts'  
8 forecasts of future earnings.<sup>11</sup> A study cited by David Dreman in his book *Contrarian*  
9 *Investment Strategies: The Next Generation* found that *Value Line* analysts were  
10 optimistic in their forecasts by 9 percent annually, on average for the 1987 – 1989 period.  
11 Another study conducted by David Dreman found that between 1982 and 1997, analysts  
12 overestimated the growth of earnings of companies in the S&P 500 by 188 percent.

13 Also, Burton Malkiel of Princeton University studied the one-year and five-year earnings  
14 forecasts made by some of the most respected names in the investment business. His  
15 results showed that the five-year estimates of professional analysts, when compared with  
16 actual earnings growth rates, were much worse than the predictions from several naïve  
17 forecasting models, such as the long-run rate of growth of national income. In the  
18 following excerpt from Professor Malkiel's book *A Random Walk Down Wall Street*, he  
19 discusses the results of his study:

20 *When confronted with the poor record of their five-year growth estimates,*  
21 *the security analysts honestly, if sheepishly, admitted that five years*  
22 *ahead is really too far in advance to make reliable projections. They*  
23 *protested that although long-term projections are admittedly important,*  
24 *they really ought to be judged on their ability to project earnings changes*

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<sup>11</sup> See Seigel, Jeremy J. *Stocks for the Long Run*. 2002. McGraw-Hill. New York. p. 100. Dreman, David. *Contrarian Investment Strategies: The Next Generation*. 1998. Simon & Schuster. New York. pp. 97-98. Malkiel, Burton G. *A Random Walk Down Wall Street*. 2003. W.W. Norton & Co. New York. p. 175. Testimony of Professors Myron J. Gordon and Lawrence I. Gould, consultant to the Trial Staff (Common Carrier Bureau), FCC Docket 79-63, p. 95.

1                    *one year ahead. Believe it or not, it turned out that their one-year*  
2                    *forecasts were even worse than their five-year projections.*

3                    *The analysts fought back gamely. They complained that it was unfair to*  
4                    *judge their performance on a wide cross section of industries, because*  
5                    *earnings for high-tech firms and various "cyclical" companies are*  
6                    *notoriously hard to forecast. "Try us on utilities," one analyst*  
7                    *confidently asserted. At the time they were considered among the most*  
8                    *stable group of companies because of government regulation. So we*  
9                    *tried it and they didn't like it. Even the forecasts for the stable utilities*  
10                   *were far off the mark.*<sup>12</sup> (Emphasis added)

11  
12        **Q.     Are investors aware of the problems related to analysts' forecasts?**

13        A.     Yes. In addition to books, there are numerous published articles appearing in *The Wall*  
14        *Street Journal* and other financial publications that cast doubt as to how accurate research  
15        analysts are in their forecasts.<sup>13</sup> Investors, being keenly aware of these inherent biases in  
16        forecasts, will use other methods to assess future growth.

17  

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<sup>12</sup> Malkiel, Burton G. *A Random Walk Down Wall Street*. 2003. W.W. Norton & Co. New York. p. 175

<sup>13</sup> See Smith, Randall & Craig, Suzanne. "Big Firms Had Research Ploy: Quiet Payments Among Rivals." *The Wall Street Journal*. April 30, 2003. Brown, Ken. "Analysts: Still Coming Up Rosy." *The Wall Street Journal*. January 27, 2003. p. C1. Karmin, Craig. "Profit Forecasts Become Anybody's Guess." *The Wall Street Journal*. January 21, 2003. p. C1. Gasparino, Charles. "Merrill Lynch Investigation Widens." *The Wall Street Journal*. April 11, 2002. p. C4. Elstein, Aaron. "Earnings Estimates Are All Over the Map." *The Wall Street Journal*. August 2, 2001. p. C1. Dreman, David. "Don't Count on those Earnings Forecasts." *Forbes*. January 26, 1998. p. 110.

1 **Q. Does Staff have any comments on the study cited by Mr. Bourassa, conducted by**  
2 **David A. Gordon, Myron J. Gordon and Lawrence I. Gould<sup>14</sup> that he asserts**  
3 **supports heavy use of analysts' forecasts in the DCF model?**

4 A. Yes. The article cited by Mr. Bourassa does not conclude that investors ignore or heavily  
5 discount past growth when pricing stocks. Instead, the article describes more generally  
6 that methods exclusively using analysts' forecasts are "popular or attractive models", but  
7 the article does not support the conclusion that these forecasts should be used alone or as  
8 the primary estimates.

9  
10 **Q. Does Professor Gordon recommend relying exclusively on analysts' forecasts as the**  
11 **measure of growth in the DCF model?**

12 A. No. Subsequent to the study cited by Mr. Bourassa,<sup>15</sup> Professor Gordon provided the  
13 keynote address at the 30th Financial Forum of the Society of Utility and Regulatory  
14 Financial Analysts, in which he stated:

15 *I understand that companies coming before regulatory agencies liked and*  
16 *advocated the high growth rates in security analyst forecasts for arriving*  
17 *at their cost of equity capital. Instead of rejecting these forecasts, I*  
18 *understand that FERC and other regulatory agencies have decided to*  
19 *compromise with them. In particular, in arriving at the cost of equity for*  
20 *company X, the FERC has decided to arrive at the growth rate in my*  
21 *dividend growth model by using an average of two growth rates. One is*  
22 *security analysts forecast of the short-term growth rate in earnings*  
23 *provided by IBES or Value Line and the other a more long run and*  
24 *typically lower figure such as the past growth in GNP.*

25 *Such an average can be questioned on various grounds. However, my*  
26 *judgment is that between the short-term forecast alone and its average*  
27 *with the past growth rate in GNP, the latter may be a more reasonable*  
28 *figure.<sup>16</sup> (Emphasis added)*

<sup>14</sup> Gordon, David A., Myron J. Gordon, Lawrence I. Gould. "Choice Among Methods of Estimating Share Yield." *The Journal of Portfolio Management*. Spring 1989. pp. 50-55. (Bourassa's direct testimony, page 30, footnote.)

<sup>15</sup> Ibid.

<sup>16</sup> Gordon, M. J. Keynote Address at the 30<sup>th</sup> Financial Forum of the Society of Utility and Regulatory Financial Analysts. May 8, 1998. Transparency 3.

1           Simply stated, Professor Gordon would temper the typically higher analysts' forecasts  
2           with the typically lower GNP growth rate by averaging the two.

3  
4           **Q.   How does Staff respond to Mr. Bourassa's statement, "Logically, in estimating future**  
5           **growth, financial institutions and analysts have taken into account all relevant**  
6           **historical information on a company as well as other more recent information. To**  
7           **the extent that past results provide useful indications of future growth prospects,**  
8           **analysts' forecasts would already incorporate that information."? (Bourassa's Direct**  
9           **Testimony, Page 30, line 9-12)**

10          A.   The appropriate growth rate to use in the DCF formula is the dividend growth rate  
11          expected by *investors*, not analysts. Therefore, while analysts may have considered  
12          historical measures of growth, it is reasonable to assume that investors rely to some extent  
13          on past growth as well. This calls for consideration of both analysts' forecasts as well as  
14          past growth.

15  
16          **Q.   Does Staff have any comments on Mr. Bourassa's slight reliance on historical DPS**  
17          **growth to estimate DPS growth constant growth DCF estimates?**

18          A.   Yes. As previously stated on section V of this testimony, the current market price of a  
19          stock is equal to the present value of all expected future dividends, not future earnings.  
20          Professor Jeremy Siegel from the Wharton School of Finance stated:

21  
22                   *Note that the price of the stock is always equal to the present value of all*  
23                   *future dividends and not the present value of future earnings. Earnings*  
24                   *not paid to investors can have value only if they are paid as dividends or*  
25                   *other cash disbursements at a later date. Valuing stock as the present*  
26                   *discounted value of future earnings is manifestly wrong and greatly*  
27                   *overstates the value of the firm.<sup>17</sup>*  
28

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<sup>17</sup> Siegel, Jeremy J. Stocks for the Long Run. 2002. McGraw-Hill. New York. P. 93.

1           In other words, investors pay attention to earnings as long as they are paid as dividends.  
2           Earnings can easily be overstated. If investors do not receive dividends or other cash  
3           disbursement at a later date, then such earnings are meaningless. Accordingly, historical  
4           DPS growth should receive appropriate consideration in the estimation of DPS growth  
5           component of the DCF cost of equity estimation model.

6  
7           **Q. Does Staff have any comment on data in Mr. Bourassa Schedule D-4.4 which he uses**  
8           **to calculate a DCF dividend growth rate in his Past and Future DCF method?**

9           A. Yes. Schedule D-4.4 presents calculations based on five years of historical data. Using  
10          only five years of data could result in significant variances in the outcomes due to a single  
11          high or low data point. A larger number of data points, i.e., use of more years, is usually  
12          preferable. Also, five years may be too limited to capture a full business cycle, resulting  
13          in unnecessary skewing of the outcomes.

14

1 *Firm-Specific Risk*

2 **Q. Mr. Bourassa asserts “While the level of debt for SWC is lower, the proportion of**  
3 **zero-cost capital (advances-in-aid of construction and contributions-in-aid of**  
4 **construction) in SWC total capitalization is higher at over 41 percent compared to**  
5 **the publicly traded water utilities at an average 25 percent.”<sup>18</sup> He further asserts**  
6 **that this higher proportion of zero cost capital contributes to risk and states “Neither**  
7 **AIAC nor CIAC receive recognition in rate base and thus do not contribute to**  
8 **earnings. AIAC is refundable and is an obligation of the Company. Like debt**  
9 **payments, they have priority claims on the cash flows of the Company. Granted the**  
10 **depreciation recovery in rates help cash flow the refunds, but the refunds themselves**  
11 **consume cash flow that might otherwise be available to help pay operating expenses**  
12 **or fund plant replacement and plant improvements. CIAC is non-refundable, but**  
13 **there is also no depreciation recovery in rates and therefore no cash flow. This plant**  
14 **will eventually have to be replaced but will have no prior cash flow to help fund the**  
15 **plant replacement, thus requiring greater amounts and new sources of capital in the**  
16 **future.”<sup>19</sup> What is Staff’s response?**

17 **A. Contrary to Mr. Bourassa’s assertion, advances and contributions provide many benefits to**  
18 **and are highly sought by utilities. Advances and contributions allow utilities to postpone**  
19 **seeking capital funds to construct new facilities, and provide long planning horizons for**  
20 **funding replacement plant. Refunding advances is a mechanism allowing a utility to**  
21 **gradually and systematically provide capital funding for plant as *revenues permit*. In other**  
22 **words, advances-in-aid of construction (“AIAC”) refunds are only payable when the**  
23 **Company has generated revenues from the plant funded by AIAC. Also, as AIAC is**

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<sup>18</sup> Direct Testimony of Thomas J. Bourassa, Sahuarita Water Company, Docket No. W-03718A-09-0359, page 19 lines 20-23

<sup>19</sup> Direct Testimony of Thomas J. Bourassa, Sahuarita Water Company, Docket No. W-03718A-09-0359, page 20 lines 3-13

1 refunded, rate base increases allowing greater potential earnings. Thus, access to zero cost  
2 capital via advances and contributions can reduce a utility's firm-specific risk.

3  
4 **Q. Does Staff have any comment on Mr. Bourassa's statement that "Arizona water and**  
5 **wastewater utilities face legal constraints that limit their ability to obtain rate relief**  
6 **outside of a general rate case in which the 'fair value' of the utility's property is**  
7 **determined and used to set rates?"<sup>20</sup>**

8 A. Yes. The unique regulatory environments of the sample companies and SWC are firm  
9 specific risks for which investors cannot expect compensation. None of Mr. Bourassa's  
10 comments demonstrate that Arizona is a less favorable regulatory environment from those  
11 of the sample companies. Every regulatory jurisdiction has its own framework with its  
12 own specific identifiable advantages and disadvantages; however, it is the overall effect  
13 that is relevant. Nothing in Mr. Bourassa's testimony provides this overall perspective.  
14 The fact that investors continue to acquire Arizona utilities and invest capital in Arizona  
15 utilities debunks the notion that the regulatory environment in Arizona places utilities at  
16 some disadvantage. The regulatory framework in Arizona has many attractive attributes  
17 including: ability to seek accounting orders, recognition of known and measurable  
18 changes, use of hook-up fees and regulatory responsiveness to utility industry concerns  
19 (e.g., arsenic cost recovery mechanisms and arsenic remedial surcharge mechanisms).

20

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<sup>20</sup> Direct Testimony of Thomas J. Bourassa, Sahuarita Water Company, Docket No. W-03718A-09-0359, page 21 lines 18-21

1 **Q. What is Staff's response to Mr. Bourassa's contention that the market data provided**  
2 **by the sample water utilities does not capture all of the market risk associated with**  
3 **SWC due to Arizona regulatory requirements' use of historical test years and limited**  
4 **out of period adjustment recognition?**<sup>21</sup>

5 A. The examples cited by Mr. Bourassa are examples of firm-specific or unique risks.  
6 Existence of firm-specific risk does not necessarily indicate that a company has more total  
7 risk than others, as all companies have firm-specific risks. Moreover, as previously  
8 discussed, the market does not compensate investors for firm-specific risk because it can  
9 be eliminated through diversification.

10  
11 **Q. What is Staff's response to Mr. Bourassa's contention that SWC should receive a**  
12 **higher cost of equity estimate because of its smaller size through a "small firm risk**  
13 **premium"**<sup>22</sup> **and to his assertion that SWC is not comparable to the six publicly**  
14 **traded water utilities in the sample group due to a difference in size?**<sup>23</sup>

15 A. Staff does not agree that SWC should be allowed a small firm risk premium. No generally  
16 accepted analysis demonstrates that utilities are subject to the same size dependent betas  
17 as the general market. The Commission has previously ruled that firm size does not  
18 warrant recognition of a risk premium. In Decision No. 64282, dated December 28, 2001,  
19 for Arizona Water, the Commission stated, "We do not agree with the Company's  
20 proposal to assign a risk premium to Arizona Water based on its size relative to other  
21 publicly traded water utilities...." In Decision No. 64727, dated April 17, 2002, for Black  
22 Mountain Gas, the Commission agreed with Staff that "the 'firm size phenomenon' does

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<sup>21</sup> Direct Testimony of Thomas J. Bourassa, Sahuarita Water Company, Docket No. W-03718A-09-0359, page 21 lines 25-26

<sup>22</sup> Direct Testimony of Thomas J. Bourassa, Sahuarita Water Company, Docket No. W-03718A-09-0359, page 40 lines 15-16

<sup>23</sup> Direct Testimony of Thomas J. Bourassa, Sahuarita Water Company, Docket No. W-03718A-09-0359, page 39 lines 11-12

1 not exist for regulated utilities, and that therefore there is no need to adjust for risk for  
2 small firm size in utility rate regulation.”

3

4 **X. CONCLUSION**

5 **Q. Please summarize Staff's recommendations.**

6 A. Staff recommends that the Commission adopt a capital structure for SWC in this  
7 proceeding composed of 17.8 percent debt and 82.2 percent equity.

8

9 Staff also recommends that the Commission adopt a 9.0 percent ROR for the Applicant,  
10 based on Staff's cost of equity estimates that range from 9.9 percent to 10.2 percent for the  
11 sample companies.

12

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

14 A. Yes, it does.

**Sahuarita Water Company Cost of Capital Calculation  
Capital Structure  
And Weighted Average Cost of Capital  
Staff Recommended and Company Proposed**

[A] <u>Description</u>	[B] <u>Weight (%)</u>	[C] <u>Cost</u>	[D] <u>Weighted Cost</u>
Staff Recommended Structure			
Debt	17.8%	4.2%	0.7%
Common Equity	82.2%	10.1%	8.3%
Weighted Average Cost of Capital			<b>9.0%</b>
Company Proposed Structure			
Debt	17.2%	4.2%	0.7%
Common Equity	82.8%	12.0%	9.9%
Weighted Average Cost of Capital			<b>10.7%</b>

[D] : [B] x [C]  
Supporting Schedules: JCM-3 and JCM-4.

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Sahuarita Water Company Cost of Capital Calculation  
 Final Cost of Equity Estimates  
 Sample Water Utilities

[A]	[B]	[C]	[D]	[E]
<b>DCF Method</b>		$\frac{D_1/P_0}{1}$	+	$\frac{k}{k}$
Constant Growth DCF Estimate		3.7%	+	9.5%
Multi-Stage DCF Estimate			+	<u>10.2%</u>
<b>Average of DCF Estimates</b>				<b>9.9%</b>
<b>CAPM Method</b>	$R_f$	$\beta^5$	x	$k$
Historical Market Risk Premium <sup>3</sup>	3.1%	0.79	x	8.6%
Current Market Risk Premium <sup>4</sup>	4.6%	0.79	x	<u>11.8%</u>
<b>Average of CAPM Estimates</b>				<b>10.2%</b>
			<b>Average</b>	<b>10.1%</b>
			<b>Financial risk adjustment</b>	<b>10.1%</b>
			<b>Total</b>	<b>10.1%</b>

1 MSN Money and Value Line

2 Schedule JCM-3

3 Risk-free rate (Rf) for 5, 7, and 10 year Treasury rates from the U.S. Treasury Department at www.ustress.gov

4 Risk-free rate (Rf) for 30 Year Treasury bond rate from the U.S. Treasury Department at www.ustress.gov

5 Value Line

6 Historical Market Risk Premium (Rp) calculated from Ibbotson Associates S&P 500 Yearbook data

7 Testimony

Sahuarita Water Company Cost of Capital Calculation  
Average Capital Structure of Sample Water Utilities

[A]	[B]	[C]	[D]
<u>Company</u>	<u>Debt</u>	Common <u>Equity</u>	<u>Total</u>
American States Water	50.2%	49.8%	100.0%
California Water	47.4%	52.6%	100.0%
Aqua America	53.6%	46.4%	100.0%
Connecticut Water	53.3%	46.7%	100.0%
Middlesex Water	53.0%	47.0%	100.0%
SJW Corp	<u>48.3%</u>	<u>51.7%</u>	<u>100.0%</u>
Average Sample Water Utilities	<b>51.0%</b>	<b>49.0%</b>	<b>100.0%</b>
Sahuarita - Actual Capital Structure	<b>17.8%</b>	<b>82.2%</b>	<b>100.0%</b>

Source:

Sample Water Companies from Value Line

Sahuarita Water Company Cost of Capital Calculation  
 Growth in Earnings and Dividends  
 Sample Water Utilities

[A] <u>Company</u>	[B] Dividends Per Share 1998 to 2008 <u>DPS</u> <sup>1</sup>	[C] Dividends Per Share Projected <u>DPS</u> <sup>1</sup>	[D] Earnings Per Share 1998 to 2008 <u>EPS</u> <sup>1</sup>	[E] Earnings Per Share Projected <u>EPS</u> <sup>1</sup>
American States Water	1.8%	4.6%	3.7%	10.9%
California Water	0.9%	2.8%	2.7%	6.9%
Aqua America	7.0%	5.0%	6.2%	11.4%
Connecticut Water	1.3%	No Projection	1.0%	No Projection
Middlesex Water	2.1%	No Projection	2.9%	No Projection
SJW Corp	5.5%	No Projection	3.0%	No Projection
Average Sample Water Utilities	3.1%	4.1%	3.3%	9.7%

<sup>1</sup> Value Line

Sahuarita Water Company Cost of Capital Calculation  
 Sustainable Growth  
 Sample Water Utilities

[A]	[B]	[C]	[D]	[E]	[F]
Company	Retention Growth 1999 to 2008 br	Retention Growth Projected br	Stock Financing Growth vs	Sustainable Growth 1999 to 2008 br + vs	Sustainable Growth Projected br + vs
American States Water	3.0%	6.4%	1.4%	4.4%	7.8%
California Water	2.0%	6.0%	4.0%	6.0%	9.9%
Aqua America	5.2%	5.9%	3.8%	9.0%	9.7%
Connecticut Water	2.6%	No Projection	0.8%	3.3%	No Projection
Middlesex Water	1.4%	No Projection	2.9%	4.3%	No Projection
SJW Corp	4.5%	No Projection	0.1%	4.6%	No Projection
Average Sample Water Utilities	3.1%	6.1%	2.1%	5.2%	9.1%

[B]: Value Line  
 [C]: Value Line  
 [D]: Value Line and MSN Money  
 [E]: [B]+[D]  
 [F]: [C]+[D]

Sahuarita Water Company Cost of Capital Calculation  
Selected Financial Data of Sample Water Utilities

[A]	[B]	[C]	[D]	[E]	[F]	[G]
Company	Symbol	Spot Price 2/3/2010	Book Value	Mkt To Book	Value Line Beta	Raw Beta
American States Water	AWR	33.13	17.89	1.9	0.80	0.67
California Water	CWT	36.52	20.38	1.8	0.75	0.60
Aqua America	WTR	17.17	8.35	2.1	0.65	0.45
Connecticut Water	CTWS	22.05	12.74	1.7	0.80	0.67
Middlesex Water	MSEX	17.19	11.07	1.6	0.80	0.67
SJW Corp	SJW	22.15	15.01	1.5	0.95	0.90
Average				1.7	0.79	0.66

[C]: Men Money

[D]: Value Line

[E]: [C] / [D]

[F]: Value Line

[G]: (-0.35 + [F]) / 0.67

Sahuarita Water Company Cost of Capital Calculation  
 Calculation of Expected Infinite Annual Growth in Dividends  
 Sample Water Utilities

[A]	[B]
<u>Description</u>	<u>g</u>
DPS Growth - Historical <sup>1</sup>	3.1%
DPS Growth - Projected <sup>1</sup>	4.1%
EPS Growth - Historical <sup>1</sup>	3.3%
EPS Growth - Projected <sup>1</sup>	9.7%
Sustainable Growth - Historical <sup>2</sup>	5.2%
<u>Sustainable Growth - Projected<sup>2</sup></u>	<u>9.1%</u>
Average	<b>5.8%</b>

<sup>1</sup> Schedule JCM-5

<sup>2</sup> Schedule JCM-6

Sahuarita Water Company Cost of Capital Calculation  
 Multi-Stage DCF Estimates  
 Sample Water Utilities

[A] Company	[B] Current Mkt. Price (P <sub>0</sub> ) <sup>1</sup> 2/3/2010	[C] d <sub>1</sub>	[D] d <sub>2</sub>	[E] d <sub>3</sub>	[F] d <sub>4</sub>	[H] Stage 2 growth <sup>3</sup> (g <sub>n</sub> )	[I] Equity Cost Estimate (K) <sup>4</sup>
American States Water	33.1	1.08	1.15	1.21	1.28	6.6%	9.8%
California Water	36.5	1.25	1.32	1.40	1.48	6.6%	9.9%
Aqua America	17.2	0.61	0.64	0.68	0.72	6.6%	10.0%
Connecticut Water	22.1	0.94	0.99	1.05	1.11	6.6%	10.8%
Middlesex Water	17.2	0.75	0.79	0.84	0.89	6.6%	10.9%
SJW Corp	22.2	0.70	0.74	0.78	0.83	6.6%	9.7%

Average **10.2%**

$$P_0 = \sum_{t=1}^n \frac{D_t}{(1+K)^t} + \frac{D_n(1+g_n)}{K-g_n} \left[ \frac{1}{(1+K)} \right]^n$$

Where : P<sub>0</sub> = current stock price

D<sub>t</sub> = dividends expected during stage 1

K = cost of equity

n = years of non - constant growth

D<sub>n</sub> = dividend expected in year n

g<sub>n</sub> = constant rate of growth expected after year n

<sup>1</sup> [B] see Schedule JCM-7  
<sup>2</sup> Derived from Value Line Information  
<sup>3</sup> Average annual growth in GDP 1929 - 2008 in current dollars.  
<sup>4</sup> Internal Rate of Return of Projected Dividends

**BEFORE THE ARIZONA CORPORATION COMMISSION**

KRISTIN K. MAYES  
Chairman  
GARY PIERCE  
Commissioner  
PAUL NEWMAN  
Commissioner  
SANDRA D. KENNEDY  
Commissioner  
BOB STUMP  
Commissioner

IN THE MATTER OF THE APPLICATION OF )  
SAHUARITA WATER COMPANY, LLC FOR A )  
RATE INCREASE )  
\_\_\_\_\_ )

DOCKET NO. W-03718A-09-0359

DIRECT  
TESTIMONY  
OF  
MARLIN SCOTT, JR.  
UTILITIES ENGINEER  
UTILITIES DIVISION  
ARIZONA CORPORATION COMMISSION

APRIL 22, 2010

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**EXHIBIT**

Engineering Report for Sahuarita Water Company, LLC .....	MSJ
---	-----

1     **INTRODUCTION**

2     **Q.     Please state your name, place of employment and job title.**

3     A.     My name is Marlin Scott, Jr. My place of employment is the Arizona Corporation  
4           Commission ("Commission"), Utilities Division, 1200 West Washington Street, Phoenix,  
5           Arizona 85007. My job title is Utilities Engineer.

6  
7     **Q.     How long have you been employed by the Commission?**

8     A.     I have been employed by the Commission since November 1987.

9  
10    **Q.     Please list your duties and responsibilities.**

11    A.     As a Utilities Engineer, specializing in water and wastewater engineering, my  
12           responsibilities include: the inspection, investigation, and evaluation of water and  
13           wastewater systems; preparing reconstruction cost new and/or original cost studies,  
14           reviewing cost of service studies and preparing investigative reports; providing technical  
15           recommendations and suggesting corrective action for water and wastewater systems; and  
16           providing written and oral testimony on rate applications and other cases before the  
17           Commission.

18  
19    **Q.     How many cases have you analyzed for the Utilities Division?**

20    A.     I have analyzed approximately 540 cases covering various responsibilities for the Utilities  
21           Division.

22  
23    **Q.     Have you previously testified before this Commission?**

24    A.     Yes, I have testified in 77 proceedings before this Commission.

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

2 A. I graduated from Northern Arizona University in 1984 with a Bachelor of Science degree  
3 in Civil Engineering Technology.

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

6 A. Prior to my employment with the Commission, I was Assistant Engineer for the City of  
7 Winslow, Arizona, for about two years. Prior to that, I was a Civil Engineering  
8 Technician with the U.S. Public Health Service in Winslow for approximately six years.

9  
10 **Q. Please state your professional membership, registrations, and licenses.**

11 A. I am a member of the National Association of Regulatory Utility Commissioners  
12 (“NARUC”) Staff Subcommittee on Water.

13  
14 **PURPOSE OF TESTIMONY**

15 **Q. What was your assignment in this proceeding?**

16 A. My assignment was to provide Staff’s engineering evaluation for Sahuarita Water  
17 Company, LLC (“Company”) in this rate proceeding.

18  
19 **Q. What is the purpose of your testimony in this proceeding?**

20 A. To present the findings of Staff’s engineering evaluation of the operation for the  
21 Company. The findings are contained in the Engineering Report that I have prepared for  
22 this proceeding and is included as Exhibit MSJ in this direct testimony.

23

1     **ENGINEERING REPORT**

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

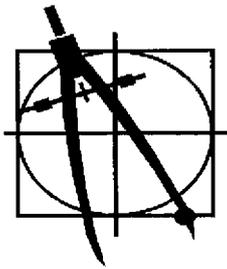
4     A.     After reviewing the application for the Company, I physically inspected the water system  
5     to evaluate its operation and to determine if any plant items were not used and useful. I  
6     obtained information from the Company regarding plant facilities, water testing expense,  
7     system maps, well monitoring, and I analyzed that information. I contacted the Arizona  
8     Department of Water Resources ("ADWR") to determine if the Company was in  
9     compliance with the ADWR's requirements governing water providers. I also reviewed  
10    the Company's Commission compliance item related to the ADWR Best Management  
11    Practice Tariffs. Based on all the above, I prepared the attached Engineering Report.

12  
13    **Q.     Do you provide a summary of your findings?**

14    A.     Yes, the summary containing Staff's engineering conclusions and recommendations are  
15    located at the beginning of my Exhibit MSJ.

16  
17    **Q.     Does this conclude your Direct Testimony?**

18    A.     Yes, it does.



**Engineering Report  
For  
Sahuarita Water Company, LLC  
Docket No. W-03718A-09-0359 (Rates)**

**April 15, 2010**

**SUMMARY**

**CONCLUSIONS**

- A. The Sahuarita Water Company, LLC (“Company”) has a water loss of 3.8% which is within the acceptable limits.
- B. The Company’s test year well capacity of 3,250 GPM and storage capacity of 2,550,000 gallons is adequate to serve the present customer base and reasonable growth.
- C. The Company has completed the construction of an arsenic treatment facility (“ATF”) and has requested that the cost of this ATF project be considered for the implementation of an Arsenic Cost Recovery Surcharge Mechanism.
- D. According to an Arizona Department of Environmental Quality (“ADEQ”) Compliance Status Report, dated September 9, 2009, ADEQ has determined that the Company’s system, Public Water System No. 10-312, is currently delivering water that meets water quality standards required by 40 CFR 141/Arizona Administrative Code, Title 18, Chapter 4.
- E. The Company is located in the Arizona Department of Water Resources’ (“ADWR”) Tucson Active Management Area and ADWR has reported that the Company is in compliance with ADWR’s requirements governing water providers and/or community water systems.
- F. According to the Utilities Division Compliance database, the Company has no delinquent Arizona Corporation Commission compliance items.
- G. The Company has an approved curtailment tariff with an effective date of December 19, 2002.
- H. The Company has an approved backflow prevention tariff with an effective date of November 1, 2002.

**RECOMMENDATIONS**

1. Staff recommends an average annual water testing expense of \$10,382 be adopted for this proceeding.
2. Staff recommends the removal of Wells #12, #17, #19, #20 and those identified plant items related to the Estancia del Corazon Subdivision, totaling to \$327,565, from the plant-in-service because these plant items are not used and useful.
3. Staff recommends that the requested post-test year plant – new Well #23 not be considered for inclusion in rate base at this time.
4. Staff recommends that the Company use the depreciation rates by individual National Association of Regulatory Utility Commissioners category as presented in Table J-1.
5. Staff recommends the acceptance of the Company's proposed service line and meter installation charges as presented in Table K-1.
6. Since the filing of the ADWR Best Management Practice ("BMP") Tariffs by the Company, Staff and the Company have been working together to finalize the BMPs. At this time, the BMPs have not been finalized. However, Staff will be providing DRAFT copies of the BMPs as Attachment – ADWR Best Management Practice Tariffs and will provide an updated Staff review and recommendation in its surrebuttal testimony due on June 16, 2010.

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## A. LOCATION OF SAHUARITA WATER COMPANY, LLC ("COMPANY")

The Company serves the Town of Sahuarita, which is approximately 20 miles south of downtown Tucson. Figure A-1 shows the location of the Company within Pima County and Figure A-2 shows the approximate 13.6 square-miles of certificated area. The service area for the existing water system is within the approximate 5.3 square-miles of certificated area that is shown along the eastern edge of Figure A-2.

### *Background*

In December 1995, the Arizona Corporation Commission ("Commission") granted Interchange Water Company ("IWC") a Certificate of Convenience and Necessity ("CC&N") to provide water service. In November 1999, the Commission granted approval of the sale of assets and transfer of the CC&N from IWC to Rancho Sahuarita Water Company, LLC ("RSWC"). In November 2008, the Commission approved the transfer of the CC&N held by RSWC to the Company. As a result of all these changes, this is the first rate application by the Company.

## B. DESCRIPTION OF WATER SYSTEM

The water system was field inspected on November 24, 2009, by Marlin Scott, Jr., Staff Utilities Engineer, in the accompaniment of Mark Seamans, President, and Marian Homlak, Controller, for the Company. The test year operation of the water system consisted of two producing wells, three storage tanks, three booster stations and a distribution system serving different pressure zones to approximately 4,670 customers as of December 2008. A detailed plant facility description follows:

Table 1. Well Data

Well #	ADWR ID No.	Pump Hp (Turbine)	Flow Rate (GPM)	Casing Size & Depth	Meter Size	Year Drilled
#1	55-562962	-	Monitoring well	8" x 500'	-	1997
#12	55-611141	-	Capped	24" x 982'	-	1970
#14	55-611142	400	1,750	24" x 1135'	10"	1970
#17	55-611143	-	Out of service	24" x 1053'	-	1974
#18	55-611144	300	1,500	20" x 905'	10"	1975
#19	55-611145	-	Capped	24" x 990'	-	1981
#20	55-611146	-	Capped	16" x 975'	-	1969
		<b>TOTAL:</b>	<b>3,250</b>			
#23	55-216840	300	1,700	18" x 1080'	10"	2009

Notes: (1) Well #1 is a monitoring well for investigating a groundwater sulfate plume per an agreement with Phelps Dodge Sierrita, Inc.

- (2) Wells #12, #17, #19, & #20 are wells for monitoring water levels by the Company.
- (3) Well #14 is leased from the Town of Sahuarita.
- (4) Well #23 is the Company's requested post-test year plant item.

Table 2. Storage Tanks

Capacity (Gallons)	Quantity (Each)	Location
1,200,000	1	Booster Station #1
1,000,000	1	Booster Station #1
350,000	1	Booster Station #2
Totals: 2,550,000 gallons	3	

Table 3. Booster Stations

Location	Booster Facilities
Booster Station #1	<p><u>Facilities for 2950 Elevation Zone:</u>                      10, 25, 40 &amp; 40 – Hp booster pumps with a 5,000 gallon pressure tank as a surge arrestor.</p> <p style="text-align: center;">&amp;</p> <p><u>Facilities for 3050 Elevation Zone:</u>                      25, 50, 75 &amp; 75 – Hp booster pumps with a 5,000 gallon pressure tank as a surge arrestor.</p>
Booster Station #2	30, 50 & 100 – Hp booster pumps with a 5,000 gallon pressure tank as a surge arrestor.

Table 4. Water Mains

Diameter	Material	Length
4-inch		4,066 ft.
6-inch		27,560 ft.
8-inch		174,700 ft.
12-inch		64,680 ft.
16-inch		7,973 ft.
	Total:	278,979 ft. or 52.8 miles

Table 5. Customer Meters

Size	Quantity
5/8 x 3/4-inch	4,091
3/4-inch	449
1-inch	106
1-1/2-inch	9
2-inch	66
3-inch Turbine	17
3-inch Compound	2
Total:	4,740

Table 6. Fire Hydrants

Size	Quantity
Standard	317

Table 7. Structures &amp; Treatment Equipment

Structures & Treatment Equipment
Well #14: Block fencing, tablet chlorination unit.
Well #18: Block fencing, tablet chlorination unit.
Well #23: Block fencing, tablet chlorination unit.
Booster Station #1: Block fencing, 400 kW diesel generator
Booster Station #2: Block fencing, 230 kW diesel generator
Water Treatment Plant #1 and Well #23: 2,000 GPM arsenic treatment system with a 16,500 gallon backwash tank, tablet chlorination unit and block fencing. The water treatment plant has a by-pass line that blends the treated water with untreated water.
Pressure Relief Valve #1: 10" PRV with 2" by-pass (installed after test year). This PRV is for system operation between 2950 Elevation Zone and 2850 Elevation Zone.

## C. WATER USE

### *Water Sold*

Based on the information provided by the Company, water use for the test year is presented in Figure C-1. Customer consumption experienced a high monthly average water use of 358 gallons per day ("GPD") per connection in June and a low monthly average water use of 194 GPD per connection in December for an average annual use of 278 GPD per connection.

### *Non-Account Water*

Non-account water should be 10% or less. The Company reported 476,946,000 gallons pumped and 458,977,000 gallons sold, resulting in a water loss of 3.8%. This 3.8% is within the acceptable limits.

### *System Analysis*

Using the Company's 2008 test year data, the Company reported its second highest peak use month as June with 48,746,000 gallons sold to 4,539 customers, resulting in the highest use per connection per day for the test year. Based on this data, Staff estimates the peak day demand to be 0.31 GPM per connection for evaluating well capacity sufficiency. For storage capacity evaluation, Staff used 358 GPD per connection. Using these factors, Staff determined that:

- a. The well capacity totaling 3,250 GPM (=Well #14 at 1,750 + Well #18 at 1,500) could adequately serve approximately 10,480 connections ( $=3,250 / 0.31$ ).
- b. The storage capacity totaling 2,550,000 gallons, minus the fire flow requirement, could adequately serve up to approximately 6,540 connections ( $(=2,550,000 - 210,000) / 358$ ). If the second well (Well #18) is included for the storage capacity requirement, this system could adequately serve approximately 12,570 connections.
- c. Looking forward, Figure D-1 shows a growth projection to approximately 7,600 total connections by December 2013.

Based on this analysis, the test year well capacity of 3,250 GPM and storage capacity of 2,550,000 gallons is adequate to serve the present customer base and growth within a five year period.

## D. GROWTH

Figure D-1 depicts the customer growth using linear regression analysis. The number of customers was obtained from annual reports submitted to the Commission. During the test year ending December 2008, the Company had approximately 4,670 customers and it is projected that the Company could have approximately 7,600 customers by December 2013.

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

According to an ADEQ Compliance Status Report, dated September 9, 2009, ADEQ has determined that the Company’s system, Public Water System No. 10-312, is currently delivering water that meets water quality standards required by 40 CFR 141/Arizona Administrative Code, Title 18, Chapter 4.

*Water Testing Expense*

During the test year, the Company was a participant in the ADEQ Monitoring Assistance Program (“MAP”) and reported its water testing expense at \$8,750. This reported amount did not include the monitoring for lead & copper.

Since the Company now serves a population over 10,000, the Company has elected to no longer participate in MAP. With the Company’s assistance, Staff has re-evaluated the water testing expense and has determined an adjusted average annual water testing expense of \$10,382 as shown in Table E-1. Staff recommends this average annual water testing expense of \$10,382 be adopted for this proceeding.

*Arsenic*

The arsenic concentration level in the Company’s source of water fluctuates and at times the levels exceed the arsenic standard of 10 parts per billion (“ppb”). The Company reported the current arsenic levels for Well #14 at 6.1 ppb and Well #18 at 9.9 ppb. In Decision No. 70984 (May 5, 2009), the Commission approved a WIFA loan in order for the Company to construct a centralized arsenic treatment facility (“ATF”) with transmission main interconnection with Wells #14 and #18. In its rate application, the Company has requested that the cost of this ATF project be considered for the implementation of an Arsenic Cost Recovery Surcharge Mechanism.

On June 9, 2009, Pima County Department of Environmental Quality (“PCDEQ”) issued a Certificate of Approval to Construct for the construction of a 2,000 gallon per minute ATF and approximately 1.7 miles of transmission mains. On November 25, 2009, PCDEQ issued the Certificate of Approval of Construction for this ATF project. Based on these approvals, along with Staff’s field inspection to confirm this ATF operation, Staff concludes that the ATF is currently used and useful for the provision of service to customers.

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

The Company is located in the Tucson Active Management Area (“AMA”). According to an ADWR compliance status report, dated February 12, 2010, the Company is in compliance with its requirements governing water providers and/or community water systems.

## G. ARIZONA CORPORATION COMMISSION ("ACC") COMPLIANCE

According to the Utilities Division Compliance database, the Company has no delinquent ACC compliance items.

## H. PLANT NOT USED AND USEFUL

In its application, the Company listed Wells #1 and #17 as out-of-service wells and Wells #12, #19, and #20 as non-equipped wells. Through its field inspection and Company data responses, Staff obtained the following additional information:

1. Well #1 is a monitoring well for investigating a groundwater sulfate plume per an agreement with Phelps Dodge Sierrita, Inc.
2. Well #17 was placed into service in 2004 and was later taken out of service in 2005 due to bacteriological problems.
3. Wells #12, #19 and #20 are non-production wells and are wells for monitoring water levels by the Company.

Based on above information, Staff considers Well #1 to be used and useful because the monitoring of this well protects the customers in the delivery of safe water. Staff further considers Wells #17, #12, #19 and #20 to be not used and useful because these wells are non-production wells that do not provide service to customers.

In addition, Staff noted that during its field inspection, the Estancia del Corazon Subdivision, Region 5, Block 29, had plant facilities constructed on site, but no homes. Through the Company data responses regarding this subdivision, Staff obtained:

1. Water system maps.
2. Cost of plant facilities per NARUC account;
  - a. Account 331 – Mains at \$233,539 for approximately 3,940 feet of 12-inch and 1,100 feet of 8-inch mains.
  - b. Account 333 – Services at \$30,159 for 89 single services.
  - c. Account 335 – Hydrants at \$15,673 for 11 fire hydrants.
  - d. Total cost: \$279,371

After Staff's review and evaluation of the submitted data, Staff considers the 3,940 feet of 12-inch main to be used and useful because this 12-inch main is a transmission main that loops a portion of the water system. Staff further considers the 1,100 feet of 8-inch main, the 89 single services and the 11 fire hydrants to be not used and useful because these plant items do not provide service to customers.

As a result of the review and evaluation of the above data, a summary of the plant items that are not considered used and useful is as follows:

Table H-1. Plant Not Used and Useful

Acct. No.	Plant Items	Year Place Into Service	Year Taken Out of Service	Original Cost
307	Wells & Springs Well #12 – this non-producing well was recorded in the plant-in-service in 2003. Well #17 – 24" X 1053' with 300-Hp pump Well #19 – not recorded. Well #20 – this non-producing well was recorded in the plant-in-service in 2005.	2004	2005	\$56,610 \$194,773 \$0 \$100
			Subtotal:	\$251,483
331	Transmission & Distribution Mains Estancia de Corazon Subdivision, Block 29, 8-inch PVC at 1,100 feet.	2007		\$30,250
333	Services Estancia de Corazon Subdivision, 89 each	2007		\$30,159
335	Hydrants Estancia de Corazon Subdivision, 11 each	2007		\$15,673
			<b>Total:</b>	<b>\$327,565</b>

Therefore, Staff recommends the removal of Wells #12, #17, #19, #20 and those identified plant items related to the Estancia del Corazon Subdivision, totaling to \$327,565, from the plant-in-service because these plant items are not used and useful.

#### I. POST-TEST YEAR PLANT

In its application, the Company requested a post-test year ("PTY") plant adjustment in the amount of \$1,844,270 for a new Well #23. Through Company data responses, the Company provided the following:

1. The Company provided an updated and final cost totaling \$1,779,243.
2. On May 11, 2009, PCDEQ issued a Certificate of Approval to Construct for the construction of the new Well #23.
3. On November 24, 2009, PCDEQ issued the Certificate of Approval of Construction for the new well.

Also in its application, the Company stated that it believes the new Well #23 would meet the criteria for inclusion of PTY plant in rate base because; (i) the well was necessary to provide service to customers at the end of the test year, and (ii) the well is a revenue neutral project.

As shown in Staff's system analysis in Section C above, the test year well and storage capacities were adequate to serve the customer base and growth within a five year period. For this reason, Staff concludes that the requested PTY plant – Well #23 is not needed at this time and recommends that the requested Well #23 not be considered for inclusion in rate base.

## **J. DEPRECIATION RATES**

In this proceeding, the Company has adopted Staff's typical and customary depreciation rates. In addition, Staff is providing a specific depreciation rate for the arsenic treatment media under Account No. 320.3. These rates are presented in Table J-1 and it is recommended that the Company use these depreciation rates by individual National Association of Regulatory Utility Commissioners category.

## **K. SERVICE LINE AND METER INSTALLATION CHARGES**

The Company proposed changes to its service line and meter installation charges. The Company's proposed charges are similar to Staff's updated customary installation charges. Since the Company may at times install meters on existing service lines, it would be appropriate for some customers to only be charged for the meter installation. Therefore, Staff recommends approval of the proposed charges as shown in Table K-1, with separate installation charges for the service line and meter installations.

## **L. CURTAILMENT PLAN TARIFF**

The Company has an approved curtailment tariff with an effective date of December 19, 2002.

## **M. BACKFLOW PREVENTION TARIFF**

The Company has an approved backflow prevention tariff with an effective date of November 1, 2002.

## **N. ADWR BEST MANAGEMENT PRACTICE TARIFFS**

### *Introduction*

In 2008, ADWR added a new regulatory program for the ADWR Third Management Plan for AMAs. The new program, called Modified Non-Per Capita Conservation Program ("Modified NPCCP"), addresses large municipal water providers (cities, towns and private water companies serving more than 250 acre-feet per year) and was developed in conjunction with stakeholders from all AMAs. Participation in the program is required for all large municipal

water providers that do not have a Designation of Assured Water Supply and that are not regulated as a large untreated water provider or an institutional provider.

The Modified NPCCP is a performance-based program that requires participating providers to implement water conservation measures that result in water use efficiency in their service areas. A water provider regulated under the program must implement a required Public Education Program and choose one or more additional Best Management Practices ("BMPs") based on its size, as defined by its total number of water service connections. The provider must select the additional BMPs from the list included in the Modified NPCCP Program. The BMPs are a mix of technical, policy, and information efforts.

Although the implementation of the Modified NPCCP is required by large municipal water providers within an AMA, the Commission has adopted this Modified NPCCP to be implemented by Commission regulated water companies.

#### *ACC Compliance*

In Decision No. 70620 (November 19, 2008) regarding the Company's application for extension of its CC&N, the Commission issued the following Finding of Fact No. 33 and the Fifth Ordering Paragraph as follows:

*"33. Since SWC is located in the Tucson Active Management Area, it will be required to comply with conservation goals and management practices of the Arizona Department of Water Resources ("ADWR"). We would like SWC, and SWC has agreed, to go beyond those requirements; therefore, we will require SWC to implement, by December 31, 2009, at least five additional Best Management practices ("BMPs") (as outlined in ADWR's Modified Non-Per Capita Conservation Program) than would be required for a water company of its customer size. This would require SWC to implement six BMPs by December 31, 2009, ten BMPs once it serves 5,001 to 30,000 connections, and fifteen BMPs once it serves over 30,000 connections."*

*"IT IS FURTHER ORDERED that Sahuarita Water Company, L.L.C., shall implement by December 31, 2009, at least five more Best Management Practices (as outlined in ADWR's Modified Non-Per Capita Conservation Program) than would be required for a water company of its customer size and submit those Best Management Practices to Docket Control within thirty days of implementation (i.e., the first six Best Management Practices would need to be submitted by January 30, 2010)."*

During the third quarter of 2009, the Company service connections exceeded 5,000. Per the Commission order, the Company must therefore implement 10 BMPs (plus the required public education requirement) by December 31, 2009. On December 9, 2009, the Company filed the BMPs with Docket Control.

*Review and Approval of BMPs*

Since the filing of the BMPs by the Company, Staff and the Company have been working together to finalize the BMPs. At this time, the BMPs have not been finalized. However, Staff will be providing DRAFT copies of the BMPs as Attachment – ADWR Best Management Practice Tariffs and will provide an updated Staff review and recommendation in its surrebuttal testimony due on June 16, 2010.

FIGURES

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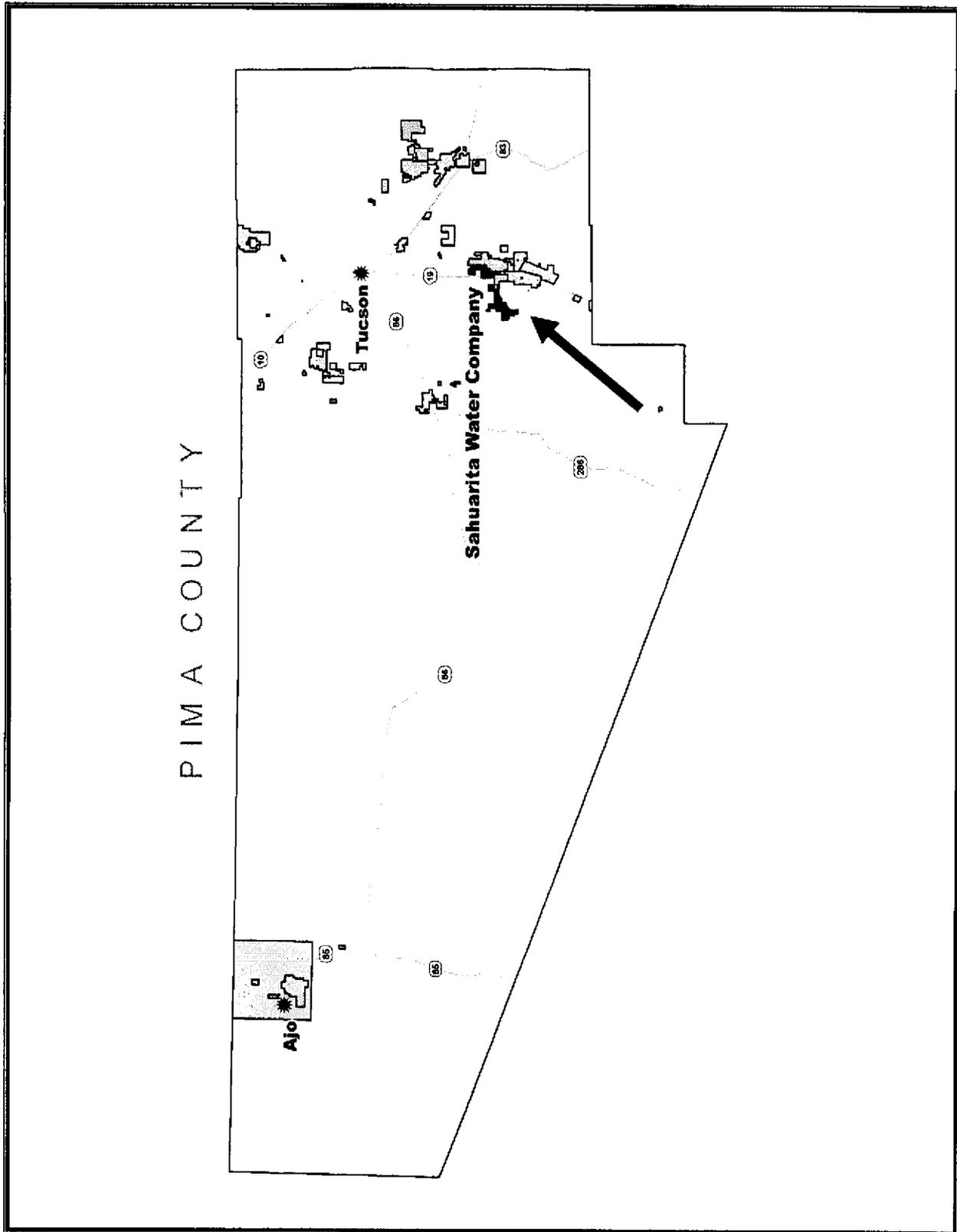


Figure A-1. Pima County Map

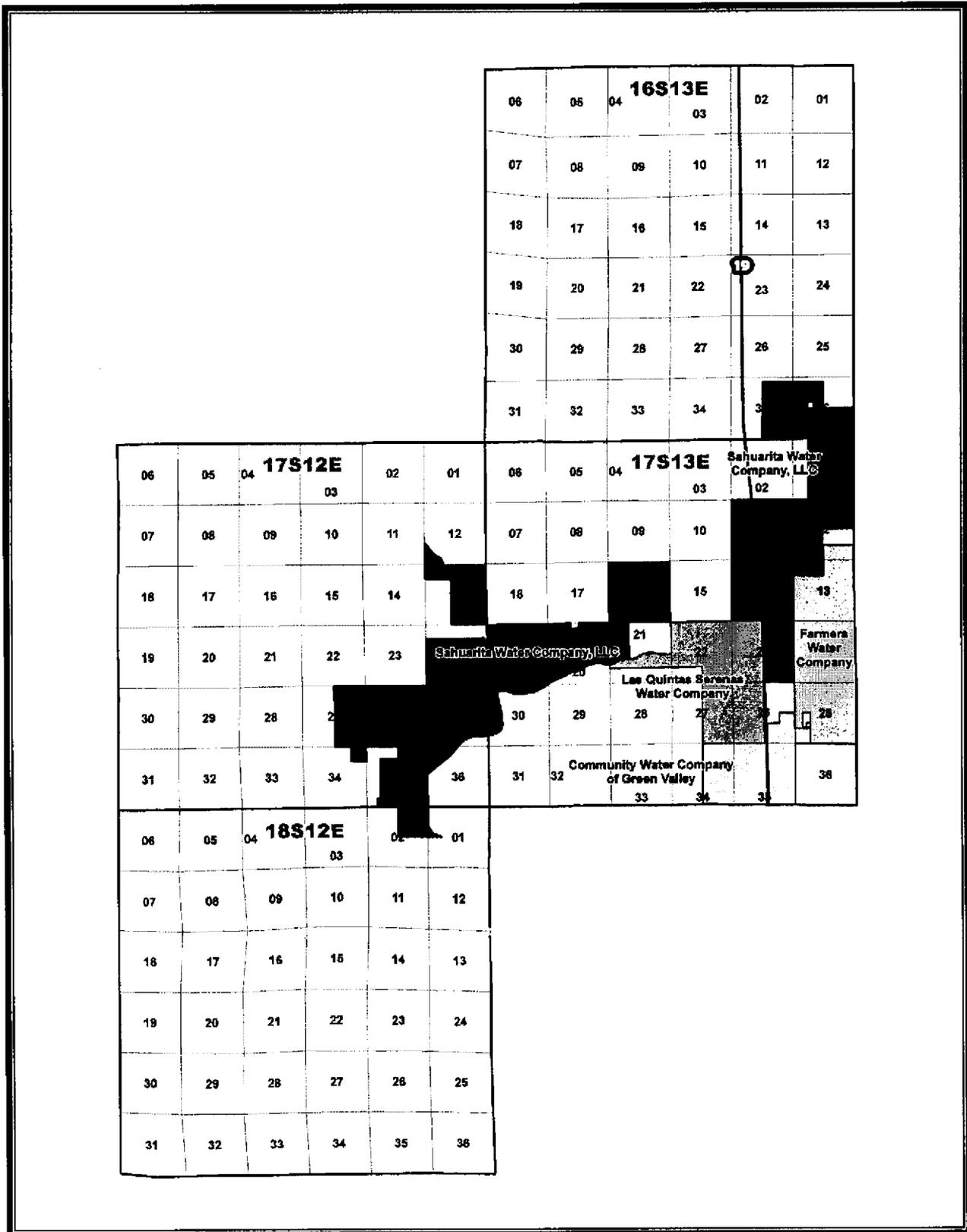


Figure A-2. Certificated Areas

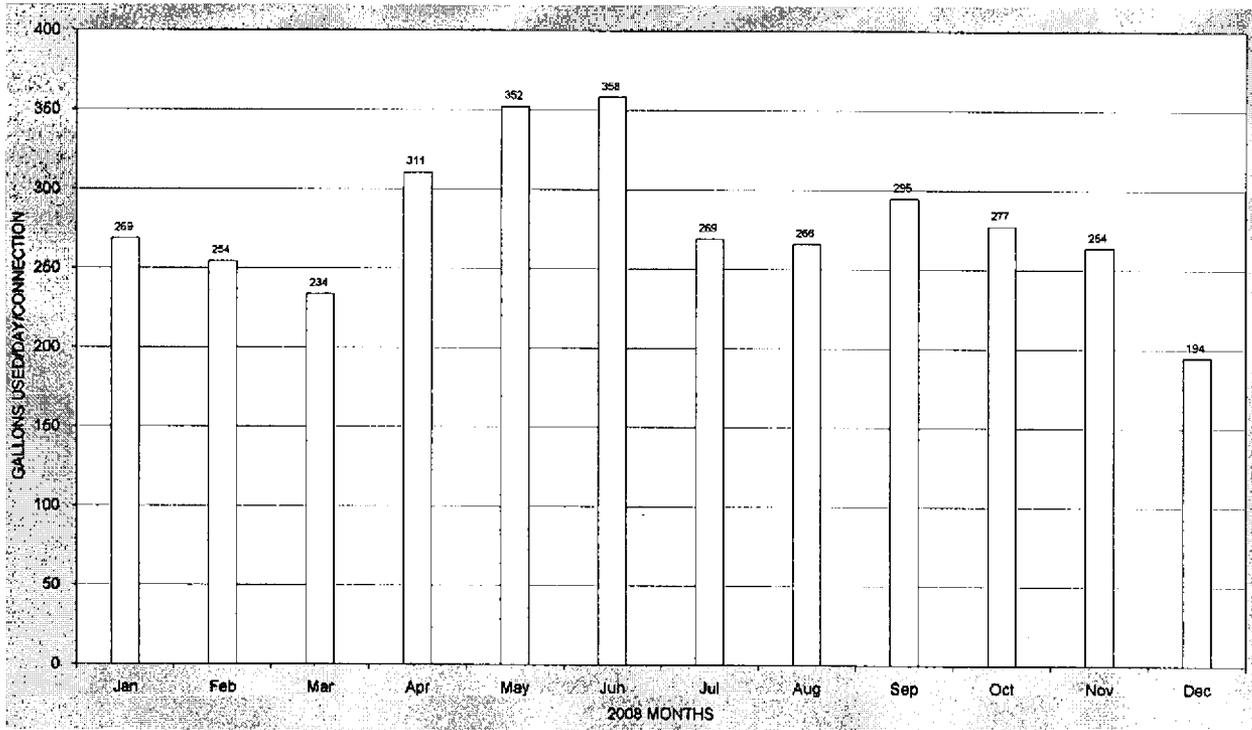


Figure C-1. Water Use

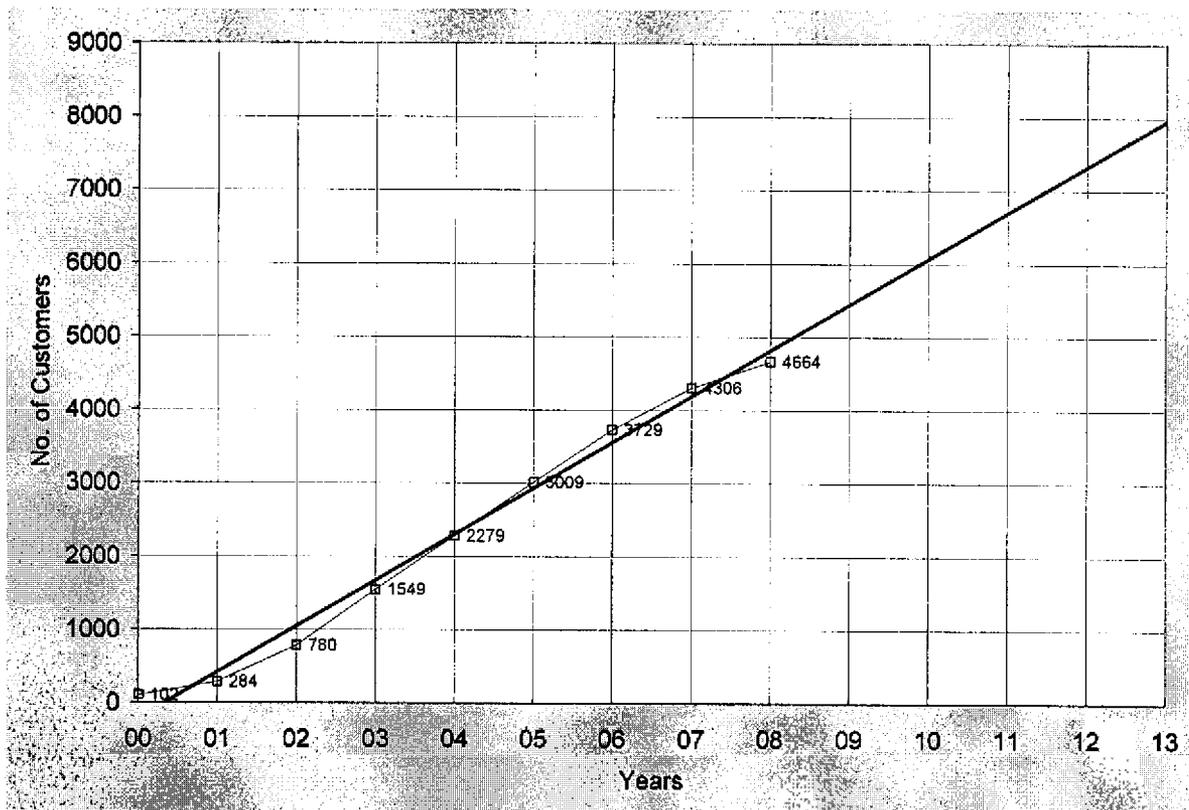


Figure D-1. Growth



Table J-1. Depreciation Rates

NARUC Acct. No.	Depreciable Plant	Proposed Rates (%)
304	Structures & Improvements	3.33
305	Collecting & Impounding Reservoirs	2.50
306	Lake, River, Canal Intakes	2.50
307	Wells & Springs	3.33
308	Infiltration Galleries	6.67
309	Raw Water Supply Mains	2.00
310	Power Generation Equipment	5.00
311	Pumping Equipment	12.5
320	Water Treatment Equipment	
320.1	Water Treatment Plants	3.33
320.2	Solution Chemical Feeders	20.0
320.3	Media for Arsenic Treatment	67.0
330	Distribution Reservoirs & Standpipes	
330.1	Storage Tanks	2.22
330.2	Pressure Tanks	5.00
331	Transmission & Distribution Mains	2.00
333	Services	3.33
334	Meters	8.33
335	Hydrants	2.00
336	Backflow Prevention Devices	6.67
339	Other Plant & Misc Equipment	6.67
340	Office Furniture & Equipment	6.67
340.1	Computers & Software	20.00
341	Transportation Equipment	20.00
342	Stores Equipment	4.00
343	Tools, Shop & Garage Equipment	5.00
344	Laboratory Equipment	10.00
345	Power Operated Equipment	5.00
346	Communication Equipment	10.00
347	Miscellaneous Equipment	10.00
348	Other Tangible Plant – Well exploration, master plan & water rights	10.00

Table K-1. Service Line and Meter Installation Charges

Meter Size	Current Total Charges	Proposed Service Line Charges	Proposed Meter Charges	Proposed Total Charges
5/8 x 3/4"	\$317.50	\$445	\$155	\$600
3/4"	\$352.50	\$445	\$255	\$700
1"	\$402.50	\$495	\$315	\$810
1-1/2"	\$597.50	\$550	\$525	\$1,075
2" Turbine	\$997.50	\$830	\$1,045	\$1,875
2" Compound	\$1,487.50	\$830	\$1,890	\$2,720
3" Turbine	\$1,377.50	\$1,045	\$1,670	\$2,715
3" Compound	\$1,927.50	\$1,165	\$2,545	\$3,710
4" Turbine	\$2,207.50	\$1,490	\$2,670	\$4,160
4" Compound	\$2,822.50	\$1,670	\$3,645	\$5,315
6" Turbine	\$4,217.50	\$2,210	\$5,025	\$7,235
6" Compound	\$5,497.50	\$2,330	\$6,920	\$9,250
8"	NT	At Cost	At Cost	At Cost
10"	NT	At Cost	At Cost	At Cost
12"	NT	At Cost	At Cost	At Cost

\*\*\*\*\* DRAFT\*\*\*\*\*

ATTACHMENT -

ADWR

Best Management Practice

Tariffs

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Phone: \_\_\_\_\_

Effective Date: \_\_\_\_\_

## **Public Education Program Tariff**

### **PURPOSE**

A program for the Company to provide free written information on water conservation measures to its customers and to remind them of the importance of conserving water (Required Public Education Program).

### **REQUIREMENTS**

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission and were adapted from the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. The Company shall provide two newsletters to each customer; one to be provided in the spring, the other in the fall. The goal of the letters is to provide timely information to customers in preparation of the hot summer months, and the cold winter months, in regards to their water uses. The Company shall remind customers of the importance of water conservation measures and inform them of the information available from the Company.
2. Information in the newsletters shall include water saving tips, home preparation recommendations for water systems/pipes, landscape watering maintenance issues for summer and winter, water cistern maintenance reminders and additional pertinent topics. Where practical, the Company shall make this information available in digital format which can be e-mailed to customers upon request or posted on the Company's website.
3. Communication channels shall include one or more of the following: water bill inserts, messages on water bills, Company web page, post cards, e-mails and special mailings of print pieces, whichever is the most cost-effective and appropriate for the subject at hand.
4. Free written water conservation materials shall be available in the Company's business office and the Company shall send information to customers on request.

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5. The Company may distribute water conservation information at other locations such as libraries, chambers of commerce, community events, etc., as well.
6. The Company shall keep a record of the following information and make it available to the Commission upon request.
  - a. A description of each communication channel (i.e., the way messages will be provided) and the number of times it has been used.
  - b. The number of customers reached (or an estimate).
  - c. A description of the written water conservation material provided free to customers.

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## **Youth Conservation Education Program Tariff – BMP 2.2**

### **PURPOSE**

A program for the Company to promote water conservation by increasing students' understanding of water resources and the need to conserve (Modified Non-Per Capita Conservation Program BMP Category 2: Conservation Education and Training 2.2: Youth Conservation Education Program).

### **REQUIREMENTS**

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission and were adapted from the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. The Company or designated representative shall work with schools in its service area to increase students' understanding of water resources and to promote water conservation.
2. The Company shall provide a combination of instructional assistance, education materials, teacher education, classroom presentations, and field trips to water related facilities.
3. The Company shall provide the following teacher resources.
  - a. Offer Project WET (Water Education for Teachers) workshops to teachers twice yearly
  - b. Provide free resource materials and information upon request
  - c. Provide in-classroom presentations upon request.
4. The Company shall make available free water conservation workbooks for elementary school students.
5. The Company shall keep a record of the following information and make it available upon request.
  - a. A description of the youth conservation education process implemented.
  - b. The number of students reached (or an estimate).

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- c. A description of the written water conservation material provided free to students.
- d. Costs of the Youth Conservation Education Program implementation.

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## **Xeriscape Demonstration Garden Tariff – BMP 2.4**

### **PURPOSE**

A program for the Company to install and maintain a water efficient demonstration garden for the purpose of educating its customer base on low water-use landscaping (Modified Non-Per Capita Conservation Program BMP Category 2: Conservation Education and Training 2.4: Xeriscape Demonstration Garden).

### **REQUIREMENTS**

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission and were adapted from the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. The Company shall design, construct and maintain a demonstration garden that shall include a large variety of low water use and native plants, shrubs and shade trees.
2. The demonstration garden shall include a walkway throughout the site and include interpretive signage and literature about low water use plants and water efficient landscape techniques.
3. The demonstration garden shall be open, free of charge, to the public during normal business hours and the \_\_\_\_\_ Saturday of each month.
4. Maps providing driving directions to the demonstration garden shall be available at the Company office, on the Company web-site, and shall be provided to each new customer upon establishment of service.
5. The Company shall work with the schools, including the universities, to continually upgrade the site with additional technologies and techniques.

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### **Customer High Water Use Inquiry Resolution Tariff – BMP 3.6**

#### **PURPOSE**

A program for the Company to assist its customers with their high water-use inquiries and complaints (Modified Non-Per Capita Conservation Program BMP Category 3: Outreach Services 3.6: Customer High Water Use Inquiry Resolution).

#### **REQUIREMENTS**

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission and were adapted from the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. The Company shall handle high water use inquiries as calls are received.
2. Calls shall be taken by a customer service representative who has been trained on typical causes of high water consumption as well as leak detection procedures that customers can perform themselves.
3. Upon request by the customer or when the Company determines it is warranted, a trained Field Technician shall be sent to the customer's residence to conduct a leak detection inspection and further assist the customer with water conservation measures.
4. The Company shall follow up in some way on every customer inquiry or complaint and keep a record of inquiries and follow-up activities.

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### **Customer High Water Use Notification Tariff – BMP 3.7**

#### **PURPOSE**

A program for the Company to monitor and notify customers when water use seems to be abnormally high and provide information that could benefit those customers and promote water conservation (Modified Non-Per Capita Conservation Program BMP Category 3: Outreach Services Program 3.7: Customer High Water Use Notification).

#### **REQUIREMENTS**

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission and were adapted from the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. The Company shall track water usage for each customer and notify the customer if water use seems excessive for that particular billing for that time of the year.
2. The Company shall identify customers with high consumption and investigate each instance to determine the possible cause.
3. The Company shall contact the high water use customers via telephone, email, by mail or in person. The Company shall contact the customer as soon as practical in order to minimize the possible loss of water. The customer will not be required to do anything to receive this notification.
4. In the notification the Company shall explain some of the most common water usage problems and common solutions and points of contact for dealing with the issues.
5. In the notification, the customer will be reminded of at least the following water-saving precautions:
  - a. Check for leaks, running toilets, or valves or flappers that need to be replaced.

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- b. Check landscape watering system valves periodically for leaks and keep sprinkler heads in good shape.
  - c. Adjust sprinklers so only the vegetation is watered and not the house, sidewalk, or street, etc.
  - d. Continue water conservation efforts with any pools such as installing covers on pools and spas and checking for leaks around pumps.
6. In the notification, the customer will also be reminded of at least the following ordinary life events that can cause a spike in water usage:
  - a. More people in the home than usual taking baths and showers.
  - b. Doing more loads of laundry than usual.
  - c. Doing a landscape project or starting a new lawn.
  - d. Washing vehicles more often than usual.
7. The Company shall provide water conservation information that could benefit the customer, such as, but not limited to, audit programs, publications, and rebate programs.
8. The Company shall assist the customer in a self-water audit and assist the customer in determining what might be causing the high water usage as well as supply customer with information regarding water conservation and landscape watering guidelines. As part of the water audit the Company shall confirm the accuracy of the customer meter if requested to do so by the customer (applicable meter testing fees shall apply).
9. The type of notification, the timing of the notification (i.e., how long after high water use was discovered by the Company), and the criteria used for determining which customers are notified shall be recorded and made available to the Commission upon request.

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### **Water Waste Investigations and Information Tariff – BMP 3.8**

#### **PURPOSE**

A program for the Company to assist customers with water waste complaints and provide customers with information designed to improve water use efficiency (Modified Non-Per Capita Conservation Program BMP Category 3: Outreach Services 3.8: Water Waste Investigations and Information).

#### **REQUIREMENTS**

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission specifically R14-2-403 and R14-2-410 and were adapted from the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. The Company shall handle water waste complaints as calls are received.
2. Calls shall be taken by a customer service representative who has been trained to determine the type of water waste and to determine if it may be attributed to a leak or broken water line.
3. The Company shall follow up on every water waste complaint.
4. Upon request by the customer or when the Company determines it is warranted, a trained Field Technician shall be sent to investigate further and notify the responsible party of the waste and offer assistance and information to prevent waste in the future.
5. A letter of enforcement will be issued to customers with water running beyond the curb and/or off the customers property due to such things as, but not limited to, backwashing of pools, broken sprinkler heads, and over watering of lawns beyond the saturation point.
6. The same procedures outlined above in item #4 will be followed in the event of a second violation. Termination of service may result in the event of the third violation within a 12 month period. In the event of a third violation the customer's service may be terminated per Arizona Administrative Code R14-2-

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410C, R14-2-410D and R14-2-410E (applicable service reconnection fees shall apply).

7. The Company shall record each account and each instance noted for water waste, the action taken and any follow-up activities.
8. Subject to the provisions of this tariff, compliance with the water waste restriction will be a condition of service.
9. The Company shall provide to its customers a complete copy of this tariff and all attachments upon request for service. The customer shall abide by the water waste restriction.
10. If a customer believes he/she has been disconnected in error, the customer may contact the Commission's Consumer Services Section at 1-800-222-7000 to initiate an investigation.

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## **Meter Repair and/or Replacement Tariff – BMP 4.2**

### **PURPOSE**

A program for the Company to systematically assess all in-service water meters (including Company production meters) in its water service area to identify under-registering meters and to repair or replace them (Modified Non-Per Capita Conservation Program Best Management Practice Category 4: Physical System Evaluation and Improvement 4.2 Meter Repair and/or Replacement Program).

### **REQUIREMENTS**

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission and were adapted from the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. On a systematic basis, the Company will inspect 100 percent of its 1-inch and smaller in-service water meters at least once every ten years for one of the following reasons:
  - a. A meter reading complaint is filed with the Company by a customer or Arizona Corporation Commission Staff,
  - b. A meter has registered 1,000,000 gallons of usage, or
  - c. A meter has been in service for ten years.
2. Meters larger than 1-inch shall be inspected for one of the following reasons:
  - a. A meter reading complaint is filed with the Company by a customer or Arizona Corporation Commission Staff,
  - b. A meter has been in service for five years.
3. The inspection will be accomplished by having the meter pulled and having a Company Technician physically inspect each meter and its fittings for leaks, registers which may have become loose or are not properly attached to the meter and could be under-registering or other broken parts which need repair. In addition, meters shall be randomly selected for flow testing to identify potentially under-registering meters.

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4. The Company shall also replace or reprogram all water meters that measure consumption in 1000 gallon increments such that they shall measure consumption in 1 gallon increments.

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**Low Water Use Landscaping Requirements Tariff for Residential, Multi-family, Non-residential, and/or Common Areas – BMP 5.1**

PURPOSE

A program for the Company to reduce water use within its service area and/or increase water use efficiency by limiting or reducing water used for specific purposes (Modified Non-Per Capita Conservation Program BMP Category 5: Ordinances/Conditions of Service/Tariffs 5.1: Low Water Use Landscaping Requirements for Residential, Multi-family, Non-residential, and/or Common Areas).

REQUIREMENTS:

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission, specifically A.A.C. R14-2-403 and R14-2-410 and were adapted from the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. The following landscape restrictions will be required in order for a customer to receive water service from the Company on or after the effective date of this tariff:

All Residential Customers -

- a. All front yards shall be landscaped with xeriscape (low water use) materials. A list of low water use landscaping materials is available from the Company upon request. No turf of any kind that requires watering shall be allowed in front yards.
- b. Turf in back yards shall be limited to no more than fifty percent (50%) of the total backyard area.
- c. No home shall be equipped with a swimming pool, jacuzzi, or other water-use intensive feature (e.g., fountain, fish pond, etc.).

All Non-Residential Customers -

- a. All landscape shall be accomplished with xeriscape (low water use) materials. A list of low water use landscaping materials is available from the Company upon request. No turf of any kind that requires

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watering shall be allowed. This requirement shall not apply to community parks that are watered with effluent.

- b. No swimming pools (except for community swimming pools and jacuzzi) or other water-use intensive features (e.g., fountain, fish pond, etc.) shall be allowed.
2. Subject to the provisions of this tariff, the installation of the landscape restrictions will be a condition of service.
3. The Company shall provide to its customers a complete copy of this tariff and all attachments upon request for service. The customer shall follow and abide by these landscape restrictions.
4. If after a customer has been connected to the Company water system, the Company discovers that the customer has installed turf or water-use intensive features contrary to the above requirements, the Company shall notify (in writing) the customer of such violation and provide the customer with the appropriate educational materials informing the customer of some possibilities of how to correct the problem. The customer shall be allowed sixty (60) days to come into compliance with the above requirements. If after sixty (60) days the customer is not in compliance with the above requirements, the customer's service may be terminated per Arizona Administrative Code R14-2-410C, R14-2-410D and R14-2-410E.
5. If a customer believes he/she has been disconnected in error, the customer may contact the Commission's Consumer Services Section at 1-800-222-7000 to initiate an investigation.

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**Water Use Plan For New Non-Residential Users Tariff – BMP 5.13****PURPOSE**

A program for the Company to require all new commercial, industrial, and institutional users who have annual projected water use of ten acre-feet or more per year to submit a water use plan that identifies all water uses anticipated by the user, and the water efficiency measures associated with the uses (Modified Non-Per Capita Conservation Program BMP Category 5: Ordinances/Conditions of Service/Tariffs 5.13: Requiring a Water Use Plan).

**REQUIREMENTS:**

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission, specifically A.A.C. R14-2-403 and R14-2-410 and were adapted from the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. Subject to the provisions of this tariff, as a condition of service all new commercial, industrial and institutional users with a projected annual water use requirement of five acre-feet (1,629,250 gallons) or more per year, will be required to submit a water use plan which identifies all water uses anticipated by the user and the water efficiency measures associated with the uses.
2. The water use plan submitted by users must include at least three of the following measures:
  - a. Statement of water efficiency policy
  - b. Water Conservation education/training for employees
  - c. Identification of on-site recycling and re-use strategies
  - d. Total cooling capacity and operating Total Dissolved Solids or conductivity for cooling towers
  - e. Identification of best available technologies used for process, cooling and domestic water uses
  - f. Landscape watering system distribution uniformity and landscape water budget

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g. Total annual water budget for the facility

3. The Company shall provide to all new commercial, industrial, and institutional customers a complete copy of this tariff and all attachments upon request for service. The customer shall follow and abide by this tariff.
4. If after a customer has been connected to the Company water system, the Company discovers that the customer has, for example, installed turf or water-use intensive features contrary to its water use plan, the Company shall notify (in writing) the customer of such violation and provide the customer with the appropriate educational materials informing the customer of some possibilities of how to correct the problem. The customer shall be allowed sixty (60) days to come into compliance with his or her plan requirements. If after sixty (60) days the customer is not in compliance with his or her plan requirements, the customer's service may be terminated per Arizona Administrative Code R14-2-410C, R14-2-410D and R14-2-410E.
5. If a customer believes he/she has been disconnected in error, the customer may contact the Commission's Consumer Services Section at 1-800-222-7000 to initiate an investigation.

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## **Large Landscape Conservation Program Tariff – BMP 6.12**

### **PURPOSE**

A program for the Company to promote water conservation measures by providing non-residential customers with support and incentives to improve their landscape water use efficiency (Modified Non-Per Capita Conservation Program BMP Category 6: Rebates/Incentives 6.12: Large Landscape Conservation Program).

### **REQUIREMENTS:**

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission and were adapted from the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. As an incentive to reduce water use for its non-residential customers with landscape watering needs, the Company shall work with the customer or the customer's contracted landscape company to collect and analyze up to 3 years of historical information for their meters, analyze past consumption patterns and compare meter size with consumption rates that might suggest meter over-sizing or meter/valve/backflow malfunctions. This analysis shall be presented in both raw data and graphically with recommendations for potential meter resizing and identification of high consumption situations and potential malfunctions of landscape watering equipment.
2. No less frequently than every three years, or upon customer request, the Company shall provide its non-residential customers with landscape watering needs, a historical consumption analysis study as described above in item #1 for their respective landscape watering meters within the Company's service area.
3. Company service shall be offered using an inverted block rate structure.
4. Upon customer request, the Company shall provide:
5. On-site consultations on low water use landscaping and efficient watering practices.

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6. A summary of water saving options and a month-by-month outdoor water budget.

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**Piloting a New Initiative, Project or Program Tariff – BMP 7.8****PURPOSE**

A program for the Company to conduct a new initiative, project or program in its water service area using state of the art water conservation technologies and techniques (Modified Non-Per Capita Conservation Program BMP Category 7: Research/Innovation Program 7.8: Piloting a New Initiative, Project or Program).

**REQUIREMENTS:**

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission ("Commission") and were adapted from the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. Prior to implementing a new project or program the Company shall file a detailed explanation with the Commission describing how the program would work, the possible results and expected costs.
2. At minimum, one new project or program shall be proposed each calendar year for Commission approval.
3. If a project or program is approved by the Commission, the Company shall document that project or program by filing a report each March covering the activities of the prior calendar year. The report shall include at least the following information:
  - a. Description of the process to implement,
  - b. Costs of implementation, and
  - c. Conservation results.
4. If necessary, the Commission may request additional information.